County of Yolo

Taro Echiburú, AICP
DIRECTOR

DEPARTMENT OF COMMUNITY SERVICES

Planning and Public Works
292 West Beamer Street
Woodland, CA 95695-2598
(530) 666-8775 FAX (530) 666-8156
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Environmental Health
292 West Beamer Street
Woodland, CA 95695
(530) 666-8646

Integrated Waste Management
44090 CR 28 H
Woodland, CA 95776
(530) 666-8852

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

Notice is hereby given that the County of Yolo, as lead agency, has prepared an Initial Study/Mitigated Negative Declaration (IS/MND) for the below referenced project. The IS/MND analyzes the potential environmental effects associated with the proposed project in accordance with the California Environmental Quality Act (CEQA). In accordance with Section 15072 of the CEQA Guidelines, the Yolo County Community Services Department has prepared this Notice of Intent to provide responsible agencies and other interested parties with notice of the availability of the IS/MND to solicit comments and concerns regarding the environmental issues associated with the proposed project.

LEAD AGENCY: Yolo County
292 West Beamer Street
Woodland, CA 95695

CONTACT PERSON: Stephanie Cormier, Senior Planner
530-666-8850
stephanie.cormier@yolocounty.org

PROJECT TITLE: Sakata Seed Woodland Station Project (ZF# 2016-0038)

PROJECT LOCATION: The project site is located approximately three miles north of the City of Woodland on the east side of County Road 100, north of County Road 17 and east of State Route 113 (APN: 027-280-003.

PROJECT DESCRIPTION:

The project is a request for a Use Permit to construct a phased project that includes a multi-use facility dedicated to the research of warm-weather vegetable crops, including seed production, milling, storing, and distribution. The applicant is Sakata Seed America. The application involves a 203-acre agriculturally-zoned parcel, 15 acres of which is proposed to be developed with a research facility, seed production facilities, and a seed cleaning and storage facility.

The proposal, known as the "Woodland Station," includes initial construction of an approximately 11,000-square foot office building that will be used for the administration of the Sakata Seed properties and will accommodate up to 30 employees directly related to seed research, production, and seed cleaning; six 3,000-square foot greenhouses for developing vegetable seed crops with a 6,090-square foot headhouse; a 20,000-square foot mill/warehouse and adjacent 4,000-square foot washery that will be used for seed cleaning and storage; a

6,000-square foot farm shop for field equipment and supply storage; and a 2,200-square foot four-bedroom dormitory that will house interns and researchers temporarily working at the site. Future phases may include a possible expansion of the milling and warehousing operations and additional office space, as well as a pathology lab and additional greenhouses.

The 203-acre parcel is currently farmed in rotating crops, and a majority of the property (approximately 85 percent) will remain in vegetable seed crop production to support the research facility uses. Agricultural and seed research facilities are permitted in the Agricultural Intensive (A-N) Zone with the issuance of a Minor Use Permit. Mitigation to address potential impacts to biological and cultural resources is proposed to reduce project related environmental impacts to less than significant levels.

PUBLIC REVIEW PERIOD: A 30-day public review period of the Initial Study/Mitigated Negative Declaration will commence **on April 5, 2017, and end on May 5, 2017,** during which interested individuals and public agencies may submit written comments on the document. Any written comments on the IS/MND must be received at the above address within the public review period.

AVAILABILITY OF DOCUMENTS: The Initial Study/Mitigated Negative Declaration is now available for public review at the following location during normal business hours: Yolo County Community Services Department, 292 W. Beamer Street, Woodland, CA 95695. **The IS/MND has been posted to the Yolo County Web site and may be downloaded and printed at http://www.yolocounty.org/community-services/planning-public-works/planning-division/current-projects.** A PDF digital file of the IS/MND, or a hard (paper) copy of the IS/MND, is also available upon request from the Planning Division at the address or e-mail depicted below.

The Initial Study/Mitigated Negative Declaration may be obtained from, and comments (written, e-mailed, or oral) may be directed to:

Stephanie Cormier, Senior Planner
Yolo County Community Services Department
292 W. Beamer Street
Woodland, CA. 95695
(530) 666-8850
stephanie.cormier@yolocounty.org

The Yolo County Zoning Administrator is **tentatively** scheduled to hold a public hearing on the proposed Use Permit on **May 9, 2017,** at 9:00 a.m. in the Cache Creek Conference Room at 292 W. Beamer St., Woodland, to hear public comments and take action on the proposal. A separate notice will be sent out in advance of the Zoning Administrator hearing.

All interested parties are invited to attend the public hearing(s) or send written communications to the Yolo County Community Services Department no later than the relevant hearing date(s).

Pursuant to California Government Code Section 65009(b)(2) and other provisions of law, any lawsuit challenging the approval of a project described in this notice shall be limited to only those issues raised at the public hearings before the Zoning Administrator/Planning Commission and Board of Supervisors or described in written correspondence delivered for consideration before the hearings are closed.

YOLO COUNTY
DEPARTMENT OF COMMUNITY SERVICES

INITIAL STUDY / MITIGATED NEGATIVE DECLARATION
ZONE FILE # 2016-0038

SAKATA SEED

WOODLAND STATION PROJECT

USE PERMIT

APRIL, 2017

Initial Environmental Study

1. **Project Title:** Zone File #2016-0038 (Sakata Seed Use Permit)

2. **Lead Agency Name and Address:**
   Yolo County Department of Community Services
   292 West Beamer Street
   Woodland, CA 95695

3. **Contact Person, Phone Number, E-Mail:**
   Stephanie Cormier, Senior Planner
   (530) 666-8850
   stephanie.cormier@yolocounty.org

4. **Project Location:** The project is located on the east side of CR 100, north of CR 17, approximately 3 miles north of the City of Woodland and 3 miles east of I-5 (APN: 027-280-003). See Figure 1 (Vicinity Map).

5. **Project Sponsor's Name and Address:**
   Timothy Do-Cambridge
   Sakata Seed America, Inc.
   18095 Serene Drive
   Morgan Hill, CA 95037

6. **Land Owner's Name and Address:**
   Sakata Seed America, Inc.
   (same as above)

7. **General Plan Designation(s):** Agriculture (AG)

8. **Zoning:** Agricultural Intensive (A-N)

9. **Description of the Project:** See attached "Project Description" on the following pages.

10. **Surrounding Land Uses and Setting:**

Relation to Project	Land Use	Zoning	General Plan Designation
Project Site	Agricultural (row crops/tomatoes)	Agricultural Intensive (A-N)	Agriculture (AG)
North	Agricultural (row crops)	Agricultural Intensive	Agriculture
South	County Road 17; vacant agricultural land (remnant valley oak grove)	Agricultural Intensive	Agriculture
East	Agricultural (row crops)	Agricultural Intensive	Agriculture
West	Agricultural (row crops), bee keeping	Agricultural Intensive	Agriculture

11. **Other public agencies whose approval is required:** Yolo County Public Works Division; Yolo County Building Division; Yolo Fire Protection District; Yolo County Environmental Health Division; Central Valley Regional Water Quality Control Board

12. **Other Project Assumptions:** The Initial Study assumes compliance with all applicable State, Federal, and local codes and regulations including, but not limited to, County of Yolo Improvement Standards, the California Building Code, the State Health and Safety Code, and the State Public Resources Code. The project is reviewed and analyzed under the County's Code of Zoning Ordinances; particularly, the Agricultural Zoning Ordinance. The purpose of the Agricultural Zoning Ordinance is to provide for land uses that support and enhance agriculture as the predominant land use in the unincorporated area of the County. Such uses shall be compatible with agriculture, and may include uses that support open space, natural resource management, outdoor recreation, and enjoyment of scenic beauty (Yolo County Code Section 8-2.301).

Project Description

Sakata Seed America is requesting a Use Permit to construct a phased project that includes a multi-use facility for the research to develop warm-weather vegetable crops, seed production for commercial seed crops, and the milling, storing, and shipping of seed to distributors and growers. The project site is located approximately three miles north of the City of Woodland on the north field of an approximately 203-acre agriculturally-zoned parcel that is farmed in row crops. County Road 100 runs along the western side of the parcel and County Road 17 runs along the south side. The property is accessed off both County Road 100 and County Road 17, and is adjacent to State Route 113. The project site will be accessed off CR 100.

The project proposal, known as the "Woodland Station," includes the construction of new structures, including a research facility, seed production facilities, and a seed cleaning and storage facility that will occur on approximately 15± acres of the 203-acre parcel (APN: 027-280-003). The majority of the remainder of the parcel will be used for the production of vegetable seed for warm weather species. Sakata Seed also owns the 15-acre parcel on the south side of County Road 17 (APN: 027-260-001) that includes a remnant valley oak grove and other mature roadside trees. No facilities will be constructed on the adjacent southern parcel and the trees will be retained in their natural state. Both properties are zoned Agricultural Intensive (A-N) and under a Williamson Act contract. The 15-acre parcel is not subject to the Use Permit and therefore will not be considered in this Initial Study.

Property and Project Details

The 203-acre property is currently farmed in row crops, most recently in tomatoes, and will be kept in rotating crops. The southern portion of the property (south field) also contains portions of the remnant valley oak grove. The project site is proposed to be sited approximately 2,900 feet north of the grove; thus, no trees are slated for removal to accommodate the project. The property is currently undeveloped but contains two agricultural wells that will be retained for irrigation purposes, and an active natural gas well (permitted in 2003) that is located at the eastern edge of the property, northeast of the proposed project site. A new well is proposed to be drilled at the site to meet domestic water supply and fire flow needs.

The project, which is proposed to develop as a phased project, includes initial construction of an approximately 11,000-square foot office building, six (6) 3,000-square foot greenhouses, a 6,090-square foot headhouse, a 20,000-square foot mill/warehouse and adjacent 4,000-square foot washery, covered parking with solar panels, a 6,000-square foot farm shop, and an approximately 2,200-square foot dormitory, with site work and utilities necessary for operation, including paved access drives, parking areas, and onsite wastewater treatment. The covered parking photovoltaic system will be used to generate power for the site. There will be minimal landscaping around the offices that will utilize some of the wash water from the wet mill for irrigation. The perimeter of the property will be fenced for security with card-access gates and CCTV surveillance cameras. Construction of the new facility is anticipated to achieve LEED certification.

The office building will be used for the administration of the Sakata Seed properties and will accommodate up to 30 employees that are directly related to seed research, production, and seed cleaning. Approximately 10 of the anticipated 30 employees currently work at Sakata Seed's leased site located a little over one-half mile north of the proposed new site. Once the new site is functional, the lease site will be dropped. Typical office hours will be from 7:00AM to 6:00PM daily, Monday through Friday.

The greenhouses will be for the development of vegetable seed crops and will be polycarbonate structures with lighting, heating, cooling, and ventilation systems. A reverse osmosis (RO) system will be used to create suitable irrigation water for seed production within the

greenhouses. The greenhouses will have earthen floors for adequate drainage of drip and mist irrigation. Four to five employees will be working in the greenhouses on a seasonal basis.

The headhouse will be used to store the equipment necessary to run the greenhouses and for initial seed preparation. The headhouse will house the RO and irrigation control systems, and will include an open work area and a cold room to keep fruit prior to seed extraction. A chemical storage room will also be located in the headhouse containing no more than one 55-gallon drum of any one chemical.

The wet seed mill will be used for seed cleaning and storage. A cold room within the mill/warehouse will store temperature-sensitive seed. Seed extraction will occur in a small water treatment system, where the wastewater will be used for landscape drip irrigation. The wet mill will be used seasonally for up to four months. The remainder of the mill will be used as a warehouse for drying, sizing, and seed storage. A dust collection system will be installed to remove airborne particulates created by seed sizing and cleaning. Milling season will generate up to six truck trips per day; the remainder of the year will include up to two truck trips per day for shipping clean seed for sales and supplying field production sites.

The dormitory will house interns and researchers working at the site for relatively short periods of time. The dorm will be a multi-bedroom facility, with up to four rooms, a common sitting area, and a kitchen. No other residential structures are anticipated to be placed at the research center.

The farm shop will be used for the storage of field equipment and supplies, including tractors, planters, tillage equipment, and supplies necessary to maintain moveable hoops used to control insect activity on vegetable plots. An equipment washdown area and a fertilizer/chemical mixing area will facilitate field production.

Future phases will provide for a possible expansion of the milling and warehousing operations, and may include up to 100,000-square feet at build-out; the addition of a 6,000-square foot pathology lab for testing seed quality and pathogens common to the seed species developed at the site; and the addition of office space for a total of approximately 35,000 square feet at build-out. Greenhouses may also be added during this phase. Seed would be brought in from various locations around the western United States for cleaning, sizing, treating, packaging, and storing. The expanded facility would operate year-round with heavier volumes up to eight months out of the year.

The additional seed space would be for dry seed that would not need water for any of the milling processes. If a seed treatment operation is added, adequate water disposal facilities would be added to eliminate any wastewater issues, as well as additional dust control equipment. Truck traffic generated from future phases would not exceed six trips per day. An additional 12 employees would be needed on a seasonal basis to accommodate the expansion. The mill/warehouse expansion is proposed to be powered by its own roof-mounted solar panel system.

The future pathology lab would be constructed as an internationally accredited laboratory for seed testing, primarily for seed health, which would include an approximately 6,000-square foot lab and two or three additional 3,000-square foot greenhouses. The addition of the lab would be staffed by up to five people on a year-round basis.

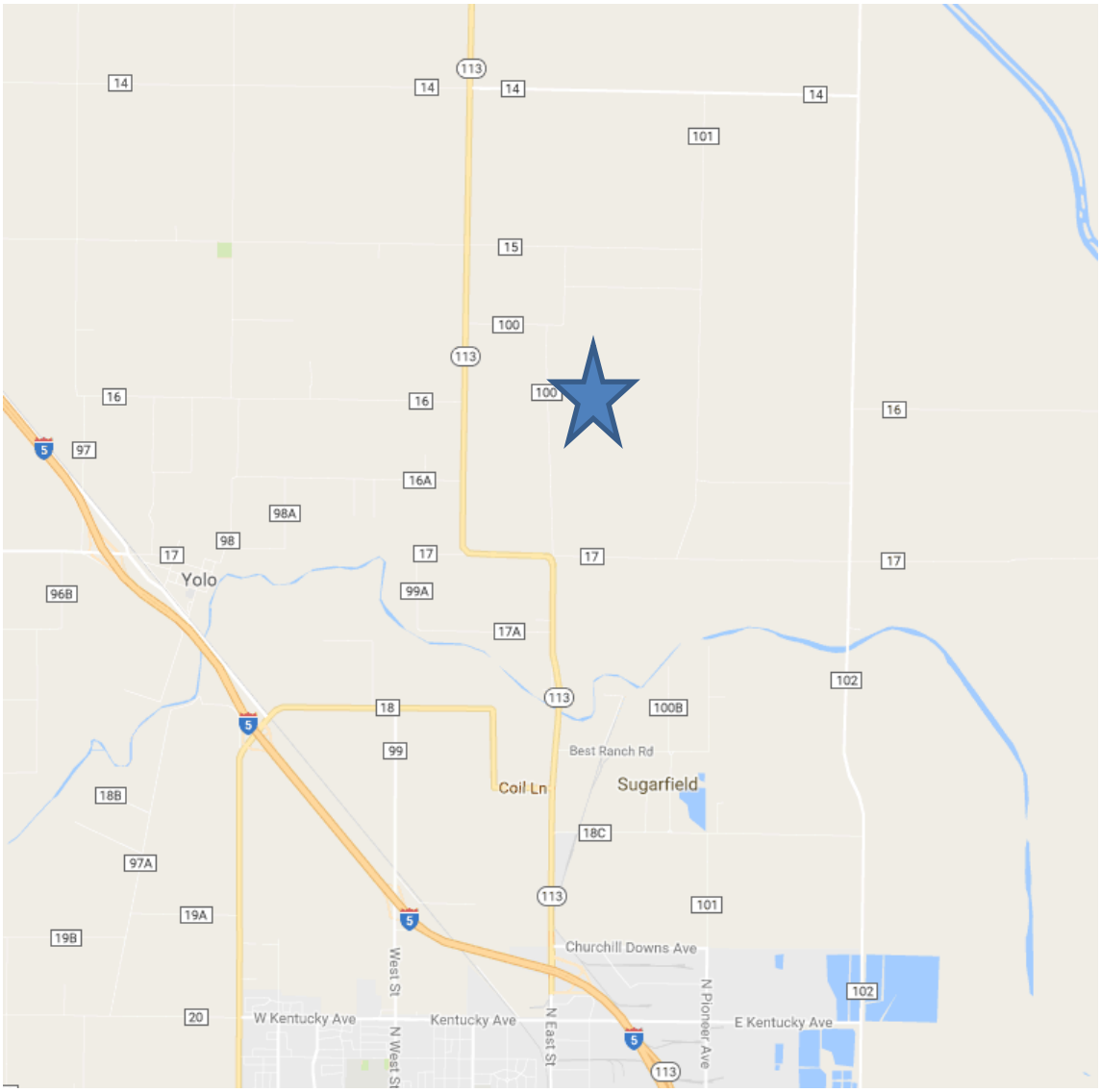
Construction of the initial phase is expected to occur over a six-month period, with construction activities lasting approximately nine months. The project site is located in a FEMA designated Flood Zone, so compliance with FEMA and local flood protection regulations will be required. According to the applicant, preliminary surveys indicate the proposed location of the project site is one to two feet above the base flood elevation. Verification of finished floor elevations will be required prior to building permit submittal.

Noise generated by the project will be from air cleaners used during milling processes and ventilation fans used in the greenhouses. Light generated by the project will be from safety lighting used around the building sites, as well as from the greenhouses. These noise and light sources are expected to be retained onsite due to the project site's remote location, which includes mature trees along the parcel's southern perimeter.

The property is surrounded by other large rural parcels in active agricultural production, mostly row crops and tree crops, with very few rural residences. The nearest residences to the project site are located approximately 3,200 feet southwest and 4,200 feet northwest of the project site. Most of the surrounding properties, including the project site, are under the Williamson Act.

The project will be required to perform pre-construction surveys to ensure nesting raptors are not disturbed and to compensate for the permanent loss of Swainson's hawk foraging habitat. Agricultural mitigation would not be required by the project since an agricultural seed research facility is a listed conditional use in the agricultural zones.

Figure 1
Vicinity Map



Approximate Property/Project Limits

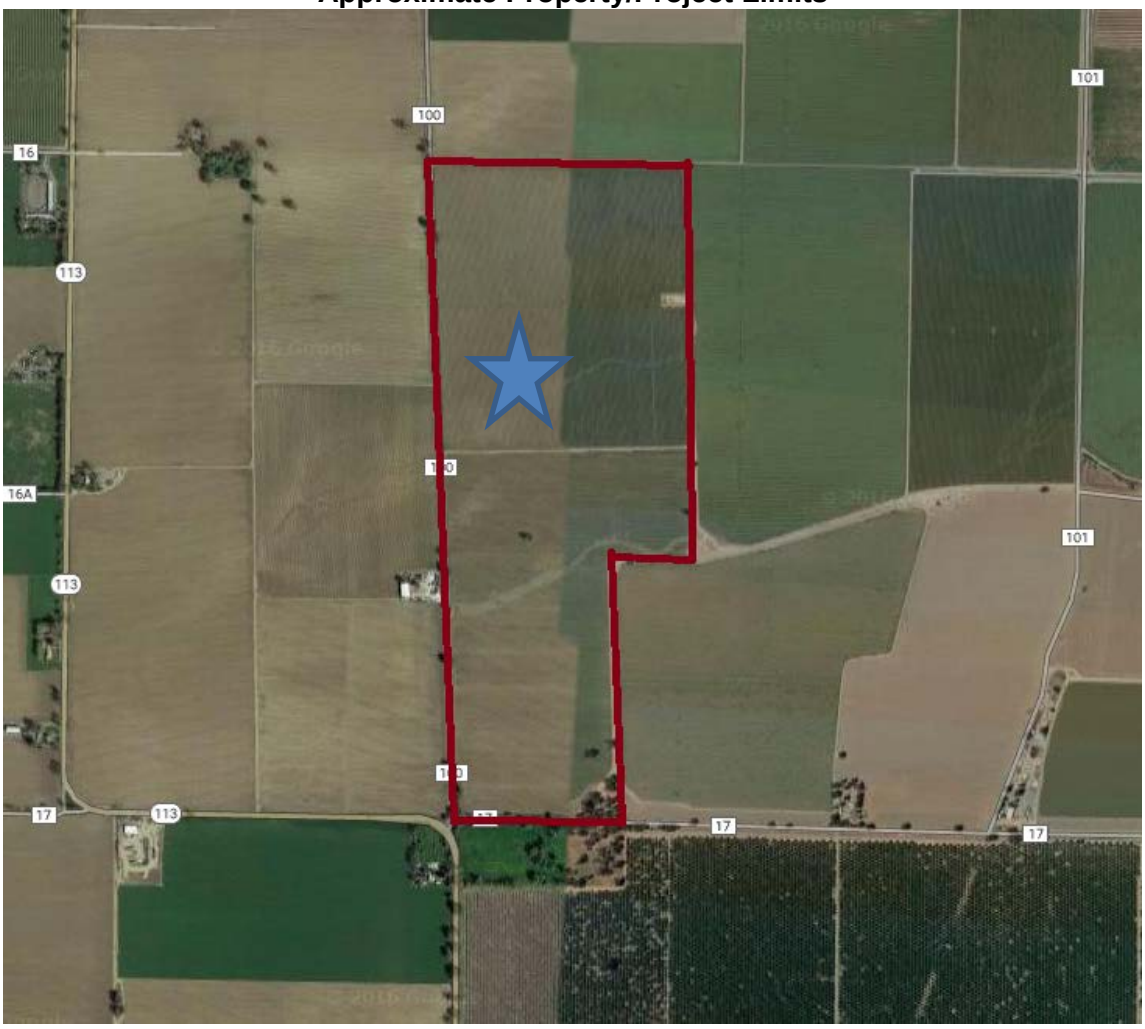
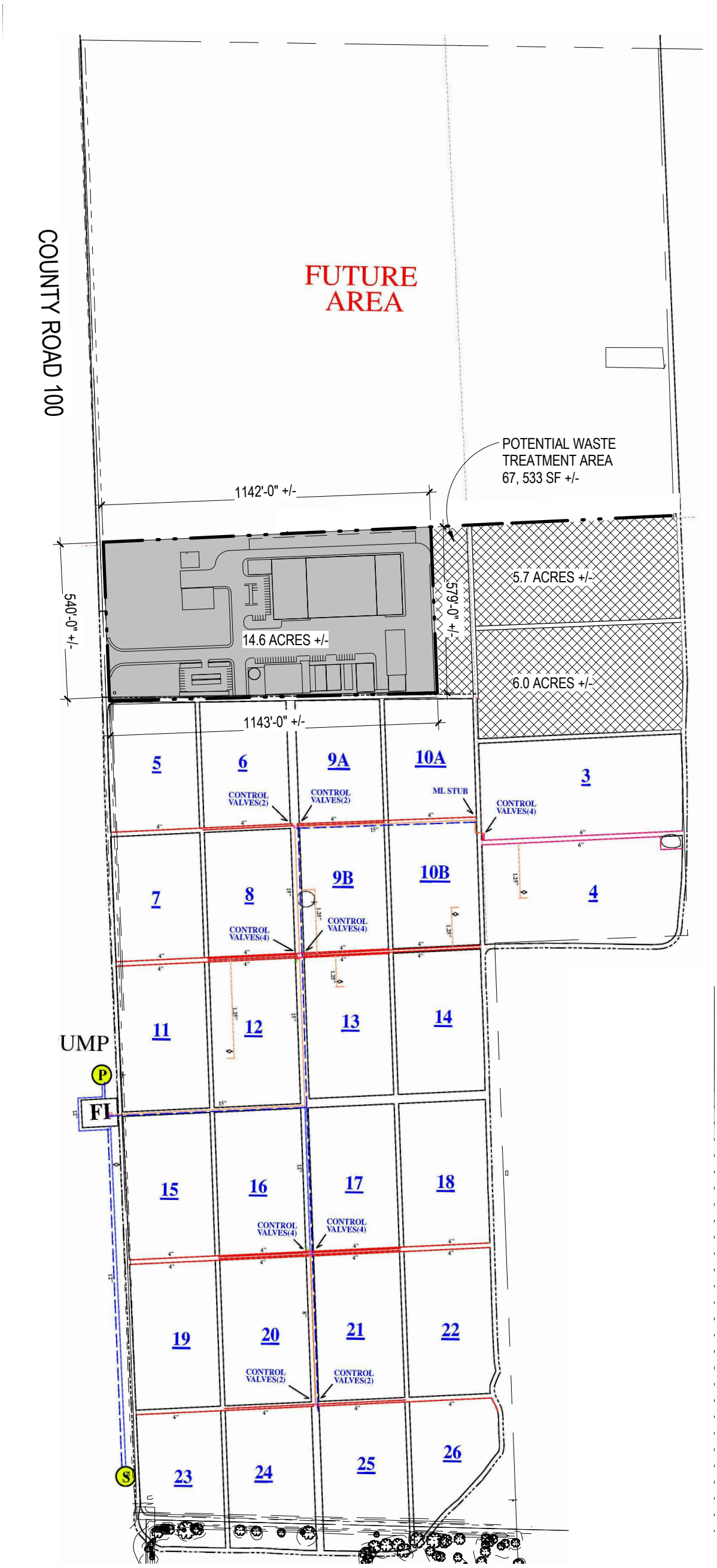


Figure 2
Site Plan



SAKATA SEED AMERICA INC.

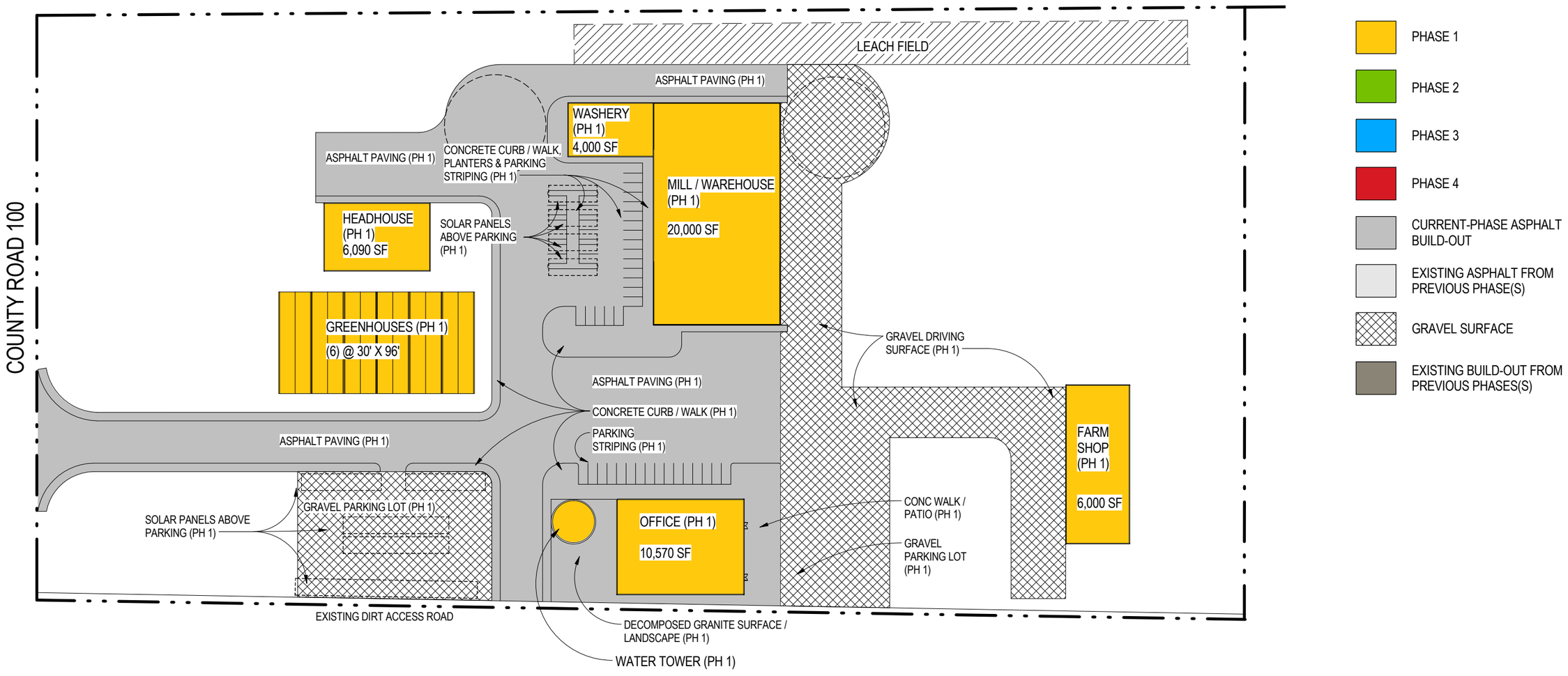
2014027500

0 200' 400' 800'

OVERALL SITE PLAN

HORIZON

02/23/17



SAKATA SEED AMERICA INC.

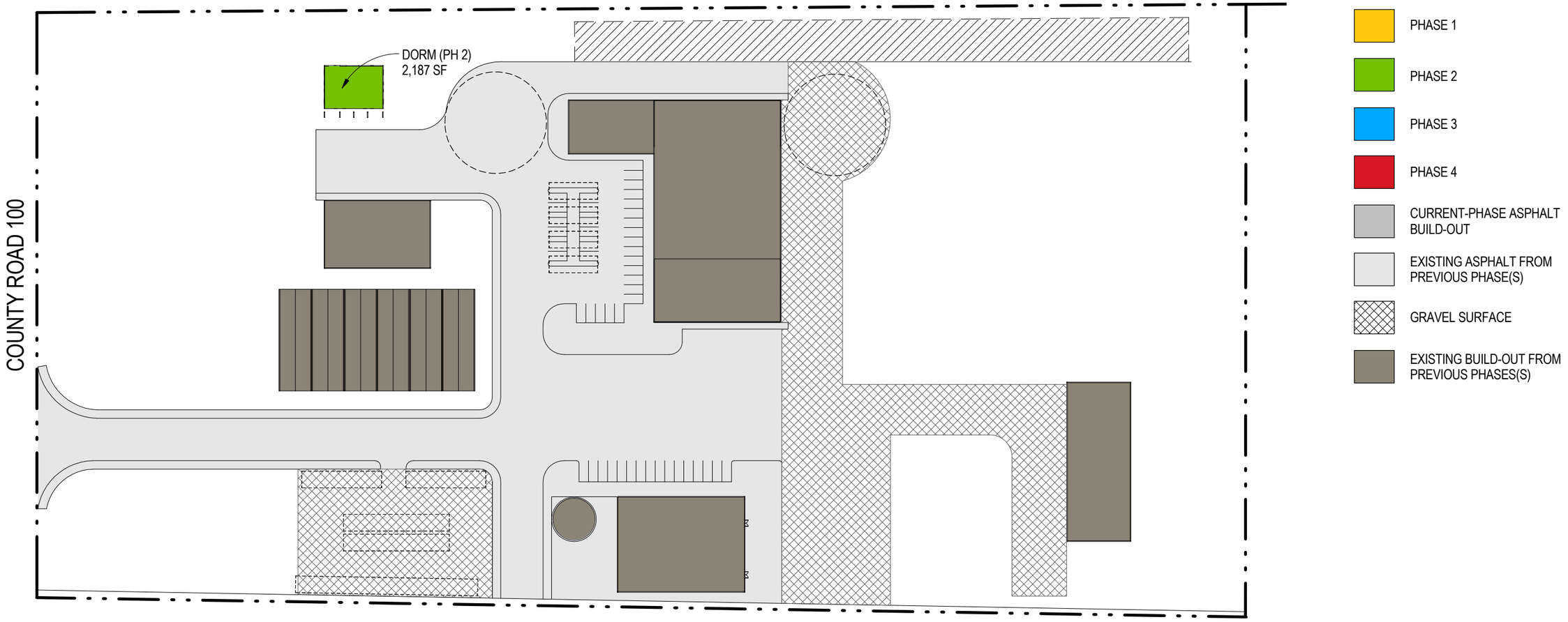
2014027500

0 50' 100' 200'

SITE PLAN_PHASE 1

HORIZON

02/23/17



SAKATA SEED AMERICA INC.

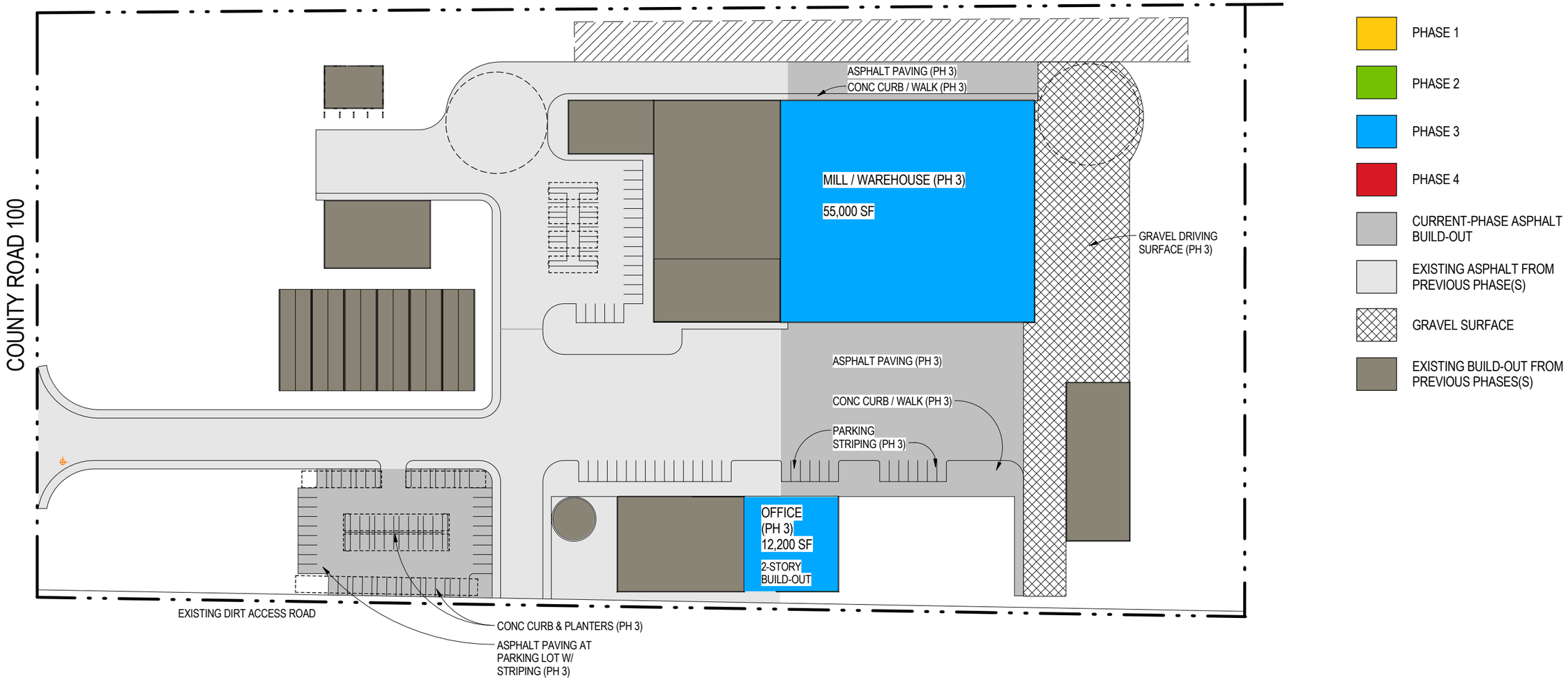
2014027500

0 50' 100' 200'

SITE PLAN_PHASE 2

HORIZON

02/23/17



SAKATA SEED AMERICA INC.

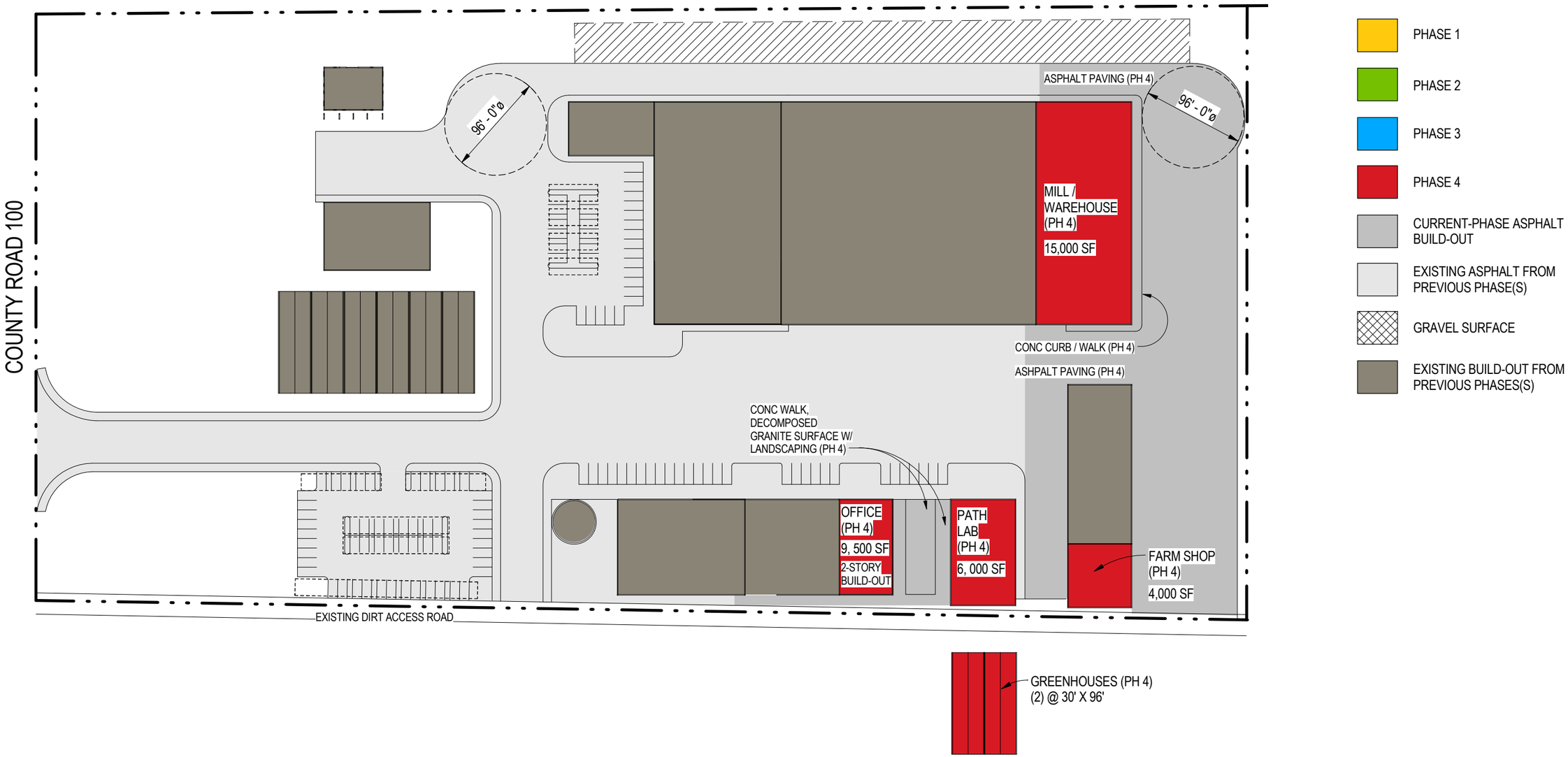
2014027500

0 50' 100' 200'

SITE PLAN_PHASE 3

HORIZON

02/23/17



SAKATA SEED AMERICA INC.

2014027500

0 50' 100' 200'

SITE PLAN_PHASE 4

HORIZON

02/23/17

Environmental Factors Potentially Affected

The environmental factors checked below could potentially be affected by this project, involving at least one impact that is a "Potentially Significant Impact" (before any proposed mitigation measures have been adopted or before any measures have been made or agreed to by the project proponent) as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agricultural and Forestry Resources	☐ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Geology / Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality
☐ Land Use / Planning	☐ Mineral Resources	☐ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☐ Transportation / Traffic	☐ Utilities / Service Systems	☐ Mandatory Findings of Significance

Determination

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have an impact on the environment that is "potentially significant" or "potentially significant unless mitigated" but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis, as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because the project is consistent with an adopted general plan and all potentially significant effects have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT, the project is exempt from further review under the California Environmental Quality Act under the requirements of Public Resources Code section 21083.3(b) and CEQA Guidelines Section 15183.

Stephanie Cormier

Planner's Signature | Date | Planner's Printed name

Environmental Factors Potentially Affected

The environmental factors checked below could potentially be affected by this project, involving at least one impact that is a "Potentially Significant Impact" (before any proposed mitigation measures have been adopted or before any measures have been made or agreed to by the project proponent) as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agricultural and Forestry Resources	☐ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Geology / Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality
☐ Land Use / Planning	☐ Mineral Resources	☐ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☐ Transportation / Traffic	☐ Utilities / Service Systems	☐ Mandatory Findings of Significance

Determination

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have an impact on the environment that is "potentially significant" or "potentially significant unless mitigated" but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis, as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because the project is consistent with an adopted general plan and all potentially significant effects have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT, the project is exempt from further review under the California Environmental Quality Act under the requirements of Public Resources Code section 21083.3(b) and CEQA Guidelines Section 15183.

Planner's Signature	Date	Planner's Printed name
SCormier	April 5, 2017	Stephanie Cormier

Purpose of this Initial Study

This Initial Study has been prepared consistent with CEQA Guideline Section 15063, to determine if the project as described herein may have a significant effect upon the environment.

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained if it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. A "Less than Significant with Mitigation Incorporated" applies when the incorporation of mitigation measures has reduced an effect from a "Potentially Significant Impact" to a "Less than Significant Impact". The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less-than-significant level. (Mitigation measures from Section XVIII, "Earlier Analyses", may be cross-referenced.)
5. A determination that a "Less than Significant Impact" would occur is appropriate when the project could create some identifiable impact, but the impact would be less than the threshold set by a performance standard or adopted policy. The initial study should describe the impact and state why it is found to be "less than significant."
6. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration [Section 15063(c)(3)(D) of the California Government Code. Earlier analyses are discussed in Section XVIII at the end of the checklist.
7. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, when appropriate, include a reference to the page or pages where the statement is substantiated.
8. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

I.	AESTHETICS.	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:					
a.	Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	☐	☐	☐	☒
c.	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d.	Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	☒	☐

DISCUSSION

a) Have a substantial adverse effect on a scenic vista?

Less than Significant Impact. For purposes of determining significance under CEQA, a "scenic vista" is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. There are no officially designated scenic vistas near the project site, although the area does provide expansive views of the rural landscape, including agricultural fields and portions of a remnant valley oak grove. The project proposes to construct facilities for the research and development of warm-weather vegetable crops, seed production, and seed milling/storage/shipping to distributors and growers. Elements of the project proposal include construction of an office building, a headhouse with six adjoining greenhouses, a mill/warehouse facility, covered parking with solar panels, and other ancillary features such as a farm shop, a four-bed dormitory, access drives, and paved parking. Project build-out may increase the mill/warehouse to approximately 100,000 square feet and the office to approximately 35,000 square feet, and add more greenhouses with a lab building. The majority of the 203-acre parcel will remain in row crop production with approximately 15± acres removed for the proposed new facilities. No valley oaks or other mature trees along the southern perimeter of the property will be removed to accommodate the project. Scenic vistas would not be obstructed by the proposed changes to the property and aesthetic impacts would be considered less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?

No Impact. There are no officially designated scenic highways near the project area. The closest County-designated scenic roadway is Old River Road, which is located approximately 8.5 miles east of the project site and provides no views of the property from the roadway. As identified in (a), above, the proposal includes construction of new facilities to implement an agricultural seed research facility for the development of warm-weather, vegetable crops, seed production, and milling/storage/shipping seed to distributors and growers. However, these proposed changes to the property's grounds will not damage scenic resources. There will be no impacts to the viewshed along a scenic highway.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less than Significant Impact. The project proposes the construction of up to 11,000-square foot office building, six 3,000-square foot greenhouses, a 6,000-square foot headhouse, a 20,000-square foot mill/warehouse, a 2,200-square foot dormitory, covered parking, a 6,090-square foot farm shop, paved access drives and parking areas, and other utility site work as necessary. At full build-out the project will occupy approximately 15± acres of the 203-acre property, which will leave the majority of the agricultural land in row crop production. This development may also include future phases that increase the office building to 35,000 square feet and the mill/warehouse to 100,000 square feet, and add new greenhouses with a 6,000-square foot pathology lab. None of the trees at the southern edge of the parcel will be removed to accommodate the project, leaving the relatively small portion of a remnant valley oak grove intact.

The approximately 203-acre property is bound by agricultural property to the north, County Road 17 and the 15-acre property containing valley oaks and other mature trees to the south, agricultural land to the east, and County Road 100 and agricultural land to the west. The closest rural home site is approximately 3,200 feet to the southwest and another nearby residence is located approximately 4,200 feet to the northwest. The project is not expected to degrade the existing aesthetic character of the site and its surroundings. The project will be screened from views from certain vantage points due to buffering from mature roadside trees at the southern/southwestern boundary. No trees will be removed for project construction. Impacts would be considered less than significant.

d) Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

Less than Significant Impact. The proposal could introduce new sources of temporary and permanent lighting to the project area due to the addition of greenhouses and safety lighting around buildings. However, operations are expected to maintain typical business hours, between 7:00AM and 6:00PM. The nearest neighbors are 3,200 and 4,200 feet away from the project site, and project lighting is not expected to generate a significant amount of light during daytime or nighttime operations. Furthermore, the project will be conditioned to require that any outdoor lighting must include light fixtures that are low-intensity, shielded and/or directed away from adjacent properties in order to minimize glare and overspill on adjacent parcels, the night sky, and the public right-of-way in order to implement General Plan policies in the Land Use and Community Character Element that protect the rural night sky. Impacts from new light sources will be less than significant.

II.	AGRICULTURE AND FOREST RESOURCES.	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and the forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:				
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b.	Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?	☐	☐	☒	☐
c.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526)?	☐	☐	☐	☒
d.	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e.	Involve other changes in the existing environment that, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

DISCUSSION

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Less than Significant Impact. The proposed seed research facility project would occupy approximately seven (7) percent (up to 15± acres) of the 203-acre parcel of agriculturally zoned land which is planted in rotating field crops. The property is currently undeveloped but contains two agricultural wells and one natural gas well (northeast of and away from the project site).

Soils within the project site are identified as Maria silt loam, Reiff very fine sandy loam, Soboba gravelly sandy loam, Sycamore silt loam, drained, Sycamore silty clay loam, drained, and Sycamore complex, drained. The Sycamore soils are identified as somewhat poorly drained silty clay loams that have a "good" (grade 2) rating by the updated U.S. Soil Conservation Service *Soil Survey of Yolo County* (2001); the Maria soils are identified as having poorly drained silt loams and the Soboba soils consist of excessively drained very gravelly loamy sands that are

both classified as “fair” (grade 3); and the Reiff soils consist of well-drained very fine sandy soils with an “excellent” rating (grade 1). The project site is designated as “Prime Farmland” on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. Prime Farmland is a designation given to land that has the best combination of physical and chemical features for maintaining long-term sustainable crop production.

The project will convert up to approximately 15± acres of land that is identified as “Prime Farmland” for construction of the project, which is equivalent to approximately seven percent of the agriculturally-productive area. The primary goal of the project is to facilitate the research of warm-weather vegetable crops for the production of high quality seeds that display strong performance and yields. The majority of the property will remain in active production of vegetable crops.

The project’s impact to prime farmland is considered less than significant because the Yolo County General Plan (and County zoning regulations that implement General Plan policies) consider agricultural research facilities to be an agricultural use. The Yolo County Code defines “agricultural use” as those principal, accessory, and conditional uses and structures that are defined in the Agricultural Zoning Ordinance (Yolo County Code Sections 8-2.304 and 8-2.307). Agricultural and research facilities are listed as conditionally permitted uses in the Agricultural Intensive (A-N) Zone, and are defined as industrial or scientific uses subordinate to, and in support of agriculture, that include product processing plants and agriculturally based laboratories or facilities for the production or research of food, fiber, seeds, animal husbandry or medicine, and may include administrative office space in support of the operation.

According to the 2030 Countywide General Plan, lands designated as Agricultural (AG) include uses that specifically encourage agricultural research, processing and storage. Loss of a small percentage of the agricultural land to construct the project would not be required to mitigate under the County’s adopted Agricultural Conservation and Mitigation Program (Section 8-2.404 of the Yolo County Code), since the proposed use is a conditionally permitted use in the A-N zone. Although the proposed project would result in the conversion of approximately seven percent of active agricultural land, the rest of the property would remain in vegetable seed production. Furthermore, the research facility will be used for agricultural and seed research in order to support long-term seed production of high yielding crops with excellent performance. Impacts resulting in the conversion of prime farmland would be considered less than significant.

b) Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?

Less than Significant Impact. The proposed project is located on A-N (Agricultural Intensive) zoned property that is enrolled in the Williamson Act. The A-N zone is applied to those parcels designated as Agriculture by the 2030 Countywide General Plan that are best suited for intensive agricultural uses. These lands are typically dependent on higher quality soils, water availability, and relatively flat topography. The purpose of the A-N zone is to promote those uses, as well as activities compatible with agricultural uses, and includes allowing agriculturally-related support uses.

The project proposes to construct a research facility for warm-weather vegetable seeds, including an office, greenhouses, headhouse, mill/warehouse, a farm shop, dormitory, and future laboratory. The project will be constructed in phases, with the initial phase of construction to develop an 11,000-square foot office building for administrative functions; six 3,000-square foot greenhouses and a 6,090-square foot headhouse for initial seed preparation/development and equipment storage; a 20,000-square foot mill/warehouse for seed cleaning and storage; a 6,000-square foot farm shop to store field equipment and supplies; and a 2,200-square foot dormitory to temporarily house interns and researchers. Site amenities, such as covered parking and access, utilities, and wastewater treatment, will also be developed during the initial phase of construction. Future phases will provide for the possible expansion of the mill/warehouse (up to

100,000 square feet at build-out); the addition of a 6,000-square foot pathology lab for testing seed quality and pathogens; and the addition of office space (up to 35,000 square feet a build-out). According to the applicant, the seed research project will allow Sakata Seed to produce non-GMO seeds, for both organic and conventional vegetables, for distributors and growers.

The project is consistent with existing zoning because the Yolo County General Plan (and County zoning regulations that implement General Plan policies) consider agricultural and seed research facilities to be an agricultural use. The Yolo County Code defines "agricultural use" as those principal, accessory, and conditional uses and structures that are defined in the Agricultural Zoning Ordinance (Yolo County Code Sections 8-2.304 and 8-2.307). Agricultural and seed research facilities are listed as conditionally permitted uses in the Agricultural Intensive (A-N) Zone, and are defined as industrial or scientific uses subordinate to, and in support of agriculture, that include product processing plants and agriculturally based laboratories or facilities for the production or research of food, fiber, seeds, animal husbandry or medicine, and may include administrative office space in support of the operation.

The project proposes converting up to approximately 15± acres of the 203-acre property to develop an agricultural and seed research facility. The property, which has been enrolled in the Williamson Act since 1970, has been farmed in rotating crops for decades. According to the applicant, the project will support the viability of warm-weather vegetable seed production in a manner that is consistent with the Williamson Act because it will not significantly compromise or impair the long-term productive agricultural capability of the property, and will not result in the removal of any adjacent contracted land. A majority of the property, approximately 85 percent, will remain in active crop production to facilitate warm weather seed production and research for distributors and growers.

Although a small portion of the property, up to seven percent, will be removed from production to accommodate the construction of facilities, the research component supports and is dependent upon the continuation of agricultural operations at the project site. The project is not expected to conflict with zoning or the Williamson Act; impacts will be less than significant.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526)?; *and*

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The proposed seed research facility project would not conflict with existing zoning for, or cause rezoning of, or result in the loss or conversion of forest or timberland.

e) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use?

Less than Significant Impact. As identified in (a), above, the project site has been shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency as "Prime Farmland." The surrounding area has similarly been mapped. Most of the surrounding farmland is under active agricultural production, including orchards and rotating crops.

The project site will be located internal to the existing agricultural operations at the property, allowing the project applicant to coordinate project-related activities with existing agricultural operations. These changes to the approximately 203-acre farming property would occupy up to approximately 15± acres at build-out (up to 7 percent of the agriculturally-productive land) and are not expected to impact any adjacent farming operations. The project site is surrounded by other large agricultural parcels in active production, including row crops and tree crops. Parcels in proximity to the 203-acre parcel include very few rural residential uses. Thus, traffic in the

vicinity of the project is relatively low and is largely generated by agricultural production. County Road 100, between CR 17 and CR 15B, serves up to five separate farming entities, and the project is not expected to impact any of these existing operations. See discussion in (a), above. Impacts to agricultural resources would be considered less than significant.

III.	AIR QUALITY.	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Where applicable, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:					
a.	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d.	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e.	Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

Thresholds of Significance:

The project site is within the Yolo-Solano Air Quality Management District (YSAQMD), and the Sacramento Valley Air Basin regulates air quality conditions within Yolo County. Yolo County is classified as a non-attainment area for several air pollutants, including ozone (O_3) and particulate matter 10 microns or less in diameter (PM_{10}) for both federal and state standards, the partial non-attainment of the federal particulate matter 2.5 ($PM_{2.5}$), and is classified as a moderate maintenance area for carbon monoxide (CO) by the state.

Development projects are most likely to violate an air quality plan or standard, or contribute substantially to an existing or project air quality violation, through generation of vehicle trips.

For the evaluation of project-related air quality impacts, the YSAQMD recommends the use of the following thresholds of significance:

- Long-term Emissions of Criteria Air Pollutants (ROG, NO_X, and PM_{10})—The criteria air pollutants of primary concern include ozone-precursor pollutants (ROG and NO_X) and PM_{10}. Significance thresholds have been developed for project-generated emissions of reactive organic gases (ROG), nitrogen oxides (NO_X), and particulate matter of 10 microns or less (PM_{10}). Because $PM_{2.5}$ is a subset of $PM_{10,}$ a separate significance threshold has not be established for $PM_{2.5}$. Operational impacts associated with the proposed project would be considered significant if project-generated emissions would exceed YSAQMD-recommended significance thresholds, as identified below:

Table AQ-1 YSAQMD-Recommended Quantitative Thresholds of Significance for Criteria Air Pollutants	
Pollutant	**Threshold**
Reactive Organic Gases (ROG)	10 tons/year (approx. 55 lbs/day)
Oxides of Nitrogen (NO_X)	10 tons/year (approx. 55 lbs/day)
Particulate Matter (PM_{10})	80 lbs/day
Carbon Monoxide (CO)	Violation of State ambient air quality standard
Source: Handbook for Assessing and Mitigating Air Quality impacts (YSAQMD, 2007)	

- Emissions of Criteria Air Pollutants (ROG, NO_X, and PM_{10})—Construction impacts associated with the proposed project would be considered significant if project-generated emissions would exceed YSAQMD-recommended significance thresholds, as identified in Table AQ-1, and recommended control measures are not incorporated.

- Conflict with or Obstruct Implementation of Applicable Air Quality Plan— Projects resulting in the development of a new land use or a change in planned land use designation may result in a significant increase in vehicle miles traveled (VMT). Substantial increases in VMT, as well as, the installation of new area sources of emissions, may result in significant increases of criteria air pollutants that may conflict with the emissions inventories contained in regional air quality control plans. For this reason and given the region's non-attainment status for ozone and PM_{10}, project-generated emissions of ozone precursor pollutants (i.e., ROG and NO_x) or PM_{10} that would exceed the YSAQMD's recommended project-level significance thresholds, would also be considered to potentially conflict with or obstruct implementation of regional air quality attainment plans.

- Local Mobile-Source CO Concentrations—Local mobile source impacts associated with the proposed project would be considered significant if the project contributes to CO concentrations at receptor locations in excess of the CAAQS (i.e., 9.0 ppm for 8 hours or 20 ppm for 1 hour).

- Toxic Air Contaminants. Exposure to toxic air contaminants (TAC) would be considered significant if the probability of contracting cancer for the Maximally Exposed Individual (i.e., maximum individual risk) would exceed 10 in 1 million or would result in a Hazard Index greater than 1.

- Odors. Odor impacts associated with the proposed project would be considered significant if the project has the potential to frequently expose members of the public to objectionable odors.

DISCUSSION

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Impact. The seed research facility project would not substantially conflict with or obstruct implementation of the Yolo Solano Air Quality Management District Air Quality Attainment Plan (1992), the Sacramento Area Regional Ozone Attainment Plan (1994), or the goals and objectives of the Yolo County 2030 Countywide General Plan.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than Significant Impact. The Yolo-Solano Region is a non-attainment area for state particulate matter (PM_{10}) and ozone standards, the federal ozone standard, and the partial non-attainment of the federal particulate matter 2.5 ($PM_{2.5}$). Development of the seed research facility would not contribute significantly to air quality impacts, but could generate significant amounts of PM_{10} and $PM_{2.5,}$ during grading and construction activities to develop the project. To address the potential for short-term impacts related to grading and construction activities, standard dust and emissions control measures which are recommended by the Yolo Solano Air Quality Management District will be attached as Conditions of Approval to the Use Permit, and include the following best environmental practices:

To reduce tailpipe emissions from diesel-powered construction equipment, all applicable and feasible measures would be implemented, such as:

- Maximizing the use of diesel construction equipment that meet CARB's 2010 or newer certification standard for off-road heavy-duty diesel engines;
- Using emission control devices at least as effective as the original factory-installed equipment;
- Substituting gasoline-powered for diesel-powered equipment when feasible;
- Ensuring that all construction equipment is properly tuned and maintained prior to and for the duration of onsite operation; and
- Using Tier 4 engines in all construction equipment, if available. If Tier 4 engines are not available, then Tier 3 engines may be used.

To reduce construction fugitive dust emissions, the following dust control measures would be implemented:

- Water all active construction sites at least twice daily in dry conditions, with the frequency of watering based on the type of operation, soil, and wind exposure;
- Effectively stabilize dust emissions by using water or other approved substances on all disturbed areas, including storage piles, which are not being actively utilized for construction purposes;
- Prohibit all grading activities during periods of high wind (over 20 miles per hour);
- Limit onsite vehicle speeds on unpaved roads to 15 miles per hour;
- Cover all trucks hauling dirt, sand, or loose materials;
- Cover inactive storage piles;
- Post a publicly visible sign with the telephone number and person to contact regarding dust complaints; and
- Limit the area under construction at any one time

Additionally, the project proposes to pave access roads and parking areas, thereby further limiting fugitive dust. Impacts to air quality will be less than significant.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less than Significant Impact. Development projects are considered cumulatively significant by the YSAQMD if: (1) the project requires a change in the existing land use designation (i.e., general plan amendment, rezone); and (2) projected emissions (ROG, NOx, or PM_{10} and $PM_{2.5}$) of the project are greater than the emissions anticipated for the site if developed under the existing land use designation. The project is a seed research facility that will include construction of a 35,000-square foot office building (at full build-out), several 3,000-square foot greenhouses, a 6,090-square foot headhouse, a 100,000-square foot mill/warehouse (at full build-out), a 4,000-square foot washery, a 6,000-square foot farm shop, a 2,200-square foot dormitory, and a possible future 6,000-square foot pathology lab. Additional project amenities include paved access roads and covered parking, an onsite wastewater treatment system, and storm water drainage, as necessary. The project would not result in significant projected emissions. Agricultural and seed research facilities are conditionally permitted uses in the agricultural zones.

The project is proposed to be constructed in phases with initial construction to include an 11,000-square foot office building, six greenhouses and the headhouse, the access roads and covered parking areas, a 20,000-square foot mill/warehouse and adjacent washery, the farm shop, and dormitory. Future phase construction will include the additional square footage for the office/administrative building and the mill/warehouse, as well as the laboratory. The project site is relatively flat, and the site will be minimally graded as necessary to accommodate the proposed development.

Temporary project construction emissions could contribute to levels that exceed State ambient air quality standards on a cumulative basis, contributing to existing nonattainment conditions, when considered along with other construction projects. However, the project is located in a rural area that largely supports ongoing agricultural activities, including daily farming operations and seasonal harvesting activities. Construction of the site for initial phased development is expected to occur over a nine-month period.

By implementing the above Conditions of Approval identified in (b), potential for construction-related emissions for the proposed project would result in less than significant levels. Short-term air quality impacts would be generated by truck trips during construction activities.

Long-term mobile source emissions from the anticipated seed research facility would also not exceed thresholds established by the Yolo-Solano Air Quality Management District Handbook (2007) and would not be cumulatively considerable for any non-attainment pollutant from the project. Milling season (up to four months) is anticipated to generate up to six truck trips per day, and the remainder of the year will include up to two truck trips per day for shipping clean seed for sales and supplying field production sites. According to the applicant, truck traffic generated from future phases would not exceed six trips per day. (Traffic generation assumptions include round-trips, i.e., to and from the site.)

Project vehicle trips would also be associated with employees accessing the facility, which may include up to 35 full-time employees and 17 seasonal employees at full project build-out, as well as up to eight interns and/or researchers temporarily staying at the site. Daily hours of operation will be from 7:00 am to 6:00 pm Monday through Friday. Traffic generated by implementation of the project at full build-out is thus estimated at approximately 41 daily vehicle trips to and from the site, and up to 62 daily round trips during seasonal work and/or during temporary use of the dormitory. This traffic would create air emissions that are lower than the significance thresholds set by the YSAQMD.

Stationary source emissions will be reduced with the installation of a dust collection system in the warehouse to remove airborne particulates created by seed sizing and cleaning during the drying, sizing, and seed storage operations.

Although the proposed project will increase daily use of the project site, it would not create a cumulatively considerable net increase of any criteria pollutants.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. The proposed project is located in an agricultural area in unincorporated Yolo County, approximately three miles north of the City of Woodland, with relatively few sensitive receptors within proximity to the project site. ("Sensitive receptors" refer to those segments of the population most susceptible to poor air quality, i.e. children, elderly, and the sick, and to certain at-risk sensitive land uses such as schools, hospitals, parks, or residential communities.) The closest residences are located approximately 3,200 feet southwest and 4,200 feet northwest of the project site. Existing agricultural operations at the site and in the surrounding vicinity include typical farming operations, such as harvest and planting activities, etc.

The project could have the potential to expose nearby receptors to minimal pollutant concentrations from construction equipment and truck trips. However, dust will be controlled through effective management practices, such as water spraying during construction activity. Thus, short term air quality impacts due to construction activities to implement the project would not have an adverse impact on rural homes in the area and the proposed project will not expose sensitive receptors to pollutant concentrations in excess of standards.

Milling and warehousing activities associated with implementation of the project would be conducted within an enclosed building and at a considerable distance from the closest rural residences. These agricultural operations would have a less than significant impact on air pollutant concentrations, particularly with the installation of a dust collection system within the mill/warehouse. Other long-term impacts would be from vehicles, including employee vehicle and truck trips accessing the site for daily operations, as well as seasonal operations from four to eight months out of the year.

Construction activities to develop the seed research facility will be required to control dust through effective management practices. As a condition of project approval, the following list of best management practices will be required to control dust:

- All construction areas shall be watered as needed.
- All trucks hauling soil, sand, or other loose materials shall be covered or required to maintain at least two feet of freeboard.
- Unpaved access roads, parking areas, and staging areas shall be paved, watered, or treated with a non-toxic soil stabilizer, as needed.
- Exposed stockpiles shall be covered, watered, or treated with a non-toxic soil stabilizer, as needed.
- Traffic speeds on unpaved access roads shall be limited to 15 miles per hour.
- Any visible soil material that is carried onto adjacent public streets shall be swept with water sweepers, as needed.

Air quality impacts to sensitive and other nearby receptors are expected to be less than significant.

e) Create objectionable odors affecting a substantial number of people?

No Impact. The proposed seed research facility is not expected to generate objectionable odors.

IV.	BIOLOGICAL RESOURCES.	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:					
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f.	Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The project site occurs within an intensively-farmed agricultural landscape dominated by orchards and rotating crops. Natural habitats are limited to roadside trees and a small remnant valley oak grove located south of the project site.

DISCUSSION

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant with Mitigation Incorporated. The site of the proposed seed research facility is located in a relatively flat, predominantly agricultural area of northern unincorporated Woodland. The property is separated from adjacent farming activities by County Road 100 at its western border. The 203-acre property is planted in rotating crops, most recently tomatoes, and includes portions of a remnant valley oak grove at its southern boundary (approximately 2,900 feet south of the proposed project site), along the north side of County Road 17. The property is

adjacent to other large agricultural parcels that are in active production, including orchards and other intensive farming such as row crops. Approximately seven percent (up to 15 acres) of the farmland will be converted to develop the project; however, the majority of the property will remain in agricultural production for the development and research of warm weather vegetable seed crops.

The proposal includes the phased construction of an approximately 11,000-square foot office building (up to 35,000 square feet at full build-out) that will be used for the administration of the Sakata Seed properties, as well as an approximately 20,000-square foot mill/warehouse facility (up to 100,000 square feet at project build-out) for seed cleaning and storage. Other project amenities include a 6,090-square foot farm shop to store field equipment and supplies, a 4,000-square foot washery for seed cleaning, several 3,000-square foot greenhouses for the development of vegetable seed crops and a 6,090-square foot headhouse for storing equipment necessary to run the greenhouses, a 2,200-square foot four-bedroom dormitory for the temporary lodging of interns and researchers, covered parking and paved access areas, and a possible future 6,000-square foot pathology lab for seed testing.

According to the Yolo Habitat Conservancy (YCH) and Jim Estep, Estep Environmental Consulting, there are several documented Swainson's hawk nest sites within one mile of the proposed project site. In addition to nesting raptor habitat, there is also suitable habitat for six species of concern within one mile of the project site, three of which have suitable habitat within the project site's parcel boundaries. This information has also been confirmed by referencing the California Natural Diversity Data Base. The three species include the Swainson's hawk, a California threatened species, the Tricolored blackbird, a California species of special concern, and the White-tailed kite, a fully protected species. The Burrowing owl, a California species of special concern, the Giant garter snake, a federally and California threatened species, and the Western pond turtle, a California species of special concern, have been identified as having habitat within one mile, but outside of the project's parcel boundaries. Aside from the remnant valley oak grove, no plant species of concern have been identified to be within 10 miles of the project site, likely due to ongoing intensive farming activities.

Swainson's Hawk. The Swainson's hawk (*Buteo swainsoni*) is a medium-sized raptor associated with generally flat, open landscapes. In the Central Valley it nests in mature native and nonnative trees and forages in grassland and agricultural habitats. Although a state-threatened species, the Swainson's hawk is relatively common in Yolo County due to the availability of nest trees and the agricultural crop patterns that are compatible with Swainson's hawk foraging. Numerous nest sites have been documented in Yolo County, but relatively few in the far western portion of the valley (Estep 2008).

The state-threatened Swainson's hawk is known to occur in the vicinity of the project and known to forage in the agricultural fields surrounding the project site. There are also quite a few nesting pairs in the immediate area (e-mail correspondence with Jim Estep, March 2017). The project site is considered suitable foraging habitat for this species. The project would therefore be subject to the County's Swainson's hawk mitigation fee to mitigate the loss of foraging habitat. Additionally, if Swainson's hawk nests occur within the vicinity of the project area, construction disturbance during the breeding season could result in the loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Thus, the proposed project would also be required to identify the locations of any nest sites within one-quarter to one-half mile of the construction site to address potential impacts to nesting pairs.

White-tailed kite. The white-tailed kite (*Elanus leucurus*) is a highly specialized and distinctively-marked raptor associated with open grassland and seasonal wetland landscapes. It typically nests in riparian forests, woodlands, woodlots, and occasionally in isolated trees, primarily willow, valley oak, cottonwood, and walnut) and some nonnative trees. It forages in grassland, seasonal wetland, and agricultural lands, but is more limited in its use of cultivated

habitats compared with the Swainson's hawk. As a result, the species occurs throughout most of Yolo County, but in low breeding densities (Dunk 1995, Erichsen 1995, Estep 2008).

There are no documented nest sites within or within proximity to the project site, but similar to the Swainson's hawk, the agricultural land is considered suitable foraging habitat for this species. Loss of foraging habitat for this species would be sufficiently addressed through the Swainson's hawk mitigation fee program. The proposed project would have no impact to potential nesting sites.

Tricolored Blackbird. Although currently designated as a state species of special concern, the legal status of the tricolored blackbird has recently been under review by the CDFW and the USFWS. The species was emergency listed as endangered under the state endangered species act in December 2014, which expired in December 2015. The species is currently under review for a permanent state listing. The species is also currently under review by the USFWS following a 90-day finding that formal federal listing may be warranted.

The tricolored blackbird nests in colonies from several dozen to several thousand breeding pairs. The primary concern for the tricolored blackbird is the potential for human activity disturbances to occur near their breeding colonies.

There is no potential tricolored blackbird breeding habitat in the immediate vicinity of the project site, and there is no reported breeding habitat within one mile of the site. The agricultural land represents suitable foraging habitat for this species, but the disturbance to area will not affect any breeding colony or tricolored blackbird foraging use of the area.

Western Pond Turtle. Western pond turtles (*Actinemys marmorata*) are closely associated with permanent water bodies, such as lakes, ponds, slow moving streams, and irrigation canals that include downed logs or rocks basking sites, and that support sufficient aquatic prey. Western pond turtles also require upland habitat that is suitable for building nests and to overwinter. Nests are constructed in sandy banks immediately adjacent to aquatic habitat or if necessary, females will climb hillsides and sometimes move considerable distances to find suitable nest sites (Jennings and Hayes 1994).

There are no water bodies, streams, or suitable conveyance channels (e.g., permanent water) at the project site, and therefore no potential for this species to occur onsite.

Burrowing Owl. The western burrowing owl (*Athene cunicularia*) occurs in open, dry grasslands, agricultural and range lands, and desert habitats. In the Central Valley, they are associated with remaining grassland habitats, pasturelands, and edges of agricultural fields. They also occur in vacant lots and remnant grassland or ruderal habitats within urbanizing areas. Historically nesting in larger colonies, due to limited nesting habitat availability, most of the more recent occurrences are individual nesting pairs or several loosely associated nesting pairs. The burrowing owl is a subterranean-nesting species, typically occupying the burrows created by California ground squirrels (*Otospermophilus beecheyi*). They also occupy artificial habitats, such as those created by rock piles and occasionally in open pipes and small culverts. They forage for small rodents and insects in grassland and some agricultural habitats with low vegetative height. Key to burrowing owl occupancy is grassland or ruderal conditions that maintain very short vegetative height around potential nesting sites. They will generally avoid otherwise suitable grassland habitats if vegetation exceeds 12 inches in height (Gervais et al. 2008).

In Yolo County, the majority of burrowing owl occurrences are from the grassland and pasture habitats of the southern panhandle and in cultivated and ruderal habitats in the Davis area. Nesting and wintering occurrences have also been reported from the area immediately north of Winters and elsewhere and along the grassland foothills on the west side of the valley, and in the southern Dunnigan Hills. Isolated occurrences have also been reported from cultivated lands

in the interior of the county.

The state species of special concern western burrowing owl is not known to occur in the immediate vicinity of the project, and the site does not provide suitable habitat for this species.

Giant Garter Snake. Giant garter snakes ***(Thamnophis gigas)*** are listed as threatened under the Federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA). They are the largest species of garter snake. Dull yellow striping, wide head and commonly distinguishes GGS from other common species of garter snake. GGSs are found in the wetlands of the Sacramento and San Joaquin Valleys from Chico, Butte County to Mendota Wildlife Area, Fresno County. Suitable habitat includes marshes, sloughs, back waters of rivers, irrigation canals, drainage canals, agricultural wetlands, flooded rice fields and occasionally streams with low gradient and slow to stagnant waters. GGSs breed from March to April and females give birth to live young from July to early September. Current threats facing the GGS is urbanization, flood control and canal maintenance, grazing and agricultural practices, wetland management for water fowl, invasive species and natural gas exploration (USFWS 2012).

This federally listed species is unlikely to occur in the vicinity of the project due to the lack of aquatic habitat. The project site and immediate vicinity do not support water conveyance channels or other aquatic habitats and therefore the potential for giant garter snake to be found at the site is very low.

Loss of Habitat

Potential Impacts

The project will remove up to 15± acres of farmland at full build-out and convert the area to planned facilities with associated paved access, drives, and parking. The remaining farmland will remain in agricultural production of vegetable seed crops. Due to the value provided by the farm field, the 15-acre loss is considered a potential biologically significant loss of habitat, particularly to the Swainson's hawk and other foraging raptors and birds. No other habitats and no trees will be removed or otherwise affected. The components of the project must comply with the Yolo County General Plan Policies related to biological resources, as well as state and federal guidelines for avoidance of special-status species. The proposed project will therefore be subject to mitigation to reduce the potential for significant impacts to biological resources to less than significant levels.

The County requires projects that would impact Swainson's hawk foraging habitat to mitigate for such loss in accordance with General Plan Policy CO-2.42. As identified below, the project will be conditioned to require the following mitigation in order to address potential impacts to special status species.

> **Mitigation Measure BIO-1**
> Prior to issuance of any grading or building permits, the applicant will be required to mitigate for the permanent loss of Swainson's hawk foraging habitat, which may be satisfied by payment of an in-lieu fee, the purchase of credits from an approved mitigation bank or mitigation receiving site, dedication of conservation easements either onsite or offsite, or other arrangements satisfactory to the County that ensure permanent 1:1 conservation of high-quality foraging habitat for the Swainson's hawk.
>
> If the project is implemented in phases, construction documentation shall be made available at grading or building permit submittal, with a calculated area of total project disturbance. Any future phase construction that disturbs additional habitat outside the previously developed project area shall also be subject to 1:1 mitigation requirements.

Mitigation Measure BIO-2

Project construction activities shall be initiated outside of the Swainson's hawk nesting season (March 1 – September 15). If project activities cannot be initiated outside of the Swainson's hawk nesting season then the following shall occur: A qualified biologist will be required to conduct a Swainson's hawk pre-construction survey within 7 days of starting vegetation removal or initial ground disturbing activities, whichever activity occurs first. If an active Swainson's hawk nest (i.e. with egg(s) or young) is observed within one-half mile from scheduled project activities during the pre-construction survey, then a species protection buffer will be established as defined by the qualified biologist in consultation with CDFW. Construction activity shall be prohibited within the buffer zone(s) until the young have fledged or the nest fails. Construction will be permitted if a qualified biologist or CDFW determine that project activities are not disturbing the nest(s). Nests shall be monitored once per week and a report submitted to the County weekly. Monitoring would only be required if the Swainson's hawk nest is within the buffer and continued until the young have fledged.

Significance After Mitigation

Implementation of MM BIO-1 and MM BIO-2 adequately addresses the loss of suitable foraging habitat for the Swainson's hawk and other foraging raptors and birds, including the white-tailed kite and tri-colored blackbird, and nesting habitat for the Swainson's hawk. With mitigation, impacts to special status species would be considered less than significant.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less than Significant Impact. The project is not located within proximity to any riparian habitat, but is within proximity (approximately 2,900 feet away) to a remnant valley oak grove, which has been described as enhancing the overall value of the agricultural landscape in the 2030 Countywide General Plan (Yolo County 2009). Conservation policies in the General Plan require preservation of those biological communities that contribute to the County's rich biodiversity, including remnant valley oak groves and roadside tree rows.

The project proposes use of up to approximately 15 acres of the cultivated property (approximately seven percent of active agricultural production) to develop a seed research facility for developing and producing warm weather vegetable seed crops. The project site is approximately 2,900 feet away from a portion of the remnant valley oak grove that is located south of the project proposal, and project activities, including construction, are not expected to disturb the grove; no trees are slated for removal to implement the project. Impacts to natural communities will be less than significant.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. The project is not located within proximity to any wetlands, nor will the project impact any wetlands in the region.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. The project is located on a parcel where the majority of the land is planted in rotating crops, which includes daily farming operations and seasonal harvest activity. The property has been farmed for decades. Project implementation will primarily occur within an approximately 15-acre (seven percent of the 203-acre parcel) developed footprint. The project is not expected to interfere with the movement of any wildlife species nor impede a wildlife nursery site.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant Impact. See discussion in (b), above, that addresses conservation policies to protect biological communities of local importance. The proposed project would not conflict with any other local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. The County does not have any other conservation ordinances, except for a voluntary oak tree preservation ordinance that seeks to minimize damage and require replacement when oak groves are affected by development. There are no proposed oak tree removals to accommodate the project, including removal of any roadside tree rows or trees within the southern remnant valley oak grove. Impacts to biological resources will be less than significant.

f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The Yolo Habitat Conservancy, a Joint Powers Agency composed of the County, the cities, and other entities, is in the process of preparing a Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP) for Yolo County. The NCCP/HCP will focus on protecting habitat of terrestrial (land, non-fish) species. Through implementation of the project's Mitigation Measures outlined above, conflicts with the developing NCCP/HCP are not anticipated, as potential impacts to raptor foraging habitat and nests, including the Swainson's hawk, have been addressed.

V.	CULTURAL RESOURCES.	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:					
a.	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☐	☒
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d.	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

No Impact. The project site, which is currently undeveloped and utilized for agricultural cultivation, is not recognized as an historical resource. The 203-acre parcel currently contains two agricultural wells used for irrigation purposes and one active natural gas well, approved in 2003, located at the northeastern portion of the property (not a part of the proposed project footprint). The project will not cause an adverse change in the significance of an historical resource.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less than Significant with Mitigation Incorporated. The majority of the 203-acre parcel is currently planted to rotating crops (most recently in tomatoes). The adjacent 15-acre parcel located on the south side of County Road 17, containing a portion of the remnant valley oak grove, is owned by the applicant but is not a part of the proposed project development. The project site is within the aboriginal territories of the Yocha Dehe Wintun Nation who has a cultural interest and authority in the project area. In a letter dated January 10, 2017, Yocha Dehe Cultural Resources indicated a concern that the project could impact undiscovered archaeological deposits and requested a site visit including cultural monitors during project development or ground disturbance, including backhoe trenching and excavations. To date, a site visit has not been conducted by Yocha Dehe, though an invitation to tour the site has been extended.

Conservation policies in the Countywide General Plan require that projects avoid or mitigate to the maximum extent feasible the impacts of development on Native American archaeological and cultural resources. Thus, in order to address the potential for disturbing undiscovered resources and to meet the needs of the Yocha Dehe Wintun Nation, the project will be subject to mitigation that is incorporated into the project's Conditions of Approval, as outlined below.

Mitigation Measure CUL-1

Prior to starting any ground disturbing activities, such as land clearing, grading, and trenching or excavation, the Yocha Dehe Wintun Nation shall be notified and, in consultation with their designated monitors, the site shall be evaluated for cultural significance.

Should subsurface cultural resources be encountered during any project construction phase while tribal monitors are not present (including grading, trenching or excavation, and land clearing activities), construction shall be halted until a professional archaeologist can be consulted and the Yocha Dehe Wintun Nation shall be notified, and, in consultation with their designated monitors, the site shall be evaluated for cultural significance and to determine proper disposition of any artifacts or culturally sensitive resources.

Significance After Mitigation
Implementation of MM CUL-1 adequately addresses the protection of cultural resources, including sacred sites and previously undiscovered resources. With mitigation, impacts to archaeological resources would be considered less than significant.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant Impact. See discussion in (b), above. Project construction and implementation are not expected to affect any paleontological resources known or suspected to occur on the project site.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant Impact. No human remains are known or predicted to exist in the project area. However, the potential exists during construction to uncover previously unidentified resources. Section 7050.5 of the California Health and Safety Code states that when human remains are discovered, no further site disturbance shall occur until the County coroner has determined that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendation concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, in the manner provided in Section 5097.98 of the Public Resources Code. If the coroner determines that the remains are not subject to his or her authority and the remains are recognized to be those of a Native American, the coroner shall contact the Native American Heritage Commission within 24 hours.

VI.	GEOLOGY AND SOILS.	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:					
a.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☒
	1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
	2. Strong seismic groundshaking?				
	3. Seismic-related ground failure, including liquefaction?				
	4. Landslides?				
b.	Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c.	Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	☒
d.	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

GEOLOGICAL SETTING

According to the 2030 Countywide General Plan, the only fault in Yolo County that has been identified by the California Division of Mines and Geology (1997) to be subject to surface rupture (within an Alquist-Priolo Earthquake Fault Zone) is the Hunting Creek Fault, which is partly located in a sparsely inhabited area of the extreme northwest corner of the County. Most of the fault extends through Lake and Napa Counties. The other potentially active faults in the County are the Dunnigan Hills Fault, which extends west of I-5 between Dunnigan and northwest of Yolo, and the newly identified West Valley and East Valley Faults (Fault Activity Map of California, California Geological Survey, 2010), which are also not in the vicinity of the proposed project. These faults are not within an Alquist-Priolo Earthquake Fault Zone, and are therefore not subject to surface rupture.

DISCUSSION

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture or a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist

for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42).

No Impact. The project is not located within an Alquist-Priolo Earthquake Special Study Zone. No landforms are known to be on the project site that would indicate the presence of active faults. Several earthquake fault zones are present within the County, and the above-identified faults are within regional proximity, albeit remote, of the project site. However, surface ground rupture along faults is generally limited to a linear zone a few yards wide. Because the project site is not located within an Alquist-Priolo Earthquake Special Study Zone, ground rupture that would expose people or structures at the facility to substantial adverse effects is unlikely to result in any significant impacts.

ii) Strong seismic ground shaking?

No Impact. Ground shaking occurs as a result of energy released during faulting, which could potentially result in the damage or collapse of buildings and other structures, depending on the magnitude of the earthquake, the location of the epicenter, and the character and duration of the ground motion. Any major earthquake damage on the project site is likely to occur from ground shaking, and seismically related ground and structural failures. Local soil conditions, such as soil strength, thickness, density, water content, and firmness of underlying brock affect seismic response. Although known active seismic sources are located within regional proximity to the project site, damage from seismically induced shaking during a major event should be no more severe in the project area than elsewhere in the region. Any proposed construction would be required to be built in accordance with Uniform Building Code requirements, and will be generally flexible enough to sustain only minor structural damage from ground shaking. Therefore, people and structures would not be exposed to potential substantial adverse effects involving strong seismic ground shaking.

iii) Seismic-related ground failure, including liquefaction?

No Impact. Soil liquefaction occurs when ground shaking from an earthquake causes a sediment layer saturated with groundwater to lose strength and take on the characteristics of a fluid. Factors determining the liquefaction potential are the level and duration of seismic ground motions, the type and consistency of soils, and the depth to groundwater. Liquefaction poses a hazard to engineered structures, as the loss of soil strength can result in bearing capacity insufficient to support foundation loads. The project includes construction of new facilities, as well as other development, and is therefore required to comply with all applicable Uniform Building Code and County Improvement Standards requirements to ensure that risks from ground failure are minimized.

iv) Landslides?

No Impact. A landslide involves the downslope transport of soil, rock, and sometimes vegetative material *en masse*, primarily under the influence of gravity. Landslides occur when shear stress (primarily weight) exceeds shear strength of the soil/rock. The shear strength of the soil/rock may be reduced during high rainfall periods when materials become saturated. Landslides also may be induced by ground shaking from earthquakes.

The project site is relatively flat and is in an area of low landslide susceptibility due to the slope class and material strength. Development of the project will be required to comply with all applicable Uniform Building Code and County Improvement Standards. Large landslides are unlikely to occur at the project site, particularly with enough force and

material to expose people or structures on the project site to potentially substantial adverse effects, including the risk of loss, injury, or death.

b) Result in substantial soil erosion or the loss of topsoil?

No Impact. The land surface at the project site is relatively flat and will require minimal grading to develop the facilities. Grading activities at the site will require permitting to address erosion and hydrology; however, the project is not expected to lose topsoil. Substantial soil erosion or loss of topsoil is unlikely to occur.

Construction proposed by the project will be subject to a grading permit that requires implementation of best management practices to minimize any adverse effects, and a Storm Water Pollution Prevention Plan is required for disturbance of one acre or more. These existing requirements for erosion control, stability of building sites, including building code compliance, would remain in effect for all phases of project implementation. The proposed seed research facility project would not be expected to result in significant impacts related to erosion.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

No Impact. The project site is not located in an area of unstable geologic materials, and the project is not expected to significantly affect the stability of the underlying materials, which could potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. The project proposes agricultural seed research, including development of seed crops, washing, sorting, storing, and distribution, but is not expected to subject people to landslides or liquefaction or other cyclic strength degradation during a seismic event. Landslides and lateral spreading occurrences in Yolo County are typically more prevalent in the Capay Valley along Cache Creek. The project is approximately 1.3 miles north of Cache Creek.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?

No Impact. The existence of substantial areas of expansive and/or corrosive soils has not been documented at the project site. The seed research facility project proposes new development, and all construction to implement the project will be required to be built in accordance with Uniform Building Code requirements. A geotechnical report, along with soil samples, may be required as part of the building permit process. Risks to life and property from project development on expansive soils would not be considered significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The proposed seed research facility project will be served by an onsite septic system. As required by Yolo County Environmental Health, the project will be conditioned to require an approved Site Evaluation Report from Yolo County Environmental Health for onsite sewage disposal prior to project implementation. Additionally, prior to any building permit issuance, a sewage disposal site plan/evaluation report must be reviewed for adequate soil permeability, depth to shallow groundwater, depth of restrictive soils, structures' footprint area, drainage courses, contours, and other necessary criteria for approval. These required Environmental Health regulations will be adopted as standard Conditions of Approval to ensure impacts are not significant.

VII.	GREENHOUSE GAS EMISSIONS/CLIMATE CHANGE.	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:					
a.	Generate greenhouse gas emissions either directly or indirectly, that may have a significant impact on the environment.	☐	☐	☒	☐
b.	Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.	☐	☐	☐	☒
c.	Be affected by climate change impacts, e.g., sea level rise, increased wildfire dangers, diminishing snow pack and water supplies, etc.?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The issue of combating climate change and reducing greenhouse gas emissions (GHG) has been the subject of state legislation (AB 32 and SB 375). The Governor's Office of Planning and Research has adopted changes to the California Environmental Quality Act (CEQA) Guidelines, and the environmental checklist which is used for Initial Studies such as this one. The changes to the checklist, which were approved in 2010, are incorporated above in the two questions related to a project's GHG impacts. A third question has been added by Yolo County to consider potential impacts related to climate change's effect on individual projects, such as sea level rise and increased wildfire dangers.

Yolo County has adopted General Plan policies and a Climate Action Plan (CAP) which addresses these issues. In order to demonstrate project-level compliance with CEQA relevant to GHG emissions and climate change impacts, applications for discretionary projects must demonstrate consistency with the General Plan and CAP. The adopted 2030 Yolo Countywide General Plan contains the following relevant policies and actions:

Policy CO-8.2: Use the development review process to achieve measurable reductions in greenhouse gas emissions.

Action CO-A117: Pursuant to the adopted Climate Action Plan (CAP), the County shall take all feasible measures to reduce its total carbon dioxide equivalent (CO2e) emissions within the unincorporated area (excluding those of other jurisdictions, e.g., UC-Davis, Yocha Dehe Wintun Nation, DQ University, school districts, special districts, reclamation districts, etc.), from 648,252 metric tons (MT) of CO2e in 2008 to 613,651 MT of CO2e by 2020. In addition, the County shall strive to further reduce total CO2e emissions within the unincorporated area to 447,965 MT by 2030. These reductions shall be achieved through the measures and actions provided for in the adopted CAP, including those measures that address the need to adapt to climate change. (Implements Policy CO-8.1)

Action CO-A118: Pursuant to and based on the CAP, the following thresholds shall be used for determining the significance of GHG emissions and climate change impacts associated with future projects:

> 1) Impacts associated with GHG emissions from projects that are consistent with the General Plan and otherwise exempt from CEQA are determined to be less than significant and further CEQA analysis for this area of impact is not required.

2) Impacts associated with GHG emissions from projects that are consistent with the General Plan, fall within the assumptions of the General Plan EIR, consistent with the CAP, and not exempt from CEQA are determined to be less than significant or mitigated to a less than significant level, and further CEQA analysis for this area of impact is generally not required.

To be determined consistent with the CAP, a project must demonstrate that it is included in the growth projections upon which the CAP modeling is based, and that it incorporates applicable strategies and measures from the CAP as binding and enforceable components of the project.

3) Impacts associated with GHG emissions from projects that are not consistent with the General Plan, do not fall within the assumptions of the General Plan EIR, and/or are not consistent with the CAP, and are subject to CEQA review are rebuttably presumed to be significant and further CEQA analysis is required. The applicant must demonstrate to the County's satisfaction how the project will achieve its fair share of the established targets including:

- Use of alternative design components and/or operational protocols to achieve the required GHG reductions; and

- Use of real, additional, permanent, verifiable and enforceable offsets to achieve required GHG reductions. To the greatest feasible extent, offsets shall be: locally based, project relevant, and consistent with other long term goals of the County.

The project must also be able to demonstrate that it would not substantially interfere with implementation of CAP strategies, measures, or actions. (Implements Policy CO-8.5)

DISCUSSION

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact. The proposed seed research facility project is consistent with the Countywide General Plan as it contains allowed and conditionally permitted uses within the agricultural zoning districts, including the Agricultural Intensive (A-N) Zone, which implements policies in the General Plan. Likewise, the project is consistent with the growth projections assumed in the General Plan EIR, since growth of agricultural research uses are projected in the agricultural and rural areas of the County. The project could create GHG emissions due to vehicle trips generated during construction of the project. However, project development will be phased with initial site preparation for placing a farm shop for equipment storage, a seed washery, and greenhouses to accommodate the upcoming seed growing season; subsequent phases will include installation of a headhouse, with 2018 construction including the development of administrative offices and a mill/warehouse. Emissions from phased construction would be of a temporary nature and thus are not expected to have a significant permanent impact.

Long-term GHG impacts from the anticipated seed research facility would be caused by truck trips up to six times per day (to and from the facility) at full build-out and vehicle traffic generated from employees, which includes up to 35 full-time and 17 seasonal employees at full build-out. Some of the employee traffic generated by the proposed seed research facility includes up to 10 employees currently working at the Sakata Seed research facility located approximately one mile north of the site. Project traffic is estimated at approximately 41 roundtrip vehicle trips per day and up to 62 roundtrips during seasonal work and/or during temporary use of the dormitory. See

traffic generation information in Sections III Air Quality and XVI Traffic. This traffic assumption does not include existing traffic generated at the site for ongoing agricultural operations, including associated harvest and planting activities.

The project's design features propose use of covered solar parking and LEED architectural elements to minimize energy use. The applicant anticipates LEED certification at either the Gold or Silver level. Building considerations will thus meet many of the 2030 Countywide General Plan policies that support use of green building design in new development.

The proposed project is not considered to have an individually significant or cumulatively considerable impact on global climate change.

b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact. The proposed seed research facility project would not conflict with any applicable plan, policy or regulation adopted to reduce GHG emissions, including the numerous policies of the adopted 2030 Yolo Countywide General Plan and Climate Action Plan. As identified in (a), above, the project proposes using green architecture, including solar panels over covered parking and LEED certification, to minimize energy use by incorporating sustainable design features. The project thus implements several policies in the General Plan that support the reduction of greenhouse gas emissions.

c) Be affected by climate change impacts, e.g., sea level rise, increased wildfire dangers, diminishing snow pack and water supplies, etc.?

No Impact. The project is not located in an area of risk for fire or sea level rise. No impacts are expected due to climate change.

VIII.	HAZARDS AND HAZARDOUS MATERIALS.	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:					
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h.	Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

DISCUSSION

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? *and*

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact. Construction of the proposed project could require the transport, storage, use, handling and disposal of different types of hazardous substances including fuel, oil, lubricants, and solvents. Operation of the project itself, however, would not include significant storage or handling of hazardous materials, other than typical use of forklifts and storage of propane. The transport, use, and disposal of any construction and/or operations related to hazardous materials, such as forklifts and propane storage, will be stored and handled in

accordance with all applicable federal, state, and local requirements, including Yolo County Environmental Health Division regulations, which require submittal of a Hazardous Materials/Waste Application Package (Business Plan), as applicable. Hazardous impacts to the public or environment would be considered less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The project site is not located within one-quarter mile of an existing or proposed school.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The project will not be located on a site that has been included on a list of hazardous materials sites.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The project site is not located within an airport land use plan, is not within the vicinity of a public airport, and would not result in a safety hazard for people residing or working in the project area. There would be no safety hazard related to public airports that would endanger people residing or working in the project area.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. There are several agricultural and private landing strips for airplanes located throughout the County, although the project site is not located within the immediate vicinity of a private airstrip. There would be no safety hazard related to private airstrips that would endanger people residing or working in the project area.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. The location of the seed research facility would not affect any adopted emergency response plan or emergency evacuation plan. The project site is located in a sparsely populated rural area of the County with adequate access off County Road 100, a 30-foot wide, two-lane paved local roadway in relatively good repair. The project site is easily accessed from State Route 113 and/or County Road 17 and County Road 15B. Impacts will be less than significant.

h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. The project site is not located in a designated Fire Hazard Severity Zone, and is furthermore located in an area rich in vegetation and surrounded by irrigated farmland.

IX.	HYDROLOGY AND WATER QUALITY.	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:					
a.	Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on-site or off-site?	☐	☐	☒	☐
d.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site?	☐	☐	☒	☐
e.	Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f.	Otherwise substantially degrade water quality?	☐	☐	☒	☐
g.	Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☒	☐
h.	Place within a 100-year flood hazard area structures that would impede or redirect floodflows?	☐	☐	☒	☐
i.	Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j.	Contribute to inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

DISCUSSION

a) Violate any water quality standards or waste discharge requirements?

Less than Significant Impact. The project proposes construction of a domestic well and onsite wastewater treatment system that will be required to meet construction requirements and standards through the implementation of the project's adopted Conditions of Approval. Yolo County Environmental Health standards and requirements include the review and approval of a sewage disposal site plan/evaluation report, as well as a water source plan, prior to implementation of an approved project. See, also, discussion in (c), (d), below, regarding use of best management practices and other required measures to prevent project storm water pollution. Section XVII(a) (Utilities and Service Systems) addresses project requirements for proper onsite sewage disposal and a public water system.

Process wastewater from the seed washery is subject to the regulatory authority of the Regional Water Quality Control Board and the project may qualify for coverage under a Conditional Waiver of Waste Discharge Requirements for Small Food Processors, Small Wineries and Related Agricultural Processors within the Central Valley Region, Order R5-2015-0005 (CVRWQCB agency response letter dated November 22, 2016). Thus, as a standard Condition of Approval, the applicant will be required to comply with Waste Discharge Requirements (WDRs) of the Central Valley Regional Water Quality Control Board. Water quality standards and waste discharge requirements are not expected to be violated.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

Less than Significant Impact. The project proposes to convert approximately 15± acres of the farmland property, including some cultivated row crops, to accommodate construction of the seed research facility. New well systems would have to be reviewed by and meet all the requirements of the Yolo County Environmental Health Division. Permits will be required from Environmental Health for the construction and operation of a public water supply system to ensure long-term sustainability and compliance with drinking water laws and regulations. See, also, discussion in Section XVII (Utilities and Service Systems) regarding Public Water Systems.

Proposed associated uses at the project site, such as seed washing and irrigation of vegetable seed crops, are not expected to result in significant impacts to other nearby groundwater wells. The property is currently irrigated for cultivation by two irrigation wells, and the applicant does not anticipate the construction of any additional irrigation wells, other than a new domestic well. The proposed project is not expected to substantially affect any nearby or onsite wells and would not deplete groundwater supplies or otherwise interfere with groundwater recharge.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation? *and*

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding?

Less than Significant Impact. The proposed seed research facility project is located in an area of relatively level ground on a farmland property that has been cultivated in rotating crops for decades. Development of the project includes construction of an 11,000-square foot office building, six 3,000-square foot greenhouses, a 6,090-square foot headhouse, a 20,000-square foot mill/warehouse and adjacent 4,000-square foot washery, a 6,000-square foot farm shop, and a 2,200-square foot dormitory, as well as paved access and covered parking areas. Future improvements to the 203-acre farmland property include expansion of the office building to 35,000 square feet (at full build-out), expansion of the mill/warehouse to 100,000 square feet at build-out, and a possible 6,000-square foot pathology lab with additional greenhouses. Total acreage of the project footprint is approximately 15± acres. Due to the property's location in a floodplain, the project will be required to implement any applicable flood protection measures as regulated by the County's Flood Protection Ordinance and FEMA.

Through adopted Conditions of Approval, the applicant will be required to submit civil improvement plans for the entire project site to ensure all new drainage improvements to the property tie-in to existing drainage facilities and features, as necessary. The applicant will be prohibited from designing or re-grading the project site to drain to a public right-of-way, such as

a roadside ditch along County Road 100. All applicable permanent post-construction storm water pollution controls for new development will be required to adhere to Yolo County Improvement Standards, which will be reviewed by Yolo County Engineering staff. Construction of the project will also be required to comply with Improvement Standards that require best management practices to address storm water quality, erosion, and sediment control, which will include a Storm Water Pollution Prevention Plan since one acre, or more, is anticipated to be disturbed.

The project is not expected to substantially alter the existing drainage pattern of the project site, which will be addressed through the requirement for engineered civil improvement plans. As indicated elsewhere in this Initial Study, the project includes well over 150,000 square feet of new building area with associated paved parking and access drives. Potential impacts caused by the construction of the project and effects on the increase in storm water discharge from the project site are required to be evaluated prior to project development. Through project specific Conditions of Approval, proper onsite detention/retention of storm water runoff shall be addressed by a licensed, professional civil engineer for review and approval by the County Engineer, prior to grading the site for development. Implementation of the above required Conditions of Approval will ensure that the project does not significantly modify any drainage patterns or change absorption rates, or the rate and amount of surface runoff. Impacts will be less than significant.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? *and*

f) Otherwise substantially degrade water quality?

Less than Significant Impact. See discussion in (c) and (d), above. With the implementation of project construction and site preparation-related Conditions of Approval that address proper drainage improvements, flood protection measures, and storm water pollution controls, the proposed seed research facility project is not expected to cause additional runoff. Roughly seven percent of the 203-acre property will be affected, with a majority of the property remaining in active vegetable seed crop production. Impacts to water quality are expected to be less than significant.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

Less than Significant Impact. The project is located within a 100-year flood plain (Flood Zone A) as mapped by FEMA (Federal Emergency Management Agency). Flood Zone A is a designation given to areas located in a flood hazard area where the base flood level has not been determined. According to the applicant, preliminary surveys of the project site indicate development will be above the base flood level. The project does not propose any permanent residences to accommodate the seed research facility, but does include plans for a four-bedroom dormitory to temporarily house interns and researchers during brief stays. Any residential component of the project will be required to address local and FEMA regulations for new development within a floodplain, which include raising the building pad to at least one foot above an established base flood elevation. Impacts will be less than significant.

h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

Less than Significant Impact. The project is located within a 100-year flood plain and will be required to address flood protection regulations and standards, as applicable, to ensure new development does not impede any flood flows or subject individuals on the project site to risk from flooding. Specifically, the project will be required to meet the requirements of Yolo County

Code Section 8-4.501 that define standards of construction in areas of designated flood zones in order to reduce flood hazards. These standards of construction address requirements for anchoring, construction materials and methods, and elevation and floodproofing, as applicable. If building locations are determined to be below the floodplain, adherence to flood protection measures will ensure impacts remain less than significant.

i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

Less than Significant Impact. See discussion in (h), above. The project site is not located in a dam inundation zone or levee system that could expose people to flooding, but is in a designated flood zone. The 2030 Countywide General Plan includes policies and measures in the Health and Safety Element for achieving General Plan Goal HS-2: flood hazard protection. These actions are implemented through the County's Flood Protection Ordinance codified in Chapter 4 of Title 8 of the Yolo County Code. The development review process for approval of the project includes standard conditions for protecting people, structures, and personal property from unreasonable risk from flooding and flood hazards (General Plan Policy HS-2.1). As such, new construction is required to adhere to the standards of construction for providing flood protection, as applicable. These standards ensure that the design and construction of a project will not significantly contribute to cumulative flooding that could pose a hazard to surrounding landowners and/or or the public. With the implementation of these standard requirements for development within a floodplain, risk of exposing people or structures to hazards due to flooding will be less than significant.

j) Result in inundation by seiche, tsunami, or mudflow?

No Impact. The project is not located in an area that could potentially pose a seiche or tsunami hazard and is not located near any physical or geologic features that would produce a mudflow hazard.

X.	LAND USE AND PLANNING.	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:					
a.	Physically divide an established community?	☐	☐	☐	☒
b.	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c.	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

DISCUSSION

a) Physically divide an established community?

No Impact. The proposed project is located in unincorporated Yolo County, approximately three miles north of the City of Woodland. The property is surrounded by other agricultural uses within the rural and sparsely populated area of northern Woodland. The project would not divide an established community.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The proposed project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The project site is designated Agriculture (AG) in the Yolo County 2030 Countywide General Plan. The project site's AG designation supports agricultural and seed research uses in the agricultural areas. Specifically, the AG designation defines agricultural industrial uses as including agricultural research, processing and storage, supply and service. The project conforms to the County's General Plan and zoning ordinance and would be consistent with several General Plan Goals and Policies from the Land Use and Community Character Element, Conservation and Open Space Element, and Agriculture and Economic Development Element. The proposed project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The County does not have an adopted Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP), although a draft plan is now being prepared by the Yolo County Habitat/Natural Community Conservation Plan Joint Powers Agency (the Yolo Habitat Conservancy (YHC)). In accordance with this draft plan, this Initial Study addresses measures to reduce impacts to special status species that have been identified by YHC as possibly occurring at the project site due to the potential for the site to support habitat. See discussion in Section IV (Biological Resources).

XI.	MINERAL RESOURCES.	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:					
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b.	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

DISCUSSION

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?; *and*

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact. The project area is not located within any identified area of significant aggregate deposits, as classified by the State Department of Mines and Geology. Most aggregate resources in Yolo County are located along Cache Creek in the Esparto-Woodland area.

XII.	NOISE.	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:					
a.	Exposure of persons to or generation of noise levels in excess of standards established in a local general plan or noise ordinance, or in other applicable local, state, or federal standards?	☐	☐	☒	☐
b.	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d.	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f.	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

Yolo County has not adopted a noise ordinance which sets specific noise levels for different zoning districts or for different land uses in the unincorporated area. Instead, the County relies on the State of California Department of Health Services' recommended Community Noise Exposure standards, which are set forth in the State's General Plan Guidelines (2003). These standards are included in the Yolo County 2030 Countywide General Plan and used to provide guidance for new development projects. The recommended standards provide acceptable ranges of decibel (dB) levels. The noise levels are in the context of Community Noise Equivalent Level (CNEL) measurements, which reflect an averaged noise level over a 24-hour or annual period. The Countywide General Plan identifies up to 75 dB CNEL as an acceptable exterior noise environment for agricultural land uses and up to 60 dB CNEL for residential land uses.

DISCUSSION

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?

Less than Significant Impact. The project site is surrounded by active agricultural land uses and includes a few rural home sites that are within a mile of the project site; there are no residential uses at the project site. As indicated above, the State noise guidelines define up to 75 dB CNEL for outdoor noise levels in agricultural areas as an acceptable level, measured at the property line. The ambient noise levels in the project vicinity are a result of onsite, surrounding, and distant agricultural activities, such as tractors disking farm fields, harvest activity in fields and orchards, as well as other farm vehicles and local traffic along County Road 100. Typical noise levels for tractors are approximately 80 dB at 50 feet away.

Because the project site is located in a rural and sparsely populated area of the County, noise levels for County Road 100 are not available. According to traffic counts prepared for the 2030 Countywide General Plan, the average daily trip count for County Road 17 (south of the project site) from State Route 113 to County Road 102 is 1,100 vehicles with a noise level of 53 dB 100 feet from centerline (Yolo County, 2009). Noise levels due to existing daily traffic levels near the project site are relatively minor in the project vicinity.

It is expected that construction activities related to site preparation for developing the project may be audible during daytime hours in the vicinity of the nearest residences. Construction activity is expected to occur in phases to implement the project, with initial development occurring over a nine-month period.

The 2030 Yolo Countywide General Plan Final Environmental Impact Report (FEIR) (Yolo County, 2009) notes that typical construction noise ranges between 80 to 88 dBA at 50 feet generated by tractors, front loaders, trucks, and dozers. Temporary noise associated with construction activities would be similar to existing noise associated with ongoing agricultural activities, such as tractors, diesel pumps and generators, harvest activities, truck hauling, and other agricultural vehicles on County Road 100 and other nearby roadways, including State Route 113. Existing agricultural noise sources at and near the project site include typical farming activities such as day and nighttime diesel pump operations, crop-dusting aircraft, and 24-hour harvest activity. The FEIR notes that typical noise levels for tractors conducting farming activities ranges from 78 dBA L_{max} to 106 dBA at 50 feet, with an average of about 84 dBA.

The noisiest typical construction equipment is pile drivers, which may measure 93 dBA at 50 feet. Depending on the engineering of the soils, the seed research facility may require pile driving to anchor pads, so noise levels in this upper range may be generated during construction (see discussion in Section (b), below). The proposed grading and construction of the seed research facility are not expected to generate noise levels at the boundaries of the property that will significantly impact the nearest neighbors, since the residences are located far enough away from the noisiest construction activities. Noise levels diminish or attenuate as distance from the noise source increases, based on an inverse square rule. Noise from a single piece of construction equipment attenuates at a rate of 6dB for each doubling of distance.

The proposed project is located in a rural and sparsely populated agricultural area with no sensitive receptors in the vicinity. There are a few rural residences located in the vicinity of the project; however, individual rural homes on agricultural land are not considered sensitive receptors. The closest rural residence is located approximately 3,200 feet southwest of the proposed seed research facility. It is also surrounded by existing farmland, where harvest and other daily agriculturally-related activities take place.

Long-term mobile noise sources from operation of the seed research facility will come from truck trips to and from the site up to six times per day at full build-out and up to 35 full time and 17 seasonal employees accessing the site (at project build-out), with typical hours of operation from 7:00 AM to 6:00 PM Monday through Friday. Stationary noise sources will come from air compressors and other machinery typically used in farming activities. Milling operations will be located within an enclosed metal building and are not expected to create significant noise impacts.

The 2030 Countywide General Plan strongly promotes the continuation of farming activities on agricultural land and anticipates those activities to expand. Policies in the Countywide General Plan promote compatibility of permitted land use activities with applicable noise standards and encourage new discretionary development to use best-available noise reduction measures in project design. Overall, noise levels are not expected to expose nearby receptors in excess of standards adopted by the County's General Plan, including the State-recommended Community Noise Exposure standards. Impacts to noise levels are expected to be less than significant.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact. Groundborne vibration levels may be measured similar to noise in vibration decibels (VdB). The 2030 Yolo Countywide General Plan FEIR notes that typical construction vibration levels range from 58 VdB at 25 feet for a small bulldozer and up to 112 VdB for a pile driver. As noted above, the seed research facility may require pile driving to anchor pads, so vibration levels in this upper range may be generated during construction. However, construction activities are not expected to generate vibration levels at the boundaries of the property that will significantly impact the nearest neighbors, since the residences are located far enough away from the construction activities.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant Impact. See discussion in (a), above, which describes noise sources related to farming activities. Given the relatively low traffic use in the area, traffic noise levels along County Road 100 at the project site are not currently contributing to significant noise levels throughout the day. Existing operations at the project site include daily general farming operations.

Upon completion of the seed research facility, noise from agricultural processing operations would be generated from air compressors, fork lifts, and truck trips. These ongoing operational noises will be mitigated through building design and location of the project. Noise generated by the agriculturally-related operations of the seed research facility would be expected to be at a level similar to existing agricultural activities already occurring at the site, and should not adversely impact the nearest residences since they are far enough away (approximately 3,200 and 4,200 feet) from the proposed facility and are already exposed to agricultural uses at the site, and surrounding vicinity, including daily use of agriculturally-related machinery and vehicles.

Other noise sources generated by the project will include an increase in daily employee activities, including seasonal work in the greenhouses. While an increase in ambient noise levels due to the increase in daily vehicle trips, associated with employee and truck traffic, is likely, the increase in traffic levels is not expected to result in a substantial permanent increase in noise levels. Up to 10 employees that will be accessing the new facility currently work just north of the project site at Sakata Seed's lease site. Impacts to ambient noise levels in the vicinity of the project are expected to be less than significant.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant Impact. See discussion in (c), above. Construction noise associated with project implementation would initiate with development of the site to include a 6,000-square foot farm shop, a 4,000-square foot seed washery, and three 3,000-square foot greenhouses, including associated paved access drives, parking, and utilities. Thereafter, phased construction will continue with development of a 6,090-square foot headhouse (anticipated for late fall 2017); 2018 construction activities include development of an 11,000-square foot office building, 20,000-square foot mill/warehouse, and 2,200-square foot dormitory. Future phases, if implemented, would include expansion of the office building to approximately 35,000 square feet and the mill/warehouse to 100,000 square feet at full project build-out, as well as the possible construction of a 6,000-square foot pathology lab and additional greenhouses. Temporary phased construction activities could result in substantial increases in ambient noise levels but would be attenuated at the property boundaries to acceptable levels. These temporary construction activities are expected to generate similar levels of noise as existing agricultural uses on the property and elsewhere in the vicinity.

Operational noise levels of the seed research facility would not be adverse to the nearest residences. The nearest residence is located approximately 3,200 feet away to the southwest and is surrounded by existing agricultural activities. Since sound attenuates as it leaves the source, it is unlikely that the closest residents will be experiencing noise sources at substantial levels. Impacts from periodic increases in ambient noise levels are expected to be less than significant.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?; *and*

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The proposed project site is not located within an airport land use plan. Implementation of the proposed project would not expose individuals to excessive noise levels associated with any nearby airstrip's aircraft operations.

XIII.	POPULATION AND HOUSING.	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:					
a.	Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☒	☐
b.	Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c.	Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

DISCUSSION

a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

Less than Significant Impact. The proposed project may result in a slight increase in human population due to full-time and seasonal employee opportunities associated with the research facility. However, at least 10 of the employees currently working at the Sakata Seed lease site located north of the proposed project site are expected to continue working at the new facility. The project is not expected to result in a significant increase in population growth, other than growth associated with the agricultural industry that was previously analyzed in projected assumptions for the Environmental Impact Report adopted with the 2030 Countywide General Plan. Impacts would be less than significant.

b) Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?; *and*

c) Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project would not displace any existing housing or residents that would necessitate the construction of housing elsewhere.

XIV.	PUBLIC SERVICES.	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:					
a.	Fire protection?	☐	☐	☒	☐
b.	Police protection?	☐	☐	☒	☐
c.	Schools?	☐	☐	☐	☒
d.	Parks?	☐	☐	☐	☒
e.	Other public facilities?	☐	☐	☐	☒

DISCUSSION

a) Fire protection?

Less than Significant Impact. The Yolo Fire Protection District, located approximately 2.5 miles (as the crow flies) southwest of the project site, provides fire protection services to the property and surrounding environs. Implementation of the proposed project could increase the risk for fire, and thus, the demand for fire protection services. The project will require adherence to all applicable fire codes, including suppression and water supply, as per Fire District requirements. Construction of the project will be conditioned to ensure an adequate water supply is secured onsite for fire-fighting purposes, as approved by the Yolo Fire Protection District. Prior to issuance of building permits at the project site, any applicable impact fees would also be collected.

Implementation of the project's Conditions of Approval relating to fire protection measures, as well as implementation of construction standards that meet current building and fire codes, will ensure that impacts to fire protection services will be less than significant.

b) Police Protection?

Less than Significant Impact. Implementation of the project may increase the need for law enforcement at the project site and along the roadways, but would not result in the construction of new or modified facilities in order to maintain adequate service levels. Impacts will be less than significant.

c) Schools?;
d) Parks?; *and*
e) Other public facilities?

No Impact. The proposed seed research facility could result in the need for housing, but not beyond the demand that already exists in the area and the region. The addition of up to 15 full-time employees (plus the 10 employees already working north of the proposed project site) and 17 seasonal employees is not expected to result in the demand for additional schools, parks, or other public facilities such as libraries, hospitals, and satellite County offices, etc. Prior to issuance of building permits at the project site, any applicable impact fees will be collected.

XV.	RECREATION.	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:					
a.	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b.	Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

DISCUSSION

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?; *and*

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

No Impact. The proposed project would not require the construction of additional recreational facilities nor substantially increase the use of existing recreational facilities.

XVI.	TRANSPORTATION/TRAFFIC.	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:					
a.	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b.	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e.	Result in inadequate emergency access?	☐	☐	☒	☐
f.	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The roadway network within unincorporated Yolo County consists primarily of two lane roads that are designed to serve small farming communities and agricultural uses. Thus, policies in the 2030 Countywide General Plan encourage inter-and intra-regional traffic to use State and federal interstates and highways, since the primary role of county roads is to serve local and agricultural traffic. The project site is north of the City of Woodland, in the rural and agricultural area of unincorporated Yolo County. County Road 100 is not a designated "General Plan roadway" in the 2030 Countywide General Plan, but is adjacent to a Minor Two-Lane County Road (County Road 17, which is south of the project site) and a Conventional Two-Lane Highway (State Route 113, west of the site) (Yolo County, 2009). County Road 100 is a 50-foot wide two-lane public right of way (30 feet of paved roadway with 10-foot unpaved shoulders).

Minor Two-Lane County Roads are described by the Countywide General Plan as collector roads providing access to adjacent land carrying local traffic; Conventional Two-Lane Highways are identified for State-maintained highways used as connectors between major traffic generators or links in State and national highway networks (Yolo County, 2009).

Level of Service (LOS) is a quantitative measure of traffic operating conditions whereby a letter grade A through F is assigned to an intersection or roadway segment, representing progressively worsening traffic conditions. LOS A, B, and C are considered satisfactory to most motorists, and allow for the relatively free movement of traffic. LOS D is marginally acceptable,

with noticeable delays and unstable traffic speeds. LOS E and F are associated with increased congestion and delay.

County Road 100 has not been measured for level of service. The nearest Minor Two-Lane roadway is County Road 17, which is approximately one-half mile south of the project site, and currently has an established LOS B with a daily average of 1,100 vehicle trips, and a projected LOS B with an expected daily average of up to 1,200 vehicle trips (from State Route 113 to County Road 102) upon build-out of the 2030 Countywide General Plan.

The nearest Two-Lane Highway is State Route 113, which is approximately 0.6 mile south and 0.5 mile east of the project site, and currently has an established LOS A with a daily average of 900 vehicles trips, and a projected LOS C with an expected daily average of up to 5,200 vehicle trips (within the project vicinity). Estimates derived from build-out of 2030 Countywide General Plan (Yolo County, 2009). There are no traffic counts available for County Road 100.

DISCUSSION

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?; *and*

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less than Significant Impact. The proposed seed research facility project will require construction truck trips to prepare the site for the project, including minor grading activities. Construction traffic, which will be phased over an initial nine-month period, may generate approximately three truck trips per day, every three months, to grade, gravel, pave and construct the project. Initial project development will include construction of the 6,000-square foot farm shop, 4,000-square foot seed washery, and three 3,000-square foot greenhouses, as well as internal access roads and parking. Subsequent construction will include the addition of a 6,090-square foot headhouse, an 11,000-square foot office building, 20,000-square foot mill/warehouse, and, eventually, the 2,200-square foot dormitory. Future phases may include possible expansion of the office and mill/warehouse, as well as a 6,000-square foot pathology lab and additional greenhouses. Thus, traffic construction activity for each small phase is anticipated at approximately 180 truck trips per three months of construction, for a combined total of 540 truck trips for the first nine months of construction. Any future phase of development will generate a similar level of truck trips for each construction period.

Access to the seed research facility would be provided off County Road 100 by established driveway approaches. Operation of the seed research facility could generate approximately 41 daily roundtrip vehicle trips, with up to 62 daily round trips during seasonal work and temporary use of the dormitory, which assumes vehicle trip levels at full project build-out. Initial phases of development would generate much lower daily traffic volumes.

Agricultural uses related to seed research and other commercial/industrial agriculturally-related uses were considered in the 2030 Countywide General Plan. Thus, corresponding traffic assumptions have already been accounted for in the EIR prepared for the Countywide General Plan. Regional traffic is not expected to significantly increase with implementation of the project.

Existing traffic counts for the vicinity of the project site include the 2009 figures from the General Plan EIR for County Road 17, the closest Minor Two-Land Road, and State Route 113, the

closest Two-Lane Highway. As described above, build-out of the General Plan assumed additional traffic generation from agricultural industrial and research related uses in unincorporated agricultural areas of the County, keeping the level of service at LOS B on County Road 17 and bringing the level of service from LOS A to LOS C on State Route 113 (a locally designated truck route). The Countywide General Plan identifies LOS C as an acceptable level of service for Yolo County roadways. Impacts from traffic generated as a result of the project will be less than significant.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. The project site is not located within the vicinity of a public airport or private airstrip. The proposed project does not include any uses that would adversely affect air traffic patterns.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than Significant Impact. See discussion in (a), (b), above. The site is accessed off County Road 100, north and east of County Road 17 and State Route 113. A dedicated driveway approach will lead to an internal roadway that will provide paved access to the project site and ample parking areas. County Road 100 is a 30-foot wide paved two-lane roadway with 10-foot unpaved shoulders (60-foot total public right-of-way). There are no line-of-site obstacles along the roadway. The existing farmland property already serves large trucks accessing the site for agriculturally-related activities, such as daily farming and harvest. Construction equipment that is utilized during construction will be able to adequately access the site. Impacts are expected to be less than significant.

e) Result in inadequate emergency access?

Less than Significant Impact. The project would not result in inadequate emergency access. See discussion in (d), above. The project site will be accessed from County Road 100, and a dedicated driveway approach and internal roadway will serve the facility. Parking areas will be provided adjacent to the various buildings and the internal roadway and access ways will not be obstructed by the new development. The seed research facility project will be conditioned to prohibit parking on the County right-of-way (County Road 100 and County Road 17). Impacts to emergency access will be less than significant.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No Impact. The project would not result in any permanent features that would affect or alter existing public transit, bicycle, or pedestrian facilities nor interfere with the construction of any planned facilities.

XVII.	UTILITIES AND SERVICE SYSTEMS.	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:					
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c.	Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?	☐	☐	☐	☒
e.	Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g.	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

DISCUSSION

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less than Significant Impact. The project site will be served by a private septic system that will require review and approval from Yolo County Environmental Health, the regulating agency for the design and monitoring of private onsite septic systems. The proposed project includes development of a seed research facility that will include administrative offices, as well as agricultural processing that includes seed washing, drying, storing, and distributing. A site evaluation and sewage disposal site plan and water source plan must be reviewed and approved by Yolo County Environmental Health prior to development of the project. Site information shall include soil permeability, depth to shallow ground water, depth of restrictive soils, structure(s) foot print area, property lines, easements, minimum sewage disposal areas, replacement sewage disposal area, drainage courses, proposed well locations, contours and other necessary criteria.

Project wastewater from the seed washery/wet milling activities would be subject to permit requirements of the Central Valley Regional Water Quality Control Board and may qualify for coverage under a Conditional Waiver of Waste Discharge Requirements (see discussion in Section IX, Hydrology and Water Quality). As a condition of project approval, the applicant will

be required to comply with Yolo County Environmental Health standards for onsite wastewater treatment systems, as well as Waste Discharge Requirements of the Regional Water Quality Control Board. With implementation of these conditions, the project is not expected to exceed wastewater treatment requirements from improper wastewater disposal; impacts will be less than significant.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less than Significant Impact. The proposed seed research facility project would not result in the construction of new water and wastewater treatment facilities, and there are currently no public water or wastewater treatment facilities serving the project area. As stated above, the project proposes use of an onsite domestic well and onsite wastewater disposal system. As a Condition of Approval, the applicant will be required to seek approval from Yolo County Environmental Health for the addition of new well(s) and septic system(s) to implement the proposed project.

Additionally, as required by Environmental Health, wells used for potable water must meet construction requirements for a domestic well. Copies of a well construction permit and Well Completion Report must be submitted to Yolo County Environmental health prior to project implementation. Source water shall meet water quality and quantity standards. Test results which show the source meets water quality and quantity standards shall be submitted to Environmental Health.

As a standard Condition of Approval, Yolo County Environmental Health will require that the drinking water system be permitted as a Public Water System. Therefore, as an adopted Condition of Approval, a Domestic Water Supply permit application and appropriate fee must be submitted to Environmental Health prior to project implementation. With the required Environmental Health standards included in the project's adopted Conditions of Approval, impacts will be less than significant.

c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less than Significant Impact. The proposed development of the Sakata Seed Woodland Station facility is not expected to significantly change the overall site drainage patterns, as there will be minimal net increase in runoff from the site due to the overall drainage capacity of the property, i.e., approximately 15 acres of the 203-acre property will be developed. See, also, discussion in Section IX (Hydrology). As per Yolo County Public Works Engineering requirements, a grading plan for the entire project site shall be submitted for review to ensure the proposed development properly ties in all new drainage improvements to existing drainage facilities and features, as necessary. The applicant shall not design or regrade the project site to drain to County Road 100 or County Road 17. The proposed project does not require or result in the construction of new storm water drainage facilities. Impacts will be less than significant.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?

No Impact. See discussion in (b), above. The project is proposed to be served by a new domestic well. Any new well will require review and approval from Yolo County Environmental Health, as described above.

e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less than Significant Impact. The project site is not served by a wastewater treatment facility, but includes a proposal for a new onsite septic system and leach fields for domestic wastewater discharge. Process wastewater from agricultural processing activities will be regulated under the authority of the Regional Water Quality Control Board, which will require adherence to their Waste Discharge Requirements. As discussed in (b), above, Yolo County Environmental Health will require a site map and site evaluation for the project's use of any new onsite septic system, and the project may qualify for a Waiver from the Regional Water Quality Control Board. Adopted Conditions of Approval will ensure that use of a new onsite septic system will have adequate capacity to meet project demands, and that the project will comply with requirements of the Central Valley Regional Water Quality Control Board. Impacts will be less than significant.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?; *and*

g) Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. The existing Yolo County Central Landfill can adequately accommodate the solid waste generation by the proposed seed research facility. The project would not significantly impact the disposal capacity of the landfill, and the applicant would be required to comply with all solid waste regulations as implemented and enforced by Yolo County.

XVIII.	MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b.	Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☒	☐
c.	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

DISCUSSION

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

Less than Significant Impact. Based on the analysis provided in this Initial Study and the Conditions of Approval required for project implementation, including the mitigation measures addressed in Section IV, the project would not degrade the quality of the environment. As required in Section IV (Biological Resources) of this Initial Study, mitigation proposed for the loss of foraging habitat and the for the potential to disturb nesting raptors, adequately addresses impacts to sensitive species and/or their habitat. Impacts to biological resources will be less than significant.

No important examples of California history or prehistory will be eliminated due to project implementation. Adopted Conditions of Approval will require that surveys be performed if any previously undiscovered cultural resources are unearthed during ground disturbing activities. Overall, impacts will be less than significant.

b) Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less than Significant Impact. The proposed project has temporary construction impacts which could degrade air quality cumulatively, in combination with other construction projects in Yolo

County. These potential impacts will be reduced to a less-than-significant level through implementation of the standard air quality measures described in Section III (Air Quality) of this Initial Study. In addition, the project will contribute incrementally to an increase in cumulative energy demand, traffic levels, and greenhouse gas (GHG) emissions in the region and globally. The latter cumulative impacts are associated with growth allowed under the 2030 Yolo Countywide General Plan. The General Plan and adopted Climate Action Plan include numerous policies and measures that require new development, including this project, to reduce air quality, energy, transportation, and GHG impacts, through application of design features and other measures. California Building Codes require that the applicant reduce the level of energy consumed during construction of the project. Overall, with implementation of the project's Conditions of Approval and proposed design considerations, cumulative impacts will be less than significant.

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact. Based on the analysis provided in this Initial Study, impacts to human beings resulting from the proposed project would be less than significant with the implementation of required standard regulations. The project as conditioned would not have substantial adverse effects on human beings, either directly or indirectly, and would be required to comply with Conditions of Approval to manage: glare from new sources of outdoor lighting; dust control from construction-related activities; water quality and storm water pollution prevention; and the approval of septic and water systems. Impacts related to all issues discussed in this Initial Study have been determined to be less than significant through the implementation of standard requirements and project design. Overall impacts from implementation of the project will be less than significant.

References

- Project description and application materials provided by applicant
- Estep Environmental Consulting, 2017. *Email correspondence*
- USDA Natural Resource Conservation District maps and materials provided by District Conservationist
- Yolo County, 2009. *Yolo County 2030 Countywide General Plan*, adopted November, 2009 and *Yolo County 2030 Countywide General Plan Final EIR*, April 2009
- Yolo County, 1986. *Historic Resources Survey*
- Yolo-Solano Air Quality Management District, 2007. *Handbook for Assessing and Mitigating Air Quality Impacts,* July, 2007.
- Yolo County Zoning Ordinance*, Title 8, Chapter 2 of the County Code*, 2014, as amended