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County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING STEVEN E. WHITE, DIRECTOR

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

For County Clerk's Stamp

DEC 07 2018

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Notice is hereby given that the County of Fresno has prepared Initial Study Application (IS) No. 7338 pursuant to the requirements of the California Environmental Quality Act for the following proposed project:

INITIAL STUDY APPLICATION NO. 7338 and CLASSIFIED CONDITIONAL USE PERMIT APPLICATION NO. 3584 filed by INNOVATIVE AG. SERVICES, LLC, proposing to allow the addition of three corrals, a new 100-stall milk barn, 900 additional heifers with no addition to the milking numbers, a new covered lagoon manure digester and a biogas engine generator set with supporting equipment on two parcels totaling 159 acres in the AE-20 (Exclusive Agricultural, 20-acre minimum parcel size) Zone District. The project site is located on the southeast side of S. McMullin Grade, between S. Madera Avenue and S. Goldenrod Avenue, approximately 6.6 miles east of the City of San Joaquin (10014 S. McMullin Grade) (Sup. Dist. 4) (APN 035-100-22S and 035-100-23S).

(hereafter, the "Proposed Project")

The County of Fresno has determined that it is appropriate to adopt a Mitigated Negative Declaration for the Proposed Project. The purpose of this Notice is to (1) provide notice of the availability of IS Application No. 7338 and the draft Mitigated Negative Declaration, and request written comments thereon; and (2) provide notice of the public hearing regarding the Proposed Project.

Public Comment Period

The County of Fresno will receive written comments on the Proposed Project and Mitigated Negative Declaration from December 12, 2018 through January 12, 2019.

Email written comments to cmonfette@co.fresno.ca.us, or mail comments to:

Fresno County Department of Public Works and Planning Development Services and Capital Projects Division Attn: Chrissy Monfette 2220 Tulare Street, Suite A Fresno, CA 93721

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Appendix C	'
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Notice of Completion & Environmental Document Transmittal

May to, State Electrophones U() Dev 2044 Secondente CA (5010 2044 (017) 445 0(12)	SCH #

Project Title: Lone Oaks Dairy #2 - Expansion: Condition	al Use Permit No.	3584 and Initial Stud	<u>y No. 7338</u>
Lead Agency: The County of Fresno		Contact Person: Chri	
Mailing Address: 2220 Tulare Street, 6th Floor		Phone: 559 600-42	45
City: Fresno	Zip: <u>93721</u>	County: Fresno	
Mini Mini Alat and		Next stand points boost boost back were	. Sinch South Boom Block Sider Land Brink Manda Mond Maked Secu
Project Location: County: Fresno	City/Nearest Com	munity: <u>Helm</u>	
Cross Streets: McMullin Grade and S. Madera Avenue			Zip Code: <u>93706</u>
Longitude/Latitude (degrees, minutes and seconds): 36 ° 34	<u>′28.02″ N / 120</u> °	• <u>4 ′ 46.2 ″</u> W Tota	al Acres: 159
Assessor's Parcel No.: 035-100-22S and -23S	Section: 31	Twp.: 15 Ran	ige: 18 Base: MDBM
Within 2 Miles: State Hwy #: 41	Waterways: Fish S	lough	
Airports: none		Sch	ools: none
Document Type: CEQA: NOP Draft EIR Early Cons Supplement/Subsequent EII Neg Dec (Prior SCH No.) X Mit Neg Dec Other:	₹ [] []	NOI Other: EA Draft EIS FONSI	Joint Document Final Document Other:
Local Action Type: General Plan Update Specific Plan General Plan Amendment Master Plan General Plan Element Planned Unit Development Community Plan Site Plan			Annexation Redevelopment Coastal Permit Other:
Development Type:			
Residential: Units Acres Office: Sq.ft. Commercial:Sq.ft. Acres Industrial: Sq.ft. Educational: Employees Recreational: MGD	[_] Mining: X Power: Waste Ti	Mineral Type anaerob reatment: Type us Waste: Type	bic digester MW1,028kW MGD
Project Issues Discussed in Document:		enni yanna galeti 3000 3000 parrat yana yana	
X Aesthetic/VisualFiscalX Aesthetic/VisualFiscalX Agricultural LandFlood Plain/FloodingX Air QualityForest Land/Fire HazardX Archeological/HistoricalGeologic/SeismicX Biological ResourcesMineralsCoastal ZoneNoiseX Drainage/AbsorptionPopulation/Housing BalantEconomic/JobsPublic Services/Facilities	🔀 Solid Waste	versities ns ity Compaction/Grading dous	 X Vegetation X Water Quality X Water Supply/Groundwater X Wetland/Riparian X Growth Inducement X Land Use X Cumulative Effects Other:

Present Land Use/Zoning/General Plan Designation:

Present use: Dairy, Row Crops - Zoning: Exclusive Agricultural, 20-acre minimum parcel size) - General Plan: Agriculture **Project Description:** (*please use a separate page if necessary*) Allow the addition of three additional corrals, a new 100-stall milk barn, 900 additional heifers with no addition to the milking

numbers, a new covered lagoon manure digester, a biogas engine generator set and supporting equipment.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghous If you have already sent your document to the agencies	e distribution by marking agencies below with and "X". cy please denote that with an "S".
If you have already sent your document to the agend X Air Resources Board Boating & Waterways, Department of California Emergency Management Agency California Highway Patrol Calitrans District # Caltrans Division of Aeronautics Caltrans Planning Central Valley Flood Protection Board Coachella Valley Mtns. Conservancy Colorado River Board Conservation, Department of Corrections, Department of Delta Protection Commission Education, Department of Energy Commission X Fish & Game Region #8 Food & Agriculture, Department of General Services, Department of Health Services, Department of Health Services, Department of Health Services, Department of Housing & Community Development Native American Heritage Commission	 Office of Historic Preservation Office of Public School Construction Parks & Recreation, Department of X Pesticide Regulation, Department of X Public Utilities Commission X Regional WQCB #5 Resources Agency Resources Recycling and Recovery, Department of S.F. Bay Conservation & Development Comm. San Gabriel & Lower L.A. Rivers & Mtns. Conservancy Santa Monica Mtns. Conservancy State Lands Commission SWRCB: Clean Water Grants X SWRCB: Water Quality SWRCB: Water Rights Tahoe Regional Planning Agency Toxic Substances Control, Department of
Local Public Review Period (to be filled in by lease Starting Date November 30, 2018	Ending Date December 31, 2018
Lead Agency (Complete if applicable): Consulting Firm: The County of Fresno Address: 2220 Tulare Street, 6th Floor City/State/Zip: Fresno, CA 93722 Contact: Christina Monfette Phone: 559 600-4245	Applicant: Innovative Ag. Services Address: 2101 Delta View Road, Suite 5 City/State/Zip: Hanford, CA 93230 Phone: 559 587-2800
Signature of Lead Agency Representative:	Date: 12/7/18

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.



County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING STEVEN E. WHITE, DIRECTOR

INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

1. Project title:

, Lone Oak Dairy #2: Initial Study Application No. 7338 and Conditional Use Permit Application No. 3584

2. Lead agency name and address:

The County of Fresno, Development Services and Capital Projects Division 2220 Tulare Street, 6th Floor Fresno, CA 93721

3. Contact person and phone number:

Chrissy Monfette (559) 600-4245

4. Project location:

The project site is located on the southeast side of S. McMullin Grade, between S. Madera Avenue and S. Goldenrod Avenue (APN 035-100-22S and 035-100-23S)

5. Project Applicant's name and address:

Innovative Age Services, LLC 1201 Delta View Rd. Ste 5 Hanford, CA 93230

6. General Plan designation: Agriculture

7. Zoning:

AE-20 (Exclusive Agricultural, 20-acre minimum parcel size)

8. Description of project: (Describe the whole action involved, including, but not limited to, later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

Allow the addition of three additional corrals, a new 100-stall milk barn, 900 additional heifers with no addition to the milking numbers, a new covered lagoon manure digester, a biogas engine generator set and supporting equipment.

9. Surrounding land uses and setting: Briefly describe the project's surroundings:

Surrounding development consists of large parcels which are committed to the development of row crops. Adjacent and nearby properties generally range in size between 77.59 acres and 640 acres and are used for vineyard or orchards. One parcel west of the subject parcel is 5.66 acres which is improved with row crops.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

A	Aesthetics	Agriculture and Forestry Resources
Δ	Air Quality	Biological Resources
c	Cultural Resources	Geology/Soils
E H	lazards and Hazardous Materials	Hydrology/Water Quality
L	and Use/Planning	Mineral Resources
N	loise	Population/Housing
P	Public Services	Recreation
Т	ransportation/Traffic	Utilities/Service Systems
N	Aandatory Findings of Significance	Greenhouse Gas Emissions

DETERMINATION OF REQUIRED ENVIRONMENTAL DOCUMENT:

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment. A NEGATIVE DECLARATION WILL BE PREPARED

 \mathbb{N} 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 the Mitigation Measures described on the attached sheet have been added to the project. A MITIGATED NEGATIVE DECLARATION WILL BE PREPARED.

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

I find that as a result of the proposed project, no new effects could occur, or new Mitigation Measures would be required that have not been addressed within the scope of a previous Environmental Impact Report.

PERFORMED BY:

Christina Monfette, Planner

Date: _____12/6/18

REVIEWED BY:

A OLL RING anne Mollring, Senior Planner

Date: 12-7-19

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INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM (Initial Study Application No. 7338 and Classified Conditional Use Permit Application No. 3584)

The following checklist is used to determine if the proposed project could potentially have a significant effect on the environment. Explanations and information regarding each question follow the checklist.

1 = No Impact

- 2 = Less Than Significant Impact
- 3 = Less Than Significant Impact with Mitigation Incorporated
- 4 = Potentially Significant Impact

I. AESTHETICS

Would the project:

- 1 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 within a state 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 day or nighttime views in the area?

II. AGRICULTURAL AND FORESTRY RESOURCES

Would the project:

- _2 a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- _2_ b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?
- _____ c) Conflict with existing zoning for forest land, timberland or timberland zoned Timberland Production?
- _____ 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 which, 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?

III. AIR QUALITY

Would the project:

- _2 a) Conflict with or obstruct implementation of the applicable Air Quality Plan?
- <u>2</u> b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?
- _2 c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under applicable Federal or State ambient air quality standards (including releasing emissions which exceed quantitative thresholds for ozone precursors)?
- <u>2</u> d) Expose sensitive receptors to substantial pollutant concentrations?
- 2 e) Create objectionable odors affecting a substantial number of people?

IV. BIOLOGICAL RESOURCES

Would the project:

- _3 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 Wildlife 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, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- _1 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, marsh, vernal pool, coastal, 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?

V. CULTURAL RESOURCES

Would the project:

- _3 a) Cause a substantial adverse change in the significance of a historical resource as defined in Public Resources Code Section 15064.5?
- <u>3</u> b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Public Resources Code Section 15064.5?
- _3 c) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?
- _3 d) Disturb any human remains, including those interred outside of formal cemeteries?
- _3 e) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074?

VI. GEOLOGY AND SOILS

Would the project:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
- i) 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?
- 2 ii) Strong seismic ground shaking?
- 2 iii) Seismic-related ground failure, including liquefaction?
- 2 iv) Landslides?
- 2 b) Result in substantial soil erosion or loss of topsoil?
- _1 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?

- _1____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 waste water disposal systems where sewers are not available for the disposal of waste water?

VII. GREENHOUSE GAS EMISSIONS

Would the project:

- 2 a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- <u>b</u>) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

VIII. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

- _2 a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- 2 b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- <u>c</u>) Create hazardous emissions or utilize hazardous or acutely hazardous materials, substances, or waste within onequarter mile of an existing or proposed school?
- <u>1</u> 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) Result in a safety hazard for people residing or working in the project area 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?
- _1 f) Result in a safety hazard for people residing or working in the project area for a project within the vicinity of a private airstrip?
- _1 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?

IX. HYDROLOGY AND WATER QUALITY

Would the project:

- <u>2</u> a) Violate any water quality standards or waste discharge requirements?
- 2 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 which would not support existing land uses or planned uses for which permits have been granted)?
- _1 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 erosion or siltation on 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 which would result in flooding on or off site?

- <u>Ae</u> e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?
- _1 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 which would impede or redirect flood flows?
- 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?
- 1 j) Cause inundation by seiche, tsunami, or mudflow?

X. LAND USE AND PLANNING

Would the project:

- 1 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, the 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?

XI. MINERAL RESOURCES

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?

XII. NOISE

Would the project:

- 2 a) Expose persons to or generate noise levels in excess of standards established in the local General Plan or Noise Ordinance, or applicable standards of other agencies?
- 2 b) Expose persons to or generate excessive ground-borne vibration or ground-borne noise levels?
- 2 c) Create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- 2 d) Create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
- e) Expose people residing or working in the project area to excessive noise levels, 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?
- f) Expose people residing or working in the project area to excessive noise levels, for a project within the vicinity of a private airstrip?

XIII. POPULATION AND HOUSING

Would the project:

- _1 a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

1 c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

XIV. PUBLIC SERVICES

Would the project:

Result in substantial adverse physical impacts associated with the provision of new or physically-altered governmental facilities, or the 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 public services:

- _1_ a) Fire protection?
- 1 b) Police protection?
- <u>1</u> c) Schools?
- _1 d) Parks?
- _2_ e) Other public facilities?

XV. RECREATION

Would the project:

- _1 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 which might have an adverse physical effect on the environment?

XVI. TRANSPORTATION / TRAFFIC

Would the project:

- 2 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?
- _2 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, which 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)?

Documents Referenced:

- 1 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?

XVII. UTILITIES AND SERVICE SYSTEMS

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 storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- d) Have sufficient water supplies available to service the project from existing entitlements and resources, or are new or expanded entitlements needed?
- 1 e) Result in a determination by the wastewater treatment provider which 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?
- _2_ g) Comply with federal, state, and local statutes and regulations related to solid waste?

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:

- a) 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, 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) 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) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

This Initial Study is referenced by the documents listed below. These documents are available for public review at the County of Fresno, Department of Public Works and Planning, Development Services and Capital Projects Division, 2220 Tulare Street, Suite A, Fresno, California (corner of M & Tulare Streets) or are available online, as noted:

Fresno County General Plan, Policy Document and Final EIR Fresno County Zoning Ordinance Important Farmland 2014 Map, State Department of Conservation National Wetlands Inventory, U.S. Fish and Wildlife Service, Accessed November 14, 2018 Fault Activity Map of California, State Department of Conservation, Accessed November 14, 2018 NEPAssist Mapping Application, U.S. Environmental Protection Agency, Accessed November 14, 2018 FEMA Flood Map Service (<u>https://msc.fema.gov/portal/</u>) Accessed November 14, 2018

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County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING STEVEN E. WHITE, DIRECTOR

EVALUATION OF ENVIRONMENTAL IMPACTS

- APPLICANT: Innovative Ag Services, LLC
- APPLICATION NOS.: Initial Study Application No. 7338 and Conditional Use Permit Application No. 3584
- DESCRIPTION: Allow the addition of three corrals, a new 100-stall milk barn, 900 additional heifers with no addition to the milking numbers, a new covered lagoon manure digester and a biogas engine generator set with supporting equipment on two parcels totaling 159 acres in the AE-20 (Exclusive Agricultural, 20-acre minimum parcel size) Zone District.
- LOCATION: The project site is located on the southeast side of S. McMullin Grade, between S. Madera Avenue and S. Goldenrod Avenue, approximately 6.6 miles east of the City of San Joaquin (10014 S. McMullin Grade) (Sup. Dist. 4) (APN 035-100-22S and 035-100-23S).

I. AESTHETICS

- A. Would the project have a substantial adverse effect on a scenic vista; or
- B. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

FINDING: NO IMPACT:

McMullin Grade, Madera Avenue, and Goldenrod Avenue have not been designated by the Fresno County General Plan as landscaped or scenic drives, or as scenic highways. There are no scenic vistas in the area. Development in the vicinity of the project site is primarily large-scale agricultural operations. Therefore, the addition of corrals, a milk barn, and a covered digester to this existing dairy will not present a change in the appearance of land uses in the area and will therefore not impact any scenic resources.

C. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

FINDING: NO IMPACT:

The proposed improvements are consistent with the existing dairy operation and therefore will not degrade the existing visual character or quality of the site and its surroundings. Surrounding development consists of large parcels which are committed to the development of orchard and vineyard. The additional corrals and milk barn will represent a negligible increase to the dairy as seen from nearby public roads, primarily McMullin Grade. The digester consists of a series of covered ponds, which will be at grade or only slightly raised during operation and a generator which will be stored within a new building. Therefore, there will be no adverse impact to the existing visual character and quality of the site.

D. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

FINDING: NO IMPACT:

No outdoor lighting is proposed as part of this application. The improvements will be constructed with typical construction materials and therefore will not contribute to glare impacts.

- II. AGRICULTURAL AND FORESTRY RESOURCES
 - A. Would the project convert prime or unique farmlands or farmland of state-wide importance to non-agricultural use?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Farmland on the subject parcels has been classified as a mixture of prime farmland, unique farmland, farmland of statewide importance, and confined animal agriculture. The confined animal designation is limited to the area where the dairy cows are housed and the remaining designations are intermixed across the area of row crops. The new milk barn and additional herd will be located in the area of the existing diary improvements where the land has been designated for confined animal agriculture; however, the proposed digester and three new open lot corrals will be located east of the existing improvements, on land designated as prime farmland. While these improvements represent a change in the use of the prime farmland on this parcel, the new uses are supportive of agriculture and therefore, this project will have a less than significant impact on the conversion of prime or unique farmland or farmland of statewide importance to a non-agricultural use.

B. Would the project conflict with existing agricultural zoning or Williamson Act Contracts?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project site is restricted by Williamson Act Contract No. 2416. Electrical power generation facilities that sell the generated electricity to the grid are not considered uses that are permitted under or compatible with the Williamson Act Contract. Therefore, approximately 7.65 acres of land where the digester is proposed must be removed from Contract. The Policy Planning Division determined that the land could be removed with

the filing of a Notice of Non-renewal for the portion of land where the digester is proposed. Removal of this land from Contract #2416 represents a removal of approximately 1.2% of the contracted land at the project site. The amount of land now under non-renewal does not represent a significant reduction in land restricted by Williamson Act Contract.

The Notice for Non-renewal was filed on August 9, 2018 for the portion of the property where the digester is proposed. With this Notice, there are no conflicts with the remaining Williamson Act Contract.

The proposed improvements are consistent with the Zoning Ordinance, which requires the approval of a Conditional Use Permit. Said permit will be considered concurrently with this environmental review. Therefore, this project will have a less than significant impact on existing zoning.

- C. Would the project conflict with existing zoning for or cause rezoning of forest land, timberland, or timberland zoned Timberland Production; or
- D. Would the project result in the loss of forest land or conversion of forest land to nonforest use?

FINDING: NO IMPACT:

The project is not located near any land that is used or zoned for used for Timberland Production. Therefore, there are no conflicts with or loss of timberland or forest land as a result of this project.

E. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural uses or conversion of forest land to non-forest use?

FINDING: NO IMPACT:

The proposed improvements are an expansion of the existing dairy on this parcel. The portion of the parcel where the digester is located was submitted for non-renewal of the Williamson Act Contract that restricts the two subject parcels; however, the inclusion of the digester on site is generally supportive of the whole agricultural operation on the project site. The conflict with the Williamson Act is primarily due to the commercial nature of the digester, which proposes to generate electricity for sale to PG&E. The continued agricultural production on these parcels is necessary to receive wastewater from the digester and the operation of the dairy is necessary to provide the input for the digester. Therefore, approval of this project will not result in the conversion of farmland to non-agricultural uses.

As noted above, the project is not located in the vicinity of forest land and therefore, will have no impacts on the conversion of forestland to non-forest uses.

III. AIR QUALITY

- A. Would the project conflict with or obstruct implementation of the applicable Air Quality Plan; or
- B. Would the project violate any air quality standard or contribute to an existing or projected air quality violation?

FINDING: LESS THAN SIGNIFICANT IMPACT:

An Air Impact Assessment was reviewed by the San Joaquin Valley Air Pollution Control District (District) to determine if project emissions would exceed District significance thresholds for Carbon Monoxide, Nitrogen Oxides, Sulfur Oxides, and Particulate Matter of 10 and 1.5 microns or less in size. Annual emissions were determined to be less than the significance thresholds set by the District and therefore, impacts from this project are considered to be less than significant.

This project will be subject to several regulations administered by the District, such as Rule 4102 (Nuisance), Rule 4550 (Conservation Management Practices), Rule 4570 (Confined Animal Activities), and Rule 2201 or 2010 (New and Modified Stationary Source Review or Permits Required). In addition, the developer is required to obtain an Authority to Construct prior to construction. Compliance to these regulations will ensure that the project does not conflict with the State Implementation Plan or contribute to existing or potential violations in Fresno County.

C. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under a Federal or State ambient air quality standard?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The County of Fresno is considered a non-attainment region for the following pollutants: one-hour ozone (state standard); eight-hour ozone (state and federal); Particulate Matter (PM) 10 (state); and PM2.5 (state and federal). The District has developed rules and regulations which ensure that projects which release criteria pollutants are operated in a manner that does not interfere with attainment or maintenance of Air Quality Standards. Therefore, with compliance to these existing regulations, this project will have a less than significant impact on incremental, cumulative contributions towards the exceedance of Federal or State ambient air quality standards.

- D. Would the project expose sensitive receptors to substantial pollutant concentrations; or
- E. Would the project create objectionable odors affecting a substantial number of people?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Dairies are known to release objectionable odors, primarily due to animal waste from the milking cows. The proposed project includes an increase in the number of animals

at the project site; however, it also proposes to install a covered digester which will process manure. The manure will be anaerobically activated to release methane, which will then be piped to a nearby engine building where it will run an engine to create power. The capture and use of methane gas is anticipated to remove adverse odors from the air as compared to the baseline.

Further, development in this area is dominated by large parcels of agricultural production with very limited residential development. The nearest residences based on a review of Google Earth (imagery dated February 2, 2018) are located on the subject parcel, adjacent to the existing dairy. The nearest off-site residence is approximately one half-mile from the proposed improvements. Therefore, due to the anticipated reduction in objectionable odors and the distance between the closest residences and the project site, this project will not expose sensitive receptors to substantial pollutant concentrations and will not create objectionable odors affecting a substantial number of people.

IV. BIOLOGICAL RESOURCES

A. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any candidate, sensitive, or special-status species?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

According to comments by the California Department of Fish and Wildlife (CDFW), a State Species of Concern, the tri-colored blackbird (TRBL), has the potential to nest or forage on or adjacent to the Project Site. Flood-irrigated agricultural land provides nesting habitat for these species and take could occur if construction takes place during the nesting season. Therefore, a mitigation measure shall be required to ensure that construction occurs outside of the typical breeding season. If construction must occur during the breeding season, then appropriate pre-construction surveys shall be required and should a nesting colony be observed, then consultation with CDFW and/or a take permit shall be required.

* Mitigation Measure

- 1. To mitigate impacts to the tricolored blackbird (TRBL), the following measures shall be implemented:
 - a. Where construction occurs outside the normal bird breeding season (February 1 through September 15), no further mitigation is necessary.
 - b. To evaluate potential Project-related impacts planned for the normal bird breeding season (February 1 through September 15), a qualified wildlife biologist shall conduct surveys for nesting TRBL no more than 10 days prior to the start of project implementation.
 - c. If an active TRBL nesting colony is found during preconstruction surveys, a minimum 300-foot no-disturbance buffer shall be established in

accordance with the California Department of Fish and Wildlife (CDFW) "Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015" (CDFW 2015). This buffer shall remain in place until the breeding season has ended or until a qualified biologist has determined that nesting has ceased, the birds have fledged, and are no longer reliant upon the colony or parental care for survival. The TRBL colonies can expand over time and for this reason, the colony shall be reassessed to determine the extent of the breeding colony before conducting construction activities.

- d. If the 300-foot no-disturbance nest buffer is not feasible, the developer shall consult with California Department of Fish and Wildlife to determine if the Project can avoid take. If take cannot be avoided, the developer shall acquire an Incidental Take Permit for tricolored blackbird to comply with the California Endangered Species Act.
- B. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The U.S. Fish and Wildlife Service's National Wetlands Mapper identifies fourteen wetlands on the project site. Across the two parcels that comprise the project site, the Mapper identified ten separate freshwater ponds, each of which was classified as a palustrine system with unconsolidated shore which is temporarily flooded. The Mapper also identified four stretches of scrub-shrub palustrine systems. It is noted that the wetlands in this area were identified using color infrared imagery from 1987 and that aerial photos do not indicate the presence of any of these wetlands. Grading in the vicinity of the dairy ensures that water does not pool on site. It is similarly unlikely that wetlands persist in the areas of the row crops, where the land has been disced and improved for farming.

An irrigation canal runs parallel to S. McMullen Grade in this area. It is located on the opposite side of the road from the project site and will not be impacted by development.

Therefore, due to the removal of wetlands from the project site during the by-right operation of the Dairy and the distance between the proposed improvements and the existing irrigation canal, the project will have a less than significant impact on wetlands.

C. Would the project have a substantial adverse effect on federally-protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption or other means?

FINDING: NO IMPACT:

There are no federally-protected wetlands present on the project site. Wetlands were indicated based on infrared review of photos taken in 1987 and the project site has been developed with row crops and confined animal pens since 2005.

- D. Would the project 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; or
- E. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- F. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

FINDING: NO IMPACT:

This project will not interfere with the movement of any fish or wildlife species as the proposed improvements represent only an incremental change to the existing development on the parcel. The parcel does not currently serve as a migratory corridor and is not intersected by a stream or river that would provide a corridor for aquatic species.

The project site is not restricted by any Natural Community Conservation Plan or other approved habitat conservation plan or tree preservation policy.

V. CULTURAL RESOURCES

- A. Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5; or
- B. Would the project cause a substantial adverse change in the significance of an archeological resource pursuant to Section 15064.5; or
- C. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- D. Would the project disturb any human remains, including those interred outside of formal cemeteries; or
- E. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

Under the provisions of Assembly Bill 52, the County of Fresno was required to provide notice that this Initial Study was being prepared to Native American Tribes who had previously indicated interest in reviewing CEQA projects. Notices were sent on July 31,

2017 to Robert Ledger of the Dumna Wo Wah, Robert Pennell of Table Mountain Rancheria, and Ruben Barrios of Santa Rosa Rancheria. A notice was also sent to Tara Estes-Harter of the Picayune Rancheria of Chukchansi Indians on October 20, 2017.

Of these Tribal Governments, only Dumna Wo Wah requested consultation. Staff responded to the request in a letter dated September 6, 2017 and attended a meeting on September 13, 2017 with two Tribal Representatives to discuss this and other projects where the Tribe recommended consultation. On February 12, 2018, the results of a Sacred Lands File search by the Native American Heritage Commission and a records search performed by the San Joaquin Valley Information Center were forwarded to Robert Ledger along with a request for the tribe to identify any known resources at the project site. There was no response from the tribe since the September 13, 2017 meeting and staff therefore concluded consultation without identification of any known cultural resources.

However, despite the failure of the tribes and historical databases to identify known cultural resources, the potential exists for significant artifacts to be excavated during construction. Therefore, the following mitigation measure is proposed to ensure that impacts to previously unknown cultural resources can be reduced to less than significant.

* Mitigation Measure

1. In the event that cultural resources are unearthed during ground-disturbing activities, all work shall be halted in the area of the find. An Archeologist shall be called to evaluate the findings and make any necessary mitigation recommendations. If human remains are unearthed during ground-disturbing activities, no further disturbance is to occur until the Fresno County Sheriff-Coroner has made the necessary findings as to origin and disposition. All normal evidence procedures should be followed by photos, reports, video, etc. If such remains are determined to be Native American, the Sheriff-Coroner must notify the Native American Commission within 24 hours.

VI. GEOLOGY AND SOILS

- A. Would the project expose people or structures to potential substantial adverse effects, including risk of loss, injury or death involving:
 - 1. Rupture of a known earthquake?
 - 2. Strong seismic ground shaking?
 - 3. Seismic-related ground failure, including liquefaction?
 - 4. Landslides?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project site is located approximately five miles north of a series of faults identified by the California Department of Conservation's Fault Activity Map. These faults have had recognized movement in the last 1.6 million years; however, Figure 9-5 of the Fresno County General Plan Background Report (FCGPBR) indicates that the project site is located in an area where ground acceleration due to seismic hazards has only a 10% chance to exceed 20%g (speed of gravity) within the next 50 years. Therefore, despite the relative proximity of a series of fault lines, it is not anticipated that severe groundshaking or rupture of these faults will occur. The structures associated with this project will be subject to building standards at the time of development, which include specific regulations to protect against damage caused by earthquake and/or ground acceleration.

Figure 9-6 (FCGPBR) shows that the project site is not in an area of moderate or high landslide or subsidence hazards and the project site is generally flat, precluding site-specific risk factors. Therefore, due to the project's location in a low-risk area and required compliance to the Fresno County Building code, development of this project will have a less than significant impact on the risk of adverse effects due to rupture of a known earthquake, strong seismic ground shaking or ground-related failure, and landslides.

B. Would the project result in substantial erosion or loss of topsoil?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The proposed improvements to this existing dairy will not represent a significant expansion of graded area on the project site. Any grading that is performed will require a grading permit or voucher and ministerial review of those permits will ensure that substantial erosion or loss of topsoil does not occur.

- C. Would the project result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse; or
- D. Would the project be located on expansive soils, creating substantial risks to life or property?

FINDING: NO IMPACT:

The project site is not located in an area that is at risk of on-site or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse, according to Figure 7-1 (FCGPBR), and will not be located on expansive soils.

E. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative disposal systems where sewers are not available for wastewater disposal?

FINDING: NO IMPACT:

The project currently operates with the use of the existing permitted septic systems. No new septic is proposed as part of this application.

VII. GREENHOUSE GAS EMISSIONS

- A. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- B. Would the project conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Review of this project by the San Joaquin Valley Air District (District) determined that the project's emissions of criteria pollutants would not exceed the District's thresholds for significance and that the operation of the project would be consistent with the State Implementation Plan. Therefore, the project will have a less than significant impact on the generation of greenhouse gases and adherence to existing plans, policies, and regulations adopted for the purpose of reducing greenhouse gas emissions.

VIII. HAZARDS AND HAZARDOUS MATERIALS

- A. Would the project create a significant public hazard through routine transport, use or disposal of hazardous materials; or
- B. Would the project create a significant public hazard involving accidental release of hazardous materials into the environment?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Methane will be produced in the anaerobic digester by natural biological processes (the decomposition of manure waste) and will be pumped to an engine house. The house would be located just north of the proposed digester, within the boundaries of the project site. Manure will enter the digester on the northwestern corner, pass through the double U in the digester and exit at the southwestern corner. Digester effluent will flow into the nearby storage ponds from where it will eventually be diluted and applied to the row crops. The methane biogas will be piped directly to the engine building where it will be pushed through a condenser and into the engine, which will will be mated to an electric generator. The generator will export its power to the PG&E grid through new switchgear and step-up electrical transformer.

Therefore, while the routine use of the hazardous methane gas will occur, risk to the public as a result of its transport or accidental release is less than significant. The operation is limited to the southwestern corner of the dairy, approximately 3.8 acres, which is also surrounded by the row crops where the remaining effluent will be applied. The operator is required to maintain an emergency response plan. With compliance to the existing regulations and the operation of the digester distant from nearby

residences, there will be a less than significant impact on public hazards as a result of the transport or use of hazardous materials.

C. Would the project create hazardous emissions or utilize hazardous materials, substances or waste within one quarter-mile of a school?

FINDING: NO IMPACT:

The project site is not located with one quarter mile of a school.

D. Would the project be located on a hazardous materials site?

FINDING: NO IMPACT:

Review of the US EPA's NEPAssist report indicates that there are no hazardous or contaminated sites within one mile of the project site. The following lists were consulted: Resource Conservation and Recovery Act (RCRA), Toxic Releases Inventory (TRI), Superfund/National Priorities List, Brownfields Assessment Cleanup and Redevelopment Exchange System (ACRES), RADInfo, and Toxic Substances Control Act.

- E. Would a project located within an airport land use plan or, absent such a plan, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area; or
- F. Would a project located within the vicinity of a private airstrip result in a safety hazard for people residing or working in the project area?

FINDING: NO IMPACT:

The project is not located within the vicinity of a public or private airport or an airstrip.

- G. Would the project impair implementation of or physically interfere with an adopted Emergency Response Plan or Emergency Evacuation Plan; or
- H. Would the project 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?

FINDING: NO IMPACT:

Approval of this project will not impair the implementation of an Emergency Response Plan or Emergency Evacuation Plan. Following construction, there will be a negligible increase in the amount of traffic generated by this project for maintenance and repair of the proposed digester, engine, and transformer.

The project site is located in an area of local responsibility for fire protection and is not at significant risk of damage due to wildfire.

IX. HYDROLOGY AND WATER QUALITY

- A. Would the project violate any water quality standards or waste discharge requirements or otherwise degrade water quality; or
- B. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge so that there would be a net deficit in aquifer volume or a lowering of the local groundwater table?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The subject dairy is enrolled under the Waste Discharge Requirements Lone Oak Dairy #2, Order R5-2008-0001, which is associated with a monitoring and reporting program. The Central Valley Regional Water Quality Control Board is responsible for monitoring the quality of water produced by this dairy. With the required updates to technical reports required by the Digester Order, this project will be in compliance with the Water Boards' standards and will not violate any water quality standards.

The project site is not located in an area of water shortage and a percentage of the water used in cleaning the stalls will be recovered as effluent that will be applied to the fields, further reducing impacts to the groundwater supplies and recharge.

- C. Would the project substantially alter existing drainage patterns, including alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site; or
- D. Would the project substantially alter existing drainage patterns, including alteration of the course of a stream or river, in a manner which would result in flooding on or off site; or
- E. Would the project create or contribute run-off which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted run-off?

FINDING: NO IMPACT:

The project site is not located in an area of special flood hazard; however, all development in the County of Fresno which involves grading is required to obtain a grading permit or voucher. Compliance to the provisions in the permit or voucher will ensure that excessive flooding an erosion do not occur.

F. Would the project otherwise substantially degrade water quality?

FINDING: NO IMPACT:

Approval of this project will not degrade water quality. Wastewater will be applied to field crops after it is processed through the digester. Without approval of the project, the waste water would be applied without any additional processing, consistent with the

nutrient management plan approved by the Regional Water Quality Control Board. Some fresh water may be mixed with the effluent to ensure that the mixture is appropriate for application to the field crops.

- G. Would the project place housing within a 100-year floodplain; or
- H. Would the project place structures within a 100-year flood hazard area that would impede or redirect flood flows?

FINDING: NO IMPACT:

The project site is not located within a 100-year floodplain according to FEMA FIRM Panel No. 06019C2575H.

I. Would the project expose persons or structures to levee or dam failure?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project site is located in an area at risk of inundation as a result of dam failure; however, the proposed buildings must comply with the Fresno County Ordinance Title 15, Chapter 15.48 Flood Hazard Areas, which require the implementation of flood protection and grading limitations to reduce the risk of damage due to flood. Compliance to these regulations will reduce risks to person or structures as a result of levee or dam failure to less than significant.

J. Would the project cause inundation by seiche, tsunami or mudflow?

FINDING: NO IMPACT:

The project site is not located near a body of water that would be subject to seiche; is not located in an area of steep slopes that could cause mudflow; and is not located near to the coast where there is a risk of tsunami. Therefore, there will be no impacts to the risk of inundation by seiche, tsunami, or mudflow.

- X. LAND USE AND PLANNING
 - A. Will the project physically divide an established community?

FINDING: NO IMPACT:

The scope of this project is limited to the two parcels which are currently in operation as Lone Oaks Dairy #2. There are no established communities in the area and the improvements are proposed to be built adjacent to the existing dairy. Therefore, approval of this project does not have the potential to divide an established community.

B. Will the project conflict with any Land Use Plan, policy or regulation of an agency with jurisdiction over the project?

FINDING: NO IMPACT:

The proposed use is allowed in the County of Fresno with the approval of a Classified Conditional Use Permit, which will be reviewed by the Planning Commission concurrently with this Initial Study.

C. Will the project conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan?

FINDING: NO IMPACT:

There are no Habitat Conservation Plans or Natural Community Conservation Plans in the vicinity of the project.

XI. MINERAL RESOURCES

- A. Would the project result in the loss of availability of a known mineral resource; or
- B. Would the project result in the loss of availability of a locally-important mineral resource recovery site designated on a General Plan?

FINDING: NO IMPACT:

According to Figure 7-7(FCGPBR), the project site is not located at an area designated for Mineral Resource Recovery.

XII. NOISE

- A. Would the project result in exposure of people to severe noise levels; or
- B. Would the project result in exposure of people to or generate excessive ground-borne vibration or ground-borne noise levels; or
- C. Would the project cause a substantial permanent increase in ambient noise levels in the project vicinity; or
- D. Would the project result in a substantial temporary or periodic increase in ambient noise levels?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Some noise may be produced by the generator; however, the nearest sensitive receptor would be located approximately one half-mile from the house for the engine. Therefore, due to the project's distance from sensitive receptors, there will be no increase in the exposure of persons to severe or adverse noise levels or ground borne noise or vibration. Additionally, the proposed design which requires that the engine be built inside a new building will further attenuate noise impacts.

- E. Would the project expose people to excessive noise levels associated with a location near an airport or a private airstrip; or
- 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?

FINDING: NO IMPACT:

The project site is not located in the vicinity of an airport or airstrip.

XIII. POPULATION AND HOUSING

A. Would the project induce substantial population growth either directly or indirectly?

FINDING: NO IMPACT:

Approval of this project would allow the increase in herd size at this dairy and would allow methane produced by the manure of cows to power the generation of electricity which would be sold to PG&E. This will not induce substantial population growth because it will not create a significant number of new job opportunities or otherwise increase the desirability of living in this area. While approval of this project is likely to reduce adverse odors in the area by capturing and burning a portion of the methane produced by manure, it is not likely to remove all adverse odors and this area will remain unlikely to attract new residents. The historical use of the surrounding parcels for large-scale agricultural production is likely to continue.

- B. Would the project displace substantial numbers of existing housing; or
- C. Would the project displace substantial numbers of people, necessitating the construction of housing elsewhere?

FINDING: NO IMPACT:

No housing will be displaced as a result of this project. This project similarly will not displace substantial numbers of people. It will be developed on areas of farmland that were previously dedicated to agricultural production.

XIV. PUBLIC SERVICES

- A. Would the project result in substantial adverse physical impacts associated with the provision of new or physically-altered public facilities in the following areas:
 - 1. Fire protection;
 - 2. Police protection;
 - 3. Schools;

4. Parks?

FINDING: NO IMPACT:

This project will not increase the need for public facilities associated with fire or police protection. As this project will not lead to population growth, there will be no impacts on schools or parks. The layout for this project will be reviewed by the Fresno County Fire Protection District to ensure compliance with California Code of Regulations Title 24 – Fire Code.

5. Other public facilities?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The electricity proposed to be generated by the operation of the dairy will be sold to PG&E and will therefore lead to a small physical alteration in PG&E's connections; a new tie-in location will be prepared to accommodate the project. This will not create a significant impact because the improvements will be made at the project site and will serve to reduce PG&E's reliance on non-renewable energy.

XV. RECREATION

- A. Would the project increase the use of existing neighborhood and regional parks; or
- B. Would the project require the construction of or expansion of recreational facilities?

FINDING: NO IMPACT:

This project will not increase the use of existing neighborhood and regional parks. There are no such facilities in the vicinity of the project and the request to expand the existing dairy and add a digester to convert methane into electricity will not result in population expansion.

XVI. TRANSPORTATION/TRAFFIC

- A. Would the project conflict with any applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation; or
- B. Would the project conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demands measures?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Operation of this facility requires less than 10 round trips per day by service and delivery vehicles. The addition of 1-2 trips per month for maintenance of the digester and related facilities will not conflict with any circulation plans or contribute to existing congestion of nearby County streets.

C. Would the project result in a change in air traffic patterns?

FINDING: NO IMPACT:

All parts of the proposal will be in compliance with the maximum height restrictions of the AE-20 Zone District and therefore will not conflict with air traffic which may exist nearby. There are no airports within two miles of the project site; however, the project site is located within military airspace. Review of the application by NAS Lemoore's Community Planning Officer determined that the project would have no negative impacts to flight operations.

- D. Would the project substantially increase traffic hazards due to design features; or
- E. Would the project result in inadequate emergency access?

FINDING: NO IMPACT:

The project has been designed to provide access along private roads which exist on the project site. The existing buildings were constructed in straight rows and private dirt roads intersect at regular intervals. Therefore, there will be no increase in traffic hazards or inadequate emergency access as a result of this application.

F. Would the project conflict with adopted plans, policies or programs regarding public transit, bicycle or pedestrian facilities or otherwise decrease the performance or safety of such facilities?

FINDING: NO IMPACT:

There are no plans, policies, or programs which relate to public transit, bicycle, or pedestrian facilities in this area. The surrounding development consists of large parcels which have been planted with row crops or support dairies similar to the project site.

XVII. UTILITIES AND SERVICE SYSTEMS

A. Would the project exceed wastewater treatment requirements?

FINDING: NO IMPACT:

The operation of dairies is regulated by the California Regional Water Quality Control Board (CRWQCB). The operator is required to conduct nutrient and groundwater monitoring to ensure that excessive pollutants are not released into the groundwater. The Nutrient Management Plan provided by the applicant discusses specific methods which must be used, such as Title 40 Code of Federal Regulations (CFR) Part 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants*. With compliance to existing regulations and oversight by the CRWQCB, this project will have no impact on existing wastewater treatment requirements.

- B. Would the project require construction of or the expansion of new water or wastewater treatment facilities; or
- C. Would the project require or result in the construction or expansion of new storm water drainage facilities; or
- D. Would the project have sufficient water supplies available from existing entitlements and resources, or are new or expanded entitlements needed; or
- E. Would the project result in a determination of inadequate wastewater treatment capacity to serve project demand?

FINDING: NO IMPACT:

This project will not require construction or expansion of new water or wastewater treatment facilities. The inclusion of the digester will add an additional step between collection of manure from the herd and application of the wastewater to the surrounding fields. Wastewater is not exported to any offsite system for processing. It is retained on site and used for irrigation, typically after being diluted with fresh water. The project site is not in an area that is known to be short of water, so there are no concerns that the limited increase in use will result in the need to obtain additional water entitlements.

F. Would the project be served by a landfill with sufficient permitted capacity?

FINDING: NO IMPACT:

This project will continue to be served by Mid Valley Disposal, which has sufficient capacity. During construction of the project, additional materials may be submitted to the landfill; however, said increase will not be in excess of Mid Valley Disposal's operational limits. During operation there will be a negligible increase in the amount of waste which will be submitted to the landfill.

G. Would the project comply with federal, state and local statutes and regulations related to solid waste?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Upon completion of construction, the applicant will be required to submit technical reports to the Central Valley Regional Water Quality Control Board. These submissions are required by Provisions in Section E of the Digester Order. The operation will also be required to obtain a permit to operate a Solid Waste Facility from the County of Fresno, Environmental Health Division, acting as the Local Enforcement Agency. The need to comply with the Digester Order and other regulations enforced by the Water Quality Control Board will ensure that there is no adverse impact regarding noncompliance with statutes and regulations related to solid waste.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

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, 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 prehistory or history?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

Flood-irrigated agricultural land provides nesting habitat for tri-colored blackbird and take could occur if construction takes place during the nesting season. Therefore, the Mitigation Measures noted in Section IV.A will be implemented, requiring preconstruction surveys and avoidance measures if construction occurs during the nesting season. In addition, it is unlikely but possible that previously undiscovered subsurface paleontological or Native American resources are present in the proposed area of development. Implementation of the mitigation measure in Section V, which describes avoidance and reporting requirements, will ensure that impacts are less than significant.

* Mitigation Measures

- 1. See Section IV.A.
- 2. See Section V.
- B. Does the project have impacts that are individually limited, but cumulatively considerable?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Emissions of criteria pollutants from this project will be consistent with the State Implementation Plan administered by the San Joaquin Valley Air Pollution Control District. The proposed improvements do not represent a substantial increase in the size of the dairy and will not result in adverse cumulative aesthetic or odor impacts. The proposed digester will capture some of the methane that is currently released into the air by the natural decomposition of manure and will convert it into electricity. Said power will be sold to PG&E, providing a source of renewable energy.

C. Does the project have environmental impacts which will cause substantial adverse effects on human beings, either directly or indirectly?

FINDING: NO IMPACT:

The proposed improvements will generally decrease the odor in the area of the project site and will contribute renewable energy to the grid where it will be transferred to PG&E customers.

CONCLUSION/SUMMARY

Based upon the Initial Study prepared for Classified Conditional Use Permit Application No. 3584, staff has concluded that the project will not have a significant effect on the environment. It has been determined that there would be no impacts to Aesthetics, Land Use and Planning, Mineral Resources, Population and Housing, and Recreation. Potential impacts related to Air Quality, Geology and Soils, Greenhouse Gases, Hazard and Hazardous Materials, Hydrology and Water Quality, Noise, Public Services, Transportation/Traffic, and Utilities and Service Systems have been determined to be less than significant. Potential impacts relating to Biological Resources and Cultural Resources have determined to be less than significant with compliance with noted Mitigation Measures.

A Mitigated Negative Declaration is recommended and is subject to approval by the decisionmaking body. The Initial Study is available for review at 2220 Tulare Street, Suite A, street level, located on the southwest corner of Tulare and "M" Street, Fresno, California.

CMM

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County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING STEVEN E. WHITE, DIRECTOR

DATE: July 31, 2017

TO:

Department of Public Works and Planning, Attn: Steven E. White, Director Department of Public Works and Planning, Attn: Bernard Jimenez, Assistant Director Development Services, Attn: William M. Kettler, Division Manager Development Services, Principal Planner, Attn: Chris Motta Development Services, Current Planning, Attn: Marianne Mollring Development Services, Policy Planning, ALCC, Attn: Mohammad Khorsand Development Services, Water/Geology/Natural Resources, Attn: Jennifer Parks Development Services, Zoning & Permit Review, Attn: Tawanda Mtunga Development Services, Site Plan Review, Attn: Hector Luna Development Services, Building & Safety/Plan Check, Attn: Chuck Jonas Development Services, Building & Safety/Plan Check, CASp, Attn: Dan Mather Resources Division, Solid Waste, Attn: John R. Thompson Development Engineering, Attn: Jennifer Parks, Grading/Mapping Road Maintenance and Operations, Attn: Randy Ishii/Frank Daniele/Nadia Lopez Design Division, Special Projects/Road Projects, Attn: Mohammad Alimi/Dale Siemer Design Division, Transportation Planning, Attn: Mohammad Alimi/Dale Siemer Fresno County Health Officer, Dept. of Public Health, Attn: Ken Bird, M.D. Department of Public Health, Environmental Health Division, Attn: Glenn Allen/Janet Gardner/Kevin Tsuda Agricultural Commissioner, Attn: Les Wright Sheriff's Office, Attn: Captain John Zanoni, Lt. John Reynolds, Lt. Louie Hernandez, Lt. Kathy Curtice, Lt. Ryan Hushaw U.S. Department of Interior, Fish & Wildlife Service, San Joaquin Valley Division, Attn: Patricia Cole, Chief U.S. Environmental Protection Agency, Air Division, Air Planning Office, Region 9, Attn: Dawn Richmond U.S. Environmental Protection Agency, Ground Water Office, Sole Source Aquifer, Region 9, Attn: Leslie Greenberg NAS Lemoore, NAVFAC, Public Works Lemoore, Attn: Marlana L. Brown CA Regional Water Quality Control Board, Attn: Dale Harvey CALTRANS, Attn: Dave Padilla CALTRANS, San Joaquin Environmental Branch, Attn: Shane Gunn CA Department of Fish and Wildlife, Attn: Steve Hulbert State Water Resources Control Board, Division of Drinking Water, Fresno District, Attn: Carl Carlucci, Jose Robeldo CA Environmental Protection Agency, Department of Toxic Substance Control, Attn: Don Plain CA Department of Toxic Substance Control (CEQA unit), Attn: Dave Kereazis State Reclamation Board, Attn: Chief Engineer CA Department of Water Resources, Attn: Kevin Faulkenberry CA State Parks and Recreation, Attn: Heather M. Reith, District Environmental Coordinator CA Integrated Waste Management Board, Permit and Inspections, Attn: Mark DeBie CA Dept. of Food & Agriculture, Meat and Poultry Insp., Attn: Dr. Narmara Garbaba

DEVELOPMENT SERVICES DIVISION

CA Public Utilities Commission, Infrastructures Permitting and CEQA, Attn: Mary Jo Borak

Table Mountain Rancheria, Attn: Robert Pennell, Cultural Resources Director/Kim Taylor, Cultural Resources Department/Sara Barnett, Cultural Resources Department

Santa Rosa Rancheria Tachi Yokut Tribe, Attn: Ruben Barrios, Tribal Chairman Dumna Wo Wah Tribal Government, Attn: Robert Ledger, Tribal Chairman; Eric

Smith, Cultural Resources manager/Chris Acree, Cultural Resources Analyst San Joaquin Valley Unified Air Pollution Control District (PIC-CEQA Division), Attn: **PIC Supervisor**

Raisin City Water District, Attn: Jerry Boren

Kings River Conservation District, Attn: Rick Hoelzel

Fresno Westside Mosquito Abatement District, Attn: Elizabeth Cline

Fresno County Fire Protection District, Attn: Chris Christopherson, Battalion Chief Fresno County Farm Bureau, Attn: Ryan Jacobsen

Pacific Gas & Electric Company, Land Services Department, Attn: Dale Overbay, Marisol Garcia

- Chrissy Monfette, Planner CM FROM: **Development Services Division**
- Initial Study Application No. 7338 and SUBJECT: Classified Conditional Use Permit Application No. 3584
- APPLICANT: Innovative Ag Services, LLC

DUE DATE: August 15, 2017

The Department of Public Works and Planning, Development Services Division is reviewing the subject applications proposing to allow a modification to the existing dairy to allow the addition of three additional corrals, a new 100-stall milk barn, 900 additional heifers with no addition to the milking numbers, a new covered lagoon manure digester, a biogas engine generator set and supporting equipment.

The Department is also reviewing for environmental effects, as mandated by the California Environmental Quality Act (CEQA) and for conformity with plans and policies of the County. Based upon this review, a determination will be made regarding conditions to be imposed on the project, including necessary on-site and off-site improvements. We must have your comments by August **15, 2017.** Any comments received after this date may not be used.

NOTE - THIS WILL BE OUR ONLY REQUEST FOR WRITTEN COMMENTS. If you do not have comments, please provide a "NO COMMENT" response to our office by the above deadline.

Please address any correspondence or questions related to environmental and/or policy/design issues to me, Chrissy Monfette, Planner, Development Services Division, Fresno County Department of Public Works and Planning, 2220 Tulare Street, Sixth Floor, Fresno, CA 93721, or call (559) 600-4245, or email cmonfette@co.fresno.ca.us.

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Activity Code (Internal Review): 2388

Enclosures

	Date Received: June 22, 2017 CUP
Fresno County Department of	f Public Works and Planning 3589
MAILING ADDRESS:	LOCATION: (Application No.)
Department of Public Works and Plannir	(ppm-sain num
Development Services Division	Street Level
FREST 2220 Tulare St., 6 th Floor Fresno, Ca. 93721	Fresno Phone: (559) 600-4497
APPLICATION FOR:	Toll Free: 1-800-742-1011 Ext. 0-4497
Pre-Application (Type)	DESCRIPTION OF PROPOSED USE OR REQUEST:
	Modification to existing dairy. 900 (7 -14
Amendment Application Director Review and App Amendment to Text for 2 nd Residence	monutoid henera) head increase of
	heifers. This will include the addition of
	three corrals. As well as, the addition of a covered lagoon digester.
—	
General Plan Amendment/Specific Plan/SP Amendment) Time Extension for	
	L
CEQA DOCUMENTATION: Initial Study PER N/A PLEASE USE FILL-IN FORM OR PRINT IN BLACK INK. Answer all quest	ions completely. Attack you just site shows from the
and deeds as specified on the Pre-Application Review. Attach Copy	of Deed, including Legal Description
LOCATION OF PROPERTY: S/E side of McMullin Grad	
between S. Madera	and S. Golden Rod Avenue
Street address: 10014 S. McMullin Grade, H	
APN: 035-100-22s/035-100-23s Parcel size: 159 acres	
ADDITIONAL APN(s):	
D~	· · · · · · · · · · · · · · · · · · ·
1, (signature), declare the	at I am the owner, or authorized representative of the owner, of
the above described property and that the application and attache knowledge. The foregoing declaration is made under penalty of per	d documents are in all respects true and correct to the best of my
Bernard & Rebecca TeVelde 13866 4th Avenue	
Owner (Print or Type) Address	Hanford 93230 559-936-2253 City Zip Phone
Innovative Aa Services, LLC	(see below)
Applicant (Print or Type) Address	City Zip Phone
Innovative Ag Services, LLC (Warren Hutchings) 1201 Delta View Rd., St Representative (Print or Type) Address	e. 5 Hanford 93230 559-587-2800 City Zip Phone
CONTACT EMAIL: whucthings@innovativeag.net	
OFFICE USE ONLY (PRINT FORM ON GREEN PAPER	
	ן <u>UTILITIES AVAILABLE:</u> ב 2,284.50
Application Type / No.: Fee:	
Application Type / No.: Fee:	
Application Type / No.: Fee:	\$ Agency
PER/Initial Study No.: 7338 Fee:	\$ 3,90/ SEWER: Yes // No
Ag Department Review: Fee: Health Department Review: Fee:	\$ 93 \$ 992 Agency:
Received By: <u>MM</u> Invoice No.: 98687 TOTAL:	
STAFF DETERMINATION: This permit is sought under Ordinance	Section: Sect-Twp/Rg: TS/R E
en el contratter en contratter en sought under of unante	ΔPN #
	APN # APN #
Related Application(s):	APN # APN # APN #
	APN #

(PRINT FORM ON GREEN PAPER)

Services (20) Delta View Herrices (20) Delta View Herrices CA 93230 PREST	A Services LLC Pre-Application Review Department of Public Works and Planning NUMBER: <u>39188</u> APPLICANT: TE VEDE PHONE:
CNEL: WYes(level) LOW WATER: @vYesWT ZONE DISTRICT: A 20; SRA: @YesH	ES# <u>N7ZAN</u> WIOLATION NO. <u>NO</u> HIN ½ MILE OF CITY: No Yes
LOT STATUS: Zoning: () Conforms; () Legal Non-Conforming lot Merger: May be subject to merger: Nov Yes ZI Map Act: () Tot of Rec. Map; () On '72 rolls; () Oth SCHOOL FEES: 00 Yes DISTRICT: <u>Collicen Plains</u> FMFCD FEE AREA: () Outside () District No.: PROPOSAL C.U. C. C. Allow Y PAUSIAN Y MAR DELLY PAUSIAN	M# Initiated In process Ter MNN; () Deeds Req'd (see Form #236) PERMIT JACKET: (NOVYes FLOOD PRONE: NOVYes PERMIT JACKET: NOVYes FLOOD PRONE: NOVYes PERMIT JACKET: NOV PERMIT JACKET: NOV
COMMENTS: ORD. SECTION(S):	A DATE: 5/5/17
SPECIFIC PLAN:	PROCEDURES AND FEES: ()MINOR VA: ()XINOR VA: ()ALCC: ()XINOR VA: ()YINOR VA: ()YINOR VA: ()YINOR VA: ()YINOR ()YINOR ()YINOR (35%): ()Other: ()Other: <t< td=""></t<>
FILING REQUIREMENTS: OTHER FI	LING FEES:
 (X) This Pre-Application Review form (Separate of (X) Copy of Deed / Legal Description (X) CA Dept. (X) Photographs (Separate of (X) Photographs (Separate of (X) Photographs (Separate of (X) IS Application and Fees* * Upon review of project material (X) IS Application and Fees* * Upon review of project material (X) IS Application and Fees* * Upon review of project material (X) IS Application and Fees* * Upon review of site Plans - 4 copies (folded to 8.5"x11") + 1 - 8.5"x11" reference (S) Floor Plan & Elevations - 4 copies (folded to 8.5"X11") + 1 - (X) Project Description / Operational Statement (Typed) () Statement of Variance Findings () Statement of Intended Use (ALCC) 	eduction
() Dependency Relationship Statement () Resolution/Letter of Release from City of Referral Letter # BY: <u>Chrissy Monfelle</u> DATE: <u>5/15/2</u> PHONE NUMBER: (559) <u>600 - 4245</u>	if the application is submitted within six (6) months of the date on this receipt.
NOTE: THE FOLLOWING REQUIREMENTS MAY ALSO APPL () COVENANT () SITE PLAN REVIEW () MAP CERTIFICATE () PARCEL MAP () VASTE FACILITIES PL () FINAL MAP () WASTE FACILITIES PL () FMFCD FEES () ALUC or ALCC () OTHER (see reverse side) Rev 9/25/2015 G:\4360Devs&Pln\FORMS\F226 Pre-Application Review.doc	ERMIT

Operational Statement: Lone Oak Farms #2 Dairy Digester

RECEIVED JUN 22 2017

DEPARTMENT OF PUBLIC WORKS AND PLANNING DEVELOPMENT SERVICES DIVISION

Prepared by Maas Energy Works Inc. 10014 S McMullin Grde Fresno, CA 93706

The Lone Oak Farms #2 Dairy Digester project includes a new covered lagoon manure digester, a biogas engine generator set, and supporting equipment.

The digester will be created by digging a new, double-lined pond as shown on the project site plan. This new pond will receive the liquid manure produce by the existing dairy farm. The dairy manure flow will remain unchanged except for adding the digester directly after the separator. The separated manure will feed the digester by gravity flow. The manure will enter the digester on the NW corner, pass through the double U in the digester and exit at the SW corner. Digester effluent exiting the digester will flow into the nearby storage ponds where it will wait for application on the fields.

The digester will create methane-rich biogas underneath the lagoon cover via anaerobic digestion. The biogas created by the digester will be piped to the nearby engine building. A blower inside the building will push it through a condenser and into the engine. The engine will be mated with a 1,028 kW electric generator which will export its power to the PG&E grid via switchgear and a step-up electrical transformer on a new metered connection to the grid.

RECEIVED 2 JUL 18 2017 DEPARTMENT OF PUBLIC WORKS March 10, 2017 ING CES DIVISION DEVELOPMEN COP 3564

RE: Operational Statement for Lone Oak Dairy Farms #2

Lone Oak Dairy Farm #2, located at 10014 S. McMullin Grade, Helm CA, and operating under Conditions Use Permit (CUP) 3216.

Lone Oak wishes to amend this CUP to include 3 additional corrals (see attached plan) for 900 more heifers, approximately 300 animals per corral. The animal number increase is an attempt to currently house all necessary animals for this dairy. The animal size will be approximately 600-800 lbs. There will be no additional milking numbers added. In addition add a 100 stall carousel milk barn.

Sincerely submitted,

I ama Al the

AF					Lone On	
1EV	COUN	Development	RECEIVE COUNTY OF FRESNO	D		~ ~
100	STON S	a\ 韵 Services	JUN 22 201		Operational Staten	nent Checklist
Or	FREST	Division	DEPARTMENT OF PUBLIC WOR AND PLANNING DEVELOPMENT SERVICES DIVIS		Department of Public Work	s and Planning
must	the type	ad or written in a logible	ement provides for a s all of the following	complete unde that apply to y	rstanding of your proposal. our proposal. <u>Your Operations of paper. Do not submit the submit submit the submit submit the submit submit</u>	onal Statement
your	Operation	onal Statement. It should	serve only as a guid	e for preparing a	of paper. Do not submit the complete Statement. & see	Collowing
~	1.	Nature of the operation	what do you prop	oose to do? De	scribe in detail.	pages
~	2.	Operational time limits: Months (if seasonal): Hours (from to Special activities:	N/A) Frequency:	Days per we Total hours Hours:	eek: 7-24 per day: Are these indoors or outd	oors?
_	3.	Number of customers of Average number per day		ımber per day:	Hours (when they will be	
	4.	Number of employees: Current: 34	Future: Hou	rs they work:	Do any live on-site as a c	
~	5.	Service and delivery ve Number:	hicles: Type: Freq	uency:		
L	6.	Access to the site: Public Road:	Private Road:	Surface:	Unpaved (dirt/gravel) / Pa	ved:
-	7.	Number of parking space Type of surfacing on park	ing area. Diet	customers, and 50 plus	d service/delivery vehicles.	
\sim	8.		51-1.		grown or produced on-site	or at some
~	9.	What equipment is used	I? If appropriate, pro	ovide pictures or	brochure.	
-	10.	What supplies or materi				
×	11.	Does the use cause an u Noise? Glare? If so, explain how this will	Dust?	Odor?		
V	12.	그 부분 방법에 들어나 가격하는 것이 같은 비행을 즐기는 것				
-		List any solid or liquid w Estimated volume of waste How is it hauled, and when	es: How and whe	ced. ere is it stored? How often?		
Ż	13.	Estimated volume of wast	es: How and whe re is it disposed?	ere is it stored? How often?	Source of water?	
1	13. 14.	How is it hauled, and when	es: How and whe re is it disposed? ter to be used (gall	ere is it stored? How often? ons per day). S		
KKN I		Estimated volume of wast How is it hauled, and when Estimated volume of wast Describe any proposed a Will existing buildings be	es: How and whe re is it disposed? ter to be used (gall advertising includin e used or will new l	ere is it stored? How often? ons per day). S ng size, appear buildings be co	ance, and placement.	s, if
KKN I	14.	Estimated volume of wast How is it hauled, and when Estimated volume of wast Describe any proposed a Will existing buildings be Describe type of construct appropriate. Explain which buildings	es: How and whe re is it disposed? ter to be used (gall advertising includin e used or will new l ion materials, height or what portion of	ere is it stored? How often? ons per day). S ng size, appear buildings be co t, color, etc. Pro buildings will b	ance, and placement. Instructed? Vide Floor Plan and elevations we used in the operation.	s, if
I VNN NN	14. 15.	Estimated volume of wast How is it hauled, and when Estimated volume of wast Describe any proposed a Will existing buildings be Describe type of construct appropriate. Explain which buildings	es: How and whe re is it disposed? ter to be used (gall advertising includin e used or will new l ion materials, height or what portion of	ere is it stored? How often? ons per day). S ng size, appear buildings be co t, color, etc. Pro buildings will b	ance, and placement. Instructed? Vide Floor Plan and elevations	s, if
ICK KKN	14. 15. 16.	Estimated volume of wast How is it hauled, and when Estimated volume of wast Describe any proposed a Will existing buildings be Describe type of construct appropriate. Explain which buildings Will any outdoor lighting Describe and indicate whe	es: How and whe re is it disposed? ter to be used (gall advertising includir e used or will new l ion materials, height or what portion of or an outdoor sou n used.	ere is it stored? How often? ons per day). S ng size, appear buildings be co t, color, etc. Pro buildings will b nd amplificatio	ance, and placement. Instructed? Vide Floor Plan and elevations we used in the operation. In system be used?	
MARKAN 1	14. 15. 16. 17.	Estimated volume of wast How is it hauled, and when Estimated volume of wast Describe any proposed a Will existing buildings be Describe type of construct appropriate. Explain which buildings Will any outdoor lighting Describe and indicate whe Landscaping or fencing p	es: How and whe re is it disposed? ter to be used (gall advertising includir e used or will new l ion materials, height or what portion of or an outdoor sou n used. proposed? Describ	ere is it stored? How often? ons per day). S ng size, appear buildings be co t, color, etc. Pro buildings will b nd amplificatio	ance, and placement. Instructed? Vide Floor Plan and elevations we used in the operation.	ruse CATTLe



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JUN 2 2 2017

DEPARTMENT OF PUBLIC WORKS AND PLANNING DEVELOPMENT SERVICES DIVISION

Operational Statement Questions

Facility Name: Lone Oak #2, 10014 S. McMullin Grade, Helm CA 93627

County: Fresno County

- Detailed Description of the existing nature of the operation.
 Dairy Farm A class of Agriculture for long term milk production. Milk is produced and hauled off-site and processed into dairy products such as cheese, butter, etc.
- 2. What is the proposed operation and how does it relate to the existing operation? Increase young heifers, ages 7-14mos. This will include the addition of three corrals. It will increase the footprint of the existing facility. The addition of a covered lagoon digester.
- How many cattle are on site?
 3508 (Mature), 1000 (15-24mos), 488 (4-6mos), 678 (0-3mos)
- 4. Will the proposal increase the number cattle? Yes If so by how many? 900 young

heifers7-14 months

- 5. Number of customers or visitors per day. 0
- Number of employees <u>34</u>.
 Will the proposal increase the number of employees? <u>No</u>
- 7. Number of services and delivery vehicles per day or per week. Less than 10/day
- 8. Are any goods to be sold on-site? <u>No</u> If so, are these goods grown or produced on-site or at some other location?



- What equipment is used on the entire site?
 Loader, Tractor, Milking Machines. Trucks hauling milk off-site, I.C. engine burning methane gas to make electricity.
- 10. What supplies or materials are used and how are they store? Cattle feed, wheat and corn silage stored under tarp. Grains stored in feed bunker.
- 11. Does the use cause an unsightly appearance? No
- 12. List and describe any solid or liquid wastes to be produced on site. Liquid manure and dry manure - this is the excretion from cattle.
- 13. Estimated volume of water to be used (gallons per day). 105,000 gallons Source of water? Well
- 14. Describe any proposed advertising including size, appearance, and placement. N/A
- 15. Will all existing buildings continue to be used or will new buildings be constructed? Yes, no changes to existing buildings. One new building; will be added to house I.C. engine.

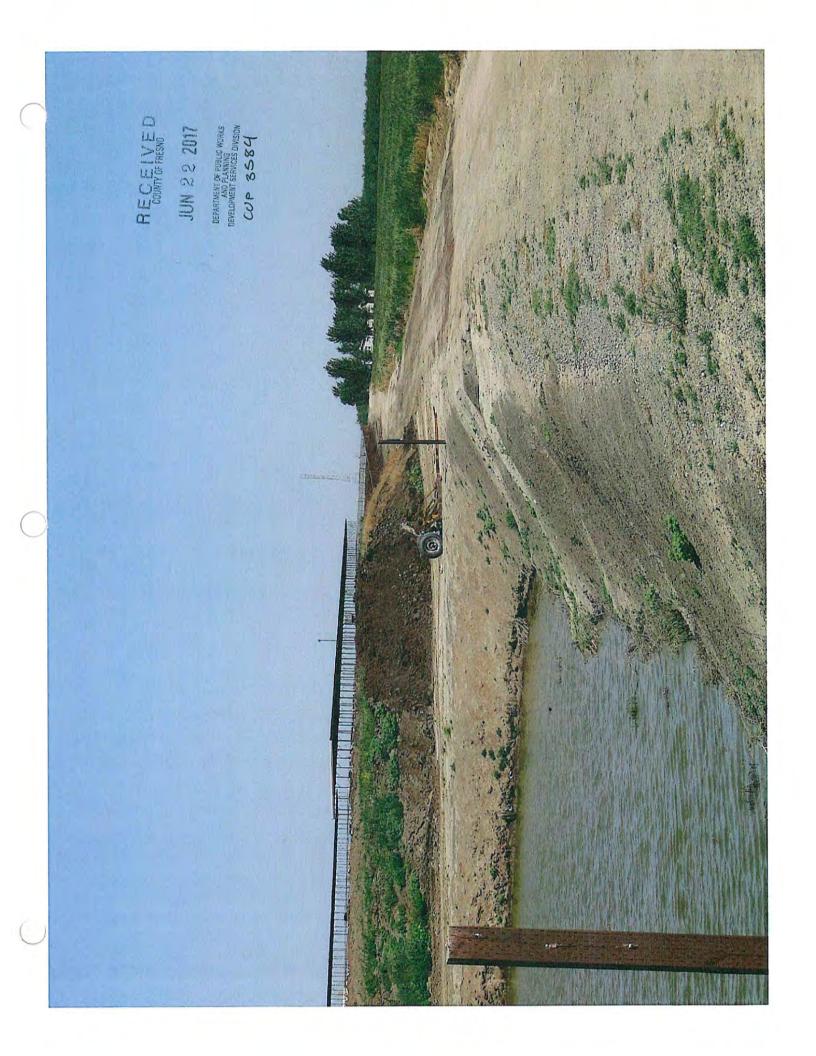


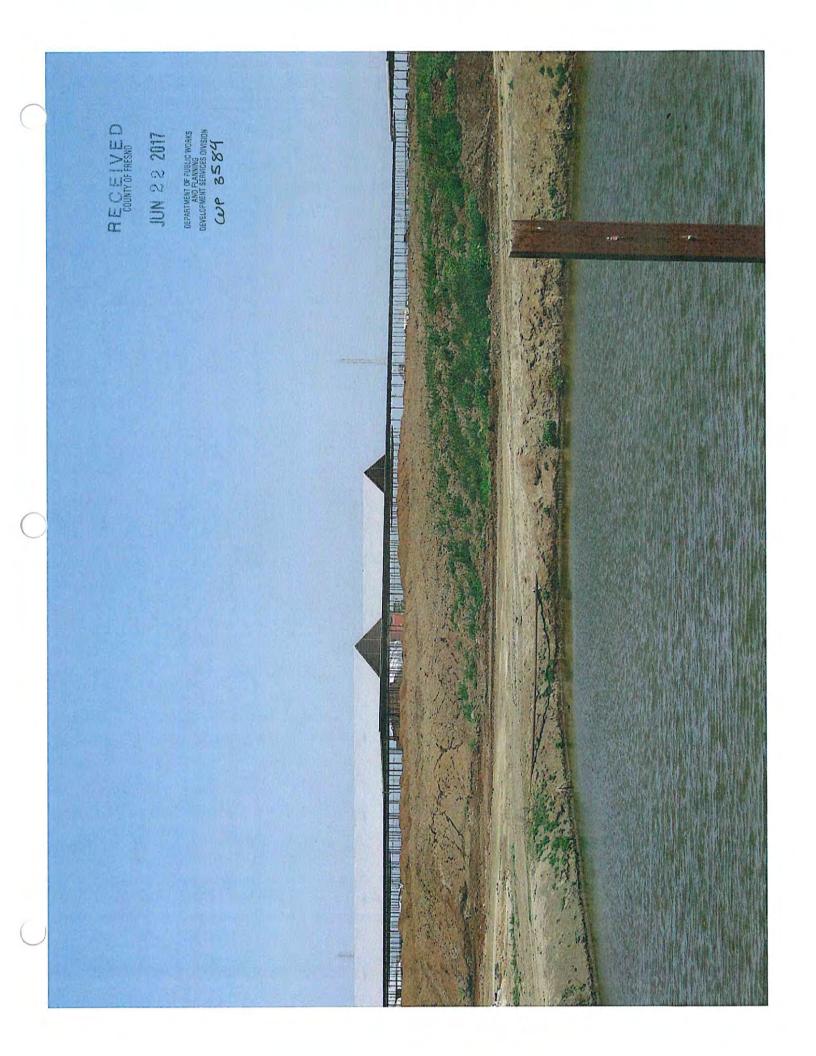
- 16. Explain which buildings or what portion of buildings will be used in the operation. New one to house I.C. engine.
 - 17. Add any additional information that will provide a clear understanding of the project or operation.

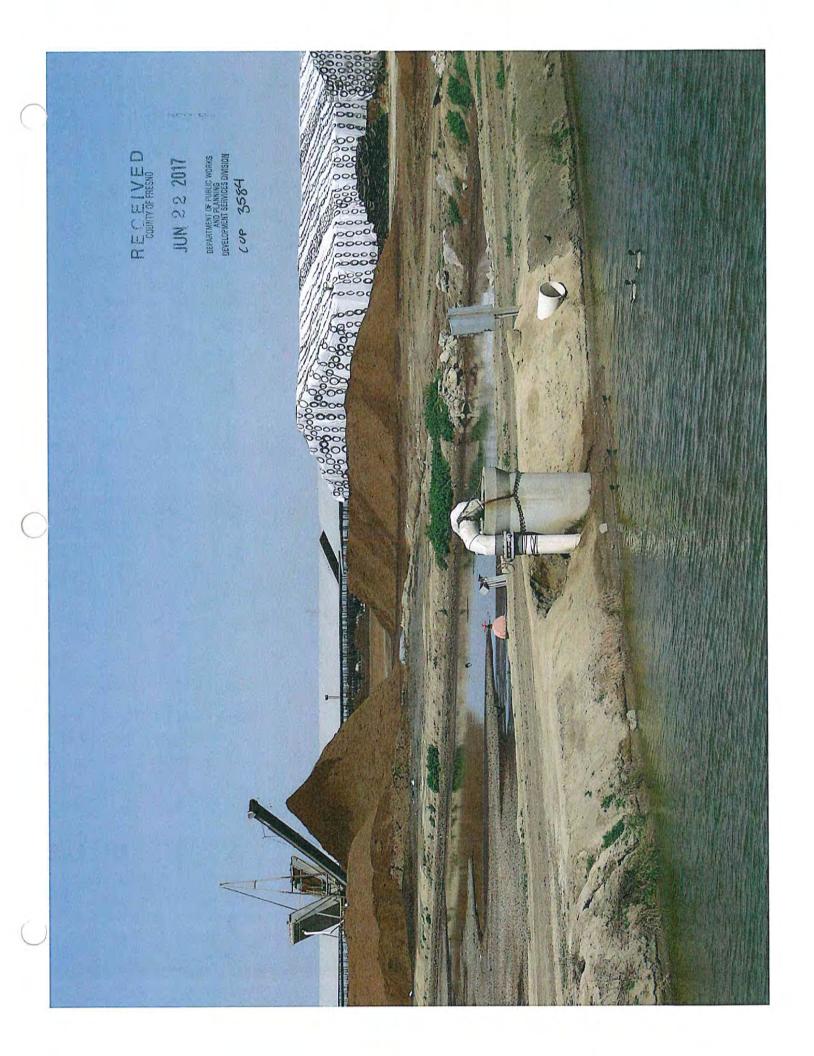
Attached is the operation statements for the addition of heifers and digester.

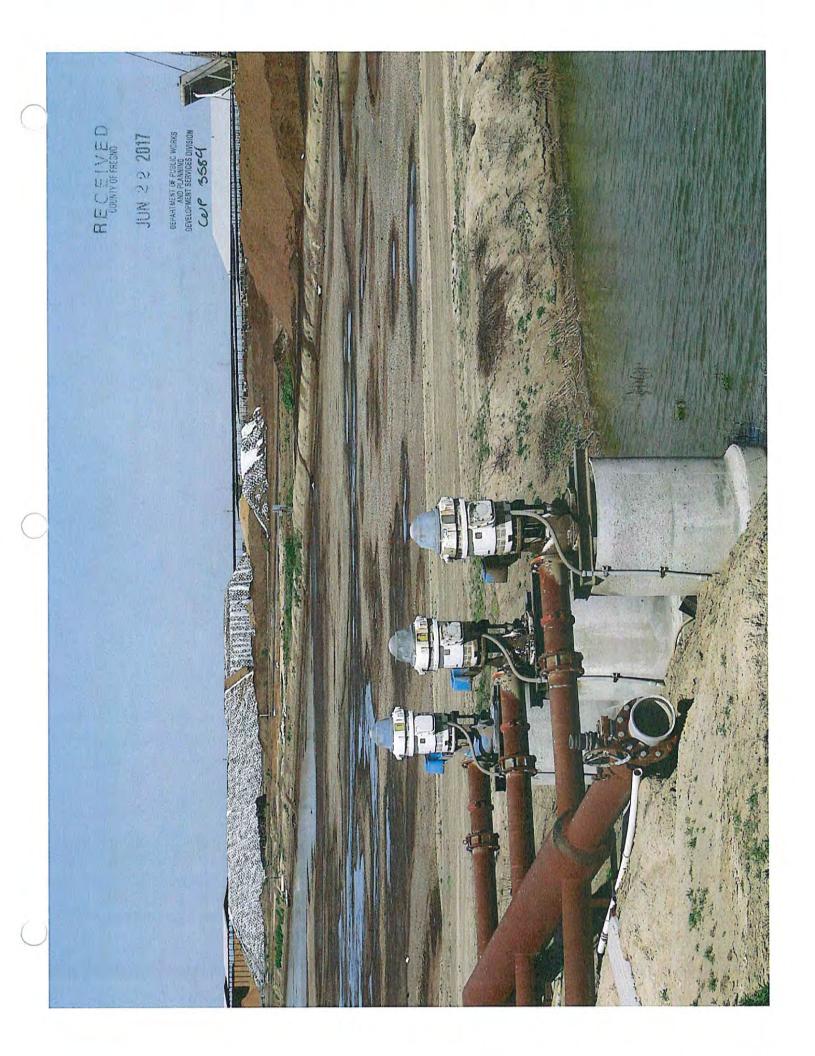
18. Identify all Owners.

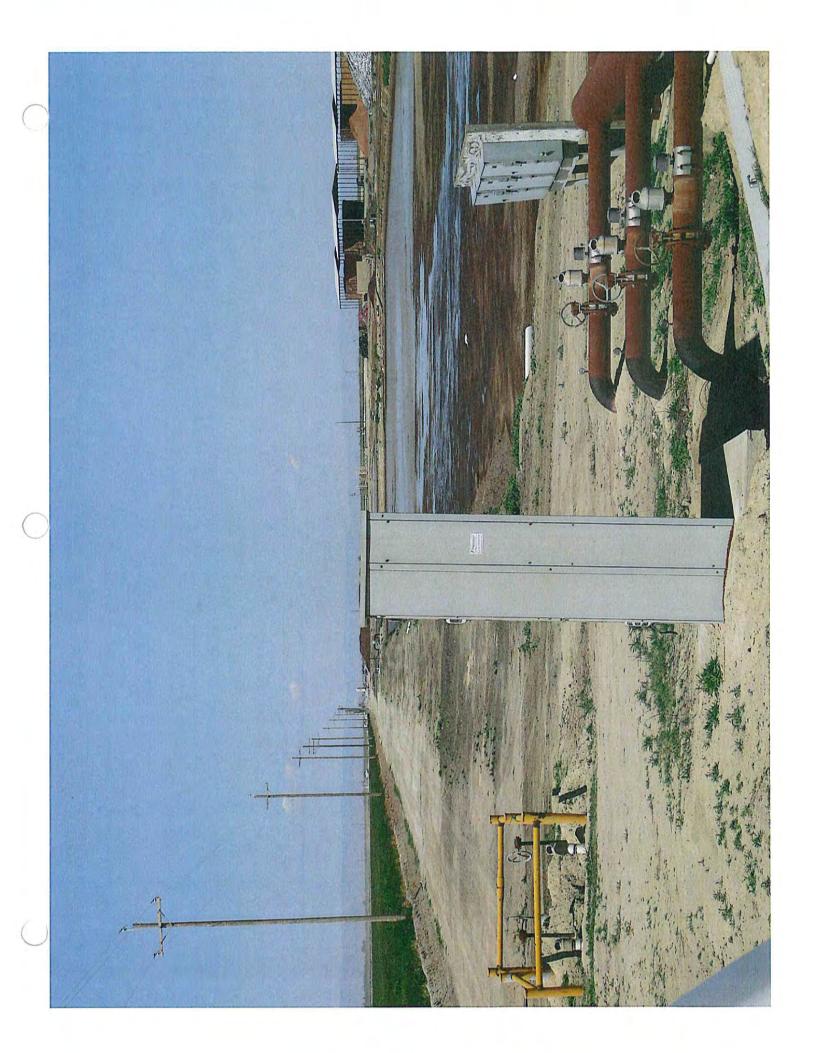
Bernard te Velde Rebecca te Velde

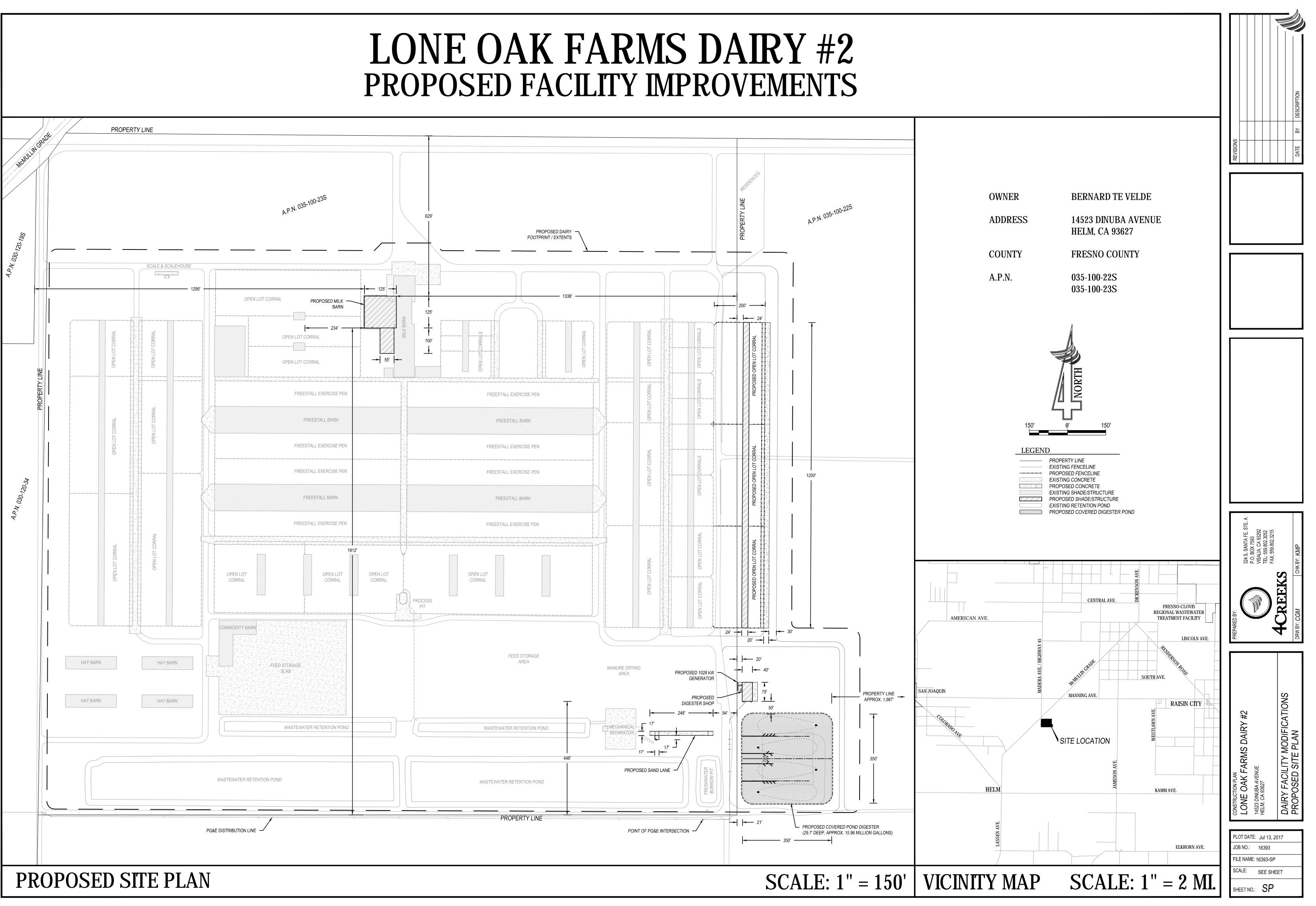


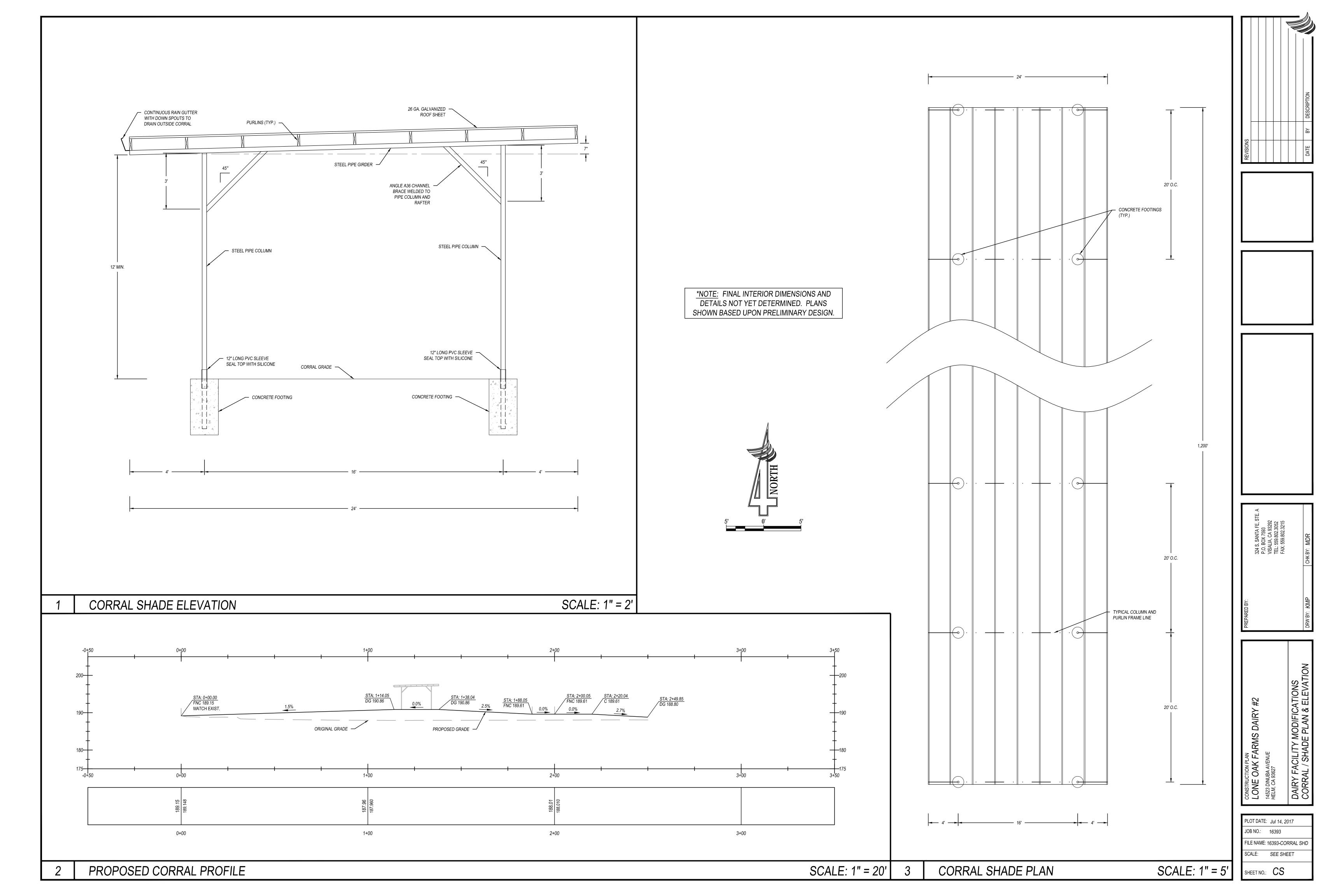


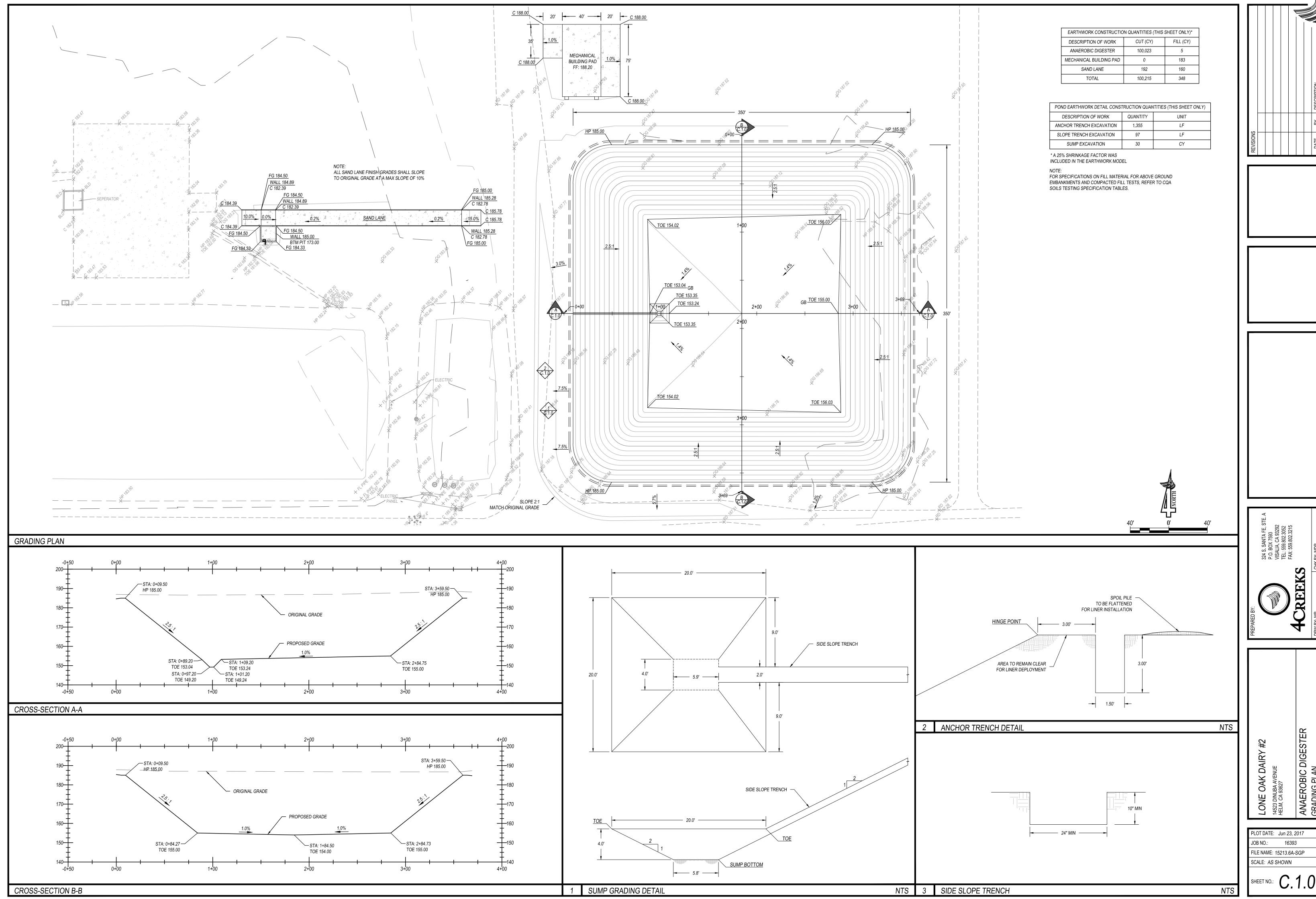






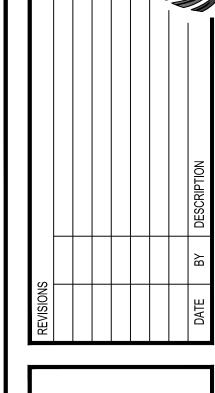


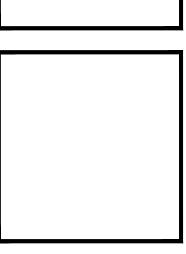




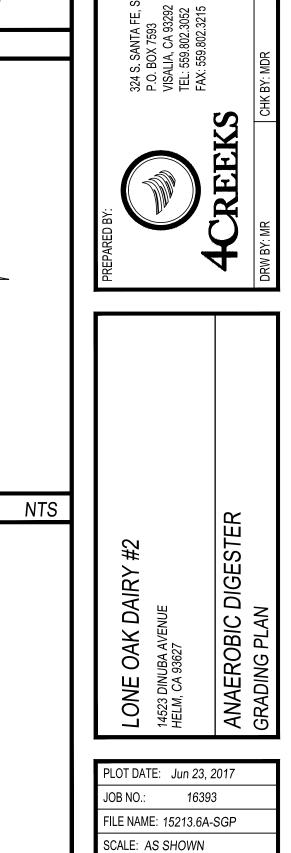
EARTHWORK CONSTRUCTION QUANTITIES (THIS SHEET ONLY)*		
DESCRIPTION OF WORK	CUT (CY)	FILL (CY)
ANAEROBIC DIGESTER	100,023	5
MECHANICAL BUILDING PAD	0	183
SAND LANE	192	160
TOTAL	100,215	348

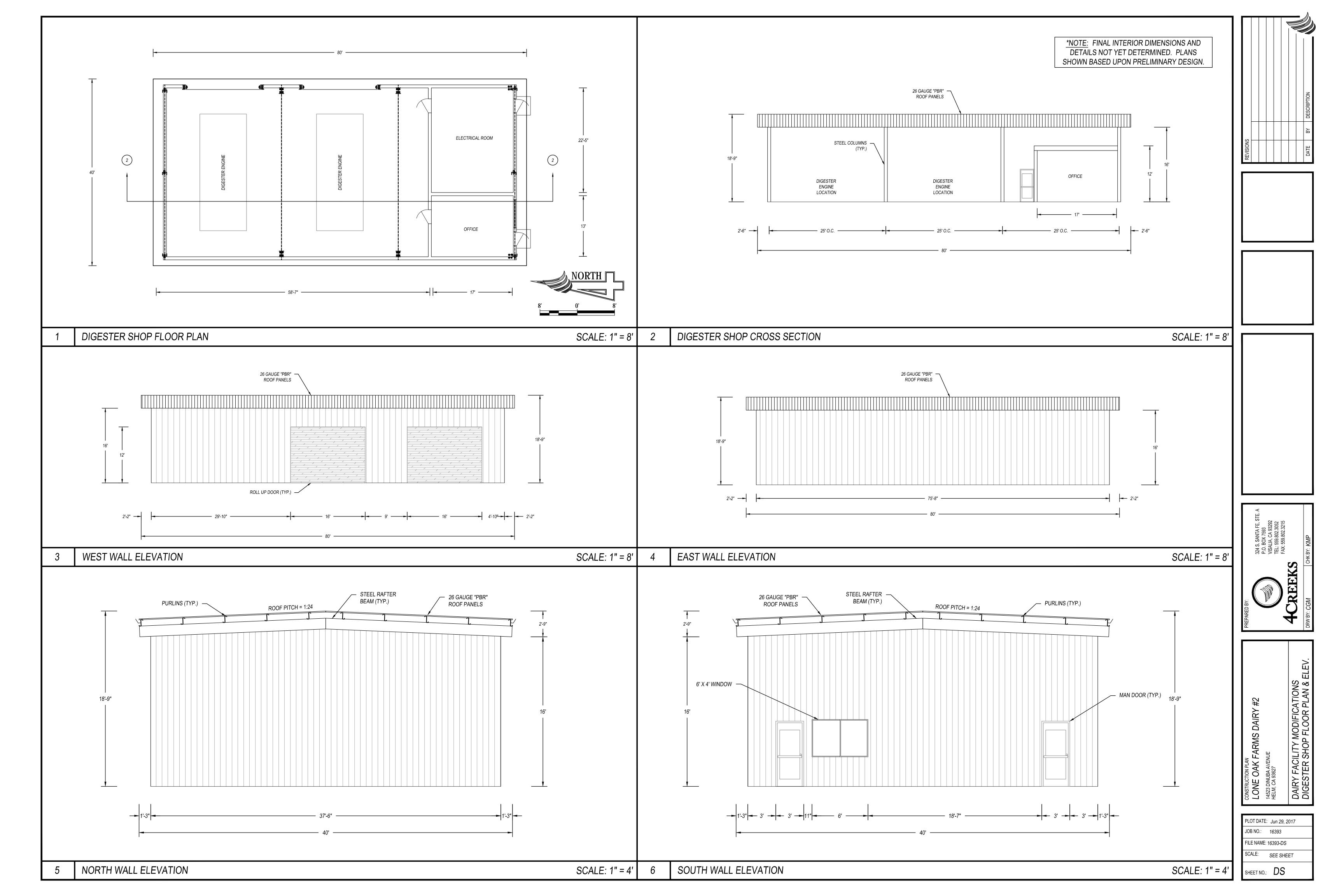
POND EARTHWORK DETAIL CONSTRUCTION QUANTITIES (THIS SHEET ONLY)			
DESCRIPTION OF WORK	QUANTITY	UNIT	
ANCHOR TRENCH EXCAVATION	1,355	LF	
SLOPE TRENCH EXCAVATION	97	LF	
SUMP EXCAVATION	30	CY	

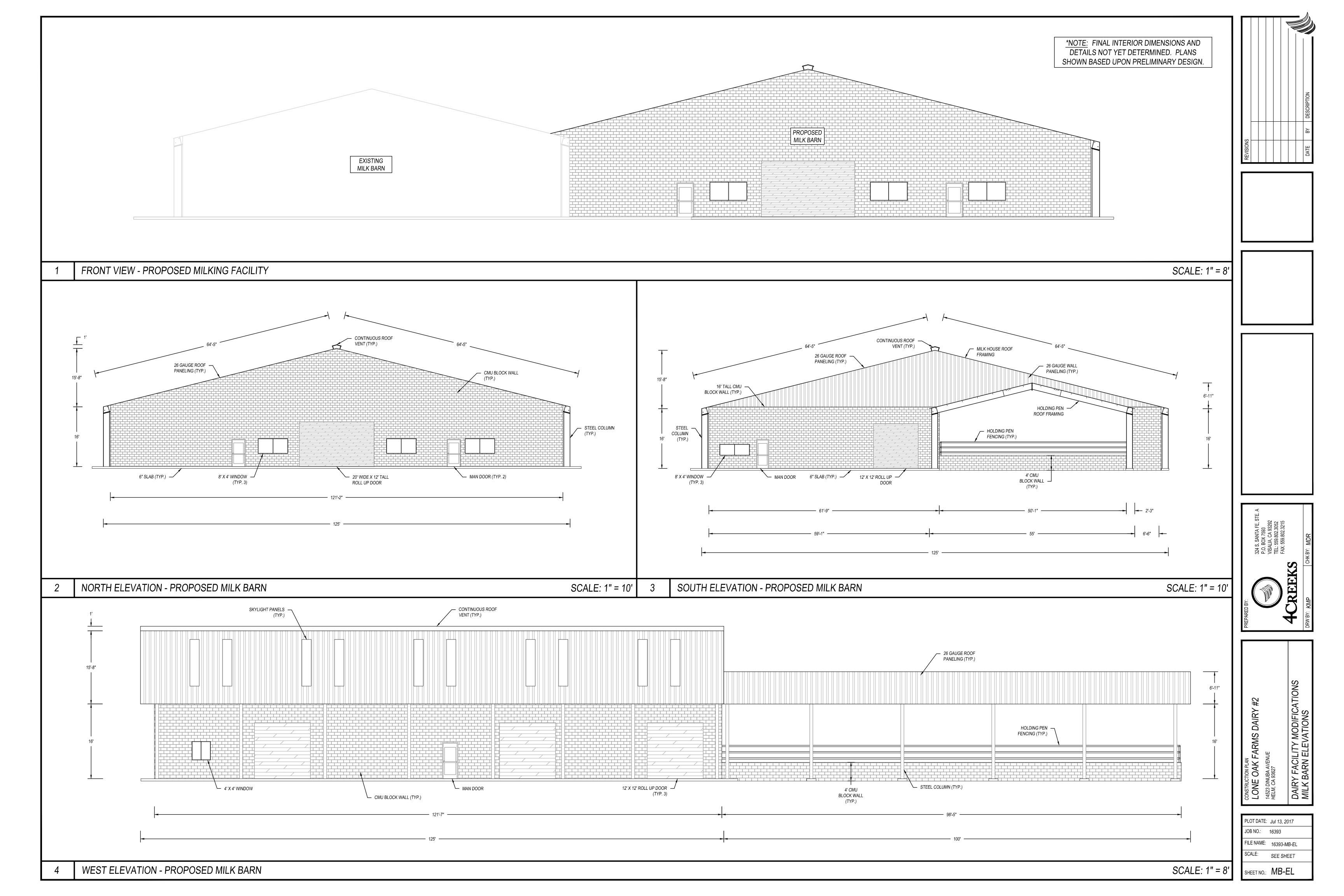


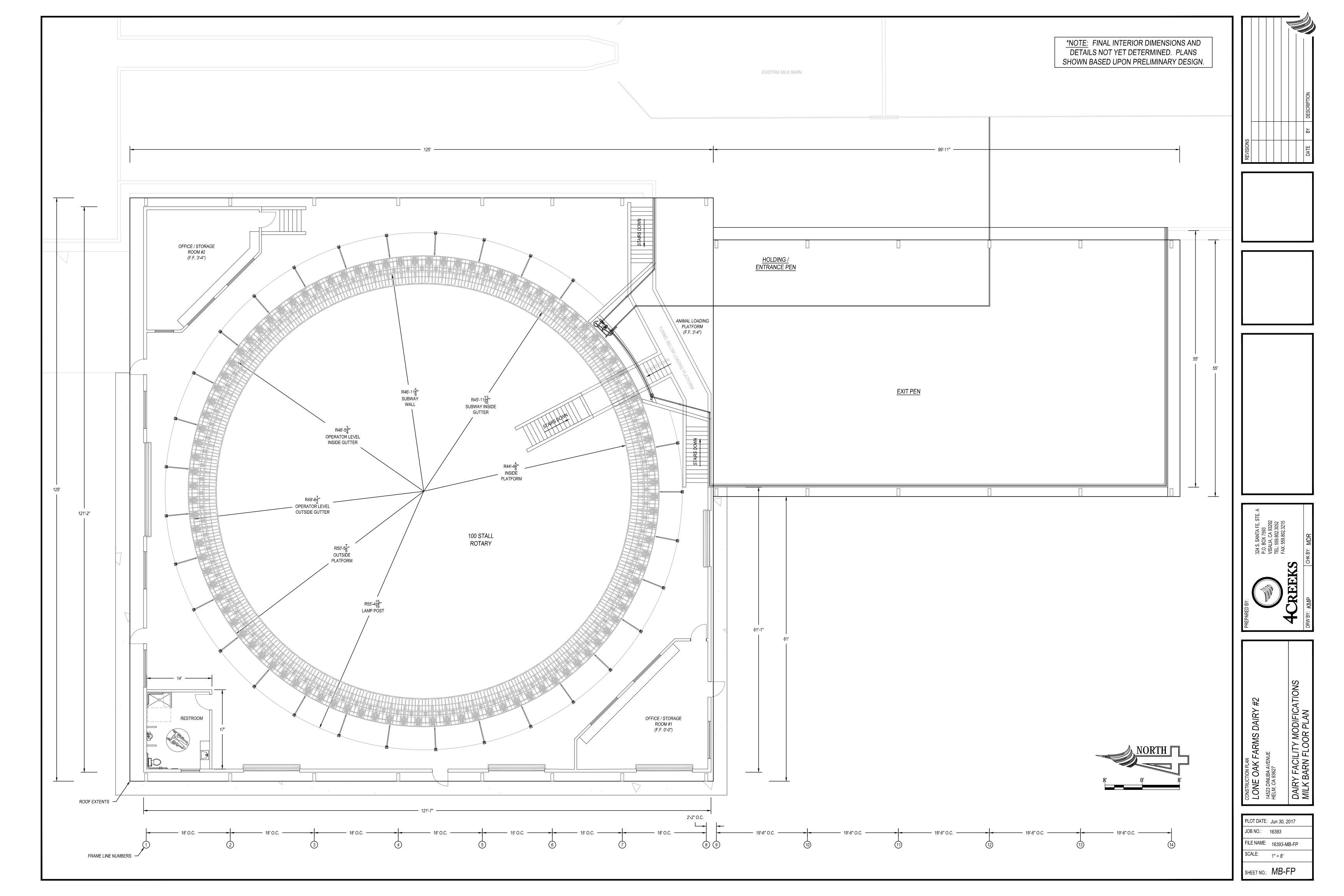


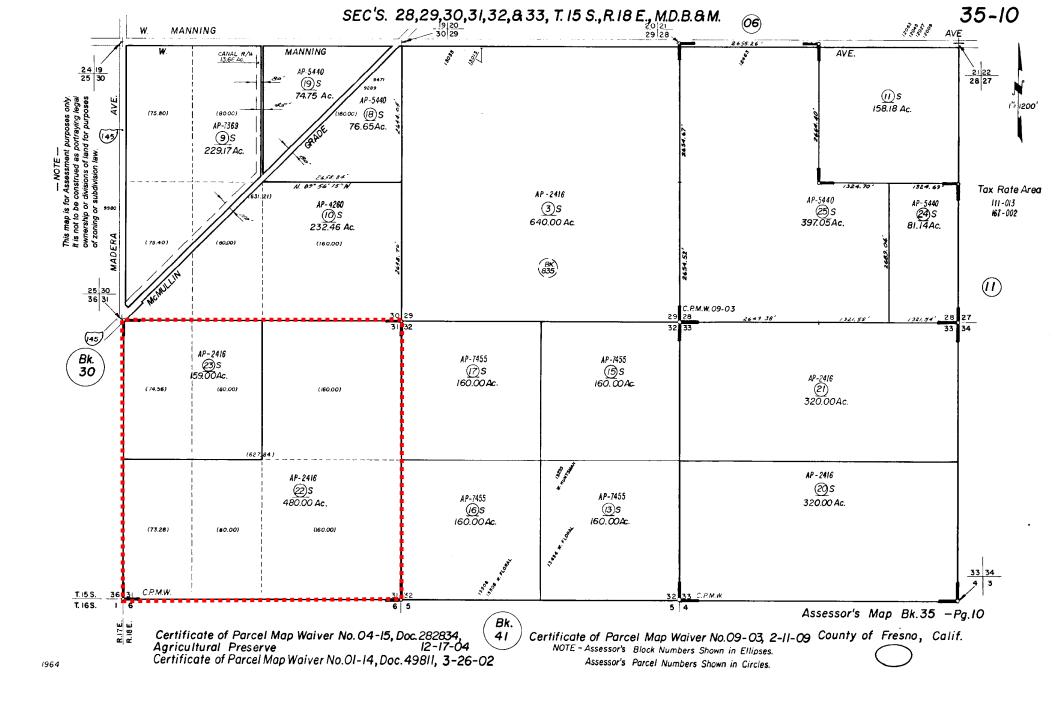


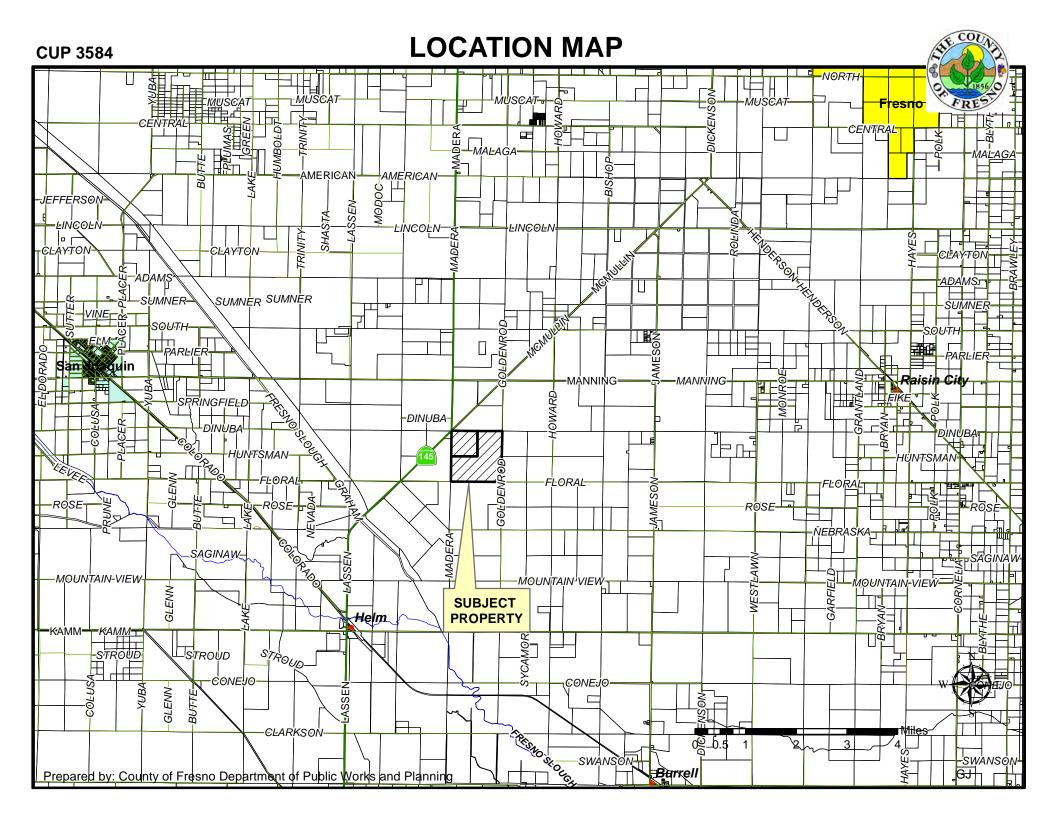


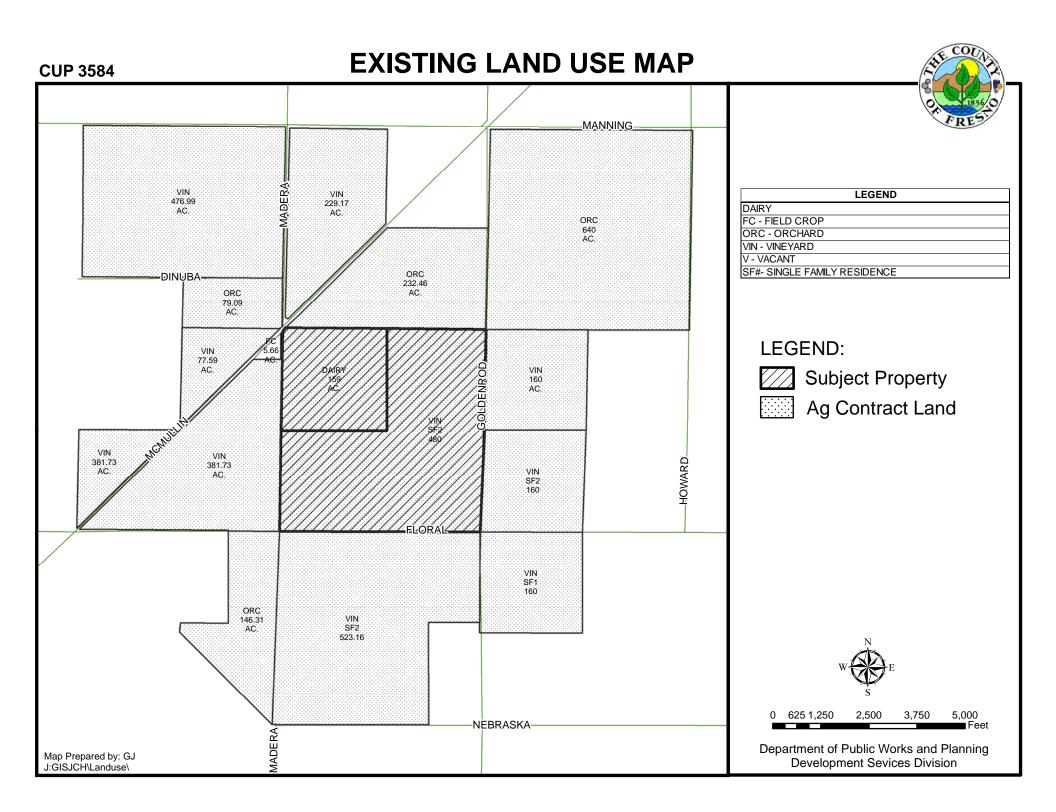


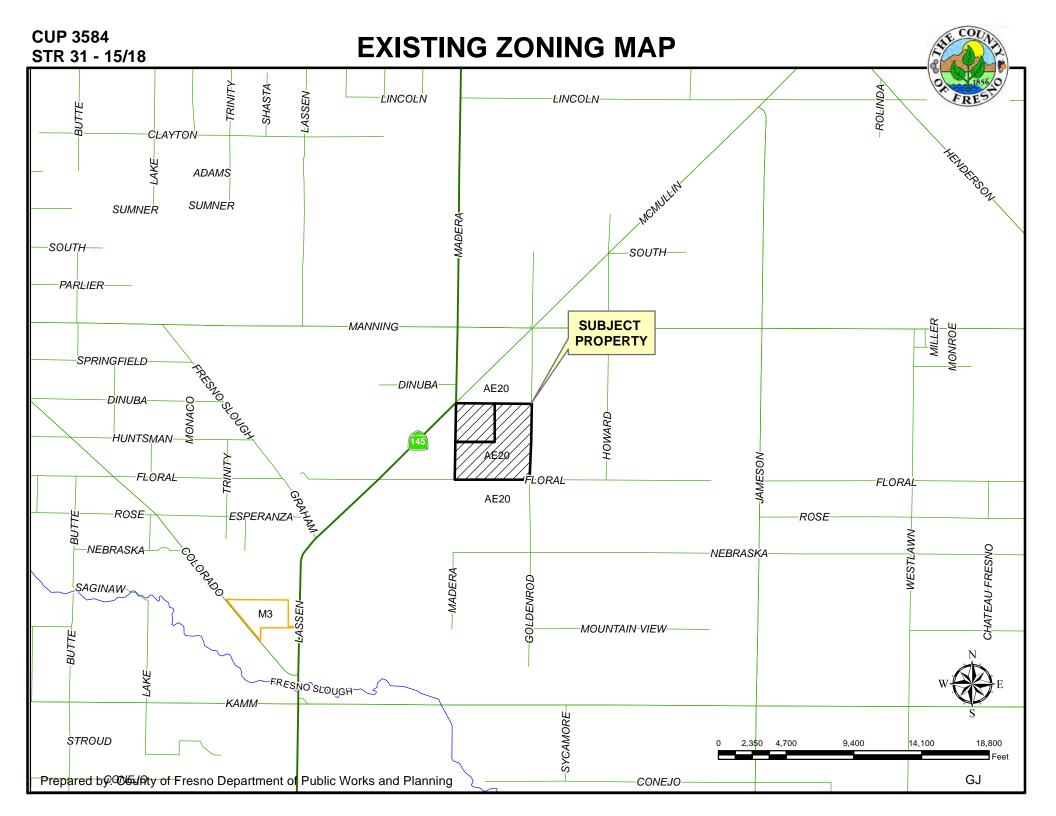












VECTOR CONTROL PROGRAM

JUN 22 2017

RECEIVED

DEPARTMENT OF PUBLIC WORKS AND PLANNING DEVELOPMENT SERVICES DIVISION

Pond Management

Ponds are managed and maintained to prevent breeding of vectors, in accordance with the local county Mosquito Abatement District.

Ponds are managed to eliminate coves and irregularities around the perimeter. Debris, vegetation, and dead algae will not accumulate on the water surface. Solid manure accumulation will be mechanically removed if needed.

MORTALITY PROGRAM

Mortality Management

This facility utilizes a Rendering Service for disposal. Rendering receipts are enclosed.

Fresno Emergency Response Plan

In Case of an Emergency Storage Facility Spill, Leak or Failure

Implement the following first containment steps:

Stop all other activities to address the spill. a.

- Stop the flow. For example, use skid loader or tractor with blade to contain or divert spill opleak2017 b.
- C. Call for help and excavator if needed.
- d. Complete the clean-up and repair the necessary components.
- e. Assess the extent of the emergency and request additional help if needed.

DEPARTMENT OF PUBLIC WORKS AND PLANNING DEVELOPMENT SERVICES DIVISION CUP 3589

HECE FRESNO

In Case of an Emergency Spill, Leak or Failure during Transport or Land Application

Implement the following first containment steps:

- Stop all other activities to address the spill and stop the flow.
- b. Call for help if needed.
- c. If the spill posed a hazard to local traffic, call for local traffic control assistance and clear the road and roadside of spilled material.
- d. Contain the spill or runoff from entering surface waters using straw bales, saw dust, soil or other appropriate materials.
- e. If flow is coming from a tile, plug the tile with a tile plug immediately.
- Assess the extent of the emergency and request additional help if needed. f.

Emergency Contacts

Fire (5	59) 587-2800 59) 621-4199
	and the second se
Deserve and deserve Ambulance (6	
Rescue services: Ambulance (5	59) 443-5900
Veterinarian	
Sheriff or local police (5	59) 488-3939
California Fish and Game (9	16) 445-9338
California Office of Emergency Services (OES) (8	00) 852-7550

Nearest available excavation equipment/supplies for responding to emergency

Equipment Type	Contact Person	Phone Number
Pumping		
Excavating		
Hauling		

Contacts to be made by the owner or operator within 24 hours

Organization	Phone Number	
Regional Water Quality Control Board (RWQCB)	(559) 445-5116	
County Health Department	(559) 600-3200	
Office of Emergency Services	(559) 459-6000	

Be prepared to provide the following information:

- a. Your name and contact information.
- b. Farm location (driving directions) and other pertinent information.
- Description of emergency.
- Estimate of the amounts, area covered, and distance traveled.
- Whether manure has reached surface waters or major field drains.
- f. Whether there is any obvious damage: employee injury, fish kill, or property damage.
- g. Current status of containment efforts.

Innovative Ag Services, LLC

Nutrient Management Plan

RECEIVED

JUN 22 2017

DEPARTMENT OF PUBLIC WORKS AND PLANNING DEVELOPMENT SERVICES DIVISION

LONE OAK #2 DAIRY 14523 DINUBA AVE. HELM CA. 93627

Prepared by:



Innovative Ag Services, LLC 1201 Delta View Road, Suite 5 Hanford, CA 93230 Office (559) 587-2800 Fax (559) 587-2801

NUTRIENT MANAGEMENT PLAN

A Nutrient Management Plan (NMP) is required for all existing milk cow dairies subject to Waste Discharge Requirements General Order No. R5-2007-0035. This Nutrient Management Plan has been prepared in accordance with the General Order requirements as outlined in Attachment C, Sections I. - VII. and Technical Standards for Nutrient Management Sections I. - X. The purpose of the NMP is to budget and manage the nutrients applied to the land application area(s) considering all sources of nutrients, crop requirements, soil types, climate, and local conditions in order to prevent adverse impacts to surface water and groundwater quality. The NMP must take the site-specific conditions into consideration in identifying steps that will minimize nutrient movement through surface runoff or leaching past the root zone.

LONE OAK #2 DAIRY

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

OPERATOR:

SIGNATURE OF OPERATOR

SIGNATURE OF OWNER

OWNER:

PRINT NAME

DATE



DATE

PRINT NAME

DATE



DAIRY FACILITY INFORMATION

A. Name of the Facility & County Location

Facility Name:	LONE OAK #2 DAIRY
County:	FRESNO

B. Facility Location

Address: 14523 DINUBA AVE. HELM CA. 93627

C. Responsible Party:

Operator:	BERNARD TE VELDE, JR	
CAPERING AND	13866 4TH AVE. HANFORD CA. 93230	

Owner:

BERNARD TE VELDE, JR 13866 4TH AVE. HANFORD CA. 93230

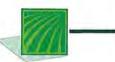


TABLE OF CONTENTS

L.	LAND APPLICATION AREA INFORMATION	1
	A. Land Application Area Map	1
	B. Crop Map	1
	C. Wastewater Agreements	1
	D. Vicinity Map	1
ii.	SAMPLING AND ANALYSIS PLAN	1
	A. Approved Sampling Procedures for Nutrients and Groundwater Monitoring	1
	B. Process Wastewater	5
	C. Manure	5
	D. Plant Tissue	6
	E. Soil	7
	F. Irrigation Water	9
	G. Site Specific Instructions	9
ш.	NUTRIENT BUDGET	10
	A. General Nutrient Production & Balance Analysis	10
	B. General Salt Production & Loading Summary	11
	C. Nutrient budget Summary and Storage Period Summary	12
	D. Field-by-field Nutrient Budget	13
IV.	SURFACE WATER PROTECTIVE MEASURES	13
	A. Setback	14
	B. Vegetated Buffer	
	C. Physical Barriers & Alternatives	14
	D. Site Specific Surface Water Protective Measures	14
٧.	FIELD RISK ASSESSMENT	14
VI.	RECORD KEEPING	15
VII.	NUTRIENT MANAGEMENT PLAN REVIEW	17
VIII.	REFERENCES	17



FIGURES:

FIGURE 1 – SOIL SAMPLING GUIDE	
FIGURE 2 – RECORD KEEPING FORM	

- ATTACHMENT A. LAND APPLICATION MAP
- ATTACHMENT B. CROP MAP
- ATTACHMENT C. WASTEWATER AGREEMENTS
- ATTACHMENT D. VICINITY MAP
- ATTACHMENT E. SITE SPECIFIC SAMPLING & ANALYSIS PLAN, if applicable
- ATTACHMENT F. GENERAL NUTRIENT PRODUCTION & BALANCE ANALYSIS
- ATTACHMENT G. GENERAL SALT PRODUCTION & LOADING ANALYSIS
- ATTACHMENT H. NUTRIENT BUDGET SUMMARY & STORAGE PERIOD SUMMARY
- ATTACHMENT I. FIELD-BY-FIELD NUTRIENT BUDGET
- ATTACHMENT J. SITE SPECIFIC SURFACE WATER PROTECTIVE MEASURES

I. LAND APPLICATION AREA INFORMATION

A. Land Application Area Map (See Attachment A)

This map identifies of all land application areas (under the control of the discharger, whether it is owned, rented or leased, to which manure or process wastewater from the production area is or may be applied for nutrient recycling) on a single published base map (topographical map or aerial photo) at an appropriate scale which includes:

- i. A field identification system (Assessor's Parcel Number; land application area by name or number; total acreage of each land application area; indication if each land application area is owned, rented or leased by the Discharger; indication what type of waste is applied; drainage flow direction in each field, nearby surface waters, and storm water discharge points; tailwater and storm water drainage controls; subsurface (tile) drainage systems; irrigation supply wells and groundwater monitoring wells; sampling locations for discharges of storm water and tailwater to surface water from the field; and
- ii. Process wastewater conveyance structures; discharge points and discharge mixing points with irrigation water supplies; pumping facilities; flow meter locations; drainage ditches and canals, culverts, drainage controls (berms, levees, etc.), and drainage easements.

B. Crop Map (See Attachment B)

This map identifies each field's common name, total acreage, crops grown, and crop rotation.

C. Wastewater Agreements (See Attachment C)

Copies of written agreements with third parties that receive process wastewater for their own use from the discharger's dairy are attached, if applicable.

D. Vicinity Map (See Attachment D)

Identify each field under the control of the discharger and within five miles of the dairy where neither process wastewater nor manure is applied. Each field shall be identified on a single published base map at an appropriate scale by the following: Assessors' Parcel Number, total acreage, and information regarding who owns or leases the field

II. SAMPLING AND ANALYSIS PLAN

A. Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies. Excerpt from: California Regional Water Quality Control Board, Central Valley Region, Sampling and Analysis http://www.waterboards.ca.gov/centralvalley/water_issues/dairies/general_order_guidance/sampling_analysis/in dex.shtml

Monitoring and Reporting Program No. R5-2007-0035 (MRP) requires existing milk cow dairies to conduct nutrient and groundwater monitoring. The MRP does not identify complete sampling procedures to be followed for this monitoring. The sampling and analytical procedures listed below for nutrients (process wastewater, manure, plant tissue, soil, and irrigation water) and groundwater are approved procedures. As noted in General Monitoring Requirements item 2 of the MRP, "When special procedures appear to be necessary at an individual dairy, the Discharger may request approval of alternative sampling procedures for nutrient management. The Executive Officer will review such requests and if adequate justification is provided, may approve the requested alternative sampling procedure."

Note: The University of California is developing recommendations on how to conduct sampling required by the Water Board's Order. These recommendations will be posted on this web site as soon at the material has been submitted and approved for use by the Executive Officer.

Electrical Conductivity

Where field measurement of electrical conductivity is required by the Order, laboratory measurements of electrical conductivity will be accepted if sample collection, preservation and holding time all comply with procedures provided by the laboratory and the laboratory is accredited for conducting such testing.

Total Ammonia-Nitrogen and Un-ionized Ammonia Nitrogen

Where field measurement of total ammonia-nitrogen and un-ionized ammonia nitrogen is required by the Order, laboratory analyses will be accepted if sample collection, preservation and holding time all comply with procedures provided by the laboratory and the laboratory is accredited for conducting such testing. The procedure used by the lab must have a minimum detection limit (MDL) of 0.05 mg/L or lover for un-ionized ammonia.

Process Wastewater Sampling and Analysis

- 1. Process wastewater composite samples shall be collected as follows:
 - a. A representative composite or grab sample of process wastewater shall be prepared. Containers that are reused shall be cleaned between sampling events.
 - b. The samples shall be collected at a point that is prior to any dilution or blending with irrigation water and shall be representative of the process wastewater applied to the land application area.
- 2. Laboratory analyses of process wastewater applied to land application areas shall be conducted by a laboratory that is either accredited for such analyses by the California Department of Health Services or that is participating in the manure analysis proficiency (MAP) program. These laboratory analyses shall be conducted in accordance with the Title 40 Code of Federal Regulations Part 136 (Guidelines Establishing Test Procedures for the Analysis of Pollutants), MAP program-approved methods or other test methods approved by the Executive Officer.

Manure Sampling and Analysis

- 1. Manure composite samples shall be collected as follows:
 - a. Equal-size samples of manure shall be collected from a minimum of three locations around the manure pile. These samples shall be collected from a depth of no less than one foot below the surface of the manure pile.
 - b. The three samples shall be combined and thoroughly mixed to make a single composite sample.
 - c. Sample containers that are reused shall be cleaned between sampling events.
- Manure analysis shall be conducted by methods utilized by the Manure Analyses Proficiency (MAP) Testing Program or accepted by the University of California and laboratories participating in the MAP Testing Program or other programs whose tests are accepted by the University of California.

Plant Tissue Sampling and Analysis

- 1. Samples of harvested silage shall be collected as follows:
 - a. Samples shall be collected within one week of harvest from a minimum of five locations in the



silage pile.

- b. Samples shall be obtained from a minimum depth of one foot below the silage pile surface.
- c. The five samples shall be combined and thoroughly mixed to make a single composite sample.
- 2. Harvested plant tissue sample samples from crops other than silage shall be collected as follows:
 - a. At least 10 equal-size samples (for example, using a two or three-pound coffee can) of the harvested portion of the crop shall be collected from the storage area. These samples shall be combined and thoroughly mixed in a plastic bag, taking care not to allow drying.
 - b. Mid-season plant tissue samples, if collected, shall be collected following University of California recommendations for the specific plan being tested.
- Plant tissue analysis shall be conducted by: methods utilized by the North American Proficiency Testing (NAPT) Program or accepted by the University of California; and laboratories participating in the NAPT Program or other programs whose tests are accepted by the University of California.

Soil Sampling and Analysis

- 1. Soil samples from each land application area shall be collected after harvest of a crop and before nutrients are added for the next crop as follows:
 - a. Dischargers with less than 400 acres shall collect a composite sample for every 40 acres of land application area. Dischargers with 400 or more acres shall collect a composite soil sample for every 80 acres.
 - b. Each composite Sample shall be composited by:
 - i. Placing equal volumes of soil from each of 10 or more sample sites for each 40 or 80 acre composite area and for each sample depth, in a clean plastic bucket. Moist soils may be air dried until they can be mixed easily.
 - ii. Thoroughly mixing the sample and placing at least one pint of the composite sample in a clean plastic container.
 - c. Samples from each site shall be split into sections representing the depth intervals to be sampled (see above). All samples from the same depth interval for all sites within each land application area shall be composited for analyses.
 - d. Soil samples shall be collected with soil probes or augers and composited as described below:
 - i. At least three of the 10 samples shall be from the upper third of the land application area.
 - ii. In fields where soil texture, crop yield, or other soil-related factors vary, at least 10 samples shall be collected form each different area and composites from each area shall be analyzed separately.
 - Sample locations in each land application area shall be recorded on a sketch for future sampling consistency.
 - iv. Soil probes or augers shall be cleaned between sample depth intervals.
- Analyses of soil shall be conducted by: methods utilized by the North American Proficiency Testing (NAPT) Program or accepted by the University of California; and laboratories participating in the NAPT Program or other programs whose tests are accepted by the University of California. This shall include analysis for nitrate-nitrogen utilizing the 2 M potassium chloride extract of soil.
- 3. Analyses of phosphorus in soil samples shall be performed using the method recommended by the University of California or the bicarbonate-P or Olsen-P test.

Irrigation Water Sampling and Analysis

- 1. Irrigation water samples shall be collected as follows:
 - a. Samples shall be collected before the addition of process wastewater; and
 - b. Samples from irrigation wells shall be collected after the pump has run for a minimum of 30 minutes or after at least three well volumes have been purged from the well.
- Laboratory analyses of irrigation water shall be conducted by a laboratory certified for such analyses by the California Department of Health Services. These laboratory analyses shall be conducted in accordance with the Title 40 Code of Federal Regulations Part 136 (Guidelines Establishing Test Procedures for the Analysis of Pollutants) or other test methods approved by the Executive Officer.
- 3. All nutrient monitoring results shall be included in the Annual Monitoring Report (see Reporting Requirements C.2.n).



Groundwater Sampling and Analysis

- 1. Groundwater samples from supply wells and subsurface (tile) drainage systems shall be collected as specified on page MRP-7 of the MRP.
- Groundwater samples from monitoring wells shall be collected as specified in an approved Monitoring Well Installation and Sampling Plan (see Attachment A to Monitoring and Reporting Program No. R5-2007-0035).
- 3. Laboratory analyses of all groundwater samples (including samples from supply wells, subsurface (tile) drainage systems, and monitoring wells) shall be conducted by a laboratory certified for such analyses by the California Department of Health Services. These laboratory analyses shall be conducted in accordance with the Title 40 Code of Federal Regulations Part 136 (Guidelines Establishing Test Procedures for the Analysis of Pollutants) or other test methods approved by the Executive Officer.

B. Process Wastewater

Process Wastewater shall be sampled and analyzed as follows:

Each application:

Record the volume (gallons or acre-inches) and date of process wastewater application to each land application area.

Quarterly during one application event:

Field measurement of electrical conductivity.

Laboratory analyses for nitrate-nitrogen (only when retention pond is aerated), un-ionized ammonia-nitrogen, total Kjeldahl nitrogen, total phosphorus, total potassium, and total dissolved solids.

Once every two years (biennially):

Laboratory analyses for general minerals (calcium, magnesium, sodium, bicarbonate, carbonate, sulfate, and chloride).

Annually

Laboratory analyses of liquid process wastewater, prior to blending with irrigation water, for pH, total dissolved solids, electrical conductivity, nitrate-nitrogen, ammonium-nitrogen, total Kjeldahl nitrogen, total phosphorus, and total potassium.

- i. Process wastewater shall be collected as follows:
 - a. A representative sample must be collected during an application event.
 - b. The sample should represent what is being applied to a field
 - c. A minimum of 1 liter (or an amount as specified by the laboratory), must be collected in a clean container, kept cool, and be delivered to the laboratory within 24 hours.
- ii. Laboratory analysis of process wastewater shall be conducted by a laboratory that is either accredited for such analyses by the California Department of Health Services or that is participating in the manure analysis proficiency (MAP) program. These laboratory analyses shall be conducted I accordance with the Title 40 Code of Federal Regulations Part 136 (Guidelines Establishing Test Procedures for the Analysis of Pollutants), MAP program-approved methods or other test methods approved be the Executive Officer.



iii. If a management change is made on the facility that affects processed wastewater, a sample shall be taken to test for a change in the processed wastewater. Examples: Freshwater is added to the lagoon, Herd size/type modifications, New or Modified Solid Separating System.

C. Manure

Manure shall be sampled and analyzed as follows:

Once every two years (biennially):

Laboratory analyses for general minerals (calcium, magnesium, sodium, sulfur, chloride) and fixed solids (ash).

Twice per year:

Laboratory analyses for total nitrogen, total phosphorus, total potassium, and percent moisture.

Each application to each land application area:

Record the percent moisture and total weight (tons) applied.

Each offsite export of manure:

Record the percent moisture and total weight (tons) exported.

Laboratory analyses for percent moisture.

Annually:

Record the total dry weight (tons) of manure applied annually to each land application area and the total dry weight (tons) of manure exported offsite.

- i. Manure shall be collected as follows:
 - a. Equal-size samples of manure shall be collected from a minimum of three locations around the manure pile. These samples shall be collected from a depth of no less than one foot below the surface of the manure pile.
 - b. The three samples shall be combined and thoroughly mixed to make a single composite sample and deliver to a laboratory within 72 hours.
 - c. Sample containers that are reused shall be cleaned between sampling events.
- ii. Manure analyses shall be conducted by methods utilized by the Manure Analyses Proficiency (MAP) Testing Program or accepted by the University of California and laboratories participating in the MAP Testing Program or other programs whose tests are accepted by the University of California.
- iii. Samples shall be taken within 30 days of the application or export of the manure to ensure representation of the manure. Each type of solid manure shall be sampled twice a year if available for land application or export. Example: Solid Separator Manure, Mature Cow Corral Manure, Heifer Corral Manure, Calf Manure, Sludge,...

D. Plant Tissue

Plant Tissue shall be sampled and analyzed as follows: At harvest:



Record the percent moisture and total weight (tons) of harvested material removed from each land application area.

Laboratory analyses for total nitrogen, total phosphorus, total potassium (expressed on a dry weight basis), fixed solids (ash), and percent moisture.

The following test is only required if the Discharger wants to add fertilizer in excess of 1.4 times the nitrogen expected to be removed by the harvested portion of the crop (see Attachment C of Order No. R5-2007-0035 for details): Mid-season, if necessary to assess the need for additional nitrogen fertilizer during the growing season.

Laboratory analyses for total nitrogen, expressed on a dry weight basis.

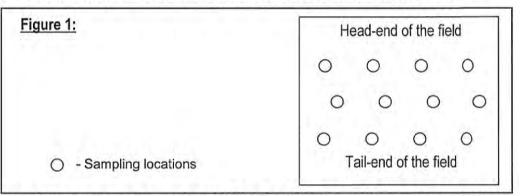
- i. Plant tissue shall be collected as follows:
 - a. Five to ten representative samples shall be combined and thoroughly mixed to make a single composite sample.
 - b. This single composite sample shall be placed into a minimum 1 quart size bag, kept cool, and be delivered to the laboratory within 72 hours.
 - c. Any mid-season plant tissue samples taken to evaluate the agronomic needs of the crop in-season shall be collected following University of California recommendations for the specific plant being tested.
- ii. Plant tissue shall be sampled and analyzed as follows:
 - <u>Each harvest, from each field</u>, laboratory analyses for total nitrogen, total phosphorous, total potassium (expressed on a dry weight basis), fixed solids (ash), and percent moisture.
 - b. If the discharger wants to add fertilizer in excess of 1.4 times the nitrogen expected to be removed by the harvested portion of the crop, a mid-season laboratory analysis for total nitrogen, expressed on a dry weight basis.
- iii. Plant tissue analyses shall be conducted by: methods utilized by the North American Proficiency Testing (NAPT) Program or accepted by the University of California; and laboratories participating in the NAPT Program or other programs whose test are accepted by the University of California.
- iv. Samples must represent the land application management area. A land application management area is defined as a land application area that is managed as a single unit, in which all planting, nutrient applications, and harvest events occur as single events, and not over separate time periods. If nutrient applications, planting dates, or harvest dates are managed separately within a land application area, then the area must be sampled separately in accordance to the management differences.
- v. Each type of plant tissue removed from the field must be sampled to represent each type of plant tissue remove that year. For example: For an 'Alfalfa' crop, each type of harvest must be sampled independently each year it is harvested, thus if Alfalfa Hay, Alfalfa Green Chop, Alfalfa Dry Chop, and/or Alfalfa/Oat Hay Blend is harvested then each type must be sample to reflect the changes in nutrient extraction that they may present. Corn Grain and Corn Fodder or Wheat Grain and Wheat Straw will both need to be harvested if they are harvested independently to represent the differences they will create in nutrient extraction.

E. Soil

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Soil samples shall be collected as follows:

- a. Dischargers with less than 400 acres shall collect a composite sample for every 40 acres of land application area. Dischargers with 400 or more acres shall collect a composite soil sample for every 80 acres.
- b. In fields that are larger than the 40/80 acres soil sampling requirements, the field must be split perpendicular to the head-end of the field. This will still facilitate the proper collection of samples in relation to the head and tail ends of the field.
- c. Each sample shall be composed of 12 sub-samples. Four from the head end of the field, four from the center of the field, and four from the tail end of the field (Figure 1).



- d. Soil samples shall be collected with soil probes or augers to a depth of 18" and composited as described below:
- ii. In fields where soil texture, crop yield, or other soil-related factors vary, at least 10 samples shall be collected from each different area and composites from each area shall be analyzed separately.
- Sample locations in each land application area shall be recorded on a sketch for future sampling consistency.
- iv. Soil probes or augers shall be cleaned between sample depth intervals.
- v. Each composite sample shall be composited by doing the following:
 - a. Moist soils may be air dried until they can be mixed easily
 - b. Thoroughly mixing the sample and placing at least one pint of the composite sample in a clean plastic container.
- vi. Soils shall be samples and analyzed for:
 - a. Saturation Percentage (SP%), pH, Electrical Conductivity (EC), Calcium, Magnesium, Sodium, Potassium, Chloride, Exchangeable Sodium Percentage (ESP), Lime Presence, Boron, Nitrate-Nitrogen (NO3-N), Phosphorus (PO4-P), Soluble Potassium (K-AA), Zinc, Maganese, Iron, Copper and Sulfate (SO4S).
 - b. Analyses of phosphorus in soil samples shall be performed using the method recommended by the University of California or the bicarbonate-P or Olsen-P test. In addition to the 40/80 acre requirement, soils shall be sampled for each land application management unit
 - c. Analyses of the soil shall be conducted by: methods utilized by the North American Proficiency Testing (NAPT) Program or accepted by the University of California; and laboratories participating in the NAPT Program or other programs whose test are accepted by the University of California. This shall include analysis for nitrate-nitrogen and ammonium-nitrogen utilizing the 2 M potassium chloride extract or soil.



- vii. Analyses of the soil shall be conducted by: methods utilized by the North American Proficiency Testing (NAPT) Program or accepted by the University of California; and laboratories participating in the NAPT Program or other programs whose test are accepted by the University of California. This shall include analysis for nitrate-nitrogen and ammonium-nitrogen utilizing the 2 M potassium chloride extract or soil.
- viii. Soils shall be sampled from each land application area after the harvest of a crop and before nutrients are added for the next crop, and:
 - a. At least once every five (5) years, or
 - b. Annually when there is a change in the cropping pattern/rotations or field management techniques.
 - c. Fields/soils that have been in alfalfa production, or other legume copes, shall be sampled before the production of the next crop to determine any nitrogen fixing by the legume crop.

F. Irrigation Water

Irrigation Water' shall be sampled and analyzed as follows:

Each irrigation event for each land application area:

Record volume (gallons or acre-inches)² and source (well or canal) of irrigation water applied and dates applied.

One irrigation event during each irrigation season during actual irrigation events:

For each irrigation water source (well and canal):

Electrical conductivity, total dissolved solids, and total nitrogen.³

Data collected to satisfy the groundwater monitoring requirements (below) can be used to satisfy this requirement.

¹ The Discharger shall monitor irrigation water (from each water well source and canal) that is used on all land application areas.

² Initial volume measurements may be the total volume for all land application areas.

³ In lieu of sampling the irrigation water, the Discharger may provide equivalent data from the local irrigation district.

- i. Irrigation water shall be collected as follows:
 - a. Samples from irrigation wells shall be collected after the pump has run for a minimum of 30 minutes or after at least three well volumes have been purged from the well.
 - b. Irrigation districts may provide a water analysis of the surface water delivered that will meet the regulatory requirements. If not, then a representative sample must be collected.
 - c. Samples shall be submitted to a laboratory within 24 hours of sampling.
- ii. Laboratory analyses of irrigation water shall be conducted by a laboratory certified for such analyses by the California Department of Health Services. These laboratory analyses shall be conducted in accordance with the Title 40 Code of Federal Regulations Part 136 (Guidelines Established Test Procedures for the Analysis of Pollutants) or other test methods approved by the Executive Officer.
- G. Site Specific Instructions (See Attachment E).

III. NUTRIENT BUDGET

In accordance to the Waste Discharge Requirements as indicated by the General Order, Attachment C, Section III, page C-4, the discharger shall develop a nutrient budget for each land application area. The nutrient budget shall establish planned rates of nutrient application for each crop based on soil test results, manure and process wastewater analyses, irrigation water analyses, crop nutrient requirements and patterns, seasonal and climatic conditions, the use and timing of irrigation water, and the nutrient application restrictions.

The attached Nutrient Budget prepared by Innovative Ag Services, LLC analyzes both the supply and demand of the nutrients for land applications. By utilizing the American Society of Agricultural Engineers excretion factors, an estimated supply of nutrients can be made to determine the nutrient supply from a discharge facility. The supply of nutrients from other sources (atmospheric deposition, irrigation water, residual soils, commercial fertilizer, etc.) can also be estimated using historical records and the best available data. The demands for these nutrients are made using a field-by-field analysis.

The following section contains guidelines for the discharger and the Certified Nutrient Management Plan Specialist regarding general nutrient production and balance analysis, field-by-field nutrient budgeting, general salt production and loading analysis, as well as creating a nutrient budget summary and storage period summary.

A. General Nutrient Production and Balance Analysis (Attachment F)

i. Summary

In compliance with the General Order, the attached General Nutrient Production and Budget Analysis provides an overview of the expected supply of nutrients available from a discharge facility anticipated for land application use or export from the facility. This analysis focuses on the nitrogen, phosphorus and potassium nutrients found and analyzed in the dairy waste through a sampling and analysis program. The General Nutrient Production and Balance Analysis is a guide to assist the discharger and Certified Nutrient Management Specialist to administer the nutrients expected from a facility.

- ii. Nutrient Measurement Method, Application, and Export:
 - a. The General Nutrient Production and Balance Analysis examines the amount of nitrogen, phosphorus and potassium expected to be generated by dairy waste at the discharger's facility are made using excretion factors based on standards established by the American Society of Agricultural Engineers. This analysis uses a 40 percent atmospheric loss of nitrogen on the production facility and breaks down the capture rate of the nitrogen in either the liquid or solid form. The capture rates of nitrogen are dependent upon the dairy facility's housing system and management practices. The American Society of Agricultural Engineers provides standards used to estimate capture rates between different housing systems (liquid form: 71% under a freestall system, 29% under a flush-lane, and 11% under an open-lot). This analysis allows the capture rate to be customized when site-specific data is available.
 - b. This analysis estimates the pounds of nitrogen, phosphorus and potassium available for land application or export to another user.
 - c. Land application of nutrients under the control of the discharger needs to be applied in accordance with the General Order and this Nutrient Management Plan. Exports of dairy waste must be tested and recorded with a "Manure Manifest" documentation provided by the



Regional Water Quality Control Board. An approved wastewater agreement is required prior to the export of processing wastewater from the dairy facility.

- iii. Results
 - a. From the available nutrient for land application, this analysis gives simple guidelines to the discharger to estimate the amount of acres required mitigate this waste in crop production. Three different cropping scenarios are analyzed to give the discharger guidance as to the amount of acres that may be needed to balance the different nutrients.
 - The high extraction analysis is based on a high yielding and aggressive cropped system that would extract 600 pounds of nitrogen, 90 pounds of phosphorus and 800 pounds of potassium per acre.
 - The medium extraction analysis is based on an average mixed cropping system that would extract 400 pounds of nitrogen, 60 pounds of phosphorus and 500 pounds of potassium per acre.
 - The low extraction analysis is based on a low yielding/producing system that would extract 200 pounds of nitrogen, 30 pounds of phosphorus and 200 lbs of potassium per acre.
 - b. The nitrogen analysis utilizes agronomic and regulatory standards of a 1.4 nitrogen ratio of applied nitrogen over extracted nitrogen.
 - c. The attached General Nutrient Production and Budget Analysis estimates the amount of acres needed to agronomically manage the nutrients found in dairy waste. There are many variables that may affect the specific nutrient balance and management on this facility and this analysis is to only serve as a guideline until further data can be collected and analyzed by a Certified Nutrient Management Plan Specialist.

B. General Salt Production and Loading Analysis (See Attachment G)

- i. Guidelines
 - a. The attached General Salt Loading Analysis estimates the amount of salts generated by the discharge facility buy using the American Society of Agricultural Engineers standards for salt excretion on the herd that is housed at this facility. This analysis then evaluates the number of acres that may be needed to mitigate these salts.
 - b. This analysis uses the same capture rates as nitrogen to determine the amount of salts in both the liquid and the solid forms.
 - c. The applications of salts to land areas are not restricted under the General Order, yet this analysis establishes common agronomic guidelines useful for managing the salts generated from a discharge facility.
- ii. Salt Production and Loading Mitigation
 - a. The discharge facility and Innovative Ag Services, LLC anticipate that the California Regional Water Quality Control Board will establish technical standards applicable for measuring and mitigating salt production and loading rates in collaboration with the University of California and the American Society of Agronomy.
 - b. This analysis uses a maximum loading rate of salt at 2,000 pounds per acre on a single crop and 3,000 pounds per acre on a double crop.
- iii. Results

- a. This analysis shows the number of acres that may be needed to mitigate salts at these maximum loading rates. The Certified Nutrient Management Specialist and the discharger can use this analysis as a guideline for the acres that may be required.
- b. These results do not display the required acres to comply with law, rather the acres needed for common agronomic and environmental practices.

C. Nutrient Budget Summary and Storage Period (See Attachment H)

i. Purpose

- a. The Nutrient Budget Summary is a review of the estimated supply of nutrient from the facility, the recommended application of nutrients to each field, the expected demand from each field, and the nutrient ratio for nitrogen, phosphorus and potassium.
- b. This summary also reviews the whole farm nutrient balance by totaling the applied recommended application and the expected demand of nutrients. This analysis provides a helpful evaluation by holistically reviewing each discharge facility.
- c. This summary evaluates the nitrogen, phosphorus and potassium nutrient with the different forms of discharge waste (liquid and solid).
- ii. Benefits of the Nutrient Budget Summary
 - a. The attached Nutrient Budget Summary demonstrates if the recommend applications meet the demand of the crops with the expected supply from the facility.
 - b. This summary can also be use to predict the demand for export, both the solid and the liquid form.
 - c. Changes in the NMP can be made to maximize the combinations of nutrient types and forms being applied to the crops.
- iii. Application and Storage
 - a. The Nutrient Budget Summary displays that there is a high demand of these valuable nutrients for crop production. While the timing of each application cannot be accurately established with the changing dynamics of climate conditions, the demand for nutrients and correlating irrigation will require applications to be made at a minimum of every 120 days. This Nutrient Management Plan evaluation establishes a maximum storage period of time anticipated between land applications events, (storage period), to be 120 days based on the proper timing of and compliance with Technical Standards V. C. of Attachment C in the General Order.

D. Field-by-Field Nutrient Budget (See Attachment I)

i. Data Sources

The Field-by-Field Nutrient Budget analysis focuses on each land application area and defines the crop(s) planned for production as required by the General Order. Each field budget is based off of the best available data including, but not limited to: harvest lab data, yield records, land application records, manure laboratory data, process wastewater laboratory data, irrigation water laboratory data, expected atmospheric deposition, and soil laboratory data.

ii. Nutrient Application Rate

The nutrient application rates for each application must follow the technical standards established by the General Order for Existing Milk Cow Dairies, R5-2007-0035 (Attachment C – Technical



Standards for Nutrient Management V. B.). The quantity of each nutrient source to be utilized for land application and crop production is defined to meet crops demand for the nutrients while complying with the General Order.

- iii. Nutrient Application Timing and Methodology
 - a. The timing of applications within the field's budget are dependent on field conditions and are to be made using the Technical Standards established within the General Order for Existing Milk Cow Dairies, R5-2007-0035 (Attachment C – Technical Standards for Nutrient Management, Section V. C.).
 - b. Each application of nutrients shall be applied uniformly to application areas or as prescribed by precision agricultural techniques. Unless otherwise noted, the method for solid manure applications are to be made with a spreader truck and process wastewater applications are to be made by the mixing with a flood irrigation event.

IV. SURFACE WATER PROTECTIVE MEASURES

This section identifies all potential surface waters or conduits to surface water that are within 100 feet of any land application area. For each land application area that is within 100 feet of surface water or a conduit to surface water, the setback, vegetated buffer, or other alternative practice that will be implemented to protect surface water is identified.

Manure and process wastewater shall not be applied closer than 100 feet to any down gradient surface waters unless a 35-foot wide vegetated buffer or physical barriers subsisted for the 100-foot setback or alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent or better than the reductions achieved by the 100-foot setback.

A. Setback

A Setback is a specified distance from surface waters or potential conduits to surface waters where manure and process wastewater may not be land applied, but where crops may continue to be grown.

B. Vegetated Buffer

- A vegetated buffer is a narrow, permanent strip of dense perennial vegetation where no crops are grown and which is established parallel to the contours of and perpendicular to the dominant slope of the land application area for the purposes of slowing water runoff, enhancing water infiltration, trapping pollutants bound to sediment, and minimizing the risk of any potential nutrients or pollutants from leaving the land application area and reaching surface waters.
- ii. Removal of vegetation in vegetated buffers will be in accordance with site production limitations, rate of plant growth, and the physiological needs of the plants.
- iii. Do not mow below the recommended height for the plant species.
- iv. Maintain adequate ground cover and plant density to maintain or improve filtering capacity of the vegetation.



- v. Maintain adequate ground cover, litter, and canopy to maintain or improve infiltration and soil condition.
- vi. Periodic rest from mechanical harvesting may be needed to maintain or restore the desired plant community following episodic events such as drought.
- vii. When weeds are a significant problem, implement pest management to protect the desired plant communities.
- viii. Prevent channels from forming.

C. Physical Barriers and Alternatives

- i. Examples of physical barriers and alternative conservation practices as applicable to field specific conditions may used alone or in conjunction with each other to provide a pollutant reduction equivalent or better than the reductions achieved by the 100-foot set back are: a levee, a raised road, a border, a berm, a diversion ditch, a surface water collection system, an uphill gradient, regulated wastewater application system such as drip irrigation or sprinklers.
- D. Site Specific Surface Water Protective Measures (See Attachment J)

V. FIELD RISK ASSESSMENT

This section evaluates the effectiveness of management practices used to control the discharge of waste constituents from land application areas by assessing the water quality monitoring results of discharges of manure, process wastewater, tailwater, subsurface drainage, or storm water from the land application areas.

Has this facility had any of the following discharges from any land application areas to surface water in the past twelve (12) months?

•	Process wastewater	Yes	No
•	Manure	Yes	No
•	Storm Water	Yes	No
•	Tailwater* (within 60 days of manure or wastewater application)	Yes	No
•	Subsurface (tile) drainage	Yes	_ _ No

If you answered "No" to all of the above, then nitrogen and/or phosphorus have not moved from any of your land application areas to surface water and your Field Risk Assessment is complete.

Start Date & Time	Stop Date & Time	Indentification of Input or Removal	Qty Applied or Removed	Calculations Used	Name & Signature*	Est. # of N per App	Est. Total N App
							U.S.
							1
							1000 A
		-				1	
					_	A	
	_					2 Contraction	

*By signing this document, you are stating that each application or harvest was hapected daily and the land application berms are in good working order (rodent control, piping, bank erosion), there is no field saturation, ponding, erosion, or runoff (including tail water discharges from the end of fields, pipes, or other conveyances), there are no nuisance conditions and vegetaled buffers are in good working order. You are also signing that soil and seld conditions were conducive to receive the application. If not, please explain on the back side of this page with the date, a description of the problem and the corrective action taken. You are also stating that precipitation dd not cour, nor was standing water precesent, at the time of a manure and/or process wastewater application, and for 24 hours prior to and after an application. If precipitation did occur or standing water was present, please note on the back of this page. Innovative Ag Services, LLC

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Date Planted:			Projected Yield per Acre:	per Acre:		Actual Yield per Acre:	
stimated Ma: g each input an	cimum Ibs. of N	Estimated Maximum lbs. of Nitrogen to be Applied per acre: Log each input and removal of nitrogen as a separate line item. i.e. well or can	per acre: well or canal water. pr	Estimated Maximum Ibs. of Nitrogen to be Applied per acre: Log each input and removal of nitrogen as a separate line item. i.e. well or canal water, process wastewater, manure, comercial fertilizers, plant fissue, other	ul fertilizers, plant fissue, other	r Innovative An Services Ise Oniv	nuirae I lea Onlu
Start Date & Time	Stop Date & Time	Indentification of Input or Removal	Qty Applied or Removed	Calculations Used	Name & Signature*		Est. Total N App
						0140	
1							

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Innovative Ag Services, LLC

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*By signing this document, you are stating that each application or harvest was inspected daily and the land application berms are in good working order (rodent control, piping, bank erosion), there is no field saturation, ponding, erosion, or runolf (including tail water discharges from the end of fields, pipes, or other conveyances), there are no nuisance conditions and vegetated buffers are in good working order. You are also signing that soil and field conditions were conductive to receive the application. If not, please explain on the back die of this page with the date, a description of the problem and the corrective action taken. You are also stating that precipitation did not occur, nor was standing water present, at the time of a manure and/or process wastewater application, and for 24 hours prior to and after an application. If precipitation did occur or standing water was present, please note on the back of this page.

VII. NUTRIENT MANAGEMENT PLAN REVIEW

A. Nutrient Management Plan Updates

- i. This Nutrient Management Plan shall be updated when discharges from any land application area exceed water quality objectives, a nutrient source has changes, site-specific information has become available to replace default values used in the overall nutrient balance or the nutrient budget, nitrogen application rates in any land application area exceed the rates specified or the Field Risk Assessment finds that management practices are not effective in minimizing discharges.
- ii. This Nutrient Management Plan shall be updated prior to any anticipated changes that could affect the overall nutrient balance or the nutrient budges such as, but not limited to, a crop rotation change, changes in the available cropland, or the changes in the volume of process wastewater generated.

B. Nutrient Management Plan Review & Regional Board Notice

The discharger shall review the Nutrient Management Plan at least once every five years and notify the Regional Board in the annual report of any proposed changes that would affect the Nutrient Management Plan.

C. Benefits of a Nutrient Management Plan

- The Nutrient Management Plan was written to assist the dairy producer and farm management team produce valuable crops. The implementation of sustainable agronomic practice found in this NMP will increase yield, reduce cost, improve quality, mitigate risks, and sustain productivity/profitability.
- ii. To maximize the benefits and the professional agronomic services provided by Innovative Ag Services, LLC, regular reviews of the nutrient supply and demand need to be made throughout the year. The ever-changing dynamics of crop production require constant management, including regular input and alteration of the Nutrient Management Plan.

VIII. REFERENCES

California Regional Water Quality Control Board – Central Valley Region – Order Number R5-2007-0035 "Waste Discharge Requirements General Order for Existing Milk Cow Dairies"

California Regional Water Quality Control Board - Central Valley Region - Sampling and Analysis

"Approved Sampling and Analysis Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies"

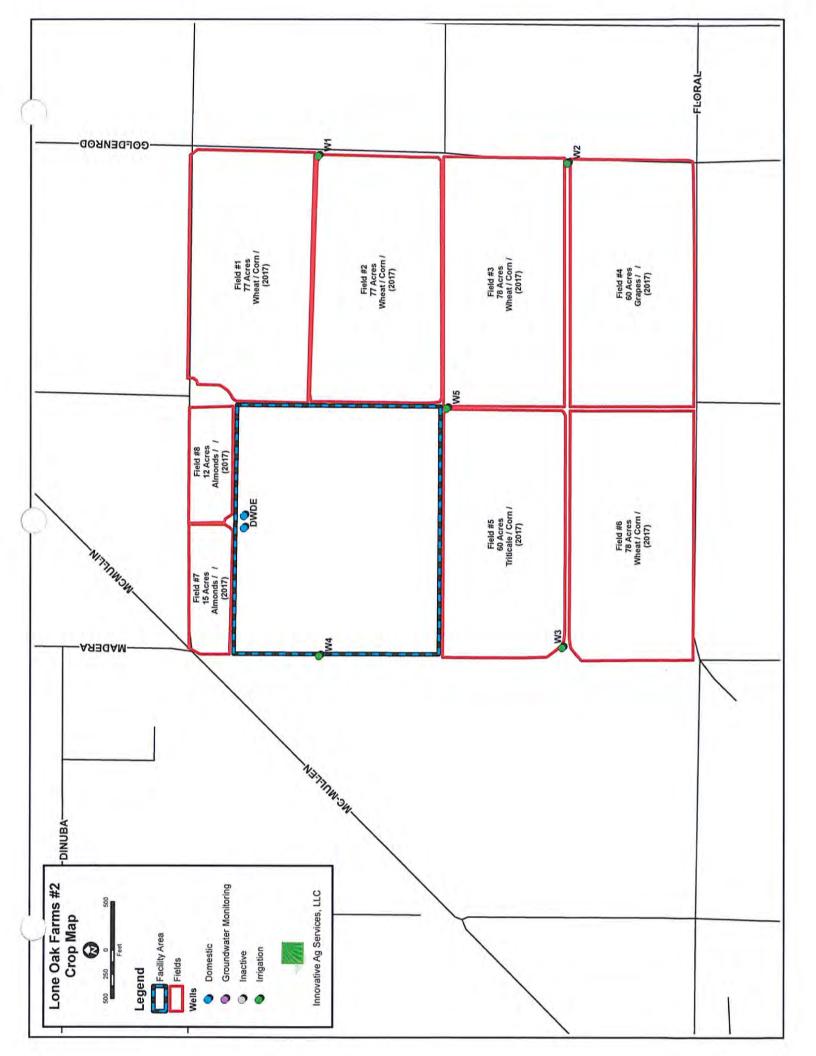
http://www.waterboards.ca.gov/ventralvalley/water_issues/dairies/general_order_guidance/sampling_analysis/index.shtml



ATTACHMENT A. LAND APPLICATION MAP



ATTACHMENT B. CROP MAP



ATTACHMENT C. WASTEWATER AGREEMENTS



ATTACHMENT D. VICINITY MAP

NORTH

Vicinity Map for Lone Oak #2



MAP KEY



- Dairy Facility & Land Application Area
- Additional Land under the control of the Discharger, within five miles of the dairy, which does not receive process wastewater or manure.
- Waste Water Agreement

ATTACHMENT E. SITE SPECIFIC SAMPLING & ANALYSIS PLAN

Waste water samples are to be taken from the lagoon near the pump intake.

Domestic wells - DW and DE are to be sampled from the faucet nearest the well head.

Irrigation wells – W1, W2, W3, and W4 are to be sampled from the well discharge pipe prior to entering the stand pipe

Manure samples are taken randomly from the piles throughout the corrals.

ATTACHMENT F. GENERAL NUTRIENT PRODUCTION & BALANCE ANALYSIS

Lone Oak Farms #2 2017 Nutrient Budget

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General Nutrient Production and Balance Analysis

				Nitro	Nitrogen		_
				Liquid		Solid	
Animal	Head	Head Housing Type	Net Available for Application*	Acres Required **	Net Available for Application*	Acres Required **	
Milk Cows	2,135	2,135 Freestalls	328,651,44	586.9	134,237.91	239.7	
Dry Cows	600	Freestalls	46,647.00	83.3	19,053.00	34.0	
Heifers (15-24)	805	Flushed Lanes	14,068.34	25.1	52,923.76	94.5	
Calves (4-6)	470	470 Flushed Lanes	3,026.14	5.4	11,384.06	20.3	
Calves (0-3)	700	700 Flushed Lanes	5,472.81	9.8	20,588.19	36.8	
	4,710		397,865.73	710.5	238,186.92	425.3	-
			Total Li	Total Liquids & Solids			
			Capture /	Available Required			

636,052.65 1,060,087.75

1,135.8

* Atmospheric Loss of 40% nitrogen used to calculate Net Available for Application ** Nitrogen Extraction Levels: 400lbs/acre (To meet a 1.4 ratio)

Excretion factors from ASAE D.384.2 March 2005, Table 1b, Page 2. Potassium excretion values for heifers and calves are not available in this study and were extrapulated based upon weight.



		1	Ρh	Phosphorus	Pc	Potassium
				Acres Required		Acres Required
Animal	Head	Head Housing Type	Net Available for Application	Extraction	Net Available for Application	Extraction
Milk Cows	2,135	2,135 Freestalls	132,476.75	2,207.9	179,233.25	358.5
Dry Cows	600	Freestalls	15,330.00	255.5	72,270.00	144.5
Heifers (15-24)	805	Flushed Lanes	17,629.50	293.8	52,888.50	105.8
Calves (4-6)	470	Flushed Lanes	7,548.20	125.8	13,724.00	27.4
Calves (0-3)	700	Flushed Lanes	2,555.00	42.6	10,220.00	20.4
	4,710		175,539.45	2,925.7	328,335.75	656.7

General Nutrient Production and Balance Analysis Lone Oak Farms #2 2017

Phosphorus Extraction Levels: 60lbs/acre (To meet a 1.0 ratio) Potassium(K) Extraction Levels: 500lbs/acre (To meet a 1.0 ratio) No atmospheric losses computed and capture rates between liquid and solid forms are unknown

Excretion factors from ASAE D.384.2 March 2005, Table 1b, Page 2. Potassium excretion values for heifers and calves are not available in this study and were extrapulated based upon weight.



ATTACHMENT G. GENERAL SALT PRODUCTION & LOADING ANALYSIS

General Salt Production and Loading Analysis Lone Oak Farms #2 2017

Estimated Crop Acre Requirements

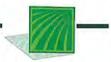
			Liquid Salts	Solid Salts	Total Salts
Animal	Head	Housing Type	lbs / year	lbs / year	lbs / year
Milk Cows	2,135	Freestalls	713,738	291,527	1,005,265
Dry Cows	600	Freestalls	97,959	40,011	137,970
Heifers (15-24)	805	Flushed Lanes	38,873	146,237	185,110
Calves (4-6)	470	Flushed Lanes	11,348	42,690	54,038
Calves (0-3)	200	Flushed Lanes	8,585	32,295	40,880
	4,710		870,503	552,760	1,423,263
		Single Crop Acres Required	435	276	712
		Double Crop Acres Required	290	184	474

Salt excretion values for milk cows and dry cows were derived from: Committee of Experts on Dairy Manure Management, 2005 and ASABE 384.2, 2005, Chapter 7 pages 54 and 65 (Excretion values for heifers and calves are not addressed in this study. Excretion values for these animals were extrapulated based upon animal weight.)

Acre requirements based on 2,000 lbs of salt per single crop and 3,000 lbs of salt per double crop



ATTACHMENT H. NUTRIENT BUDGET SUMMARY & STORAGE PERIOD SUMMARY



				Lone Was	Lone Oak Farms #2 2017 Waste Application Summary	irms #⁄	2 2017 mmary					
Field	Acres	N Applied - Liquid Waste	N Applied - Solid Waste	Total N Applied	N Removed	N Ratio	P Applied	P Removed	P Ratio	K Applied	K Removed	K Ratio
-	77	50,963.99	0.00	52,650.29	37,615.27	1.40	5,031.18	7,897.12	0.64	69,062.07	51,365.93	1.34
2	77	49,685.79	0.00	51,572.29	36,859.90	1.40	4,904.90	7,117.88	0.69	67,329.57	48,389.88	1.39
£	78	52,192.14	0.00	53,763.06	38,499.24	1.40	5,151.90	6,595.68	0.78	70,726.50	45,037.98	1.57
4	60	0.00	0.00	4,462.20	3,180.00	1.40	0.00	529.80	0.00	0.00	4,089.00	0.00
5	60	34,234.80	0.00	35,464.20	25,327.80	1.40	3,379.20	4,342.80	0.78	46,392.00	29,313.00	1.58
9	78	48,793.68	0.00	50,433.24	35,986.86	1.40	4,816.50	6,789.90	0.71	66,120.60	39,730.08	1.66
7	15	0.00	1,012.50	2,220.30	0.00	00.0	1,079.10	00.0	0.00	1,774.35	0.00	0.00
8	12	0.00	810.00	1,776.24	0.00	0.00	863.28	00.00	0.00	1,419.48	0.00	0.00
Totals:	457	235,870.40	1,822.50	252,341.82	177,469.07	1.42	25,226.06	33,273.18	0.76	322,824.57	217,925.87	1.48
Total Available For Appplication: 397,865.73 Excess (Deficient) Available: 161,995.33	ppplication ailable:	: 397,865.73 161,995.33	238,186.92 236,364.42	636,052.65 383,710.83			175,539.45 150,313.39			328,335.75 5,511.18		
Gallons of Processed Wastewater to be Exported Annually:	d Wastewat	er to be Exported	l Annually:	42,401,666								
Tons of Corral Solids to be Exported Annually:	s to be Expo	orted Annually:		6,156								
Whole Farm Balance:	••			1.42								
Whole Farm Balance without Recommended Exports:	without Re	commended Exp	orts:	3.58								

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Page 4

ATTACHMENT I. FIELD-BY-FIELD NUTRIENT BUDGET

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11

Acres:

Field Name: 1

			Field Summary (in II	bs/acre)						
		Nitrogen			Nitrogen	Phosphorus	Potassium			
Process Wa	Process Wastewater Applied	661.87	661.87 Total Nutrients Applied	p	683.77	65.34				
Solid Manure Applied	re Applied		Total Nutrients Harvested	sted	(488.51)	(102.56)	(667.09)			
			Nutrient Ratio		1.40	0.64	1.34			
Crop 1: W	Wheat (South Valley)	Variel	Variety: Wheat (South Valley	y) - General	Plan	Plant Date: November 2016	r 2016		Acres Planted:	anted: 77
Date	Application	Q, (per	Quantity (per Acre) Units	N Value Units		Nitrogen from Process Wastewater	Nitrogen from Solid Manure	Nitrogen (Ibs per acre)	Phosphorus (lbs per acre)	Potassium (Ibs per acre)
11/15/2016	11/15/2016 Waste Water		1.15 Acre Inches	458.63	mg/L	119.30		119.30	11.78	161.67
11/15/2016	11/15/2016 Ground Water		4.00 Acre Inches	1.93	mg/L			1.75	0.00	0.00
03/15/2017	03/15/2017 Ground Water		5.00 Acre Inches	1.94	mg/L			2.19	0.00	0.00
03/15/2017	Waste Water		1.25 Acre Inches	458.65	mg/L	129.68		129.68	12.80	175.73
04/15/2017	Waste Water		1.00 Acre Inches	458.63	mg/L	103.74		103.74	10.24	140.58
04/15/2017	Ground Water		5.00 Acre Inches	1.94	mg/L			2.19	0.00	00.0
05/15/2017	Harvest		22.00 Tons	0.58	%			(256.68)	(62.18)	(393.63)
						352.72		102.17	(27.36)	84.35
						Fotal Nutrients Applied	pplied	358.85	34.82	477.98
						Total Nutrients Harvested	arvested	(256.68)	(62.18)	(393.63)
						Nutrient Ratio		1.40	0.56	1.21

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77

Acres:

Field Name: 1

Crop 2:	Crop 2: Corn (Silage)	Variety: Com	Variety: Com (Silage) - General	äl		Plant Date: June 2017	7		Acres Planted:	lanted: 77
Date	Application	Quantity (per Acre) Units	Units	N Value	Units	Nitrogen from Process Wastewater	Nitrogen from Solid Manure	Nitrogen (Ibs per acre)	Phosphorus (Ibs per acre)	Potassium (Ibs per acre)
05/01/2017	05/01/2017 Ground Water	6.00	6.00 Acre Inches	1.94 n	mg/L	NAMES AND		2.63	0.00	0.00
06/01/2017	06/01/2017 Waste Water	1.00	1.00 Acre Inches	458.63 n	mg/L	103.74		103.74	10.24	140.58
06/01/2017	06/01/2017 Ground Water	5.00	5.00 Acre Inches	1.94 n	mg/L			2.19	0.00	00.0
07/01/2017	07/01/2017 Ground Water	5.00	5.00 Acre Inches	1.94 n	mg/L			2.19	0.00	00.0
07/01/2017	07/01/2017 Waste Water	1.00	1.00 Acre Inches	458.63 n	mg/L	103.74		103.74	10.24	140.58
07/01/2017	07/01/2017 Ground Water	5.00	5.00 Acre Inches	1.94 n	mg/L			2.19	0.00	0.00
08/01/2017	Ground Water	5.00	5.00 Acre Inches	1.94 n	mg/L			2.19	00.0	0.00
08/01/2017	Waste Water	0.98	0.98 Acre Inches	458.65 n	mg/L	101.67		101.67	10.04	137.77
08/01/2017	08/01/2017 Ground Water	5.00	5.00 Acre Inches	1.94 n	mg/L			2.19	0.00	0.00
09/01/2017	09/01/2017 Ground Water	5.00	5.00 Acre Inches	1.94 n	mg/L			2.19	0.00	0.00
09/30/2017 Harvest	Harvest	30.00 Tons	Tons	0.39 %	%			(231.83)	(40.38)	(273.46)
						309.15		93.09	(9.86)	145.47
						Total Nutrients Applied	pplied	324.92	30.52	418.93
						Total Nutrients Harvested	arvested	(231.83)	(40.38)	(273.46)

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1.53

0.76

1.40

Nutrient Ratio

Page 6

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17

Acres:

Field Name: 2

			Field Summary (in	lbs/acre)						
		Nitrogen			Nitrogen	Phosphorus	Potassium			
Process Wa	Process Wastewater Applied	645.27	645.27 Total Nutrients Applied	ied	669.77	63.70	874.41			
Solid Manure Applied	e Applied		Total Nutrients Harvested	ested	(478.70)	(92.44)	(628.44)			
			Nutrient Ratio		1.40	0.69	1.39			
Crop 1: W	Wheat (South Valley)	Variet	Variety: Wheat (South Valley) - General	vy) - General	Plant	Plant Date: November 2016	-2016		Acres Planted:	lanted: 77
Date	Application	Gi (pei	Quantity (per Acre) Units	N Value Units		Nitrogen from Process Wastewater	Nitrogen from Solid Manure	Nitrogen (Ibs per acre)	Phosphorus (Ibs per acre)	Potassium (Ibs per acre)
11/15/2016	11/15/2016 Ground Water		5.00 Acre Inches	1.91	mg/L			2.16	0.00	0.00
11/15/2016	11/15/2016 Waste Water		1.00 Acre Inches	458.63	mg/L	103.74		103.74	10.24	140.58
02/01/2017	02/01/2017 Ground Water		5.00 Acre Inches	1.94	mg/L			2.19	0.00	0.00
02/02/2017 Waste Water	Waste Water		1.00 Acre Inches	458.63	mg/L	103.74		103.74	10.24	140.58
03/15/2017 Waste Water	Waste Water		0.82 Acre Inches	458.65	mg/L	85.07		85.07	8.40	115.28
03/15/2017	03/15/2017 Ground Water		5.00 Acre Inches	1.94	mg/L			2.19	0.00	0.00
04/15/2017	04/15/2017 Ground Water		5.00 Acre Inches	1.94	mg/L			2.19	0.00	0.00
04/15/2017	Waste Water		0.50 Acre Inches	458.63	mg/L	51.87		51.87	5.12	70.29
05/15/2017	Harvest		22.00 Tons	0.57	%			(252.76)	(52.70)	(344.09)
						344.42		100.39	(18.70)	122.64
					Ĕ	Total Nutrients Applied	pplied	353.15	34.00	466.73

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(344.09) 1.36

(52.70) 0.65

(252.76) 1.40

Total Nutrients Harvested Nutrient Ratio

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Field Name: 2

Field Name: 2	2								Acres: 77	
Crop 2:	Com (Silage)	Variety: Com (Silage) - General	al	Plan	Plant Date: June 2017			Acres Planted:	lanted: 77	Large or
Date	Application	Quantity (per Acre) Units	N Value Units		Nitrogen from Process Wastewater	Nitrogen from Solid Manure	Nitrogen (Ibs per acre)	Phosphorus (lbs per acre)	Potassium (Ibs per acre)	
05/01/2017	05/01/2017 Ground Water	6.00 Acre Inches	1.94 n	mg/L			2.63	0.00	0.00	1 -
06/01/2017	06/01/2017 Ground Water	5.00 Acre Inches	1.94 n	mg/L			2.19	0.00	0.00	-
06/01/2017	06/01/2017 Waste Water	1.00 Acre Inches	458.63 n	mg/L	103.74		103.74	10.24	140.58	
07/01/2017	07/01/2017 Waste Water	1.00 Acre Inches	458.63 n	mg/L	103.74		103.74	10.24	140.58	
07/01/2017	07/01/2017 Ground Water	5.00 Acre Inches	1.94 n	mg/L			2.19	0.00	00.0	-
07/01/2017	07/01/2017 Ground Water	5.00 Acre Inches	1.94 n	mg/L			2.19	0.00	00.0	-
08/01/2017	08/01/2017 Ground Water	5.00 Acre Inches	1.94 n	mg/L			2.19	0.00	0.00	_
08/01/2017	08/01/2017 Waste Water	0.90 Acre Inches	458.65 n	mg/L	93.37		93.37	9.22	126.52	_
08/01/2017	08/01/2017 Ground Water	5.00 Acre Inches	1.94 n	mg/L			2.19	0.00	0.00	_
09/01/2017	Ground Water	5.00 Acre Inches	1.94 n	mg/L			2.19	0.00	00.0	_
09/30/2017	Harvest	32.00 Tons	0.35 %	%			(225.94)	(39.74)	(284.35)	_
					300.85		90.68	(10.04)	123.33	
					Total Nutrients Applied	plied	316.62	29.70	407.68	
				-	Total Nutrients Harvested	arvested	(225.94)	(39.74)	(284.35)	
					Nutrient Ratio		1.40	0.75	1.43	

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78

Acres:

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Lone Oak Farms #2 2017 Nutrient Applications

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Field Name: 3

			Field Summary (in Ib	lbs/acre)						
		Nitrogen			Nitrogen	Phosphorus	Potassium			
Process Wastewater Applied	ater Applied	669.13	669.13 Total Nutrients Applied	-	689.27	66.05	906.75			
Solid Manure Applied	plied		Total Nutrients Harves	ested	(493.58)	(84.56)	(577.41)			
]	Nutrient Ratio		1.40	0.78	1.57			
Crop 1: Wheat (Wheat (South Valley)	Variel	Variety: Wheat (South Valley) - General	I - General	Plant	Plant Date: November 2016	2016		Acres Planted:	lanted: 78
Date Appli	Application	Q (pei	Quantity (per Acre) Units	N Value Units		Nitrogen from Process Wastewater	Nitrogen from Solid Manure	Nitrogen (Ibs per acre)	Phosphorus (lbs per acre)	Potassium (Ibs per acre)
11/15/2016 Ground Water	nd Water		5.00 Acre Inches	1.94 r	mg/L			2.19	0.00	0.00
11/15/2016 Waste Water	e Water		1.25 Acre Inches	458.65 n	mg/L	129.68		129.68	12.80	175.73
03/15/2017 Waste	Waste Water		1.25 Acre Inches	458.65 n	mg/L	129.68		129.68	12.80	175.73
03/15/2017 Ground Water	nd Water		5.00 Acre Inches	1.94 n	mg/L			2.19	0.00	0.00
04/15/2017 Ground Water	nd Water		5.00 Acre Inches	1.94 n	mg/L			2.19	0.00	0.00
04/15/2017 Waste Water	e Water		1.15 Acre Inches	458.63 n	mg/L	119.30		119.30	11.78	161.67
05/15/2017 Harvest	est		22.00 Tons	0.63 %	%			(276.00)	(48.98)	(321.12)
						378.66		109.23	(11.60)	192.01
					2	Fotal Nutrients Applied	plied	385.23	37.38	513.13
					<u>ĭ</u>	Total Nutrients Harvested	Irvested	(276.00)	(48.98)	(321.12)
					ž	Nutrient Ratio		1.40	0.76	1.60

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Field Name: 3

Field Name: 3									Acres: 78
Crop 2: 0	Corn (Silage)	Variety: Com	Variety: Corn (Silage) - General	al	Plant Date: June 2017	17		Acres Planted:	lanted: 78
Date	Application	Quantity (per Acre) Units	Units	N Value Units	Nitrogen from Process Wastewater	Nitrogen from Solid Manure	Nitrogen (Ibs per acre)	Phosphorus (Ibs per acre)	Potassium (Ibs per acre)
05/01/2017	05/01/2017 Ground Water	4.00	4.00 Acre Inches	1.93 mg/L			1.75	0.00	00.0
06/01/2017	06/01/2017 Waste Water	1.00	1.00 Acre Inches	458.63 mg/L	103.74		103.74	10.24	140.58
06/01/2017	06/01/2017 Ground Water	4.00	4.00 Acre Inches	1.93 mg/L			1.75	0.00	0.00
07/01/2017	07/01/2017 Ground Water	5.00	5.00 Acre Inches	1.94 mg/L			2.19	0.00	0.00
07/01/2017	07/01/2017 Waste Water	1.00	1.00 Acre Inches	458.63 mg/L	103.74		103.74	10.24	140.58
07/01/2017	07/01/2017 Ground Water	4.00	4.00 Acre Inches	1.93 mg/L			1.75	0.00	00.0
08/01/2017	08/01/2017 Waste Water	0.80	0.80 Acre Inches	458.62 mg/L	82.99		82.99	8.19	112.46
08/01/2017	08/01/2017 Ground Water	5.00	5.00 Acre Inches	1.94 mg/L			2.19	0.00	0.00
08/01/2017	08/01/2017 Ground Water	5.00	5.00 Acre Inches	1.94 mg/L			2.19	0.00	0.00
09/01/2017	09/01/2017 Ground Water	4.00	4.00 Acre Inches	1.93 mg/L			1.75	0.00	0.00
09/30/2017 Harvest	Harvest	30.00 Tons	Tons	0.36 %			(217.58)	(35.58)	(256.29)
					290.47		86.46	(6.91)	137.33
					Total Nutrients Applied	Applied	304.04	28.67	393.62
					Total Nutrients Harvested	Harvested	(217.58)	(35.58)	(256.29)

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1.54

0.81

1.40

Nutrient Ratio

2017	S
Lone Oak Farms #2 201	Nutrient Applications

60

Acres:

Field Name: 4

Field Summary (in Ibs/acre)

		Nitrogen				Nitrogen	Phosphorus	Potassium			
Process Wa	Process Wastewater Applied		Total N	Total Nutrients Applied		74.37	0.00	0.00			
Solid Manure Applied	re Applied		Total N	Total Nutrients Harvested	đ	(53.00)	(8.83)	(68.15)			
			Nutrient Ratio	t Ratio		1.40	0.00	0.00			
Crop 1: G	Grapes	Varie	ity: Grap	Variety: Grapes - General		Plar	Plant Date: August 2016)16		Acres Planted:	anted: 60
Date	Application	be D	Quantity (per Acre) Units	Units	N Value	Units	Nitrogen from Process Wastewater	Nitrogen from Solid Manure	Nitrogen (Ibs per acre)	Phosphorus (Ibs per acre)	Potassium (Ibs per acre)
12/05/2016	12/05/2016 Ground Water		3.00	3.00 Acre Inches	1.93	mg/L			1.31	0.00	00.0
01/05/2017	01/05/2017 Ground Water		3.00	3.00 Acre Inches	1.93	mg/L			1.31	0.00	0.00
02/05/2017	Ground Water		3.00	3.00 Acre Inches	1.93	mg/L			1.31	0.00	0.00
03/05/2017	Fertilize - UN32		10.00	10.00 Gallons	32.00	%			26.66	0.00	0.00
03/05/2017	Ground Water		3.00	3.00 Acre Inches	1.93	mg/L			1.31	0.00	0.00
04/05/2017	Ground Water		3.00	3.00 Acre Inches	1.93	mg/L			1.31	0.00	0.00
04/05/2017	Ground Water		3.00	3.00 Acre Inches	1.93	mg/L			1.31	0.00	0.00
05/05/2017	Ground Water		3.00	Acre Inches	1.93	mg/L			1.31	0.00	0.00
05/05/2017	Fertilize - UN32		12.00	12.00 Gallons	32.00	%			31.99	0.00	0.00
05/05/2017	Ground Water		3.00	3.00 Acre Inches	1.93	mg/L			1.31	0.00	0.00
06/05/2017	Ground Water		3.00	3.00 Acre Inches	1.93	mg/L			1.31	0.00	00.0
07/05/2017	Ground Water		3.00	3.00 Acre Inches	1.93	mg/L			1.31	0.00	0.00
08/05/2017	Ground Water		3.00	Acre Inches	1.93	mg/L			1.31	0.00	0.00
08/05/2017	Ground Water		3.00	3.00 Acre Inches	1.93	mg/L			1.31	0.00	0.00
08/29/2017	Harvest		6.31	6.31 Tons	0.42	%			(53.00)	(8.83)	(68.15)

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Page 11

Field Name: 4

Lone Oak Farms #2 2017 Nutrient Applications

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Acres: 60

	21.37	(8.83)	(68.15)
Total Nutrients Applied	74.37	0.00	00.0
Total Nutrients Harvested	(53.00)	(8.83)	(68.15)
Nutrient Ratio	1.40	0.00	0.00

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Acres:

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Field Name: 5

Field Summary (in Ibs/acre)

								-			
		Nitrogen			-	Nitrogen	Phosphorus	Potassium			
Process Wa	Process Wastewater Applied	570.58	570.58 Total Nutrients Applied	Applied		591.07	56.32	773.20			
Solid Manure Applied	re Applied		Total Nutrients Harve	Harvested		(422.13)	(72.38)	(488.55)			
			Nutrient Ratio			1.40	0.78	1.58			
Crop 1: W	Wheat (South Valley)	Varie	Variety: Wheat (South Valley) - General	Valley) - Genera	-	Plant I	Plant Date: November 2016	2016		Acres Planted:	lanted: 60
Date	Application	о б	Quantity (per Acre) Units	N Valu	N Value Units	Z	Nitrogen from Process Wastewater	Nitrogen from Solid Manure	Nitrogen (Ibs per acre)	Phosphorus (Ibs per acre)	Potassium (Ibs per acre)
11/15/2016	11/15/2016 Ground Water		5.00 Acre Inches	thes 1.91	1 mg/L				2.16	0.00	0.00
11/15/2016	11/15/2016 Waste Water		1.25 Acre Inches	hes 458.65	5 mg/L		129.68		129.68	12.80	175.73
03/15/2017	03/15/2017 Ground Water		5.00 Acre Inches	hes 1.91	1 mg/L				2.16	0.00	0.00
03/15/2017	03/15/2017 Waste Water		1.00 Acre Inches	hes 458.63	3 mg/L		103.74		103.74	10.24	140.58
04/15/2017	04/15/2017 Waste Water		1.00 Acre Inches	hes 458.63	3 mg/L		103.74		103.74	10.24	140.58
04/15/2017	04/15/2017 Ground Water		5.00 Acre Inches	hes 1.91	1 mg/L				2.16	0.00	0.00
05/15/2017 Harvest	Harvest		22.00 Tons	0.56	6 %				(245.10)	(48.00)	(327.05)
						Į	337.16		98.54	(14.72)	129.84
						To	Fotal Nutrients Applied	plied	343.64	33.28	456.89
						<u>2</u>	Total Nutrients Harvested	arvested	(245.10)	(48.00)	(327.05)
						Ž	Nutrient Ratio		1.40	0.69	1.40

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Page 13

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Acres:

Field Name: 5

						ACLES:	B
Crop 2: Com (Silage)	Variety: Corn (Silage) - General	əral	Plant Date: June 2017			Acres Planted:	60
Date Application	Quantity (per Acre) Units	N Value Units	Nitrogen from Process Nitro Wastewater Solic	Nitrogen from Nitrogen Solid Manure (Ibs per acre)	gen Phosphorus icre) (Ibs per acre)	qi)	Potassium (Ibs per acre)
05/01/2017 Ground Water	4.00 Acre Inches	1.93 mg/L			1.75	0.00	0.00
06/01/2017 Waste Water	1.00 Acre Inches	458.63 mg/L	103.74	10	103.74	10.24	140.58
06/01/2017 Ground Water	4.00 Acre Inches	1.93 mg/L			1.75	0.00	0.00
07/01/2017 Waste Water	0.75 Acre Inches	458.66 mg/L	77.81	7	77.81	7.68	105.44
07/01/2017 Ground Water	5.00 Acre Inches	1.94 mg/L			2.19	0.00	0.00
07/01/2017 Ground Water	5.00 Acre Inches	1.94 mg/L			2.19	0.00	0.00
08/01/2017 Ground Water	5.00 Acre Inches	1.94 mg/L			2.19	0.00	0.00
08/01/2017 Ground Water	5.00 Acre Inches	1.94 mg/L			2.19	00.00	0.00
08/01/2017 Waste Water	0.50 Acre Inches	458.63 mg/L	51.87	5	51.87	5.12	70.29
09/01/2017 Ground Water	4.00 Acre Inches	1.93 mg/L			1.75	0.00	0.00
09/30/2017 Harvest	26.50 Tons	0.33 %		(177	(177.03) (2	(24.38) (((161.50)
			233.42	2	70.40	(1.34)	154.81
			Total Nutrients Applied	24	247.43	23.04	316.31
			Total Nutrients Harvested	_	(177.03) (2	(24.38) ((161.50)

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1.96

0.95

1.40

Nutrient Ratio

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78

Acres:

Field Name: 6

			Field St	Field Summary (in Ibs	os/acre)						
		Nitrogen				Nitrogen	gen Phosphorus	Potassium			
Process Was	Process Wastewater Applied	625.56	Total Nut	625.56 Total Nutrients Applied		646.58	.58 61.75				
Solid Manure Applied	e Applied		Total Nut	Total Nutrients Harvested	ed	(461.37)	37) (87.05)	(509.36)			
			Nutrient Ratio	Ratio		-	1.40 0.71	1.66			
Crop 1: W	Wheat (South Valley)	Varie	ty: Wheat	Variety: Wheat (South Valley) -	- General	F	Plant Date: November 2016	r 2016		Acres Planted:	lanted: 78
Date	Application	Q (pe	Quantity (per Acre) Units	Inits	N Value Units	Units	Nitrogen from Process Wastewater	Nitrogen from Solid Manure	Nitrogen (Ibs per acre)	Phosphorus (lbs per acre)	Potassium (Ibs per acre)
11/15/2016 Waste Water	Waste Water		1.00 A	1.00 Acre Inches	458.63 mg/L	mg/L	103.74		103.74	10.24	140.58
11/15/2016 Ground Water	Ground Water		5.00 A	5.00 Acre Inches	1.94	1.94 mg/L			2.19	0.00	0.00
03/15/2017 Ground Water	Ground Water		5.00 A	5.00 Acre Inches	1.94	mg/L			2.19	0.00	0.00
03/15/2017 Waste Water	Waste Water		1.00 A	1.00 Acre Inches	458.63	mg/L	103.74		103.74	10.24	140.58
04/15/2017 Ground Water	Ground Water		5.00 A	5.00 Acre Inches	1.94	mg/L			2.19	0.00	0.00
04/15/2017 Waste Water	Waste Water		1.00 A	1.00 Acre Inches	458.63	mg/L	103.74		103.74	10.24	140.58
05/15/2017 Harvest	Harvest		18.85 Tons	ons	0.60	%			(226.74)	(41.92)	(280.13)
							311.22		91.05	(11.20)	141.61
							Total Nutrients Applied	pplied	317.79	30.72	421.74
							Total Nutrients Harvested	arvested	(226.74)	(41.92)	(280.13)

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1.51

0.73

1.40

Nutrient Ratio

Page 15

-one Oak Farms #2 2017 Nutrient Applications
Oak

78

Acres:

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Field Name: 6

Crop 2:	Com (Silage)	Variety: Com	Variety: Corn (Silage) - General	Įk	ł	Plant Date: June 2017	2		Acres Planted:	lanted: 78
Date	Application	Quantity (per Acre) Units	Units	N Value Units	Inits	Nitrogen from Process Wastewater	Nitrogen from Solid Manure	Nitrogen (Ibs per acre)	Phosphorus (lbs per acre)	Potassium (Ibs per acre)
05/01/2017	05/01/2017 Ground Water	4.00	4.00 Acre Inches	1.93 m	mg/L			1.75	0.00	0.00
06/01/2017	06/01/2017 Ground Water	4.00	4.00 Acre Inches	1.93 m	mg/L			1.75	00.0	00.0
06/01/2017	06/01/2017 Waste Water	1.03	1.03 Acre Inches	458.66 m	mg/L	106.86		106.86	10.55	144.80
07/01/2017	07/01/2017 Waste Water	1.00	1.00 Acre Inches	458.63 m	mg/L	103.74		103.74	10.24	140.58
07/01/2017	07/01/2017 Ground Water	5.00	5.00 Acre Inches	1.94 m	mg/L			2.19	0.00	0.00
07/01/2017	07/01/2017 Ground Water	5.00	5.00 Acre Inches	1.94 m	mg/L			2.19	0.00	0.00
08/01/2017	08/01/2017 Ground Water	5.00	5.00 Acre Inches	1.94 m	mg/L			2.19	0.00	00.0
08/01/2017	08/01/2017 Ground Water	5.00	5.00 Acre Inches	1.94 m	mg/L			2.19	0.00	0.00
08/01/2017	08/01/2017 Waste Water	1.00	1.00 Acre Inches	458.63 m	mg/L	103.74		103.74	10.24	140.58
09/01/2017	09/01/2017 Ground Water	5.00	5.00 Acre Inches	1.94 m	mg/L			2.19	0.00	0.00
09/30/2017 Harvest	Harvest	30.00 Tons	Tons	0.39 %				(234.63)	(45.13)	(229.23)
						314.34		94.16	(14.10)	196.73
						Total Nutrients Applied	pplied	328.79	31.03	425.96
						Total Nutrients Harvested	arvested	(234.63)	(45.13)	(229.23)
						Nutrient Ratio		1.40	0.69	1.86

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Acres:

Field Name: 7

		Field Summary (in Ibs	lbs/acre)						
	Nitrogen			Nitrogen	Phosphorus	Potassium			
Process Wastewater Applied	ied	Total Nutrients Applied		148.02	71.94	118.29			
Solid Manure Applied	67.50	67.50 Total Nutrients Harvested	p	00.0	0.00	0.00			
		Nutrient Ratio							
Crop 1: Almonds	Varie	Variety: Almonds - General		Plant I	Plant Date: February 2017	017		Acres Planted:	anted: 15
Date Application	O O	Quantity (per Acre) Units	N Value Units		Nitrogen from Process Wastewater	Nitrogen from Solid Manure	Nitrogen (Ibs per acre)	Phosphorus (Ibs per acre)	Potassium (Ibs per acre)
02/05/2017 Ground Water		4.00 Acre Inches	1.91 n	mg/L			1.73	0.00	0.00
03/05/2017 Compost Solids	S	2.50 Tons	1.35 %	%		67.50	67.50	29.46	118.29
07/05/2017 Ground Water		4.00 Acre Inches	1.91 n	mg/L			1.73	0.00	0.00
08/05/2017 Ground Water		4.00 Acre Inches	1.91 m	mg/L			1.73	0.00	0.00
09/05/2017 Ground Water		4.00 Acre Inches	1.91 m	mg/L			1.73	00.0	0.00
09/05/2017 Fertilize (10-34-0)	(0-1	15.00 Gallons	10.00 %	%			12.50	42.48	0.00
10/05/2017 Fertilize - UN32	2	10.00 Gallons	32.00 %	%			26.66	0.00	0.00
10/05/2017 Ground Water		4.00 Acre Inches	1.91 m	mg/L			1.73	0.00	0.00
11/05/2017 Fertilize - UN32	2	10.00 Gallons	32.00 %	%			26.66	0.00	0.00
11/05/2017 Ground Water		4.00 Acre Inches	1.91 m	mg/L			1.73	00.0	0.00
12/05/2017 Ground Water		5.00 Acre Inches	1.91 m	mg/L			2.16	00.0	0.00
01/05/2018 Ground Water		5.00 Acre Inches	1.91 n	mg/L			2.16	0.00	0.00
						67.50	148.02	71.94	118.29
				To	Fotal Nutrients Applied	olied	148.02	71.94	118.29
				70	Total Nutrients Harvested	rvested	0.00	0.00	00.0
				NU	Nutrient Ratio				

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e Oak Farms #2 2017	Nutrient Applications
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Acres:

Field Name: 8

Field Summary (in Ibs/acre)

		Nitrogen				Nitrogen	Phosphorus	Potassium			
Process Wa	Process Wastewater Applied		Total Ni	Total Nutrients Applied		148.02	71.94	118.29			
Solid Manure Applied	re Applied	67.50	Total Ni	67.50 Total Nutrients Harvested	p	00.0	00.0	0.00			
			Nutrient Ratio	t Ratio							
Crop 1: Al	Almonds	Varie	ty: Almo	Variety: Almonds - General		Plan	Plant Date: February 2017	2017		Acres Planted:	fanted: 12
Date	Application	Q (pe	Quantity (per Acre) Units	Units	N Value	Units	Nitrogen from Process Wastewater	Nitrogen from Solid Manure	Nitrogen (Ibs per acre)	Phosphorus (Ibs per acre)	Potassium (Ibs per acre)
02/05/2017	02/05/2017 Ground Water		4.00	4.00 Acre Inches	1.91	mg/L			1.73	0.00	0.00
03/05/2017	03/05/2017 Compost Solids		2.50	2.50 Tons	1.35	%		67.50	67.50	29.46	118.29
07/05/2017	07/05/2017 Ground Water		4.00	4.00 Acre Inches	1.91	mg/L			1.73	0.00	00.0
08/05/2017	08/05/2017 Ground Water		4.00	4.00 Acre Inches	1.91	mg/L			1.73	0.00	00.0
09/05/2017	Fertilize (10-34-0)		15.00	15.00 Gallons	10.00	%			12.50	42.48	0.00
09/05/2017	Ground Water		4.00	4.00 Acre Inches	1.91	mg/L			1.73	0.00	00.00
10/05/2017	Fertilize - UN32		10.00	10.00 Gallons	32.00	%			26.66	0.00	0.00
10/05/2017	10/05/2017 Ground Water		4.00	4.00 Acre Inches	1.91	mg/L			1.73	0.00	0.00
11/05/2017	Ground Water		4.00	4.00 Acre Inches	1.91	mg/L			1.73	0.00	0.00
11/05/2017	Fertilize - UN32		10.00	10.00 Gallons	32.00	%			26.66	0.00	0.00
12/05/2017	12/05/2017 Ground Water		5.00	5.00 Acre Inches	1.91	mg/L			2.16	0.00	0.00
01/05/2018	01/05/2018 Ground Water		5.00	5.00 Acre Inches	1.91	mg/L			2.16	0.00	0.00
								67.50	148.02	71.94	118.29
							Total Nutrients Applied	pplied	148.02	71.94	118.29

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0.00

0.00

0.00

Total Nutrients Harvested Nutrient Ratio

ATTACHMENT J. SITE SPECIFIC SURFACE WATER PROTECTIVE MEASURES

There are no rivers, streams, creeks, drains, ditches, canals or any other mechanisms that are used to transport surface water within 100 feet of the land application area on ALL Fields on this facility.

Lone Oak Farms #2 2017 Nutrient Budget Certification

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Signature of Operator of Facility

Ŷ Teveld Print Name Bernard

15 1-11-07 ۱ UNNOr

Title and Date

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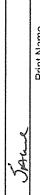
Signature of Certified Nutrient Management Plan Specialist

0-14-1 ţ Agronous F

Title and Date



Signature of Ówner of Facility



Print Name

Title and Date





County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING STEVEN E. WHITE, DIRECTOR

INITIAL STUDY APPLICATION

INSTRUCTIONS

Answer all questions completely. An incomplete form may delay processing of your application. Use additional paper if necessary and attach any supplemental information to this form. Attach an operational statement if appropriate. This application will be distributed to several agencies and persons to determine the potential environmental effects of your proposal. Please complete the form in a legible and reproducible manner (i.e., USE BLACK INK OR TYPE).

OFFICE USE ONLY IS No. 7338 Project No(s) COP 3584 COUNT OF FRESNO Application Rec'd.: JUN 222017 DEPARTMENT OF PUBLIC WORKS

GENERAL INFORMATION

		DEVELOPMENT SERVICES DIVISION
Property Owner : Bernard & Rebecca	a TeVelde	Phone/Fax <u>559-936-2253</u>
Mailing Address: 13866 4th Avenue	Hanford	CA 93230
Street	City	State/Zip
Applicant : Bernard & Rebecca TeVe	elde	Phone/Fax: 559-936-2253
<i>Mailing</i> <i>Address:</i> <u>10014 S. McMullin Grade</u>	Helm	CA 93627
Street	City	State/Zip
Representative: Innovative Ag Servic	ces, LLC (Warren Hutchinigs) Phone/Fax: 559-587-2800/559-587-2801
<i>Mailing</i> <i>Address:</i> 1201 Delta View Rd., Ste. 5	Hanford	CA 93230
Street	City	State/Zip
Proposed Project: Modification to exi	isting dairy. 900 (7 -14 mont	h old heifers) head increase of heifers.
This will include the addition of three co	orrals. As well as, the addition	on of a covered lagoon digester.
Project Location: 10014 S. McMullin	n Grade, Helm CA 93627	
Project Address: 10014 S. McMullin	Grade, Helm CA 93627	
Section/Township/Range: <u>31</u>	/15 /18	8. Parcel Size: 159 acres
Assessor's Parcel No. 035-100-22s/	035-100-23s	
2220 Tulare Street, Sixth Floor / Fresno, Ca	/ELOPMENT SERVICES DIVISION Ilifornia 93721 / Phone (559) 600-4/ resno is an Equal Employment Opr	497 / 600-4022 / 600-4540 / FAX 600-4200

- 10. Land Conservation Contract No. (If applicable): N/A
- 11. What other agencies will you need to get permits or authorization from:

	LAFCo (annexation or extension of services)	\checkmark	SJVUAPCD (Air Pollution Control District)
	CALTRANS		Reclamation Board
	Division of Aeronautics		Department of Energy
\checkmark	Water Quality Control Board		Airport Land Use Commission
	Other		-

12. Will the project utilize Federal funds or require other Federal authorization subject to the provisions of the National Environmental Policy Act (NEPA) of 1969? _____ Yes ____ No

If so, please provide a copy of all related grant and/or funding documents, related information and environmental review requirements.

- 13. Existing Zone District¹: N/A
- 14. Existing General Plan Land Use Designation¹: Agricultural

ENVIRONMENTAL INFORMATION

15. Present land use: Dairy Farm

Describe existing physical improvements including buildings, water (wells) and sewage facilities, roads, and lighting. Include a site plan or map showing these improvements:

Modification to existing dairy. 900 (7 -14 month old heifers) head increase of heifers. This will include the addition of three corrals. As well as, the addition of a covered lagoon digester.

Describe the major vegetative cover: N/A

Any perennial or intermittent water courses? If so, show on map:<u>N/A</u>

Is property in a flood-prone area? Describe:

No

16. Describe surrounding land uses (e.g., commercial, agricultural, residential, school, etc.):

North: Agricultural

South: Agricultural

East: Agricultural

West: Agricultural

- 17. What land use(s) in the area may be impacted by your Project?: N/A
- 18. What land use(s) in the area may impact your project?: N/A

19. Transportation:

- *NOTE:* The information below will be used in determining traffic impacts from this project. The data may also show the need for a Traffic Impact Study (TIS) for the project.
- A. Will additional driveways from the proposed project site be necessary to access public roads?

B. Daily traffic generation:

<i>I</i> .	Residential - Number of Units	
	Lot Size	•••••••
	Single Family	
	Apartments	
II.	Commercial - Number of Employees	
	Number of Salesmen	
	Number of Delivery Trucks	<u></u>
	Total Square Footage of Building	

- *III. Describe and quantify other traffic generation activities:* Maintenance and repair after construction is complete
- 20. Describe any source(s) of noise from your project that may affect the surrounding area: N/A
- 21. Describe any source(s) of noise in the area that may affect your project: <u>N/A</u>
- 22. Describe the probable source(s) of air pollution from your project: Dust or PM-10 from the heifers.
- 23. Proposed source of water:
 ✓ private well
 () community system³--name:______

24.	Anticipated volume of water to be used (gallons per day) ² : 900 - 1800 gallons/day
25.	Proposed method of liquid waste disposal: () septic system/individual () community system ³ -name <u>Existing system in place</u>
26.	Estimated volume of liquid waste (gallons per day) ² : 0
27.	Anticipated type(s) of liquid waste: <u>0</u>
28.	Anticipated type(s) of hazardous wastes ² : <u>0</u>
29.	Anticipated volume of hazardous wastes ² : <u>0</u>
30.	Proposed method of hazardous waste disposal ² : <u>N/A</u>
31.	Anticipated type(s) of solid waste: <u>Manure</u>
32.	Anticipated amount of solid waste (tons or cubic yards per day): 6 tons/day
33.	Anticipated amount of waste that will be recycled (tons or cubic yards per day): <u>0</u>
34.	Proposed method of solid waste disposal: Export
35.	Fire protection district(s) serving this area: Fresno County/Cal Fire
36.	Has a previous application been processed on this site? If so, list title and date: Initial study application 5886. Unclassified Conditional Use Permit application 3218.
37.	Do you have any underground storage tanks (except septic tanks)? Yes No_X
38.	If yes, are they currently in use? Yes No
To	THE BEST OF MY KNOWLEDGE, THE FOREGOING INFORMATION IS TRUE.
	12AC 6.14-17
SI	GNATURE DATE

¹Refer to Development Services Conference Checklist ²For assistance, contact Environmental Health System, (559) 600-3357 ³For County Service Areas or Waterworks Districts, contact the Resources Division, (559) 600-4259

(Revised 5/2/16)

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NOTICE AND ACKNOWLEDGMENT

INDEMNIFICATION AND DEFENSE

The Board of Supervisors has adopted a policy that applicants should be made aware that they may be responsible for participating in the defense of the County in the event a lawsuit is filed resulting from the County's action on your project. You may be required to enter into an agreement to indemnify and defend the County if it appears likely that litigation could result from the County's action. The agreement would require that you deposit an appropriate security upon notice that a lawsuit has been filed. In the event that you fail to comply with the provisions of the agreement, the County may rescind its approval of the project.

STATE FISH AND WILDLIFE FEE

State law requires that specified fees (effective January 1, 2017: \$3,078.25 for an EIR; \$2,216.25 for a (Mitigated/Negative Declaration) be paid to the California Department of Fish and Wildlife (CDFW) for projects which must be reviewed for potential adverse effect on wildlife resources. The County is required to collect the fees on behalf of CDFW. A \$50.00 handling fee will also be charged, as provided for in the legislation, to defray a portion of the County's costs for collecting the fees.

The following projects are exempt from the fees:

- 1. All projects statutorily exempt from the provisions of CEQA (California Environmental Quality Act).
- 2. All projects categorically exempt by regulations of the Secretary of Resources (State of California) from the requirement to prepare environmental documents.

A fee exemption may be issued by CDFW for eligible projects determined by that agency to have "no effect on wildlife." That determination must be provided in advance from CDFG to the County at the request of the applicant. You may wish to call the local office of CDFG at (559) 222-3761 if you need more information.

Upon completion of the Initial Study you will be notified of the applicable fee. Payment of the fee will be required before your project will be forwarded to the project analyst for scheduling of any required hearings) and final processing. The fee will be refunded if the project should be denied by the County.

Applicant's Signature

C:\USERS\PUBLIC\DOCUMENTS\INITIAL STUDY APP.DOCX

6-1-17 Date