DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
1010 10TH Street, Suite 3400, Modesto, CA 95354
Planning Phone: (209) 525-6330 Fax: (209) 525-5911
Building Phone: (209) 525-6557 Fax: (209) 525-7759

Referral
Early Consultation

Date: **March 19, 2025**

To: **Distribution List (See Attachment A)**

From: **Emily DeAnda, Associate Planner**
Planning and Community Development

Subject: **USE PERMIT APPLICATION NO. PLN2025-0011 – COUCO CREEK**

Respond By: **April 8, 2025**

****PLEASE REVIEW REFERRAL PROCESS POLICY****

The Stanislaus County Department of Planning and Community Development is soliciting comments from responsible agencies under the Early Consultation process to determine: a) whether or not the project is subject to CEQA and b) if specific conditions should be placed upon project approval.

Therefore, please contact this office by the response date if you have any comments pertaining to the proposal. Comments made identifying potential impacts should be as specific as possible and should be based on supporting data (e.g., traffic counts, expected pollutant levels, etc.). Your comments should emphasize potential impacts in areas which your agency has expertise and/or jurisdictional responsibilities.

These comments will assist our Department in preparing a staff report to present to the Planning Commission. Those reports will contain our recommendations for approval or denial. They will also contain recommended conditions to be required should the project be approved. Therefore, please list any conditions that you wish to have included for presentation to the Commission as well as any other comments you may have. Please return all comments and/or conditions as soon as possible or no later than the response date referenced above.

Thank you for your cooperation. Please call (209) 525-6330 if you have any questions.

Applicant: **Couco Creek Dairy Biogas LLC**

Project Location: **3426 South Commons Road, between West Harding and Bradbury Roads, in the Turlock area.**

APNs: **044-039-001 and 044-039-002**

Williamson Act Contract: **1975-2290**

General Plan: **Agriculture**

Community Plan: **N/A**

Current Zoning: **General Agriculture (A-2-40)**

Project Description: **Request to establish a biogas pipeline injection site on a 307± acre parcel in the General Agriculture (A-2-40) zoning district. Biogas from an on-site anaerobic dairy digester (Couco Creek Dairy) and two off-site digesters located at Blue Sky Dairy in Atwater, California, and JDS Ranch in Wasco, California, will be trucked to the project site and off-loaded into a Pacific Gas and Electric (PG&E) natural gas pipeline on-site. The equipment to be utilized for the project will be located within a 159± square-foot enclosed metal structure. Existing dairy employees will operate and maintain the off-loading process for the biogas; no additional employees are**

anticipated as part of this request. The applicant anticipates 3-6 truck trips per day associated with the project. Off-loading of the biogas will occur seven days a week between the hours of 6:00 a.m. – 8:00 p.m. Storm drainage is proposed to be maintained on-site. The site is currently planted in row crops and improved with two lagoons for liquid manure waste storage, and one anaerobic digester that is currently being constructed under Building Permit No. BLD2023-2414. The 307± acre project parcel is currently assessed under two Assessor Parcel Numbers (APNs), 044-039-001 and 044-039-002; the project site will be within the area assessed under APN 044-039-001.

Full document with attachments available for viewing at:
http://www.stancounty.com/planning/pl/act-projects.shtm

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USE PERMIT APPLICATION NO. PLN2025-0011 – COUCO CREEK
Attachment A

Distribution List

X	CA DEPT OF CONSERVATION Land Resources		STAN CO ALUC
X	CA DEPT OF FISH & WILDLIFE		STAN CO ANIMAL SERVICES
	CA DEPT OF FORESTRY (CAL FIRE)	X	STAN CO BUILDING PERMITS DIVISION
	CA DEPT OF TRANSPORTATION DIST 10	X	STAN CO CEO
X	CA OPR STATE CLEARINGHOUSE		STAN CO CSA
X	CA RWQCB CENTRAL VALLEY REGION	X	STAN CO DER
	CA STATE LANDS COMMISSION	X	STAN CO DER: MILK AND DAIRY
	CEMETERY DISTRICT	X	STAN CO FARM BUREAU
X	CENTRAL VALLEY FLOOD PROTECTION	X	STAN CO HAZARDOUS MATERIALS
	CITY OF:		STAN CO PARKS & RECREATION
	COMMUNITY SERVICES DIST:	X	STAN CO PUBLIC WORKS
X	COOPERATIVE EXTENSION	X	STAN CO PUBLIC WORKS - SURVEY
X	DISPOSAL DIST: TURLOCK SCAVENGER AREA 4		STAN CO RISK MANAGEMENT
X	DER GROUNDWATER RESOURCES DIVISION	X	STAN CO SHERIFF
X	FIRE PROTECTION DIST: TURLOCK RURAL	X	STAN CO SUPERVISOR DIST 2: CHIESA
X	GSA: WEST TURLOCK SUBBASIN	X	STAN COUNTY COUNSEL
	HOSPITAL DIST:		StanCOG
X	IRRIGATION DIST: TURLOCK	X	STANISLAUS FIRE PREVENTION BUREAU
X	MOSQUITO DIST: TURLOCK	X	STANISLAUS LAFCO
X	STANISLAUS COUNTY EMERGENCY MEDICAL SERVICES	X	STATE OF CA SWRCB DIVISION OF DRINKING WATER DIST. 10
	MUNICIPAL ADVISORY COUNCIL:		SURROUNDING LAND OWNERS
X	PACIFIC GAS & ELECTRIC		INTERESTED PARTIES
	POSTMASTER:	X	TELEPHONE COMPANY: AT&T
X	RAILROAD: UNION PACIFIC		TRIBAL CONTACTS (CA Government Code §65352.3)
X	SAN JOAQUIN VALLEY APCD		US ARMY CORPS OF ENGINEERS
X	SCHOOL DIST 1: CHATOM UNION	X	US FISH & WILDLIFE
X	SCHOOL DIST 2: TURLOCK UNIFIED		US MILITARY (SB 1462) (7 agencies)
	WORKFORCE DEVELOPMENT	X	USDA NRCS
X	STAN CO AG COMMISSIONER		
	TUOLUMNE RIVER TRUST		

STANISLAUS COUNTY
CEQA REFERRAL RESPONSE FORM

TO: **Stanislaus County Planning & Community Development**
1010 10th Street, Suite 3400
Modesto, CA 95354

FROM: _____

SUBJECT: **USE PERMIT APPLICATION NO. PLN2025-0011 – COUCO CREEK**

Based on this agency's particular field(s) of expertise, it is our position the above described project:

_____ Will not have a significant effect on the environment.
_____ May have a significant effect on the environment.
_____ No Comments.

Listed below are specific impacts which support our determination (e.g., traffic general, carrying capacity, soil types, air quality, etc.) – (attach additional sheet if necessary)

1.
2.
3.
4.

Listed below are possible mitigation measures for the above-listed impacts: *PLEASE BE SURE TO INCLUDE WHEN THE MITIGATION OR CONDITION NEEDS TO BE IMPLEMENTED (PRIOR TO RECORDING A MAP, PRIOR TO ISSUANCE OF A BUILDING PERMIT, ETC.):*

1.
2.
3.
4.

In addition, our agency has the following comments (attach additional sheets if necessary).

_____

_____

Response prepared by:

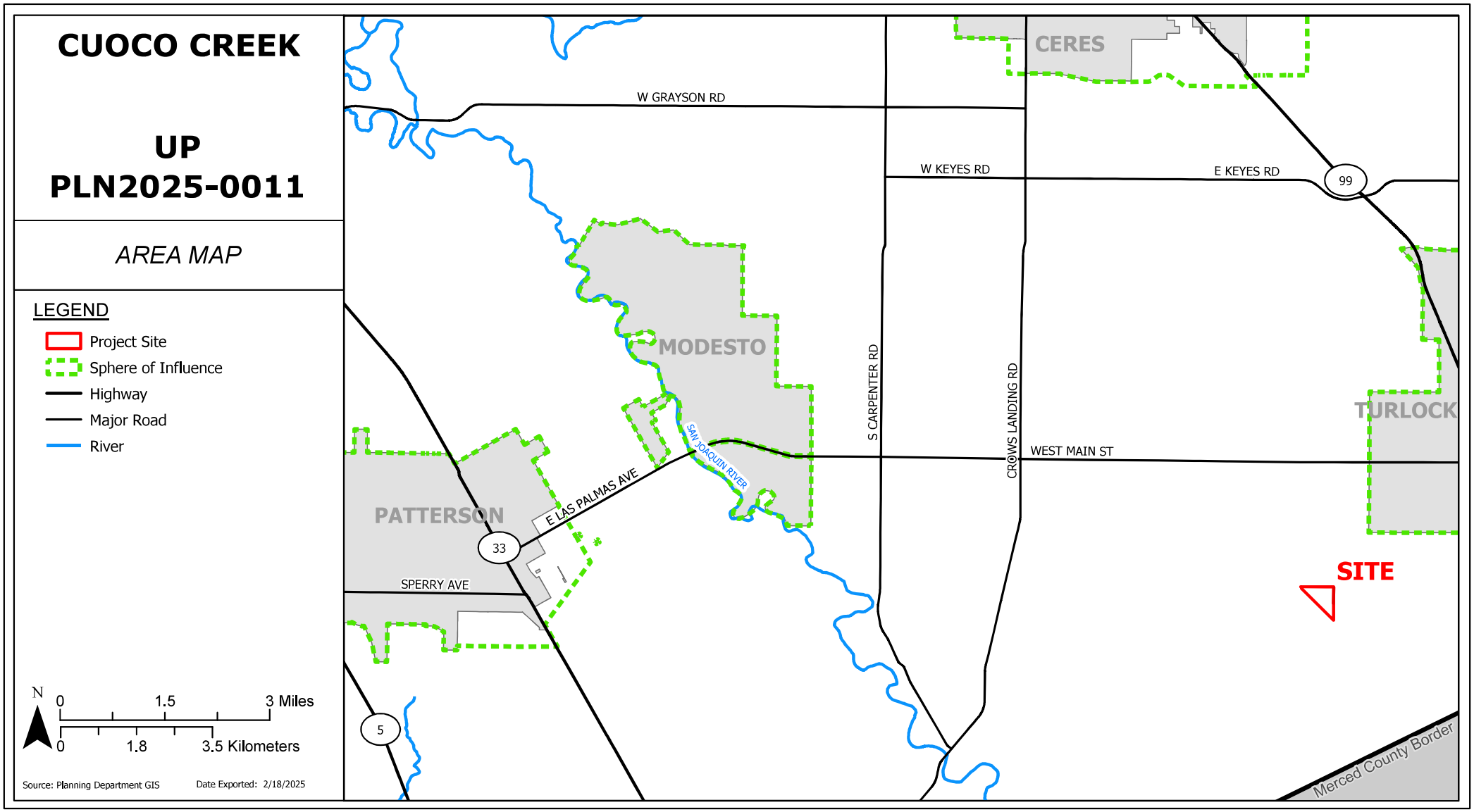
_____

Name Title Date

CUOCO CREEK

UP PLN2025-0011

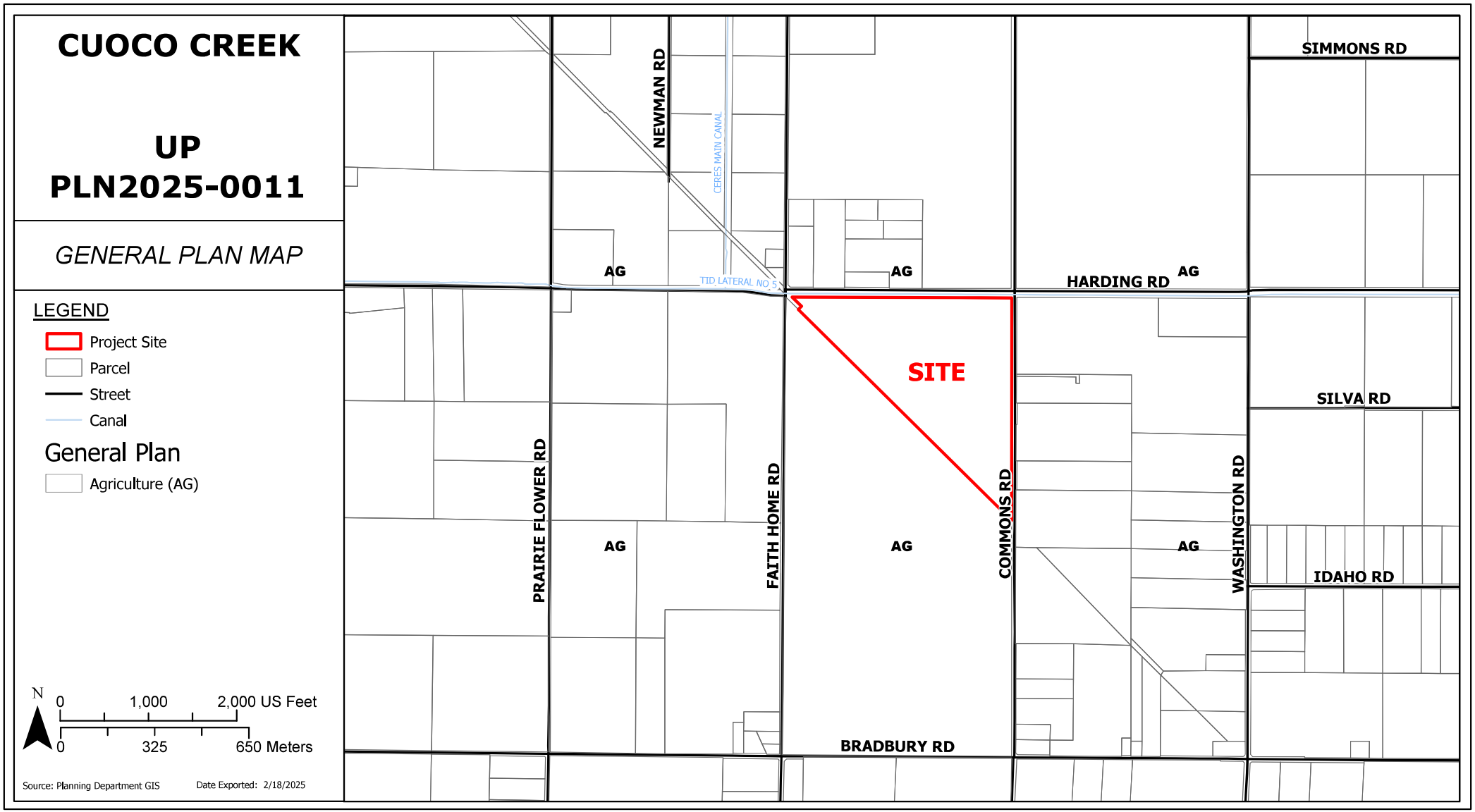
AREA MAP



CUOCO CREEK

UP PLN2025-0011

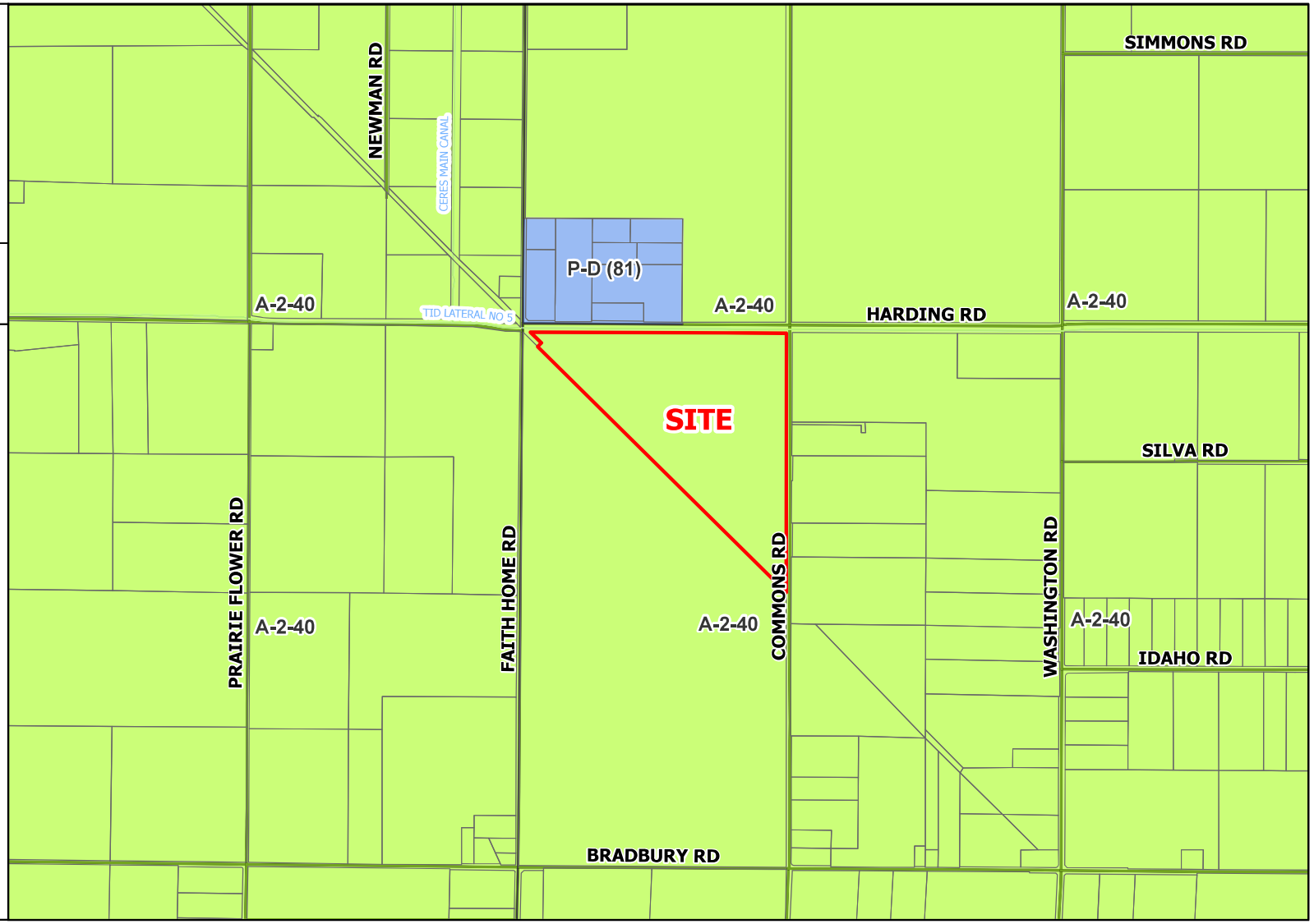
GENERAL PLAN MAP



CUOCO CREEK

UP PLN2025-0011

ZONING MAP



LEGEND

- Project Site
- Parcel
- Street
- Canal

Zoning Designation

- General AG 40 Acre (A-2-40)
- Planned Development (P-D)

N

0 1,000 2,000 US Feet

0 325 650 Meters

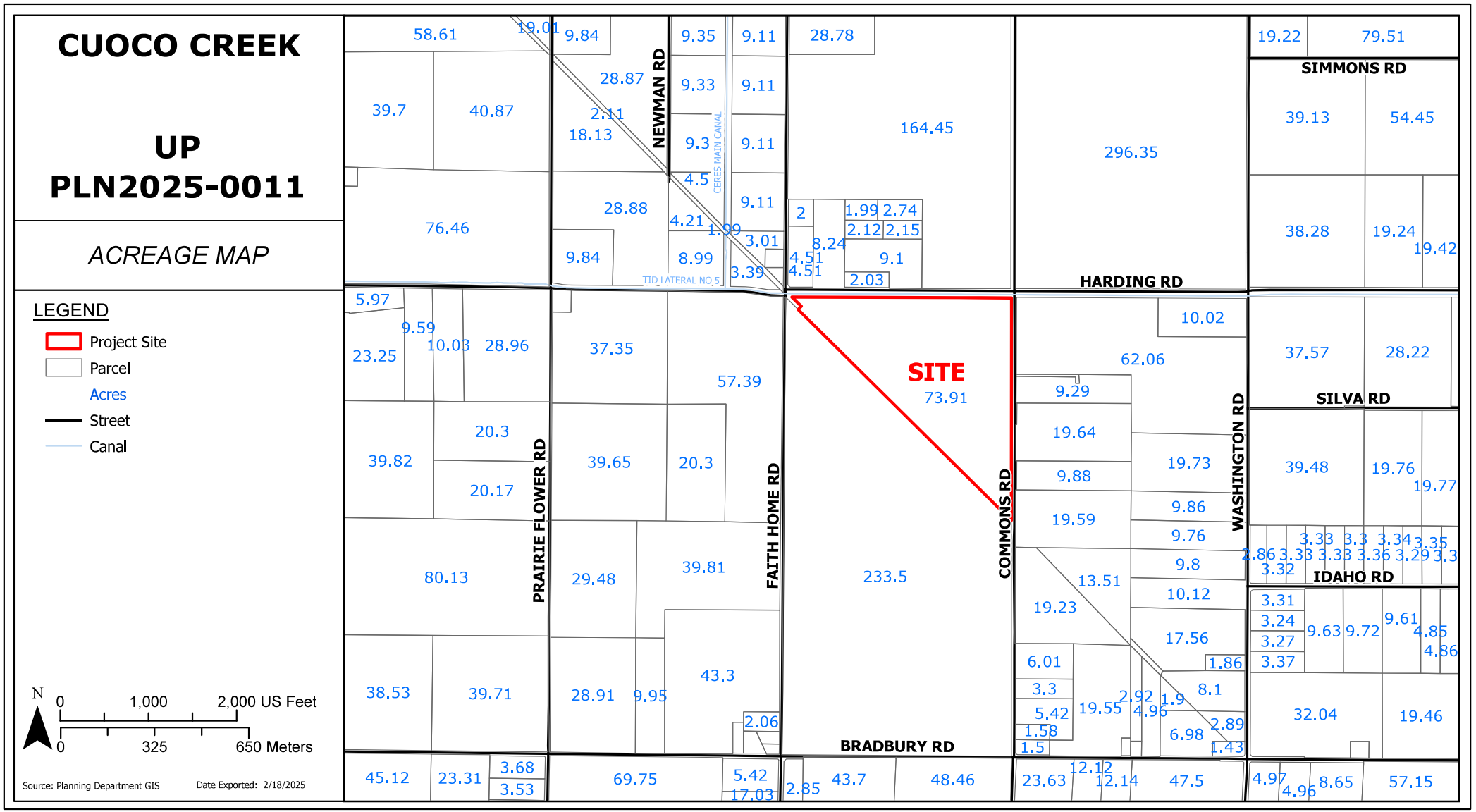
Source: Planning Department GIS

Date Exported: 2/18/2025

CUOCO CREEK

UP PLN2025-0011

ACREAGE MAP



Source: Planning Department GIS Date Exported: 2/18/2025

CUOCO CREEK

UP PLN2025-0011

2023 AERIAL AREA MAP

LEGEND

- Project Site
- Parcel
- Street
- Canal

N

0 1,000 2,000 US Feet

0 325 650 Meters

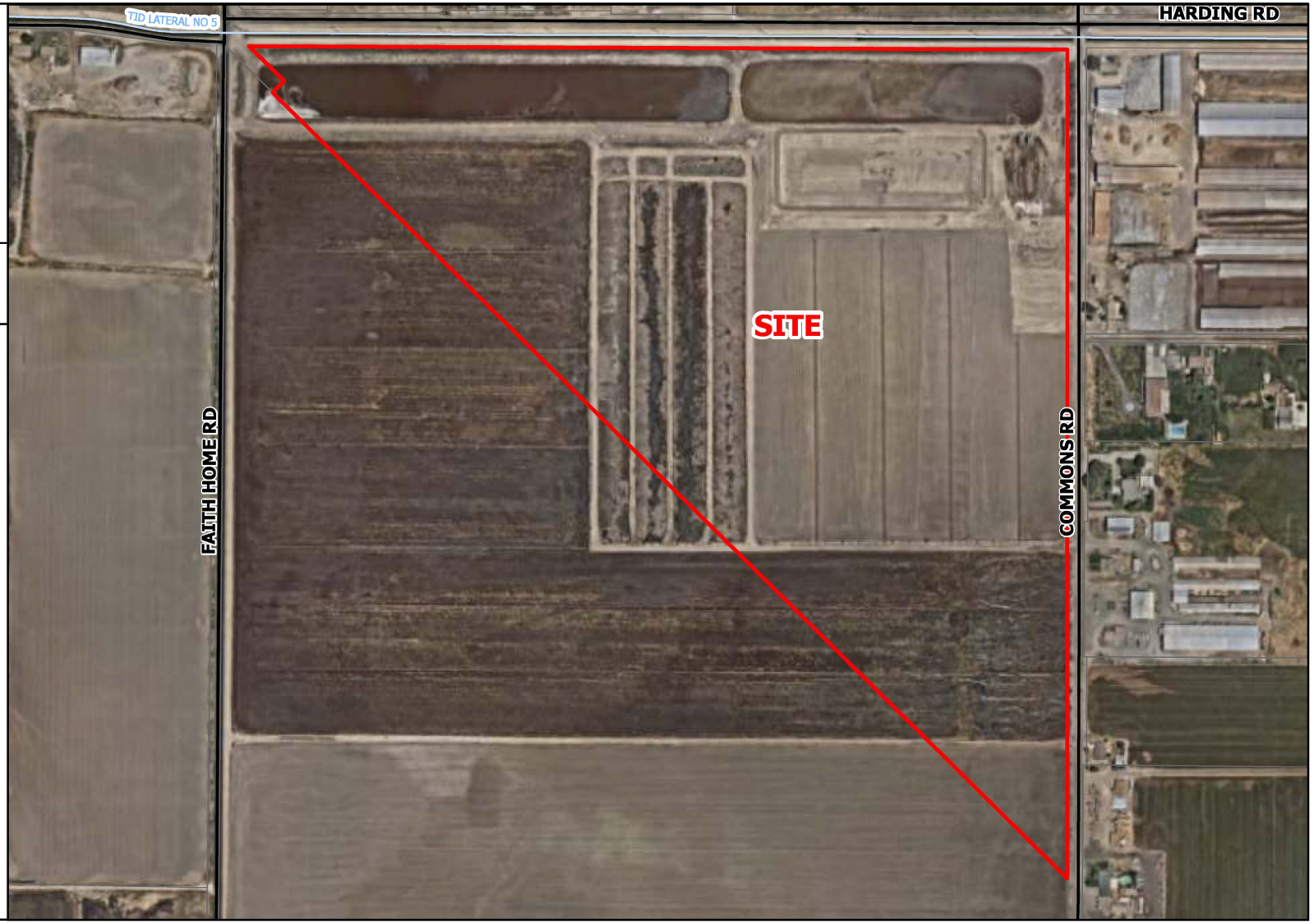
Source: Planning Department GIS

Date Exported: 2/18/2025

CUOCO CREEK

UP PLN2025-0011

2023 AERIAL SITE MAP



LEGEND

- Project Site
- Parcel
- Street
- Canal

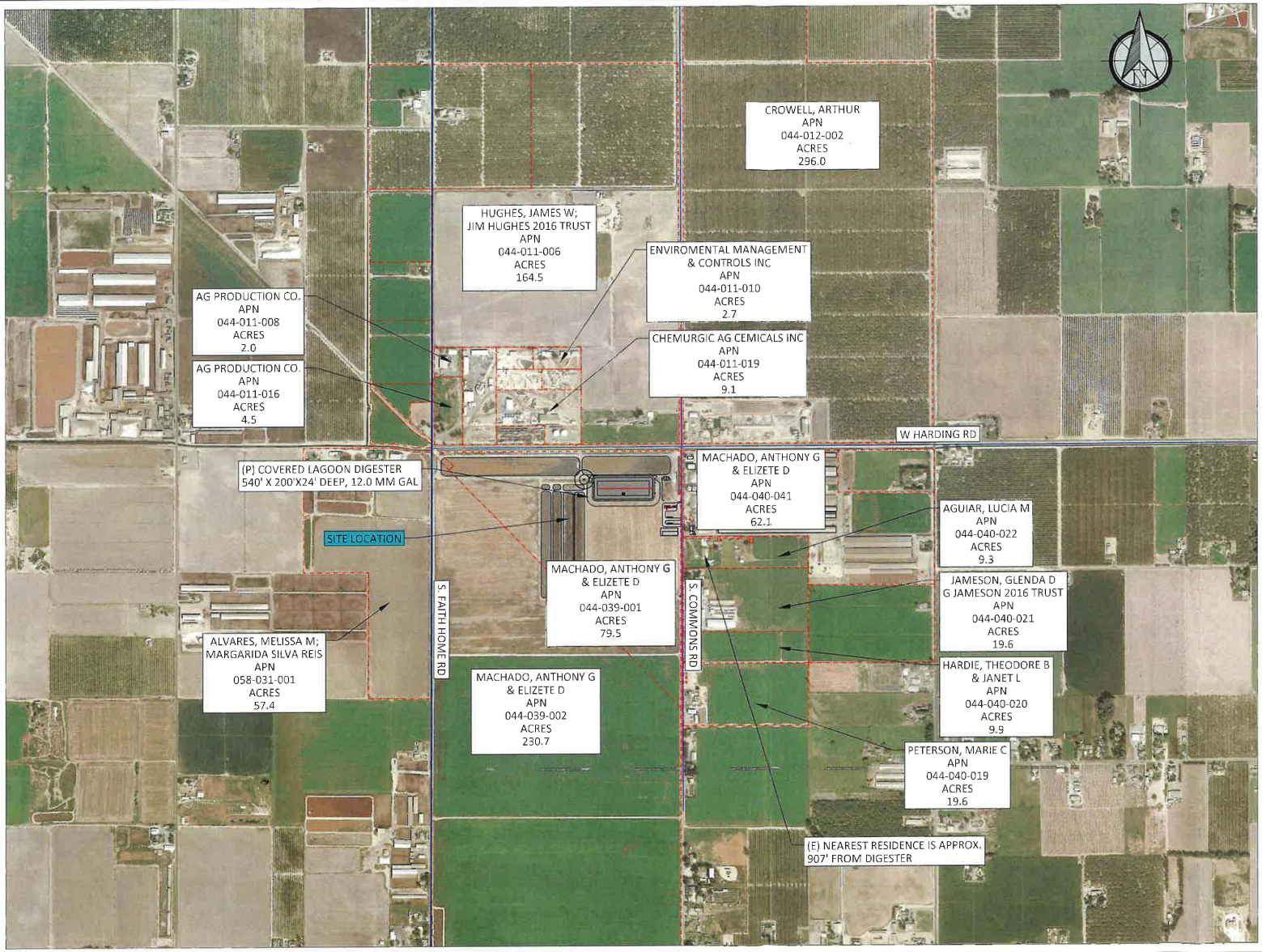
N

0 350 700 US Feet

0 100 200 Meters

Source: Planning Department GIS

Date Exported: 2/18/2025



Legend

(P) PROPOSED (E) EXISTING

APN BOUNDARY

ROADS

(E) PG&E NATURAL GAS PIPELINE

VICINITY MAP

MAAS ENERGY WORKS

Firm Address

1730 South Street
Redding, CA, 96001

Project Name and Address

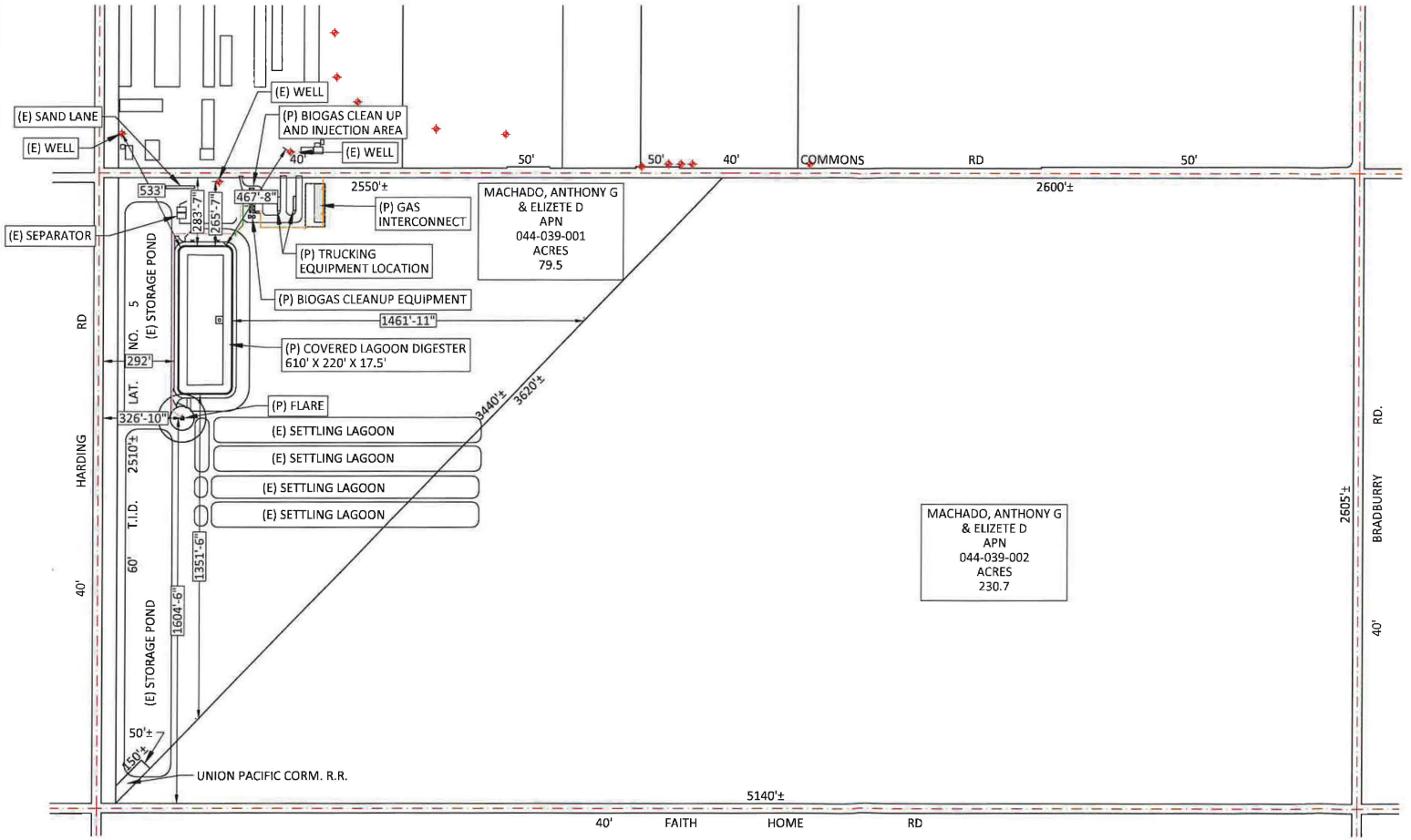
Couco Creek Dairy
3303 S. Washington Rd.
Turlock, Ca 95380

Scale Bar

0 1000' 2000'
1" 2"

Drawn By	Date	Drawing Version
RG	4/30/24	1.04
Sheet Size	**Sheet #**	**Sheet Name**
11" x 17"	1 of 2	S-1

Z:\50 - CA Standalone_Couco Creek\50 Engineering & Design\MEW Design - Drawings\DWGs\1.04_Couco Creek Dairy (Permitting County Request)_11x17.dwg



Legend

(P) PROPOSED (E) EXISTING

APN BOUNDARY

DOMESTIC WELL

DIGESTER SITE PLAN

MAAS ENERGY WORKS

Firm Address

1730 South Street
Redding, CA, 96001

Project Name and Address

Couco Creek Dairy
3303 S. Washington Rd.
Turlock, Ca 95380

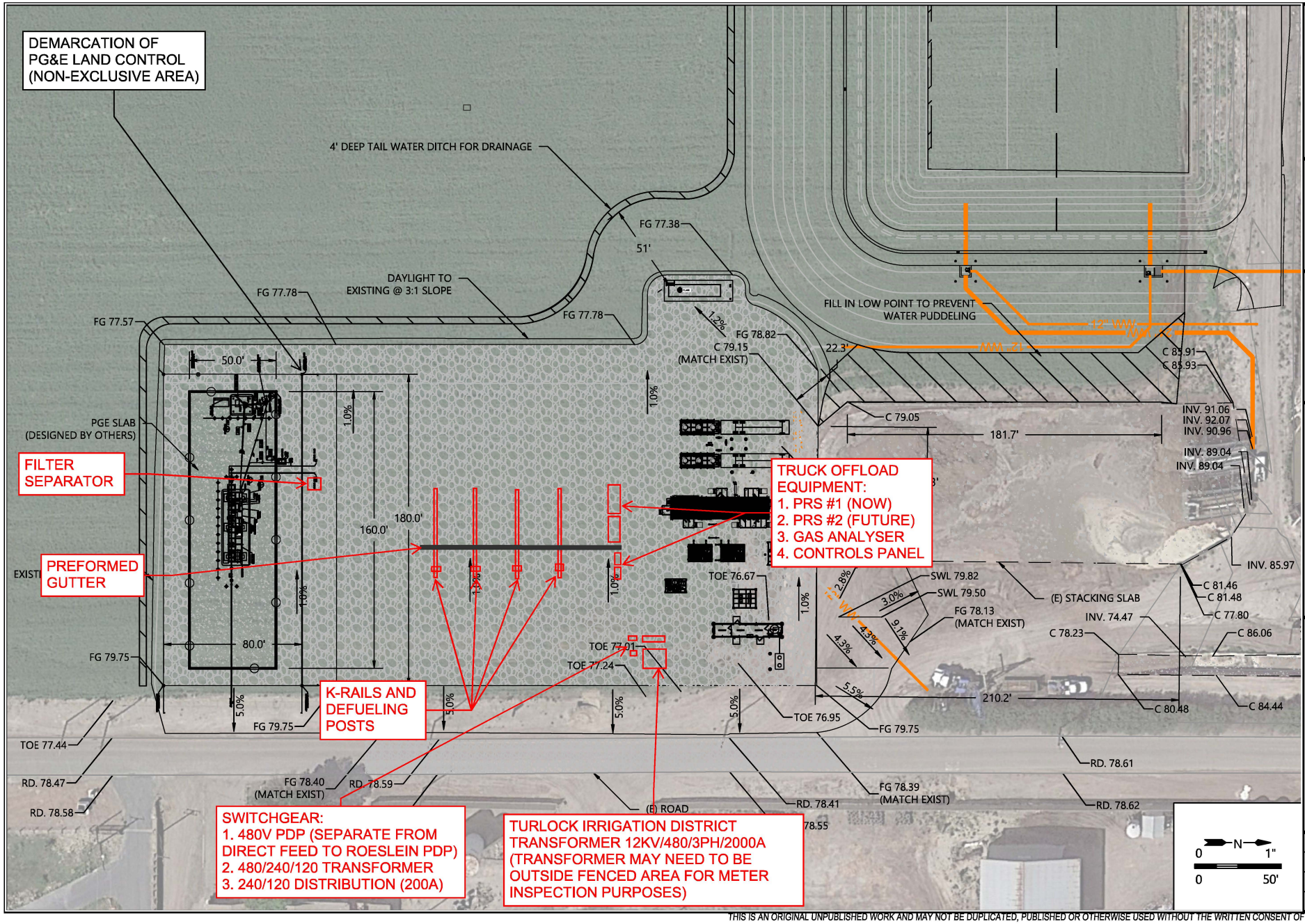
Scale Bar

0 450' 900'

1" 2"

Drawn By	Date	Drawing Version
RG	4/30/24	1.04
Sheet Size	**Sheet #**	**Sheet Name**
11" x 17"	2 of 2	S-2

Z:\50 - CA Standalone_Couco Creek\50 Engineering & Design\MEW Design - Drawings\DWGs\1.04_Couco Creek Dairy (Permitting County Request)_11x17.dwg



HARTMAN ENGINEERING
308 W OAK AVE
VISALIA, CA 93291
(559) 563-0181

PROJECT
COUCO CREEK DAIRY DIGESTER

CLIENT
MAAS ENERGY WORKS
3711 MEADOW VIEW DR
REDDING, CA 96002

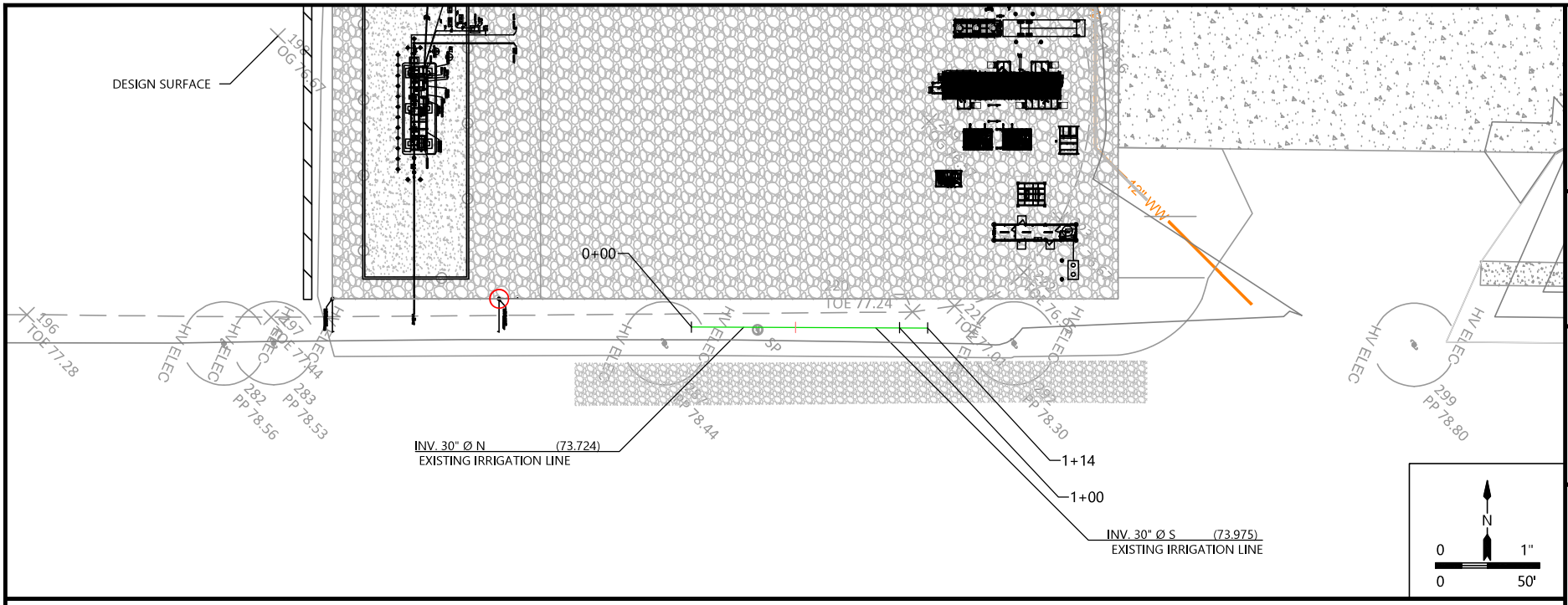
CHK BY: JGR
DRW BY: OV

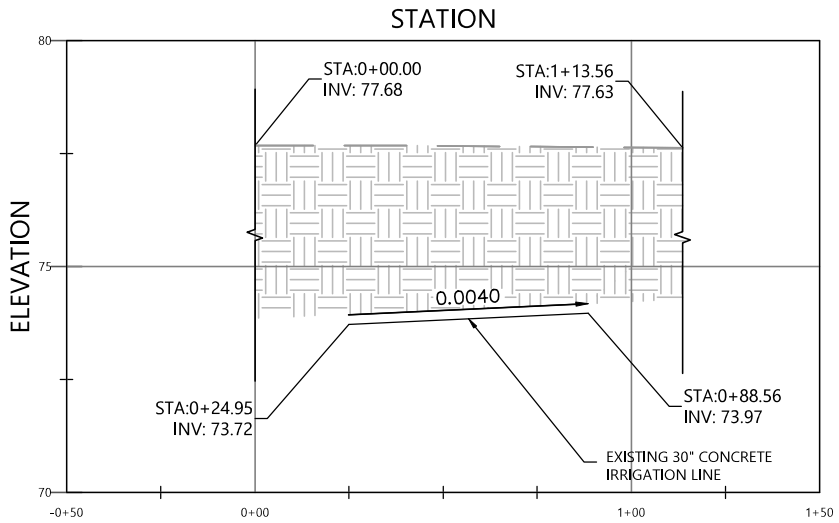
GRADING PLAN
BIOGAS PAD

REVISION LOG:
VERSION: 3.8

DATE:	8.12.2024
JOB#	22037
SCALE:	AS SHOWN
SHEET NO.	C.4.3

N
0 1"
0 50'





1
H
HARTMAN
ENGINEERING
308 W OAK AVE
VISALIA, CA 93291
(559) 563-0181

PROJECT
COUCO CREEK DAIRY
DIGESTER

CLIENT
MAAS ENERGY WORKS
3711 MEADOW VIEW DR
REDDING, CA 96002

CHK BY: JGR

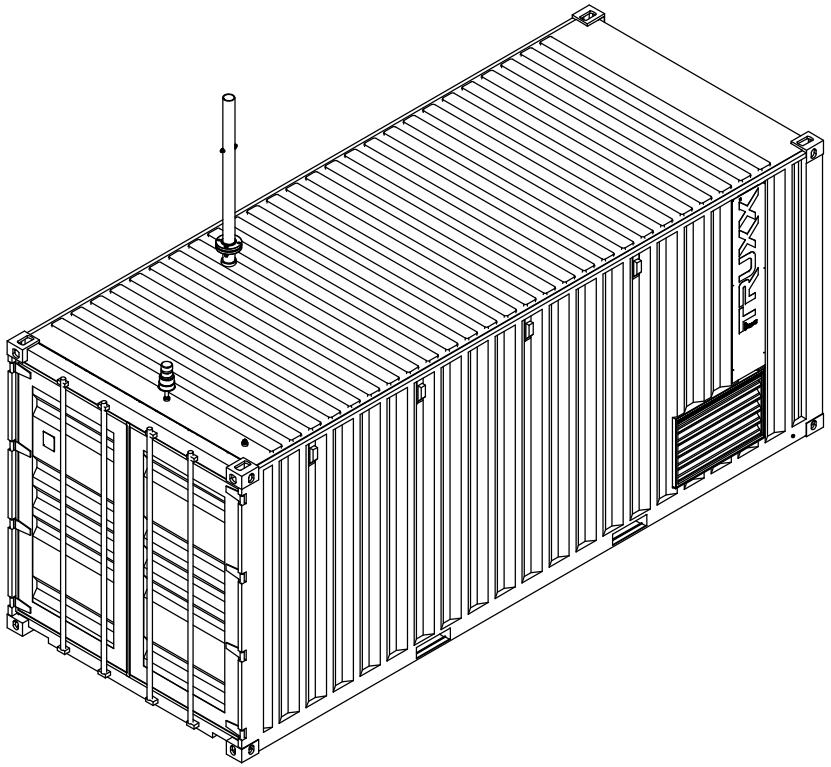
DRW BY: OV

IRRIGATION LINE
EXHIBIT

REVISION LOG:

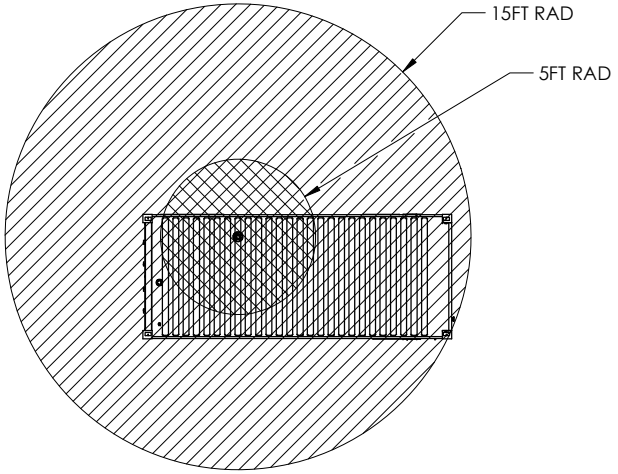
VERSION: 3.8

DATE: 8.5.2024
JOB# 22037
SCALE: AS SHOWN
SHEET NO. C.7.1

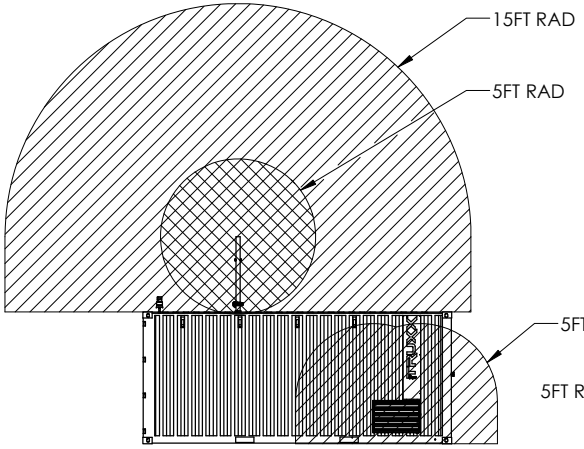


NOTES:
1. POWER - 480V/3/60HZ
2. INLET RATING
   MAWP: 4500 PSI @ 100 °F
   MDMT: -70 F @ 4500 PSIG
3. HIGH PRESSURE HEAT EXCHANGER
   SA: 4.8 FT² EACH
   MAWP: 4500 PSI @ 300 °F
4. ESTIMATED OPERATING WEIGHT - 11,250 LBS
5. OUTLET RATING
   MAWP: 1440 PSI @ 100 °F
   MDMT: -20 F @ 1440 PSIG
6. OUTLET PRESSURE: 800-900 PSIG NOMINAL
7. OUTLET TEMPERATURE: 50 °F NOMINAL
8. SUITABLE FOR OUTSIDE INSTALLATION
9. TO BE INSTALLED UPON AND LAGGED TO CONCRETE PAD WITH RE-BAR OR WIRE MESH REINFORCEMENT
10. ALL DIMENSIONS ARE IN INCHES
11. AREA CLASSIFICATIONS PER AGA CATALOG #XL1001

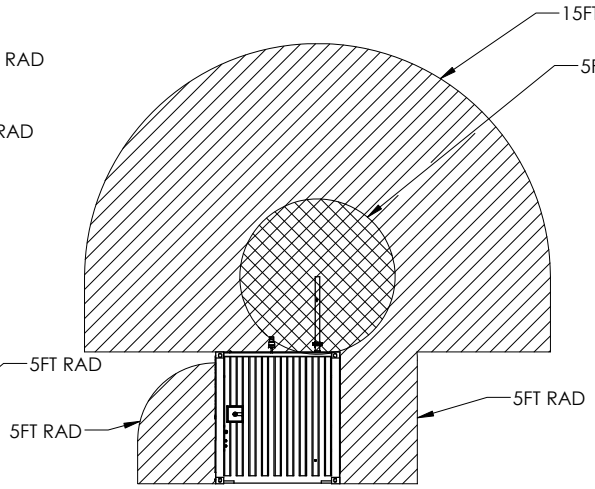
Drawn By: TAG	THIRD ANGLE PROJECTION	**TOLERANCES** UNLESS OTHERWISE SPECIFIED .X ± 0.10 .XX ± 0.030 .XXX ± 0.010 ANGLE ± 1° FRACTIONS ± 1/4"	Algas-SDI™ ALGAS-SDI.COM
Approved By:			
Date: 10/8/2024			
DO NOT SCALE DRAWING	**Size:** B	**Part No.:** 10148-64838	**Job No.:** 64838E
INTERPRET THIS DRAWING IN ACCORDANCE WITH LATEST REVISION AND ADDENDA OF ANSI/ASME Y14.5	**Title:** TRUXX 36E EQUIPMENT DRAWING		
	Scale: 1:36 AND NOTED	**Dwg. No.:** JP16569C	**Sht. No.:** 1 of 4 / **Rev.:** A



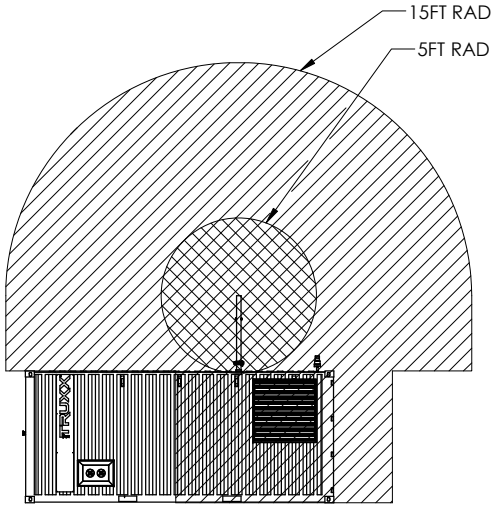
TOP VIEW



RIGHT VIEW



END (INLET) VIEW



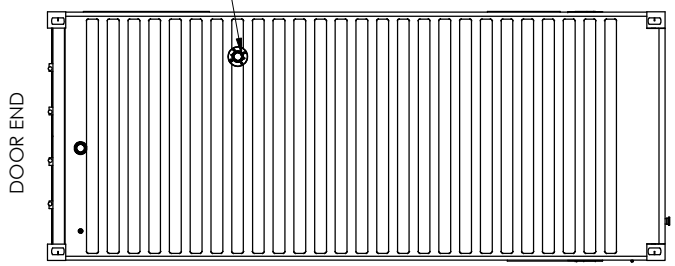
LEFT (OUTLET) VIEW

CLASS 1 DIVISION 2 GROUP D AREA

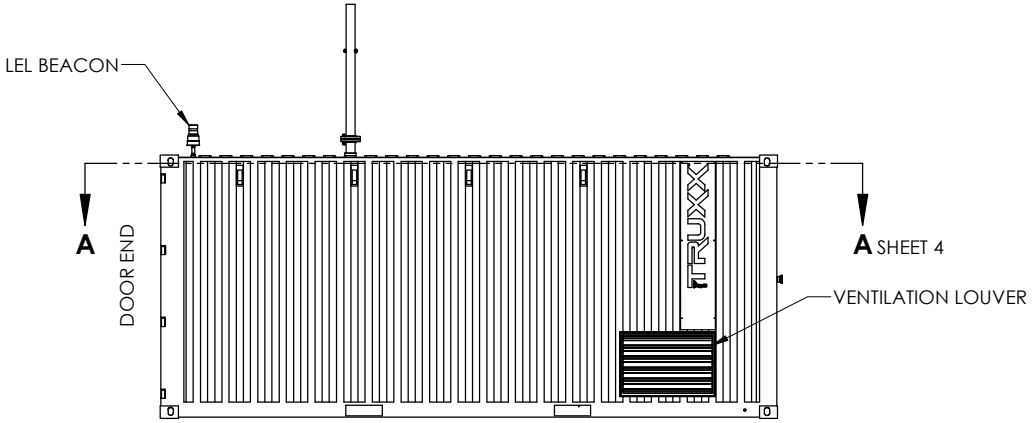
CLASS 1 DIVISION 1 GROUP D AREA

NOTE: INTERIOR OF SKID IS CLASS 1 DIVISION 2

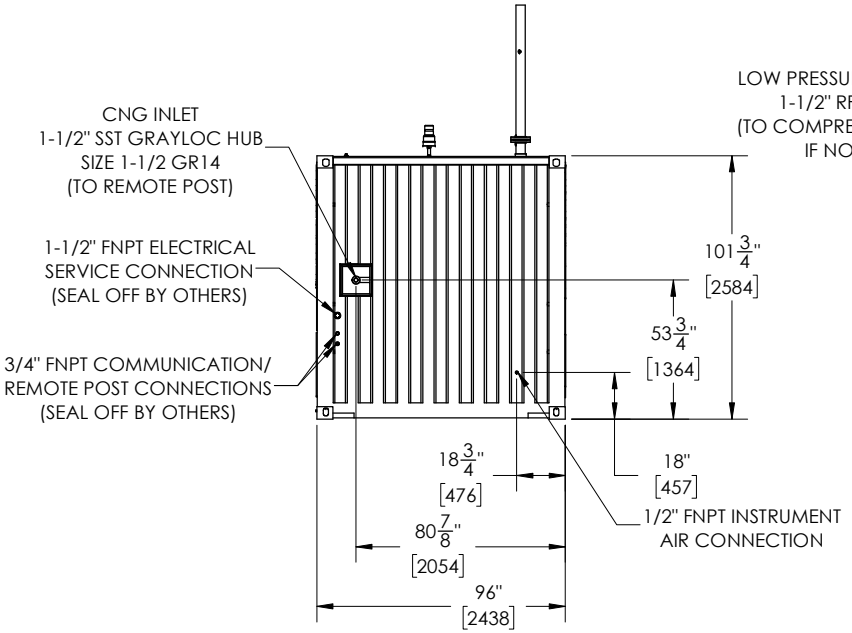
Size: B	Part No.: 10148-64838	Job No.: 64838E
Title: TRUXX 36E EQUIPMENT DRAWING		
Scale: 1:96 AND NOTED	Dwg. No.: JP16569C	Sht. No.: 2 of 4 / Rev.: A



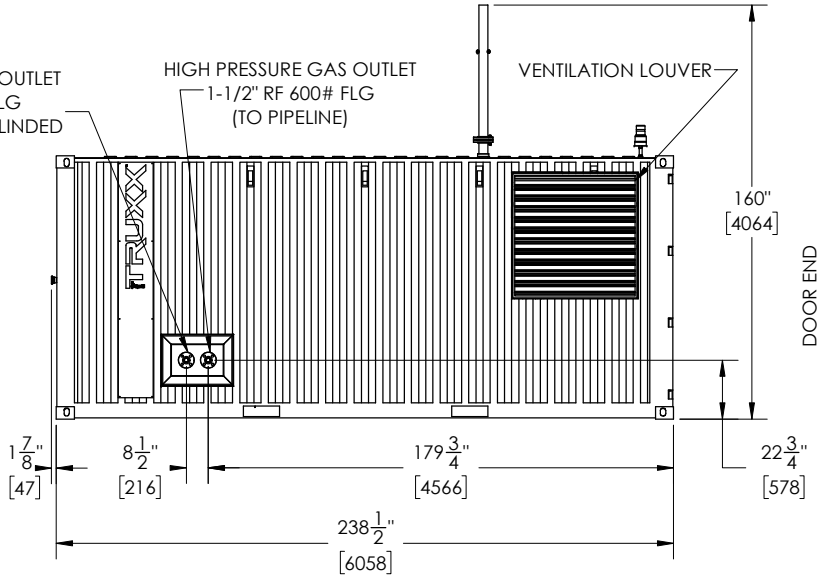
TOP VIEW



RIGHT VIEW



END (INLET) VIEW



LEFT (OUTLET) VIEW

Size: B	Part No.: 10148-64838	Job No.: 64838E	
Title: TRUXX 36E EQUIPMENT DRAWING			
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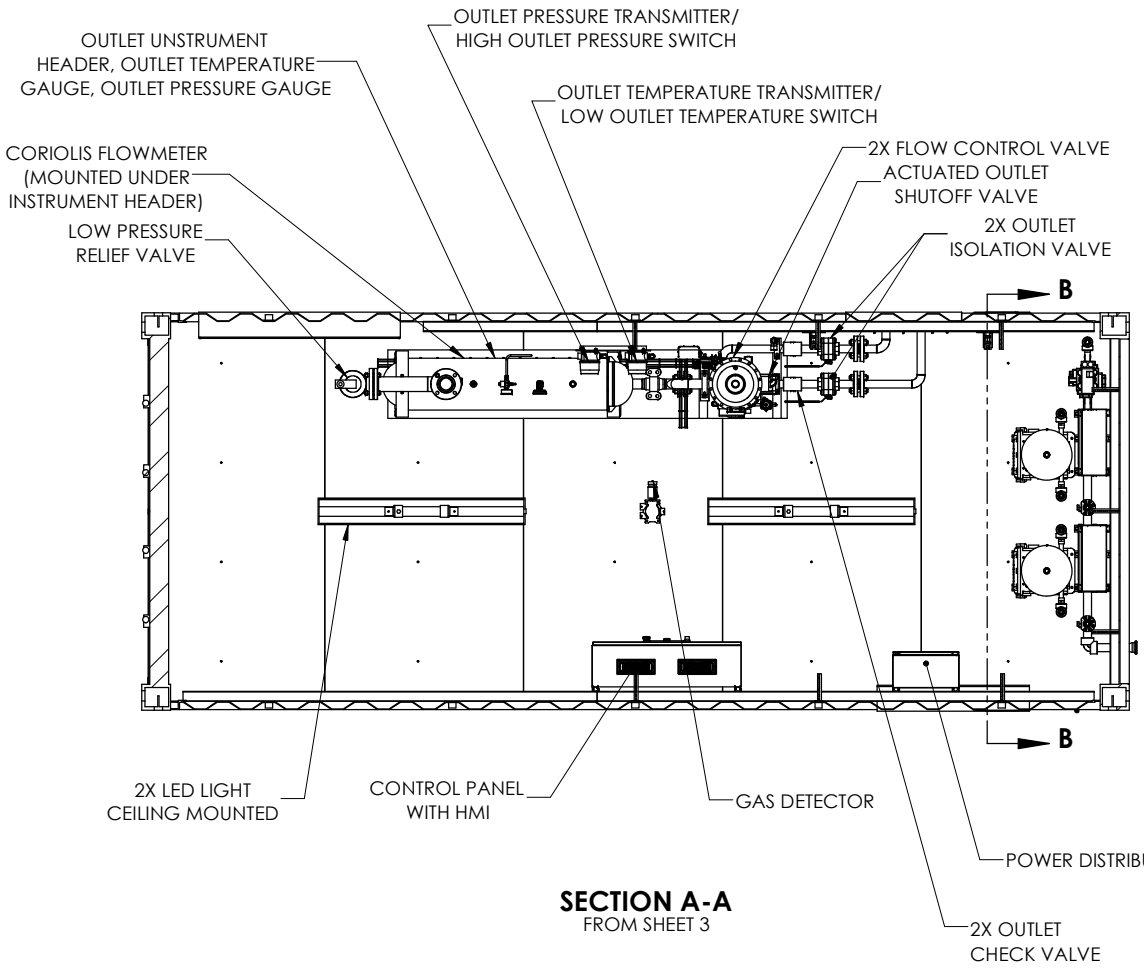
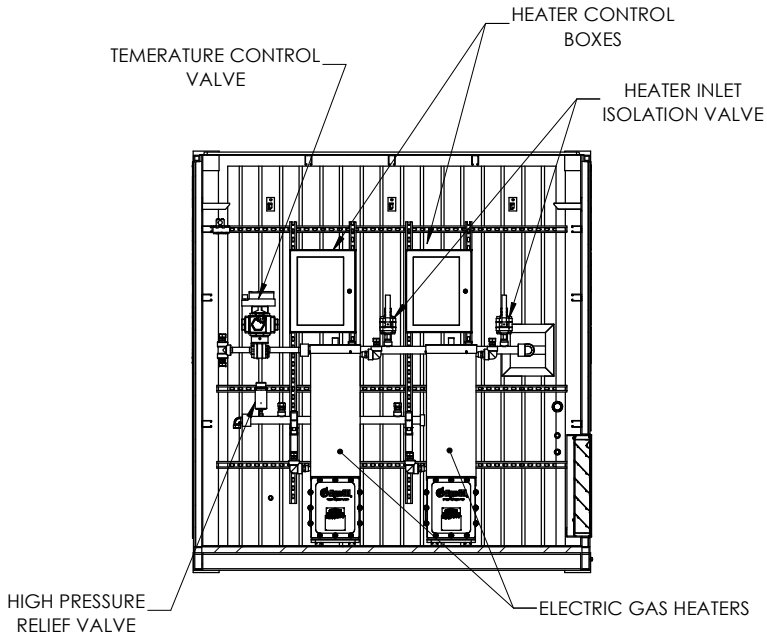


SECTION A-A
FROM SHEET 3



SECTION B-B

Size: B	Part No.: 10148-64838		Job No.: 64838E
Title: TRUXX 36E EQUIPMENT DRAWING			
Scale: 1:30 AND NOTED	Dwg. No.: JP16569C	Sht. No.: 4 of 4	Rev.: A

Stanislaus County

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
1010 10TH Street, Suite 3400, Modesto, CA 95354
Planning Phone: (209) 525-6330 Fax: (209) 525-5911
Building Phone: (209) 525-6557 Fax: (209) 525-7759
Form Available Online: http://www.stancounty.com/planning/applications.shtm

APPLICATION QUESTIONNAIRE

Please Check all applicable boxes

APPLICATION FOR:

Staff is available to assist you with determining which applications are necessary

- ☐ General Plan Amendment
- ☐ Rezone
- ☒ Use Permit
- ☐ Variance
- ☐ Historic Site Permit
- ☐ Subdivision Map
- ☐ Parcel Map
- ☐ Exception
- ☐ Williamson Act Cancellation
- ☐ Other _____

PLANNING STAFF USE ONLY:

Application No(s): PLN 2025-0002
Date: 6/16/25 Incomplete
S 31 T 5 R 10
GP Designation: Ag
Zoning: A-2-40 w/ WA
Fee: $5,703.00
Receipt No. #580954
Received By: ED
Notes: UP/VA

In order for your application to be considered COMPLETE, please answer all applicable questions on the following pages, and provide all applicable information listed on the checklist on pages i – v. Under State law, upon receipt of this application, staff has 30 days to determine if the application is complete. We typically do not take the full 30 days. It may be necessary for you to provide additional information and/or meet with staff to discuss the application. Pre-application meetings are not required, but are highly recommended. An incomplete application will be placed on hold until all the necessary information is provided to the satisfaction of the requesting agency. An application will not be accepted without all the information identified on the checklist.

Please contact staff at (209) 525-6330 to discuss any questions you may have. Staff will attempt to help you in any way we can.

PROJECT INFORMATION

PROJECT DESCRIPTION: (Describe the project in detail, including physical features of the site, proposed improvements, proposed uses or business, operating hours, number of employees, anticipated customers, etc. – Attach additional sheets as necessary)

Please note: A detailed project description is essential to the reviewing process of this request. In order to approve a project, the Planning Commission or the Board of Supervisors must decide whether there is enough information available to be able to make very specific statements about the project. These statements are called "Findings". It is your responsibility as an applicant to provide enough information about the proposed project, so that staff can recommend that the Commission or the Board make the required Findings. Specific project Findings are shown on pages 17 – 19 and can be used as a guide for preparing your project description. (If you are applying for a Variance or Exception, please contact staff to discuss special requirements).

Please see the attached Project Description document.

PROJECT SITE INFORMATION

Complete and accurate information saves time and is vital to project review and assessment. Please complete each section entirely. If a question is not applicable to your project, please indicated this to show that each question has been carefully considered. Contact the Planning & Community Development Department Staff, 1010 10th Street – 3rd Floor, (209) 525-6330, if you have any questions. Pre-application meetings are highly recommended.

ASSESSOR'S PARCEL NUMBER(S): **Book**_____ **Page**_____ **Parcel**_____

Additional parcel numbers: 044-039-001

Project Site Address or Physical Location: 3303 South Washington Road, Turlock

south of Harding Rd, east of Commons Rd

Property Area: Acres: 79.5 or Square feet: _____

Current and Previous Land Use: (Explain existing and previous land use(s) of site for the last ten years)

existing Couco Creek Dairy

List any known previous projects approved for this site, such as a Use Permit, Parcel Map, etc.: (Please identify project name, type of project, and date of approval)

None

Existing General Plan & Zoning: Agriculture/ General AG 40 Acre

Proposed General Plan & Zoning: NA
(if applicable)

ADJACENT LAND USE: (Describe adjacent land uses within 1,320 feet (1/4 mile) and/or two parcels in each direction of the project site)

East: Agriculture/ General AG 40 Acre

West: Agriculture/ General AG 40 Acre

North: Agriculture/Planned Development

South: Agriculture/ General AG 40 Acre

WILLIAMSON ACT CONTRACT:

Yes ☐ **No** ☐

Is the property currently under a Williamson Act Contract?
Contract Number: _____

If yes, has a Notice of Non-Renewal been filed?

Date Filed: _____

Yes ☐ No ☒ Do you propose to cancel any portion of the Contract?

Yes ☐ No ☒ Are there any agriculture, conservation, open space or similar easements affecting the use of the project site. (Such easements do not include Williamson Act Contracts)

If yes, please list and provide a recorded copy: _____

_____

SITE CHARACTERISTICS: (Check one or more) Flat ☒ Rolling ☐ Steep ☐

VEGETATION: What kind of plants are growing on your property? (Check one or more)

Field crops ☒ Orchard ☐ Pasture/Grassland ☐ Scattered trees ☐

Shrubs ☐ Woodland ☐ River/Riparian ☐ Other ☐

Explain Other: _____

Yes ☐ No ☒ Do you plan to remove any trees? (If yes, please show location of trees planned for removal on plot plan and provide information regarding transplanting or replanting.)

GRADING:

Yes ☐ No ☒ Do you plan to do any grading? (If yes, please indicate how many cubic yards and acres to be disturbed. Please show areas to be graded on plot plan.) no grading- the site is flat and level.

_____

STREAMS, LAKES, & PONDS:

Yes ☐ No ☒ Are there any streams, lakes, ponds or other watercourses on the property? (If yes, please show on plot plan)

Yes ☒ No ☐ Will the project change any drainage patterns? (If yes, please explain – provide additional sheet if needed) the addition of the concrete pad used for the trucking equipment will add a new inprevious surface. Stormwater would be maitained on site, which is predominantly pervious

Yes ☐ No ☒ Are there any gullies or areas of soil erosion? (If yes, please show on plot plan)

Yes ☐ No ☒ Do you plan to grade, disturb, or in any way change swales, drainages, ditches, gullies, ponds, low lying areas, seeps, springs, streams, creeks, river banks, or other area on the site that carries or holds water for any amount of time during the year? (If yes, please show areas to be graded on plot plan)

Please note: If the answer above is yes, you may be required to obtain authorization from other agencies such as the Corps of Engineers or California Department of Fish and Game.

STRUCTURES:

Yes ☐ No ☒ Are there structures on the site? (If yes, please show on plot plan. Show a relationship to property lines and other features of the site.

Yes ☐ No ☒ Will structures be moved or demolished? (If yes, indicate on plot plan.)

Yes ☐ No ☒ Do you plan to build new structures? (If yes, show location and size on plot plan.)

Yes ☐ No ☒ Are there buildings of possible Historical significance? (If yes, please explain and show location and size on plot plan.) _____

_____

PROJECT SITE COVERAGE:

Existing Building Coverage: _____Sq. Ft. Landscaped Area: _____Sq. Ft.

Proposed Building Coverage: _____Sq. Ft. Paved Surface Area: _____Sq. Ft.

BUILDING CHARACTERISTICS:

Size of new structure(s) or building addition(s) in gross sq. ft.: (Provide additional sheets if necessary) N/A

Number of floors for each building: N/A

Building height in feet (measured from ground to highest point): (Provide additional sheets if necessary) N/A

Height of other appurtenances, excluding buildings, measured from ground to highest point (i.e., antennas, mechanical equipment, light poles, etc.): (Provide additional sheets if necessary)

Proposed surface material for parking area: (Provide information addressing dust control measures if non-asphalt/concrete material to be used) engineered concrete pad for the truck offloading operation.

UTILITIES AND IRRIGATION FACILITIES:

Yes ☒ No ☐ Are there existing public or private utilities on the site? Includes telephone, power, water, etc. (If yes, show location and size on plot plan)

Who provides, or will provide the following services to the property?

Electrical: _____ Sewer*: _____

Telephone:_____ Gas/Propane: _____

Water**: _____ Irrigation: _____

***Please Note: A "will serve" letter is required if the sewer service will be provided by City, Sanitary District, Community Services District, etc.**

****Please Note: A "will serve" letter is required if the water source is a City, Irrigation District, Water District, etc., and the water purveyor may be required to provide verification through an Urban Water Management Plan that an adequate water supply exists to service your proposed development.**

Will any special or unique sewage wastes be generated by this development other than that normally associated with resident or employee restrooms? Industrial, chemical, manufacturing, animal wastes? (Please describe:)

No, there are no permanent, habitable structures being constructed. No sewer or water services will be needed.

No new utilities will be needed. The site currently has elecrical and gas service.

Please Note: Should any waste be generated by the proposed project other than that normally associated with a single family residence, it is likely that Waste Discharge Requirements will be required by the Regional Water Quality Control Board. Detailed descriptions of quantities, quality, treatment, and disposal may be required.

Yes ☐ **No** ☒ Are there existing irrigation, telephone, or power company easements on the property? (If yes, show location and size on plot plan.)

Yes ☐ **No** ☒ Do the existing utilities, including irrigation facilities, need to be moved? (If yes, show location and size on plot plan.)

Yes ☐ **No** ☒ Does the project require extension of utilities? (If yes, show location and size on plot plan.)

AFFORDABLE HOUSING/SENIOR:

Yes ☐ **No** ☒ Will the project include affordable or senior housing provisions? (If yes, please explain)

RESIDENTIAL PROJECTS: (Please complete if applicable – Attach additional sheets if necessary)

Total No. Lots:_____ Total Dwelling Units:_____ Total Acreage:_____

Net Density per Acre: _____ Gross Density per Acre: _____

(complete if applicable)	Single Family	Two Family Duplex	Multi-Family Apartments	Multi-Family Condominium/ Townhouse
Number of Units:				
Acreage:				

COMMERCIAL, INDUSTRIAL, MANUFACTURING, RETAIL, USE PERMIT, OR OTHER PROJECTS: (Please complete if applicable – Attach additional sheets if necessary)

Square footage of each existing or proposed building(s): N/A

Type of use(s): Biogas truck offloading facility on an existing dairy.

Days and hours of operation: 6am-8pm

Seasonal operation (i.e., packing shed, huller, etc.) months and hours of operation:

Occupancy/capacity of building: N/A

Number of employees: (Maximum Shift): existing employees (Minimum Shift):

Estimated number of daily customers/visitors on site at peak time: 3-6 biogas trucks per day

Other occupants:

Estimated number of truck deliveries/loadings per day: 3-6 biogas trucks per day

Estimated hours of truck deliveries/loadings per day: 12 hours

Estimated percentage of traffic to be generated by trucks:

Estimated number of railroad deliveries/loadings per day: none

Square footage of:

Office area: N/A Warehouse area: N/A

Sales area: N/A Storage area: N/A

Loading area: Manufacturing area: N/A

Other: (explain type of area)

Yes ☐ **No** ☐ Will the proposed use involve toxic or hazardous materials or waste? (Please explain)

ROAD AND ACCESS INFORMATION:

What County road(s) will provide the project's main access? (Please show all existing and proposed driveways on the plot plan)

Washington Rd

Yes ☐ No ☒ Are there private or public road or access easements on the property now? (If yes, show location and size on plot plan)

Yes ☐ No ☒ Do you require a private road or easement to access the property? (If yes, show location and size on plot plan)

Yes ☐ No ☒ Do you require security gates and fencing on the access? (If yes, show location and size on plot plan)

Please Note: Parcels that do not front on a County-maintained road or require special access may require approval of an Exception to the Subdivision Ordinance. Please contact staff to determine if an exception is needed and to discuss the necessary Findings.

STORM DRAINAGE:

How will your project handle storm water runoff? (Check one) ☒ Drainage Basin ☐ Direct Discharge ☐ Overland

☐ Other: (please explain) _____

If direct discharge is proposed, what specific waterway are you proposing to discharge to? _____

_____

Please Note: If direct discharge is proposed, you will be required to obtain a NPDES permit from the Regional Water Quality Control Board, and must provide evidence that you have contacted them regarding this proposal with your application.

EROSION CONTROL:

If you plan on grading any portion of the site, please provide a description of erosion control measures you propose to implement.

_____

_____

Please note: You may be required to obtain an NPDES Storm Water Permit from the Regional Water Quality Control Board and prepare a Storm Water Pollution Prevention Plan.

ADDITIONAL INFORMATION:

Please use this space to provide any other information you feel is appropriate for the County to consider during review of your application. (Attach extra sheets if necessary)

_____

_____

_____

_____

_____

_____

_____

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - STORM WATER PERMIT REQUIREMENTS

Storm water discharges associated with construction activity are a potentially significant source of pollutants. The most common pollutant associated with construction is sediment. Sediment and other construction related wastes can degrade water quality in creeks, rivers, lakes, and other water bodies. In 1992, the State Water Resources Control Board adopted a statewide General Permit for all storm water discharges associated with construction activity that disturbs five or more acres of land. Effective March 10, 2003, all construction sites disturbing one or more acres of land will be required to obtain permit coverage. The General Permit is intended to ensure that construction activity does not impact water quality.

You need to obtain General Permit coverage if storm water discharges from your site and either of the following apply:

- Construction activities result in one or more acres of land disturbance, including clearing, grading, excavating, staging areas, and stockpiles or;
- The project is part of a larger common plan of development or sale (e.g., subdivisions, group of lots with or without a homeowner's association, some lot line adjustments) that result in one or more acres of land disturbance.

It is the applicants responsibility to obtain any necessary permit directly from the California Regional Water Quality Control Board. The applicant(s) signature on this application form signifies an acknowledgment that this statement has been read and understood.

STATE OF CALIFORNIA HAZARDOUS WASTE AND SUBSTANCES SITES LIST (C.G.C. § 65962.5)

Pursuant to California Government Code Section 65962.5(e), before a local agency accepts as complete an application for any development project, the applicant shall consult the latest State of California Hazardous Waste and Substances Sites List on file with the Planning Department and submit a signed statement indicating whether the project is located on a site which is included on the List. The List may be obtained on the California State Department of Toxic Substances Control web site (http://www.envirostor.dtsc.ca.gov/public).

The applicant(s) signature on this application form signifies that they have consulted the latest State of California Hazardous Waste and Substances List on file with the Planning Department, and have determined that the project site ☐ **is or** ☐ **is not** included on the List.

Date of List consulted: August 19, 2024

Source of the listing: EnviroStore https://www.envirostor.dtsc.ca.gov/public/map/?mya

(To be completed only if the site is included on the List)

ASSESSOR'S INFORMATION WAIVER

The property owner(s) signature on this application authorizes the Stanislaus County Assessor's Office to make any information relating to the current owners assessed value and pursuant to R&T Code Sec. 408, available to the Stanislaus County Department of Planning and Community Development.

Nutrient Management Plan Report
General Order No. R5-2007-0035, Attachment C
July 1, 2009 deadline

DAIRY FACILITY INFORMATION

A. NAME OF DAIRY OR BUSINESS OPERATING THE DAIRY: Couco Creek Dairy Inc.

Physical address of dairy:

3303 S Washington RD	Turlock	Stanislaus	95380
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

Date facility was originally placed in operation: 06/01/1961

Regional Water Quality Control Board Basin Plan designation: San Joaquin River Basin

County Assessor Parcel Number(s) for dairy facility:

X044-X039-X001-XXX› X044-X039-X002-XXX› X044-X040-X041-XXX›

B. OPERATOR NAME: Machado, Tony Telephone no.: Landline (209) 761-9322 Cellular

3303 S Washington RD	Turlock	CA	95380
Mailing Address Number and Street	City	State	Zip Code

Operator should receive Regional Board correspondence (check): [X] Yes [ ] No

C. LEGAL OWNER NAME: Machado, Tony Telephone no.: Landline (209) 761-9322 Cellular

3303 S Washington RD	Turlock	CA	95380
Mailing Address Number and Street	City	State	Zip Code

Owner should receive Regional Board correspondence (check): [X] Yes [ ] No

D. CONTACT NAME: Locke, Sean Telephone no.: Landline (209) 250-2471 Cellular (209) 252-1408

Title: Technical Service Provider

2857 Geer RD, STE A	Turlock	CA	95382
Mailing Address Number and Street	City	State	Zip Code

CONTACT NAME: Ramos, Joe Telephone no.: Landline (209) 250-2471 Cellular (298) 226-2375

Title: technical Service Provider

2857 Geer RD, STE A	Turlock	CA	95382
Mailing Address Number and Street	City	State	Zip Code

AVAILABLE NUTRIENTS

A. HERD INFORMATION

The milk cow dairy is currently regulated under individual Waste Discharge Requirements.

Total number of milk and dry cows combined as a baseline value in response to the Report of Waste Discharge (ROWD) request of October, 2005:

3,487 *milk and dry cows combined (regulatory review is required for any expansion)*

	Milk Cows	Dry Cows	Bred Heifers (15-24 mo.)	Heifers (7-14 mo. to breeding)	Calves (4-6 mo.)	Calves (0-3 mo.)
Present count	3,050	437	750	1,000	500	0
Maximum count	3,050	437	750	1,000	500	0
Avg live weight (lbs)	1,400	1,450	900	600		
Daily hours on flush	20	6	24	24	6	0

Predominant milk cow breed: Holstein

Average milk production: 72 *pounds per cow per day*

B. IRRIGATION SOURCES

Irrigation Source Name	Type	Nitrogen (mg/L)	Phosphorus (mg/L)	Potassium (mg/L)	Discharge Rate
Chatom Irrigation Well	Groundwater (well)	0.50			2,000 *gpm*
Chatom Irrigation Well	Groundwater (well)	3.50			2,000 *gpm*
TID Canal	Surface water (canal, river)	0.50			15 *cfs*
TID Canal	Surface water (canal, river)	4.15			15 *cfs*

C. NUTRIENT IMPORTS

Nutrient Type/Name	Quantity	Moisture	Nitrogen	Phosphorus (as P2O5)	Potassium (as K2O)
30-0-0	16.05 *ton*	0.1%	30.000%	0.000%	0.000%
11-5-0	40.10 *ton*	0.1%	11.000%	5.000%	0.000%

Total nitrogen imported: 18,433.55 *lbs*

Total phosphorus imported: 1,750.62 *lbs*

Total potassium imported: 0.00 *lbs*

D. NUTRIENT EXPORTS

Nutrient Type/Name	Quantity	Moisture	Nitrogen	Phosphorus (as P2O5)	Potassium (as K2O)
Compost	5,000.00 *ton*	15.0%	2.500%	1.250%	2.200%
Fall Manure	8,500.00 *ton*	25.0%	2.000%	1.300%	2.000%
Spring Manure	8,500.00 *ton*	25.0%	2.000%	1.300%	2.000%

Total nitrogen exported: 722,500.00 *lbs*

Total phosphorus exported: 191,296.75 *lbs*

Total potassium exported: 578,510.00 *lbs*

E. STORAGE PERIOD

Storage period is the maximum period of time anticipated between land application of process wastewater (from storage ponds/lagoons) to croplands. A qualified agronomist and civil engineer should collaborate and collectively consider predominant soil types, soil infiltration rates, maximum depth, available water, field capacity, permanent wilting point, allowable depletion, crop water use, evapotranspiration, precipitation, irrigation system capacity, water delivery constraints, crop nutrient requirements, soil nutrient adsorbtion/desorption, rooting depth, nutrient accumulation/availability for current and future crop needs, facility wide process wastewater storage capacity and other factors as deemed necessary across all croplands where process wastewater is applied in selecting a storage period. In many cases conflicts will arise between crop water demands, crop nutrient demands and insufficient process wastewater storage capacity. Process wastewater may not be the best choice as a source of either water and/or nutrients to meet crop demands throughout the year. Groundwater and surface water vulnerability has been considered.

The storage period selected in this Nutrient Management Plan is consistent with the storage period selected in the Waste Management Plan.

Storage period: 120 *days*

APPLICATION AREA

A. ASSESSOR PARCEL NUMBER: 0044-0039-0001-0000
Legal owner of parcel: Owned by Dairy

ASSESSOR PARCEL NUMBER: 0044-0039-0002-0000
Legal owner of parcel: Owned by Dairy

ASSESSOR PARCEL NUMBER: 0044-0040-0003-0000
Legal owner of parcel: Owned by Dairy

ASSESSOR PARCEL NUMBER: 0044-0040-0041-0000
Legal owner of parcel: Owned by Dairy

ASSESSOR PARCEL NUMBER: 0057-0015-0034-0000
Legal owner of parcel: Owned by Dairy

B. FIELD NAME: Chatom

Cropable acres: 262

Predominant soil type: Loamy sand

Do irrigation system head-to-head flow conditions exist on the field? [ ] Yes [X] No

Can fresh water for irrigation purposes be delived to the field year round? [X] Yes [ ] No

Can process wastewater be delivered to the field at agronomic rates and times? [X] Yes [ ] No

Tailwater management method: Returned to retention pond

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Oats, silage-soft dough	Early November	Middle April	262
Corn, silage	Early May	Late August	262
Sudangrass, silage	Late August	Late October	262

FIELD NAME: Vitorino

Cropable acres: 29

Predominant soil type: Loamy sand

Do irrigation system head-to-head flow conditions exist on the field? [ ] Yes [X] No

Can fresh water for irrigation purposes be delived to the field year round? [X] Yes [ ] No

Can process wastewater be delivered to the field at agronomic rates and times? [X] Yes [ ] No

Tailwater management method: Returned to retention pond

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Oats, silage-soft dough	Early November	Middle April	29
Corn, silage	Early May	Late August	29
Sudangrass, silage	Late August	Late October	29

FIELD NAME: Zuber

Cropable acres: 40

Predominant soil type: Loamy sand

Do irrigation system head-to-head flow conditions exist on the field? [ ] Yes [X] No

Can fresh water for irrigation purposes be delived to the field year round? [X] Yes [ ] No

Can process wastewater be delivered to the field at agronomic rates and times? [X] Yes [ ] No

Tailwater management method: Returned to top of field

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Oats, silage-soft dough	Early November	Middle April	40
Corn, silage	Early May	Late August	40

Sudangrass, silage	Late August	Late September	40

C. LAND APPLICATION AREA FIELDS AND PARCELS

Field name	Cropable acres	Total harvests	Parcel number
Chatom	262	3	0044-0039-00010000 0044-0039-00020000
Vitorino	29	3	0044-0040-00030000 0044-0040-00410000
Zuber	40	3	0057-0015-00340000
Land application area totals	622	15	

NUTRIENT BUDGET

A. NUTRIENT BUDGET FOR CROP: Chatom / Oats, silage-soft dough

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Pre-irrigation prior to planting (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	1	80.0 66%	11.0 80%	95.0 80%	80.6

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	96.0
	0.6	0.0	0.0	

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	1	0.0 0%	0.0 0%	0.0 0%	0.6

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	96.0
	0.6	0.0	0.0	

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	1	106.0 66%	17.0 80%	98.0 80%	108.2

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Chatom Irrigation Well	2.2	0.0	0.0	168.0
	2.2	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	3.5	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	186.0	28.0	193.0
Other	0.0	0.0	0.0
Atmospheric deposition	4.7		
Nutrients applied	194.1	28.0	193.0
Potential crop nutrient removal	140.0	22.4	116.2
Nutrient balance	54.1	5.6	76.8
Applied to removal ratio	1.39	1.25	1.66

Fresh water applied: 1.14 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Chatom / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Starter fertilizer at planting	1	22.0	10.0	0.0	22.0
Nutrient source: Commercial fertilizer		100%	100%	0%	
Application method: Sidedress					
Pre-irrigation prior to planting (with fertilizer)	1	80.0	11.0	95.0	80.7
Nutrient source: Retention pond (lagoon)		66%	80%	80%	
Application method: Pipeline					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.7	0.0	0.0	112.0
	0.7	0.0	0.0	

In season irrigation (no fertilizer)		3	0.0	0.0	0.0	1.9
Nutrient source: Water only			0%	0%	0%	
Application method: Surface						

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	96.0
	0.6	0.0	0.0	

In season irrigation (with fertilizer)		3	40.0	5.5	47.5	121.9
Nutrient source: Retention pond (lagoon)			66%	80%	80%	
Application method: Pipeline						

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	96.0
	0.6	0.0	0.0	

In season irrigation (with fertilizer)		1	30.0	0.0	0.0	30.6
Nutrient source: Commercial fertilizer			100%	0%	0%	
Application method: Pipeline						

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	96.0
	0.6	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	5.0	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	52.0	10.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	200.0	27.5	237.5
Other	0.0	0.0	0.0
Atmospheric deposition	4.7		
Nutrients applied	261.7	37.5	237.5
Potential crop nutrient removal	192.0	36.0	158.4
Nutrient balance	69.7	1.5	79.1

Applied to removal ratio	1.36	1.04	1.50

Fresh water applied: 3.71 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Chatom / Sudangrass, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	1	0.0 0%	0.0 0%	0.0 0%	0.6

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	96.0
	0.6	0.0	0.0	

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	2	50.0 66%	7.5 80%	60.0 80%	101.2

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	96.0
	0.6	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	1.9	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	100.0	15.0	120.0
Other	0.0	0.0	0.0
Atmospheric deposition	4.7		
Nutrients applied	106.5	15.0	120.0
Potential crop nutrient removal	82.5	12.8	90.0
Nutrient balance	24.0	2.3	30.0
Applied to removal ratio	1.29	1.18	1.33

Fresh water applied: 1.36 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Vitorino / Oats, silage-soft dough

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)

NUTRIENT BUDGET FOR CROP (CONTINUED): Vitorino / Oats, silage-soft dough

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Pre-irrigation prior to planting (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	1	80.0 66%	11.0 80%	95.0 80%	80.7

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.7	0.0	0.0	12.0
	0.7	0.0	0.0	

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	1	0.0 0%	0.0 0%	0.0 0%	0.5

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.5	0.0	0.0	9.0
	0.5	0.0	0.0	

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	1	106.0 66%	17.0 80%	98.0 80%	107.2

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Chatom Irrigation Well	1.2	0.0	0.0	10.0
	1.2	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	2.4	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	186.0	28.0	193.0
Other	0.0	0.0	0.0
Atmospheric deposition	4.7		
Nutrients applied	193.1	28.0	193.0
Potential crop nutrient removal	140.0	22.4	116.2
Nutrient balance	53.1	5.6	76.8
Applied to removal ratio	1.38	1.25	1.66

Fresh water applied: 1.02 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Vitorino / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)

NUTRIENT BUDGET FOR CROP (CONTINUED): Vitorino / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Starter fertilizer at planting *Nutrient source:* Commercial fertilizer *Application method:* Sidedress	1	22.0 100%	10.0 100%	0.0 0%	22.0
Pre-irrigation prior to planting (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	1	80.0 66%	11.0 80%	95.0 80%	81.0

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	1.0	0.0	0.0	18.0
	1.0	0.0	0.0	

In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	3	0.0 0%	0.0 0%	0.0 0%	1.6

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.5	0.0	0.0	9.0
	0.5	0.0	0.0	

In season irrigation (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	3	40.0 66%	5.5 80%	47.5 80%	121.6

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.5	0.0	0.0	9.0
	0.5	0.0	0.0	

In season irrigation (with fertilizer) *Nutrient source:* Commercial fertilizer *Application method:* Pipeline	1	30.0 100%	0.0 0%	0.0 0%	30.5

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.5	0.0	0.0	9.0
	0.5	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	4.7	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	52.0	10.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	200.0	27.5	237.5
Other	0.0	0.0	0.0
Atmospheric deposition	4.7		
Nutrients applied	261.4	37.5	237.5
Potential crop nutrient removal	192.0	36.0	158.4
Nutrient balance	69.4	1.5	79.1

Applied to removal ratio	1.36	1.04	1.50

Fresh water applied: 3.46 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Vitorino / Sudangrass, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	1	0.0 0%	0.0 0%	0.0 0%	0.7

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.7	0.0	0.0	12.0
	0.7	0.0	0.0	

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	2	50.0 66%	7.5 80%	60.0 80%	101.4

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.7	0.0	0.0	12.0
	0.7	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	2.1	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	100.0	15.0	120.0
Other	0.0	0.0	0.0
Atmospheric deposition	4.7		
Nutrients applied	106.8	15.0	120.0
Potential crop nutrient removal	82.5	12.8	90.0
Nutrient balance	24.3	2.3	30.0
Applied to removal ratio	1.29	1.18	1.33

Fresh water applied: 1.54 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Zuber / Oats, silage-soft dough

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)

NUTRIENT BUDGET FOR CROP (CONTINUED): Zuber / Oats, silage-soft dough

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Pre-irrigation prior to planting (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	1	80.0 66%	11.0 80%	95.0 80%	80.7

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.7	0.0	0.0	16.0
	0.7	0.0	0.0	

In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	1	0.0 0%	0.0 0%	0.0 0%	0.5

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.5	0.0	0.0	12.0
	0.5	0.0	0.0	

In season irrigation (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	1	106.0 66%	17.0 80%	98.0 80%	109.2

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Chatom Irrigation Well	3.2	0.0	0.0	36.0
	3.2	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	4.3	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	186.0	28.0	193.0
Other	0.0	0.0	0.0
Atmospheric deposition	4.7		
Nutrients applied	195.0	28.0	193.0
Potential crop nutrient removal	140.0	22.4	116.2
Nutrient balance	55.0	5.6	76.8
Applied to removal ratio	1.39	1.25	1.66

Fresh water applied: 1.20 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Zuber / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)

NUTRIENT BUDGET FOR CROP (CONTINUED): Zuber / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Starter fertilizer at planting	1	22.0	10.0	0.0	22.0
Nutrient source: Commercial fertilizer		100%	100%	0%	
Application method: Sidedress					
Pre-irrigation prior to planting (with fertilizer)	1	80.0	11.0	95.0	80.8
Nutrient source: Retention pond (lagoon)		66%	80%	80%	
Application method: Pipeline					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.8	0.0	0.0	20.0
	0.8	0.0	0.0	

In season irrigation (no fertilizer)		3	0.0	0.0	0.0	1.8
Nutrient source: Water only			0%	0%	0%	
Application method: Surface						

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	14.0
	0.6	0.0	0.0	

In season irrigation (with fertilizer)		3	40.0	5.5	47.5	121.8
Nutrient source: Retention pond (lagoon)			66%	80%	80%	
Application method: Pipeline						

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	14.0
	0.6	0.0	0.0	

In season irrigation (with fertilizer)		1	30.0	0.0	0.0	30.6
Nutrient source: Commercial fertilizer			100%	0%	0%	
Application method: Pipeline						

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	14.0
	0.6	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	5.0	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	52.0	10.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	200.0	27.5	237.5
Other	0.0	0.0	0.0
Atmospheric deposition	4.7		
Nutrients applied	261.6	37.5	237.5
Potential crop nutrient removal	192.0	36.0	158.4
Nutrient balance	69.6	1.5	79.1

Applied to removal ratio	1.36	1.04	1.50

Fresh water applied: 3.66 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Zuber / Sudangrass, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (no fertilizer) *Nutrient source:* Water only *Application method:* Surface	1	0.0 0%	0.0 0%	0.0 0%	0.7

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.7	0.0	0.0	16.0
	0.7	0.0	0.0	

In season irrigation (with fertilizer) *Nutrient source:* Retention pond (lagoon) *Application method:* Pipeline	2	50.0 66%	7.5 80%	60.0 80%	101.3

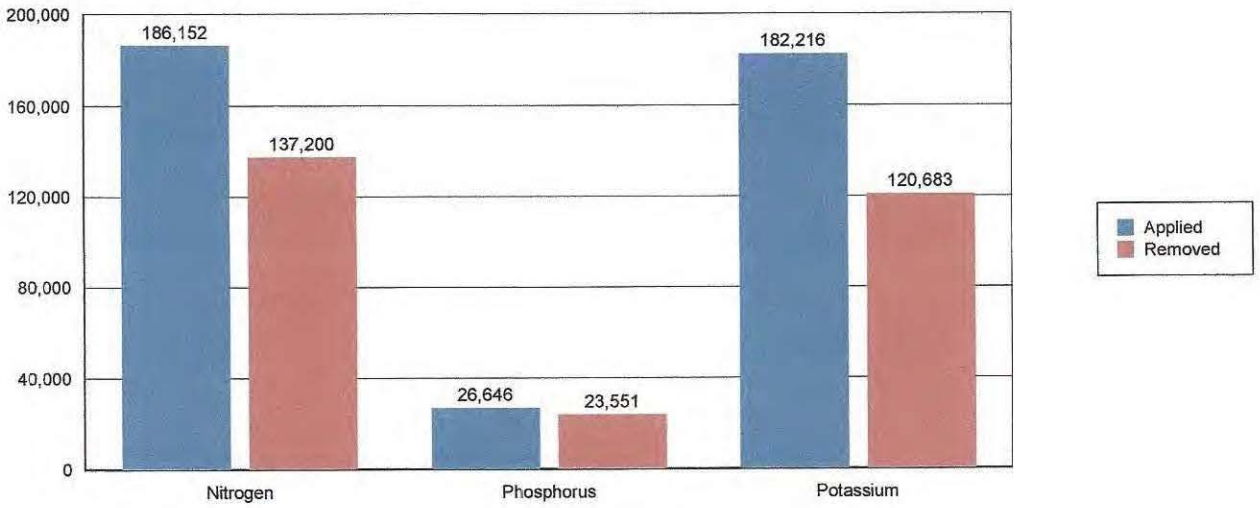
Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.7	0.0	0.0	16.0
	0.7	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	2.0	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	100.0	15.0	120.0
Other	0.0	0.0	0.0
Atmospheric deposition	4.7		
Nutrients applied	106.7	15.0	120.0
Potential crop nutrient removal	82.5	12.8	90.0
Nutrient balance	24.2	2.3	30.0
Applied to removal ratio	1.29	1.18	1.33

Fresh water applied: 1.49 *feet* Total harvests: 1

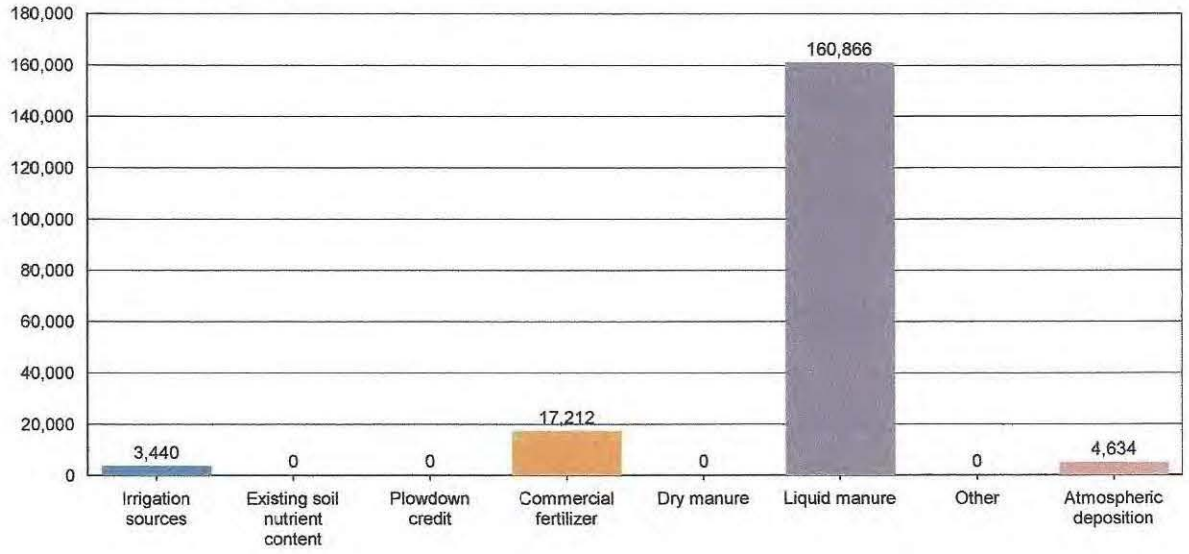
NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

A. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL POTENTIAL



	Total N (lbs)	Total P (lbs)	Total K (lbs)
Irrigation sources	3,440.1	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	17,212.0	3,310.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	160,866.0	23,335.5	182,215.5
Other	0.0	0.0	0.0
Atmospheric deposition	4,634.0		
Nutrients applied to all crops	186,152.1	26,645.5	182,215.5
Potential crop nutrient removal	137,199.5	23,550.7	120,682.6
Nutrient balance	48,952.6	3,094.9	61,532.9
Applied to removal ratio	1.36	1.13	1.51

B. POUNDS OF NITROGEN APPLIED BY NUTRIENT SOURCE



	Total N (lbs)	Total P (lbs)	Total K (lbs)
Irrigation sources	3,440.1	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	17,212.0	3,310.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	160,866.0	23,335.5	182,215.5
Other	0.0	0.0	0.0
Atmospheric deposition	4,634.0		
Nutrients applied to all crops	186,152.1	26,645.5	182,215.5
Potential crop nutrient removal	137,199.5	23,550.7	120,682.6
Nutrient balance	48,952.6	3,094.9	61,532.9
Applied to removal ratio	1.36	1.13	1.51

NUTRIENT BALANCE

A. WHOLE FARM BALANCE

	Total N (lbs)	Total P (lbs)	Total K (lbs)
Nutrients in storage from herd*			
Daily gross	3,571.6	590.0	1,611.3
Annual gross	1,303,647.0	215,332.6	588,110.8
Net to pond storage after ammonia losses (30% loss applied)	736,837.7	176,933.1	490,092.4
Net to drylot storage after ammonia losses (30% loss applied)	175,715.3	38,399.5	312,319.1
Net in storage (30% loss applied)	912,552.9	215,332.6	802,411.5
Irrigation sources	3,440.1	0.0	0.0
Atmospheric deposition	4,634.0		
Imports	18,433.5	1,750.6	0.0
Exports	722,500.0	191,296.8	578,510.0
Potential crop nutrient removal	137,199.5	23,550.7	120,682.6
Nutrient balance	79,361.0	2,235.8	103,218.9
Nutrient balance ratio	1.58	1.09	1.86

* Potassium excretion from milk cows and dry cows only.

SAMPLING AND ANALYSIS PLAN

A. MANURE SAMPLING AND ANALYSIS PLAN

			Minimum data collection requirements	
Frequency	Sampling Methods	Source	Field Analytes	Lab Analytes
Annually	Annual estimation for total manure dry weight applied to each field will be quantified using the following: Dry weight applied from a source to a crop per application event = weight applied * (1 - (percent moisture / 100)) Dry weight applied to crop per application event = sum of dry weights applied from each source Dry weight applied to a crop = sum of dry weights applied during each application Dry weight applied to a field = sum of dry weights applied to each crop Annual estimation for total manure dry weight exported will be quantified using the following: Dry weight exported from a source per event = weight exported * (1 - (percent moisture / 100)) Dry weight exported per event = sum of dry weights exported from each source Dry weight exported to any offsite destination = sum of dry weights exported per event	Separator solids Corral solids Settling basin solids	Total dry weight (tons) manure applied annually to each land application area, and total dry weight (tons) manure exported offsite annually	None required

A. MANURE SAMPLING AND ANALYSIS PLAN (CONTINUED)

			Minimum data collection requirements	
Frequency	Sampling Methods	Source	Field Analytes	Lab Analytes
Twice per year	For each manure source, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Separator solids Corral solids Settling basin solids	None required	Total nitrogen, total phosphorus, total potassium, and percent moisture
Once every two years (biennially)	For each manure source, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Separator Solids Corral solids Settling basin solids	None required	General minerals, including: calcium, magnesium, sodium, sulfate, chloride Fixed solids (ash)
Each offsite export of manure	For each manure source exported, a composite sample "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected. For each manure source exported, a scaled weight by truckload will be recorded.	Separator solids Corral solids Settling basin solids	Date exported and total weight (tons) exported	Percent moisture

A. MANURE SAMPLING AND ANALYSIS PLAN (CONTINUED)

			Minimum data collection requirements	
Frequency	Sampling Methods	Source	Field Analytes	Lab Analytes
Each application to each land application area	For each applied manure source, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected. For each applied manure source, a scaled weight by truckload will be recorded.	Separator solids Corral solids Settling basin solids	Date applied and total weight (tons) applied	Percent moisture

B. PROCESS WASTEWATER SAMPLING AND ANALYSIS PLAN

			Minimum data collection requirements	
Frequency	Sampling Methods	Source	Field Analytes	Lab Analytes
Anually	A composite or grab sample prior to blending with irrigation water per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Pond 1	None required	pH, total dissolved solids, electrical conductivity, nitrate-nitrogen, ammonion-nitrogen, total Kjeldahl nitrogen, total phosphorus, and total potassium
Once every two years (biennially)	For each pond, a composite or grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Pond 1	None required	General minerals, including: calcium, magnesium, sodium, bicarbonate, carbonate, sulfate, and chloride

B. PROCESS WASTEWATER SAMPLING AND ANALYSIS PLAN (CONTINUED)

			Minimum data collection requirements	
Frequency	Sampling Methods	Source	Field Analytes	Lab Analytes
Each application	For each pond, a composite or grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Pond 1	Date applied and volume (gallons or acre-inches) applied	None required
Quarterly during one application event	For field measurement: For each pond, a composite or grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected. For laboratory analyses: For each pond, a composite or grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Pond 1	Date applied and electrical conductivity	Nitrate-nitrogen (only when pond is aerated), un-ionized ammonia-nitrogen, total Kjeldahl nitrogen, total phosphorus, total potassium, and total dissolved solids

C. SOIL SAMPLING AND ANALYSIS PLAN

			Minimum data collection requirements	
Frequency	Sampling Methods	Source	Field Analytes	Lab Analytes

C. SOIL SAMPLING AND ANALYSIS PLAN (CONTINUED)

			Minimum data collection requirements	
Frequency	Sampling Methods	Source	Field Analytes	Lab Analytes
Spring pre-plant for each crop	For each field, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Chatom Field - 281 ac. Vitorino Field - 29 ac. Zuber Field - 40 ac.	None required	0 to 1 foot: Nitrate-nitrogen and organic matter 1 to 2 foot: Nitrate-nitrogen
Once every five years for each land application area (may be distributed over a 5-year period by sampling 20% of the land application areas annually)	For each field, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Chatom Field - 281 ac. Vitorino Field - 29 ac. Zuber Field - 40 ac.	None required	Soluble phosphorus

D. PLANT TISSUE SAMPLING AND ANALYSIS PLAN

			Minimum data collection requirements	
Frequency	Sampling Methods	Source	Field Analytes	Lab Analytes
Each crop harvest from each land application area	For each field and crop, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected. For each field and crop, a scaled weight by truckload will be recorded.	Chatom Field - Oat/Corn/Sudan Silage Vitorino Field - Oat/Corn/Sudan Silage Zuber Field - Oat/Corn/Sudan Silage	Date harvested and total weight (tons) of harvested material removed from each land application area	Percent wet weight of harvested plant removed Laboratory analyses for total nitrogen, total phosphorus, total potassium (expressed on a dry weight basis), fixed solids (ash), and percent moisture

E. IRRIGATION WATER SAMPLING AND ANALYSIS PLAN

			Minimum data collection requirements	
Frequency	Sampling Methods	Source	Field Analytes	Lab Analytes

E. IRRIGATION WATER SAMPLING AND ANALYSIS PLAN (CONTINUED)

			Minimum data collection requirements	
Frequency	Sampling Methods	Source	Field Analytes	Lab Analytes
One irrigation event during each irrigation season during actual irrigation events – for each irrigation water source (well and canal)	For each irrigation source, a grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected. In lieu of sampling the irrigation water, the Discharger may provide equivalent data from the local irrigation district.	TID Canal Chatom Well	None required	Electrical conductivity, total dissolved solids, and total nitrogen
Each fresh water irrigation event for each land application area	TID Canal - flow rate multiplied by runtime. Chatom Well - flow rate multiplied by runtime.	TiD Canal Chatom Well	Date applied and volume (gallons or acre-inches) applied	None required

F. GROUNDWATER MONITORING SAMPLING AND ANALYSIS PLAN

			Minimum data collection requirements	
Frequency	Sampling Methods	Source	Field Analytes	Lab Analytes
Every five years (may be distributed over a 5-year period by sampling 20% of the wells annually)	For each domestic and agricultural supply well, a grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	All onsite domestic wells Chatom well	None required	General minerals, including: calcium, magnesium, sodium, bicarbonate, carbonate, sulfate, chloride Total dissolved solids
Annually	For each domestic and agricultural supply well, a grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	All domestic onsite wells Chatom Well	Electrical conductivity and ammonion-nitrogen	Nitrate-nitrogen. If field measurement indicates the presence of ammonium-nitrogen, the Discharger shall collect a sample for laboratory analysis of ammonium-nitrogen.

NUTRIENT MANAGEMENT PLAN REVIEW

A. NUTRIENT MANAGEMENT PLAN REVIEW

Person who created the NMP:	Locke, Sean	*See above for contact information.*
Date the NMP was drafted:	03/18/2023	
Person who approved the final NMP:	Locke, Sean	*See above for contact information.*
Date of NMP implementation:	03/18/2023	

ATTACHED MAP AND DOCUMENTATION REFERENCES

The following list, based upon user selections and data entries, describes the minimum required attachments that must be submitted with the Nutrient Management Plan for the reporting schedule of 'July 1, 2009'.

A. PRELIMINARY DAIRY FACILITY ASSESSMENT

The NMP will include the initial Preliminary Dairy Facility Assessment (Attachment A) and the annual updates as required by Monitoring and Reporting Program No. R5-2007-0035. Copies of these assessments shall be maintained for 10 years.

B. LAND AREA MAP(S)

Identify each land application area (under the Discharger's control, 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

1. A field identification system (Assessor's Parcel Number; land application area; crops grown); indication if each land application is owned, rented, or leased by the Discharger; indication of what type of waste is applied (solid manure only, wastewater only, or both solid manure and wastewater); drainage flow direction in each field, nearby surface waters, and storm water discharge points; tailwater and storm water drainage controls; subsurface (tile) drainage systems (including discharge points and lateral extent); irrigation supply wells and groundwater monitoring wells; sampling locations for discharges of storm water and tailwater to surface water from the field.

2. Process wastewater conveyance structures, discharge points and discharge mixing points with irrigation water supplies; pumping facilities; flow meter locations; drainage ditches and canals, culverts, draining controls (berms, levees, etc.), and drainage easements.

Application area map reference number: Figure 4

Identify each field under 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:

1. Assessor's Parcel Number.
2. Total acreage.
3. Information on who owns or leases the field

Non-application area map reference number: Not Applicable

Setbacks, Buffers, and Other Alternatives to Protect Surface Water (see Technical Standard VII):

1. Identify all potential surface waters or conduits to surface water that are within 100 feet of any land application area.
2. For each land application area that is within 100 feet of a surface water or a conduit to surface water, identify the setback, vegetated buffer, or other alternative practice that will be implemented to protect surface water (Technical Standard VII).

Setbacks and buffers map reference number: Figure 4

C. PROCESS WASTEWATER WRITTEN AGREEMENTS

Provide copies of written agreements with third parties that receive process wastewater for their own use from the Discharger 's dairy (Technical Standards V.A.1 and V.A.3).

Nutrient Management Plan Report
General Order No. R5-2007-0035, Attachment C
July 1, 2009 deadline

SAMPLING AND ANALYSIS PLAN CERTIFICATION

A. DAIRY FACILITY INFORMATION

Name of dairy or business operating the dairy: Couco Creek Dairy Inc.

Physical address of dairy:

3303 S Washington RD	Turlock	Stanislaus	95380
Physical Address Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

B. DOCUMENTATION OF QUALIFICATIONS AND PLAN DEVELOPMENT

I certify that I meet the requirements as a certified specialist in developing nutrient management plans as described in Attachment C of Waste Discharge Requirements General Order No. R5-2007-0035 and that I prepared the Sampling and Analysis plan.

technical Service Provider
TITLE/QUALIFICATIONS OF CERTIFIED NUTRIENT MANAGEMENT SPECIALIST

Joe Ramos — 3/19/2023
SIGNATURE OF TRAINED PROFESSIONAL — DATE

Joe Ramos
PRINT OR TYPE NAME

2857 Geer RD, STE A; Turlock, CA 95382
MAILING ADDRESS

(209) 250-2471
PHONE NUMBER

C. OWNER AND/OR OPERATOR 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.

Tony Machado Tony Machado (Mar 20, 2023 15:42 PDT)	Tony Machado Tony Machado (Mar 20, 2023 15:42 PDT)
SIGNATURE OF OWNER OF FACILITY	SIGNATURE OF OPERATOR OF FACILITY
Tony Machado	
PRINT OR TYPE NAME	PRINT OR TYPE NAME
Mar 20, 2023	Mar 20, 2023
DATE	DATE

Nutrient Management Plan Report
General Order No. R5-2007-0035, Attachment C
July 1, 2009 deadline

NUTRIENT BUDGET CERTIFICATION

A. DAIRY FACILITY INFORMATION

Name of dairy or business operating the dairy: Couco Creek Dairy Inc.

Physical address of dairy:

3303 S Washington RD	Turlock	Stanislaus	95380
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

B. DOCUMENTATION OF QUALIFICATIONS AND PLAN DEVELOPMENT

I certify that I meet the requirements as a certified specialist in developing nutrient management plans as described in Attachment C of Waste Discharge Requirements General Order No. R5-2007-0035 and that I prepared the Nutrient Budget plan.

technical Service Provider
TITLE/QUALIFICATIONS OF CERTIFIED NUTRIENT MANAGEMENT SPECIALIST

Joe Ramos — 3/19/2023
SIGNATURE OF TRAINED PROFESSIONAL — DATE

Joe Ramos
PRINT OR TYPE NAME

2857 Geer RD, STE A; Turlock, CA 95382
MAILING ADDRESS

(209) 250-2471
PHONE NUMBER

C. OWNER AND/OR OPERATOR 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.

Tony Machado Tony Machado (Mar 20, 2023 15:42 PDT)	Tony Machado Tony Machado (Mar 20, 2023 15:42 PDT)
SIGNATURE OF OWNER OF FACILITY	SIGNATURE OF OPERATOR OF FACILITY
Tony Machado	
PRINT OR TYPE NAME	PRINT OR TYPE NAME
Mar 20, 2023	Mar 20, 2023
DATE	DATE

Nutrient Management Plan Report
General Order No. R5-2007-0035, Attachment C
July 1, 2009 deadline

STATEMENTS OF COMPLETION

Waste Discharge Requirements General Order No. R5-2007-0035 for Existing Milk Cow Dairies (General Order) requires owners and operators of existing milk cow dairies (Dischargers) to develop and implement a Nutrient Management Plan for their land application areas (land under 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 cycling). The Discharger is required to maintain the NMP at the dairy, make the NMP available to Central Valley Water Board staff during their inspections, and submit the NMP to the Executive Officer upon request.

The General Order requires the Discharger to submit two Statements of Completion during development of the NMP. The Discharger may use this form to comply with the General Order requirement to submit one or both of these Statements of Completion. Parts A and E must be completed for each Statement of Completion. Parts B, C and D are to be completed for the Statements of Completion due by 1 July 2008, 31 December 2008 and 1 July 2009, respectively. Both the owner and the operator of the dairy must sign this form in Part E below.

A. DAIRY FACILITY INFORMATION

Name of dairy or business operating the dairy: Couco Creek Dairy Inc.

3303 S Washington RD	Turlock	Stanislaus	95380
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address): _____

Operator name: _____ Telephone no.: _____ (Landline) _____ (Cellular)

_____ _____ _____ _____
Mailing Address Number and Street | City | State | Zip Code

Legal owner name: Machado, Tony Telephone no.: _____ (Landline) (209) 761-9322 (Cellular)

3303 S Washington RD	Turlock	CA	95380
Mailing Address Number and Street	City	State	Zip Code

B. STATEMENT OF COMPLETION DUE 1 JULY 2008

I have completed the following items of the Nutrient Management Plan (check the boxes of completed sections), which are due 1 July 2008:

☐ **Item I.A.1 Land Application Information**
Identification of land used for manure application and needed information on a facility map.

☐ **Item I.B Land Application Information**
Information list for information provided on map above.

☐ **Item I.C Land Application Information**
Copies of written third-party process wastewater agreements.

☐ **Item I.D Land Application Information**
Identification of fields under control of the discharger within five miles of the dairy where neither process wastewater nor manure is applied.

☐ **Item II Sampling and Analysis Plan**

☐ **Item IV Setbacks, Buffers, and Other Alternatives to Protect Surface Water**
Identification of all potential surface waters or conduits to surface waters within 100 feet of land application areas and appropriate protection.

☐ **Item VI Record-Keeping Requirements**
Identification of monitoring records that will be maintained as required in the production and land application areas.

Has Item II (Sampling and Analysis Plan) of the Nutrient Management Plan been certified by a Certified Nutrient Management Specialist as required in the General Order?

☐ Yes ☐ No

C. STATEMENT OF COMPLETION DUE 31 DECEMBER 2008

I have completed the following items of the Nutrient Management Plan (check the boxes of completed sections), which are due 31 December 2008:

☐ **Item V Field Risk Assessment**
Evaluation of 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 (tile) drainage, or storm water from the land application areas.

D. STATEMENT OF COMPLETION DUE 1 JULY 2009

I have completed the following items of the Nutrient Management Plan (check the boxes of completed sections), which are due 1 July 2009:

☐ **Item I.A.2 Land Application Area Information**
Identification of process wastewater conveyance, mixing and drainage information for each land application area on a facility map.

☐ **Item III Nutrient Budget**
Established planned rates of nutrient applications by crop based on nutrient monitoring results for each land application area.

Has Item III (Nutrient Budget) of the Nutrient Management Plan been certified by a Certified Nutrient Management Specialist as required in the General Order?

☐ Yes ☐ No

E. CERTIFICATION STATEMENT

I certify under penalty of law that I have completed the items of the Nutrient Management Plan that are checked in Parts B, C and/or D above for the dairy identified in Part A above and that the appropriate certified nutrient management specialist has certified the items requiring such certification as noted in part B and/or D above and that I have personally examined and am familiar with the information submitted in Parts A, B, C and D of 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.

Tony Machado Tony Machado (Mar 20, 2023 15:42 PDT)	Tony Machado Tony Machado (Mar 20, 2023 15:42 PDT)
SIGNATURE OF OWNER OF FACILITY	SIGNATURE OF OPERATOR OF FACILITY
Tony Machado	
PRINT OR TYPE NAME	PRINT OR TYPE NAME
Mar 20, 2023	Mar 20, 2023
DATE	DATE

Couco Creek 2023 NMP

Final Audit Report 2023-03-20

Created:	2023-03-19
By:	Joe Ramos (jramos@fragservices.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAAcHqsfBdKDJH_RN2hCaJOoHQcTwoZ4Eg

"Couco Creek 2023 NMP" History

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2023-03-19 - 3:37:47 PM GMT

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2023-03-19 - 3:41:20 PM GMT

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2023-03-19 - 3:45:41 PM GMT

Signer Elizete Machado (tonycccows@yahoo.com) entered name at signing as Tony Machado
2023-03-20 - 10:42:24 PM GMT

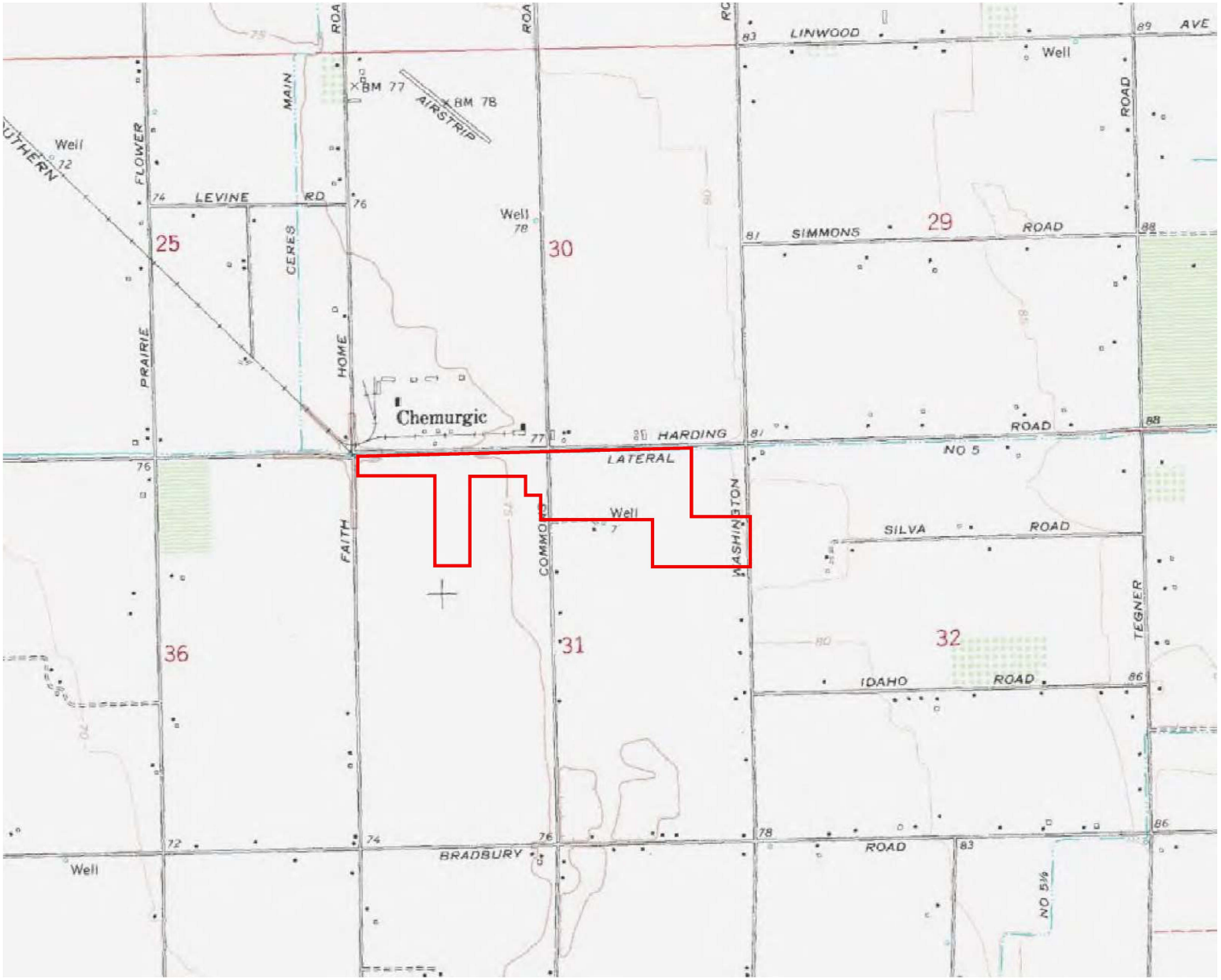
Document e-signed by Tony Machado (tonycccows@yahoo.com)
Signature Date: 2023-03-20 - 10:42:26 PM GMT - Time Source: server

Agreement completed.
2023-03-20 - 10:42:26 PM GMT

LAND APPLICATION AREA FIELD INFORMATION ATTACHMENT

DAIRY NAME: Couco Creek Dairy
DAIRY ADDRESS: 3303 Washington Road, Turlock, 95380

APN	FIELD ID	ACRES	CROPS GROWN	OWNED BY DAIRY OPERATOR	LEASED BY DAIRY OPERATOR	NUTRIENTS APPLIED
044-039-001 & 002	Chatom	262	Corn silage/sudan silage/oat silage	XX		Wastewater
044-040-003 & 041	Vitorino	29	Corn silage/sudan silage/oat silage	XX		Wastewater
057-015-34	Zuber	40	Corn silage/sudan silage/oat silage	XX		Wastewater



LEGEND

Facility Boundary

Ag Services, Inc.

SCALE:

0 4000 8000

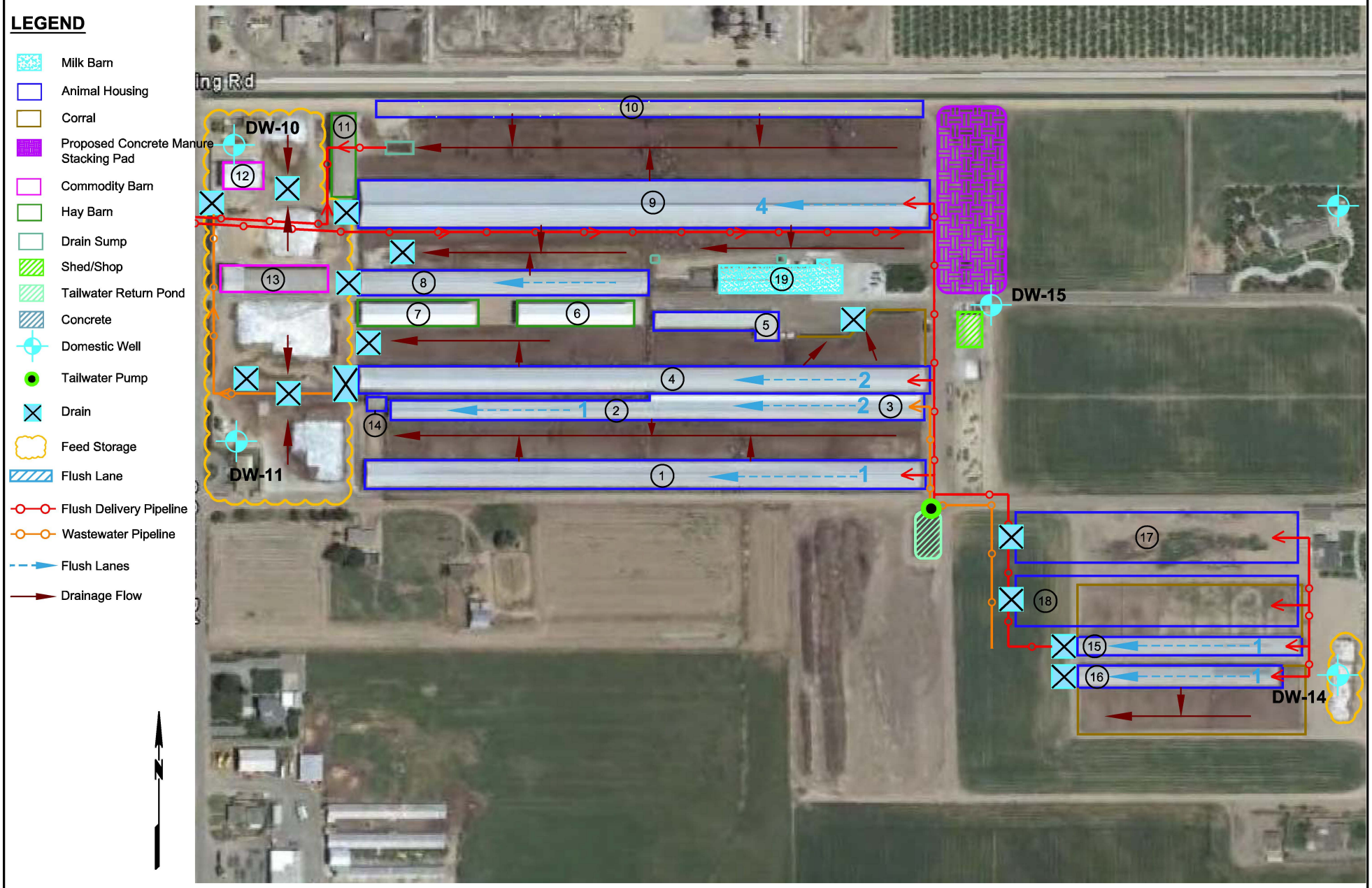
APPROXIMATE SCALE IN FEET

COUCO CREEK DAIRY
TURLOCK, CA

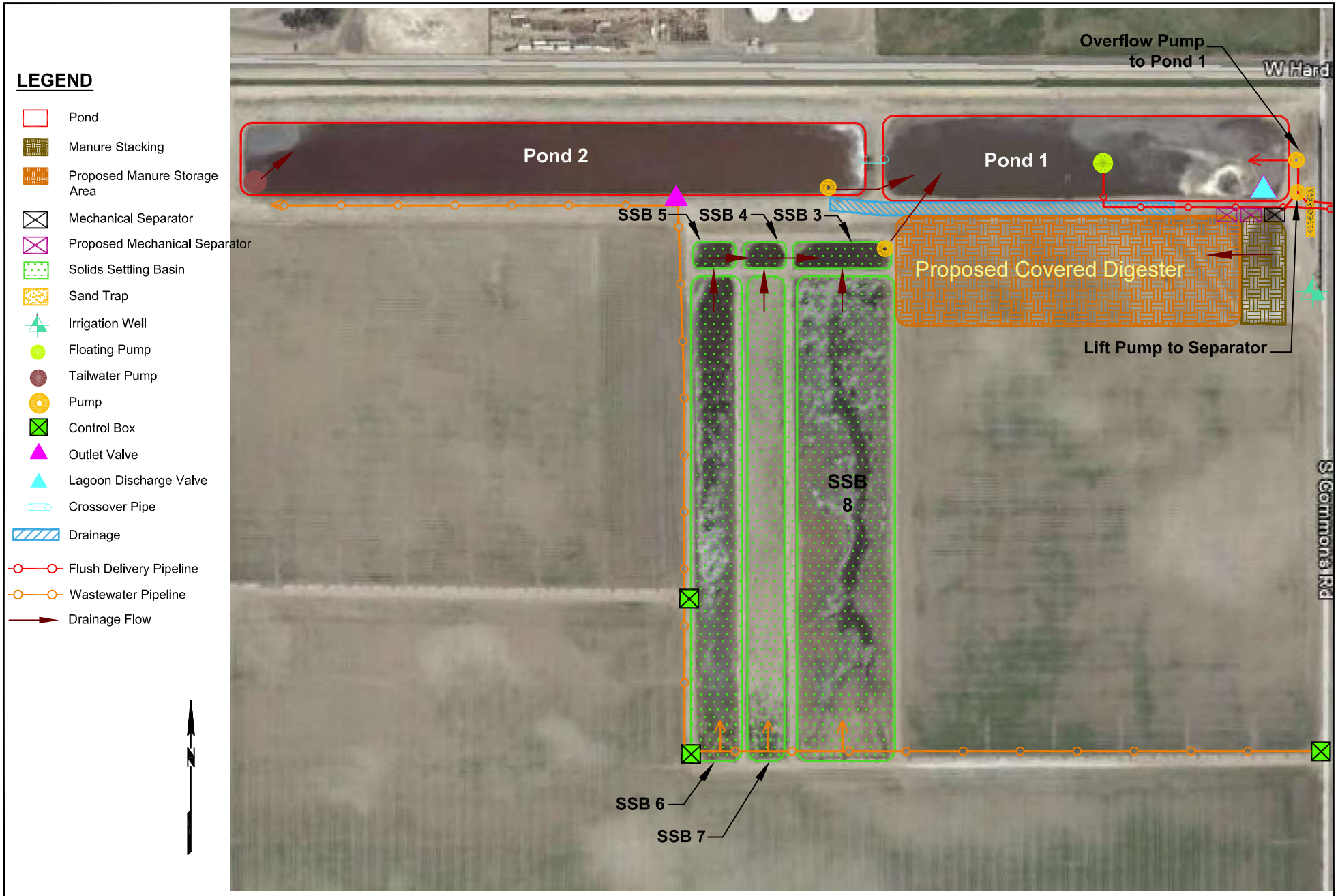
FIGURE 1
TOPOGRAPHIC MAP

PROJECT NO.	DATE:	DRAWN BY:	APP. BY:
FRA-00	5/1/14	SB	JR

COUCO Creek topomap



Ag Services, Inc.	SCALE: 0 300 600 APPROXIMATE SCALE IN FEET	COUCO CREEK DAIRY TURLOCK, CA	**FIGURE 2A** DAIRY FACILITY	
	PROJECT NO. FRA-00	DATE: 10/7/16	DRAWN BY: SB	APP. BY: JR
				COUCO fields and Facility



Ag Services, Inc.

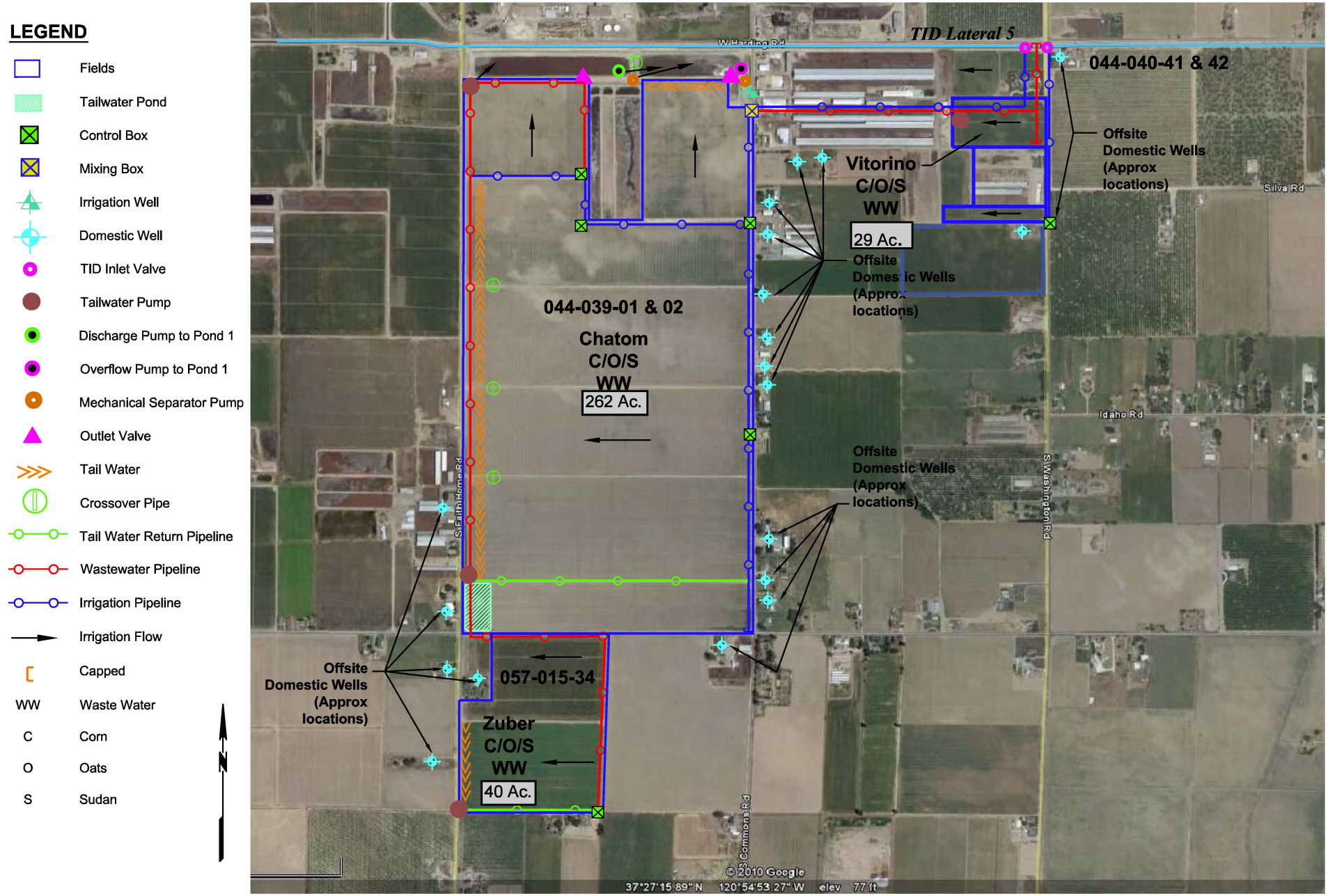
SCALE:
0 300 600
APPROXIMATE SCALE IN FEET

COUCO CREEK DAIRY
TURLOCK, CA

FIGURE 2B
DAIRY FACILITY

PROJECT NO.	DATE:	DRAWN BY:	APP. BY:
FRA-00	10/7/16	SB	JR

COUCO fields and Facility



Ag Services, Inc.

SCALE:
0 1200 2400
APPROXIMATE SCALE IN FEET

COUCO CREEK DAIRY
TURLOCK, CA

FIGURE 4
DAIRY FIELDS

PROJECT NO.	DATE:	DRAWN BY:	APP. BY:
FRA-00	3/31/18	SB	JR

COUCO fields and Facility

WASTE MANAGEMENT PLAN
REVISION

PREPARED FOR:

COUCO CREEK

TURLOCK, CA

PREPARED BY:

HARTMAN
ENGINEERING

WASTE MANAGEMENT PLAN

REVISION

FOR

COUCO CREEK

TURLOCK, CA

The following Waste Management Plan is a State Water Board Waste Discharge Requirement to ensure the dairy production area is designed, constructed, modified, operated and maintained to prevent adverse impacts to ground and surface water quality.

Owner / Operator 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 upon 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 significant penalties for submitting false information, including the possibility of fine and imprisonment.

Owner: Tony Machado
Tony Machado (Sep 6, 2023 12:04 PDT) **Date:** Sep 6, 2023

Operator: Tony Machado
Tony Machado (Sep 6, 2023 12:04 PDT) **Date:** Sep 6, 2023

Engineer Certification

I certify that this Technical Report was prepared by me or under my responsible charge, as a registered Civil Engineer, registered within the State of California.

Engineer: Craig Hartman

Date: 8-14-23

WMP Signature Page - Couco

Final Audit Report 2023-09-06

Created:	2023-09-06
By:	Benjamin Jackman (benjamin.jackman@maasenergy.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAx3GEfC2i-hGX2k5ECUOynjwjMx2G2_ja

"WMP Signature Page - Couco" History

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2023-09-06 - 3:42:55 PM GMT

Email viewed by Elizete Machado (tonycccows@yahoo.com)
2023-09-06 - 6:32:06 PM GMT

Signer Elizete Machado (tonycccows@yahoo.com) entered name at signing as Tony Machado
2023-09-06 - 7:04:43 PM GMT

Document e-signed by Tony Machado (tonycccows@yahoo.com)
Signature Date: 2023-09-06 - 7:04:45 PM GMT - Time Source: server

Agreement completed.
2023-09-06 - 7:04:45 PM GMT

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II. DAIRY FACILITY 2
A. FACILTY LOCATION AND RESPONSIBLE PARTIES 2
B. DAIRY HERD PROFILE 2
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IV. DAIRY PROCESS WATER GENERATION 4
V. DAIRY PRECIPITATION 5
VI. DAIRY CONTAINMENT CAPACITY 6
VII. DAIRY FLOOD PROTECTION 9

Attachment A: Updated Wastewater Management Calculations

Attachment B: 2018 Wastewater Management Plan

Attachment C: Updated Facility Maps

Attachment D: Flood Study

I. INTRODUCTION

The Waste Management Plan is a Technical Report developed with the Owner and Operator of the subject Dairy Facility to ensure design, construction, operation, maintenance of dairy wastes generated at the facility are managed in compliance with State Water Board Discharge requirements.

This facility is currently permitted in the General Order for Existing Milk Cow Dairies, No. R5-2007-0035. This report tiers off the existing and approved 2018 Waste Management Plan, by Manny Sousa and will serve as Revision 1 to the existing Waste Management Plan, documenting the proposed changes to the facility.

The Dairy and Waste Management Plan modifications include a digester, sand lane, seperator, and assocated piping. The dairy will stay in the existing dairy general order.

II. DAIRY FACILITY

A. FACILTY LOCATION AND RESPONSIBLE PARTIES

Facility Location:

Couco Creek
3303 S Washington Rd
Turlock, CA 95380

County: Stanislaus County

Township 5S, Range 10E, Section 31, Mount Diablo Baseline and Meridian

Latitude: 37° 44’ 28” N Longitude: -120° 29’ 51” W

Responsible Parties:

Owner: Tony Machado
3303 S Washington Rd
Turlock, CA 95380
(209) 761-9322

Operator: Tony Machado
3303 S Washington Rd
Turlock, CA 95380
(209) 761-9322

B. DAIRY HERD PROFILE

Since the 2018 Permit, there have been no changes from the existing permit or dairy herd profile. The existing permit and present dairy herd profile are listed below in Table 1.

Table 1: Dairy Herd Profile

Cow Unit	Herd Profile	Maximum Number of Animals in Past 12 Months	Breed of Animals
Milking	3,050	3,050	Holstein
Dry	437	437	Holstein
Heifers 15-24 months	750	750	Holstein
Heifers 7-14 months	1,000	1,000	Holstein
Heifers 4-6 months	500	500	Holstein
Heifers 0-3 months	0	0	Holstein
Total Herd	5,737	5,737	

III. DAIRY PROPERTY

The dairy facility has property associated with discharging its wastewater. There are no changes from the former approved Waste Management Plan on the fields, with the exception to the removal of acreage to construct the proposed a digester, sand lane, seperator, and assocated piping. The Dairy Facility features, and proposed improvements are displayed in the following Figures and Tables:

Figure 2: Vicinity Map: This map details the 5-mile zone surrounding the dairy and its fields. See Attachment C.

Figure 3: Waste Management Plan Modifications: This map details the proposed changes to the dairy. See Attachment C.

IV. DAIRY PROCESS WATER GENERATION

The 2018 Waste Management Plan measured the water used in the facility in many locations to determine a weekly Barn Water Generation of 747,250 gallons/week based upon 3,050 milk cows or 35 gallons per milk cow per day during the 120-day Waste Management Plan period of November through February. The dairy will continue to either operate at the existing water usage per cow or make modifications to decrease water usage, but not increase the per cow rate. Table 2 shows the volume of water used for Waste Management Planning.

Table 2: Process Water Generation

Wastewater Source	Proposed Milk Cows	Max Volume/cow (gal/milk cow/day)	Volume (gal/day)	Total Volume Accumulated in 120 Day Period (gal)
Milk Barn Wastewater Output	3,050	35	106,750	12,810,000

V. DAIRY PRECIPITATION

Proposed improvements are to include a digester, sand lane, seperator, and assocated piping. The additional footprint and change of existing surface area from pervious to impervious will increase the volume of rainfall that needs to be retained onsite. The revised surface summary which includes the new surface area can be found in Table 3 below. This report amends the original WMP to reflect rainwater from roofs enters pond storage.

Table 3: Proposed Dairy Facility Surface Summary for Normal Precipitation

Area Description	Run-off Area (sq. ft.)	Run-off Coefficient Precipitation	Weighted Run-off Area (sq ft)
Wastewater Retention Pond Area	960,968	1.00	960,968
Total Impervious Area	1,533,942	0.75	1,150,457
Total Pervious Area	1,646,950	0.31	510,555
Total Production Area	4,141,860		2,621,979

The weighted Run-off Area is used as a multiplier to calculate volumes from normal precipitation with Table 4 representing the Run-off Coefficients used for the 25 yr.-24 hr. large storm event.

Table 4: Proposed Dairy Facility Surface Summary for Heavy Precipitation

Area Description	Run-off Area (sq. ft.)	Run-off Coefficient Precipitation	Weighted Run-off Area (sq ft)
Wastewater Retention Pond Area	960,968	1.00	960,968
Total Impervious Area	1,533,942	0.75	1,457,245
Total Pervious Area	1,646,950	0.31	741,128
Total Production Area	4,141,860		3,159,340

The 25 yr. – 24 hr. storm event for this location is 2.44 in, with a storm volume of 4,805,146 gallons.

Based upon the revised surface areas, normal precipitation, and evaporation rates from the former approved WMP, the volumes for precipitation at the facility can be found in Table 5 below.

Table 5: Precipitation Evaporation

	Normal Precipitation		1.5 Precipitation		Evap ETpan (in.)	
Month	Ave. Rainfall (in.)	Weighted Run-off Volume (gal)	Ave. Rainfall x 1.5 (in.)	Weighted Run-off Volume (gal)	Average Evaporation Rate (in.)	Total Volume Evaporated (gal)
November	1.07	1,748,773	1.61	2,623,159	1.83	1,096,176
December	2.26	3,693,669	3.39	5,540,504	1.16	694,844
January	2.63	4,298,385	3.95	6,447,577	1.27	760,734
February	2.29	3,742,700	3.44	5,614,050	2.22	1,329,788
Total:	8.25	13,483,527	12.38	20,225,291	6.48	3,881,542

VI. DAIRY CONTAINMENT CAPACITY

The proposed improvements to the facility will greatly increase the waste management system and increase the containment capacity for dairy process water and precipitation. The fiber will be removed and maintained through the mechanical screen and drying slab. Following the screen in the process will be a sand land to remove sand, silt, and clay from entering the digester. It is estimated that the screen and sand lane will remove approximately 50% of the volumes from the manure produced by the herd. Using this estimated and the dairy heard, the manure generation can be calculated per Table 6 below.

Table 6: Dairy Herd Waste Production

Age of Animal & Housing Type	# of Animals	Waste Urine & Manure (cf/day) (ASABE 348.2)	Hours/Day on Flush Surface	Solid Separation Reduction Factor	Total (gal/day)	Total Day WMP Period (gal)
Milking Cows (Flush)	3,050	2.4	20	0.5	22,814	2,737,680
Milk Cows (Open Lot)	0	2.4	0	0.5	0	0
Dry Cows (Open Lot)	437	1.3	6	0.5	531	63,741
Heifers: 15-24 mo. (Open Lot)	750	0.78	24	0.5	2,188	262,548
Heifers: 7-14 mo. (Open Lot)	1,000	0.78	24	0.5	2,917	350,064
Heifers: 4-6 mo. (Open Lot)	500	0.3	6	0.5	140	16,830
Heifers: 0-3 mo. (Open Lot)	0	0.3	0	0.5	0	0
Total Herd:				Total:	28,591	3,430,863

The proposed pond capacity has been calculated using topographic survey with updated dimensions from the former approved WMP. These numbers as well as the solids reductions have been revised to shown the increase in capacity which can be found in Table 7 which shows an increase in volume of 0 gallons based upon improvements to remove solids from the waste stream.

Table 7: Pond Storage Summary

Pond	Pond Type	Top Length (ft)	Top Width (ft)	Average Depth (ft)	Side Slope H:V (ft:ft)	Freeboard Depth (ft)	Solids Reduction Depth (ft)	Total Raw Volume (gal)	Freeboard Reduction (gal)	Storage Period Pond Volume Reduction (gal)	Total Retention Volume (gal)
Pond 1:	Storage Pond	923	193	17	2	2	0.0	18,468,449	2,605,115	0	15,863,334
Pond 2:	Storage Pond	1452	194	14	1	2	0.0	26,173,572	4,145,261	0	22,028,310
Pond 3:	Settling Basin	224	68	3	2	1	0.0	309,167	110,251	0	198,916
Pond 4:	Settling Basin	97	63	4	2	1	0.0	153,837	43,821	0	110,016
Pond 5:	Settling Basin	97	63	2	2	1	0.0	82,613	43,472	0	39,141
Pond 6:	Settling Basin	1103	100	4	3	1	0.0	2,944,228	802,610	0	2,141,618
Pond 7:	Settling Basin	1108	100	4	3	1	0.0	2,957,692	806,257	0	2,151,435
Pond 8:	Settling Basin	1103	229	4	3	1	0.0	7,162,858	1,864,505	0	5,298,353
Pond 9:	Digester	520	220	22	2.0	2	0.0	13,894,507	1,667,462	12,227,046	0

Based on the proposed water usage per milk cow meeting existing flowrates and increasing overall proportionally to the increase in cows, the additional precipitation at the 1.5 factor, and the reduction of residual solids in ponds, the following Table 8 and Figure 1 is a summary of the Waste Management Plan which shows the facility meets the 1.5 Precipitation Factor after proposed improvements.

Table 8: Summary of Waste Management Plan

Wastewater Volume Description (gal)	1.5 Precipitation Factor	1.0 Precipitation Factor
	Total Volume in 120 Day Period (gal)	Total Volume in 120 Day Period (gal)
Operations	16,240,863	16,240,863
Precipitation	20,225,291	13,483,527
25 Year 24 Hour Event	4,805,146	4,805,146
Evaporation from Ponds	-3,881,542	-3,881,542
Required Pond Storage	37,389,758	30,647,994
Proposed Pond Storage	47,831,123	47,831,123
Excess Pond Capacity	10,441,365	17,183,129

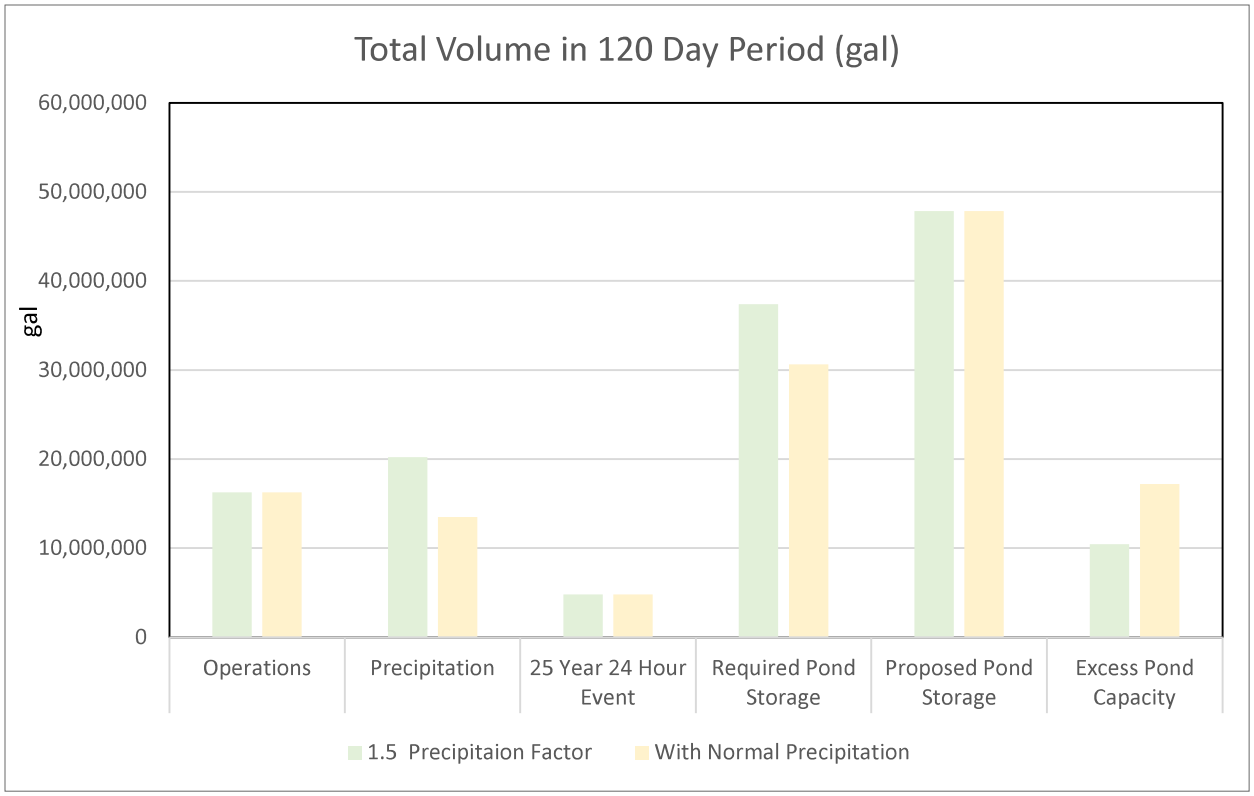


Figure 1: Waste Management Plan Summary

VII. DAIRY FLOOD PROTECTION

The Federal Emergency Management Agency (FEMA) provides a Flood Insurance Rate Map which identifies different flood zone areas. The Flood Insurance Rate Map Community Panel Number 06099C0800F 8/24/2021, indicates that the production area is in Zone X, an area in which is determined to be outside of the 0.2%, 100-year annual chance floodplain. There are no known floodways in the vicinity of this project. See Attachment D, Figure 3 for FEMA Map.

ATTACHMENT A:

UPDATED WASTEWATER MANAGEMENT CALCULATIONS

Client: Hartman Engineering, Inc. **By:** Craig Hartman, PE
Project: Couco Creek **Date:** 8/7/2023
Calculations For: Wastewater Retention Pond Volume Analysis **Project No.:** 22037

HARTMAN ENGINEERING

A. Existing and Proposed Pond Storage Volume

Existing

Pond	Pond Type	Top Length (ft.)	Top Width (ft.)	Average Depth (ft.)	Side Slope H:V (ft:ft)	Freeboard Depth (ft.)	Solids Reduction Depth on November 1 (ft.)	Total Raw Volume (gal)	Freeboard Reduction (gal)	Storage Period Pond Volume Reduction (gal)	Total Retention Volume (gal)
Pond 1:	Storage Pond	923	193	17	1.8	2	0.0	18,468,449	2,605,115	0	15,863,334
Pond 2:	Storage Pond	1452	194	14	1.4	2	0.0	26,173,572	4,145,261	0	22,028,310
Pond 3:	Settling Basin	224	68	3	1.7	1	0.0	309,167	110,251	0	198,916
Pond 4:	Settling Basin	97	63	4	1.6	1	0.0	153,837	43,821	0	110,016
Pond 5:	Settling Basin	97	63	2	1.9	1	0.0	82,613	43,472	0	39,141
Pond 6:	Settling Basin	1103	100	4	2.5	1	0.0	2,944,228	802,610	0	2,141,618
Pond 7:	Settling Basin	1108	100	4	2.5	1	0.0	2,957,692	806,257	0	2,151,435
Pond 8:	Settling Basin	1103	229	4	2.5	1	0.0	7,162,858	1,864,505	0	5,298,353
							Total:	44,951,187	6,860,627	0	47,831,123

Proposed

Pond	Pond Type	Top Length (ft.)	Top Width (ft.)	Average Depth (ft.)	Side Slope H:V (ft:ft)	Freeboard Depth (ft.)	Solids Reduction Depth (ft.)	Total Raw Volume (gal)	Freeboard Reduction (gal)	Storage Period Pond Volume Reduction (gal)	Total Retention Volume (gal)
Pond 1:	Storage Pond	923	193	17	2	2	0.0	18,468,449	2,605,115	0	15,863,334
Pond 2:	Storage Pond	1452	194	14	1	2	0.0	26,173,572	4,145,261	0	22,028,310
Pond 3:	Settling Basin	224	68	3	2	1	0.0	309,167	110,251	0	198,916
Pond 4:	Settling Basin	97	63	4	2	1	0.0	153,837	43,821	0	110,016
Pond 5:	Settling Basin	97	63	2	2	1	0.0	82,613	43,472	0	39,141
Pond 6:	Settling Basin	1103	100	4	3	1	0.0	2,944,228	802,610	0	2,141,618
Pond 7:	Settling Basin	1108	100	4	3	1	0.0	2,957,692	806,257	0	2,151,435
Pond 8:	Settling Basin	1103	229	4	3	1	0.0	7,162,858	1,864,505	0	5,298,353
Pond 9:	Digester	520	220	22	2.0	2	0.0	13,894,507	1,667,462	12,227,046	0
							Total:	72,146,922	12,088,753	12,227,046	47,831,123

Storage Increase 0

B. Process Wastewater Volume Analysis

Age of Animal & Housing Type	# of Animals	Waste Urine & Manure (cf/day) (ASABE 348.2)	Hours/Day on Flush Surface	Solid Separation Reduction Factor	Total (gal/day)	Total 120 Day WMP Period (gal)
Milking Cows (Flush)	3,050	2.4	20	0.5	22,814	2,737,680
Milk Cows (Open Lot)	0	2.4	0	0.5	0	0
Dry Cows (Open Lot)	437	1.3	6	0.5	531	63,741
Heifers: 15-24 mo. (Open Lot)	750	0.78	24	0.5	2,188	262,548
Heifers: 7-14 mo. (Open Lot)	1,000	0.78	24	0.5	2,917	350,064
Heifers: 4-6 mo. (Open Lot)	500	0.3	6	0.5	140	16,830
Heifers: 0-3 mo. (Open Lot)	0	0.3	0	0.5	0	0
				Total:	28,591	3,430,863

Summary

Wastewater Source	Max Volume/cow (gal/milk cow/day)	Volume (gal/day)	Total Volume Accumulated in 120 Day Period (gal)
Milk Barn Wastewater Output:	35	106,750	12,810,000
Animal Output (Urine & Manure):		28,591	3,430,863
Total Process Water Volume from Operations:		135,341	16,240,863

C. PRECIPITATION RUN-OFF VOLUME ANALYSIS

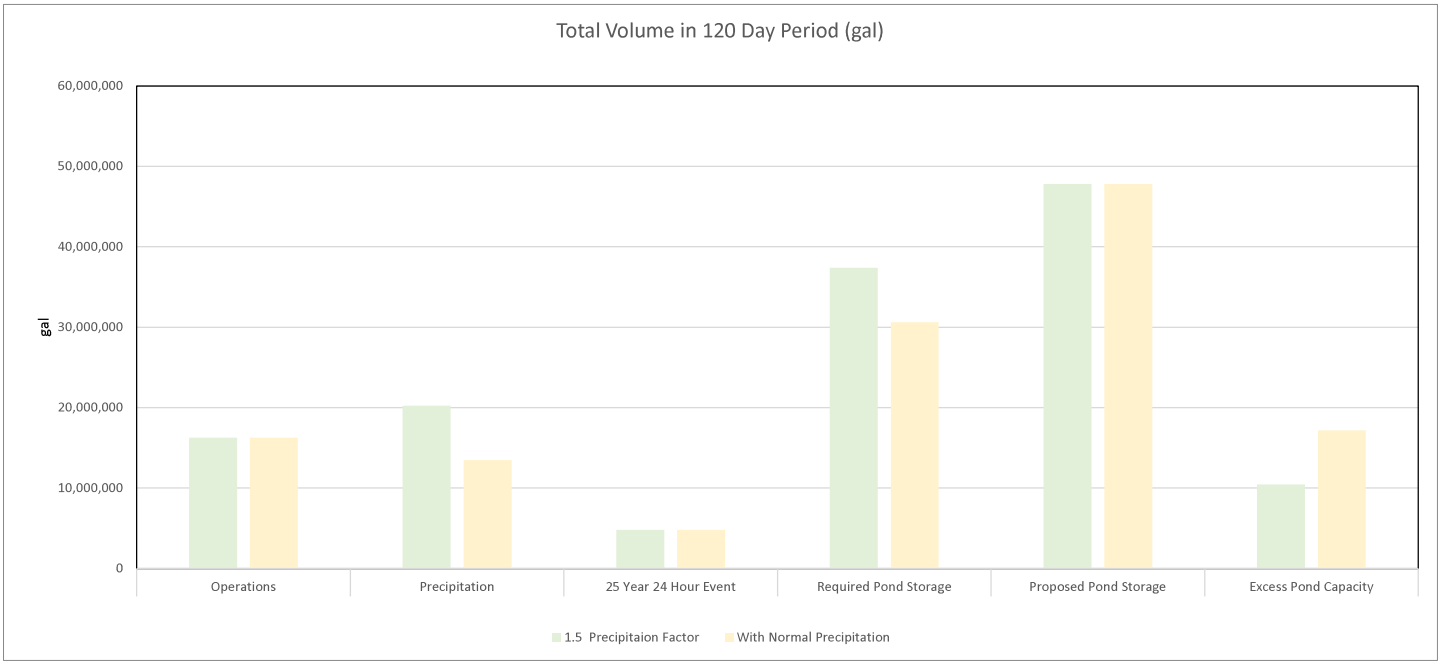
Production Area Subdivision Summary

Area Description	Run-off Area (sq. ft.)	Run-off Coefficient Precipitation	Weighted Run-off Area (sq. ft.)	Run-off Coefficient 25 yr. 24 hr.	Weighted Run-off Area (sq. ft.)	25 yr. 24 hr. Rainfall Event Rainfall (in)	Total Volume from 25 yr. 24 hr. (gal)
Wastewater Retention Pond Area	960,968	1.00	960,968	1.00	960,968	2.44	1,461,568
Total Impervious Area	1,533,942	0.75	1,150,457	0.95	1,457,245	2.44	2,216,372
Total Pervious Area	1,646,950	0.31	510,555	0.45	741,128	2.44	1,127,206
Total Production Area	4,141,860		2,621,979		3,159,340		4,805,146

Precipitation & Run-off	*Normal Precipitation*		*1.5 Precipitation*		*Evap ETpan (in.)*	
Month	*Ave. Rainfall (in.)*	*Weighted Run-off Volume (gal)*	*Ave. Rainfall x 1.5 (in.)*	*Weighted Run-off Volume (gal)*	*Average Evaporation Rate (in.)*	*Total Volume Evaporated (gal)*
November	1.07	1,748,773	1.61	2,623,159	1.83	1,096,176
December	2.26	3,693,669	3.39	5,540,504	1.16	694,844
January	2.63	4,298,385	3.95	6,447,577	1.27	760,734
February	2.29	3,742,700	3.44	5,614,050	2.22	1,329,788
Total:	8.25	13,483,527	12.38	20,225,291	6.48	3,881,542

D. SUMMARY OF REQUIRED WASTEWATER RETENTION POND STORAGE VOLUME

	1.5 Precipitation Factor	*1.0 Precipitation Factor*
Wastewater Volume Description (gal)	*Total Volume in 120 Day Period (gal)*	*Total Volume in 120 Day Period (gal)*
Operations	16,240,863	16,240,863
Precipitation	20,225,291	13,483,527
25 Year 24 Hour Event	4,805,146	4,805,146
Evaporation from Ponds	-3,881,542	-3,881,542
Required Pond Storage	37,389,758	30,647,994
Proposed Pond Storage	47,831,123	47,831,123
Excess Pond Capacity	10,441,365	17,183,129



ATTACHMENT B:

2018 APPROVED WASTE MANAGEMENT PLAN

WASTE MANAGEMENT PLAN

Couco Creek Dairy Inc.
3303 S. Washington Road
Turlock, Ca. 95380

Prepared By:

FR Ag Services, Inc.

2857 Geer Road, Suite A
Turlock, California 95382

Waste Management Plan Report
General Order No. R5-2007-0035, Attachment B
July 1, 2010 deadline

DAIRY FACILITY INFORMATION

A. NAME OF DAIRY OR BUSINESS OPERATING THE DAIRY: Couco Creek Dairy Inc.

Physical address of dairy:

3303 S Washington RD	Turlock	Stanislaus	95380
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

TRS Data and Coordinates:

5S	9E	31	Mt. Diablo	37° 44' 28.00" N	120° 29' 51.00" W
Township (T_)	Range (R_)	Section (S_)	Baseline meridian	Latitude (N)	Longitude (W)

Date facility was originally placed in operation: 06/01/1961

Regional Water Quality Control Board Basin Plan designation: San Joaquin River Basin

County Assessor Parcel Number(s) for dairy facility:

0044-0039-0001-0000 0044-0040-0041-0000

B. OPERATOR NAME: Machado, Tony Telephone no.: Landline (209) 761-9322 Cellular

3303 S Washington RD	Turlock	CA	95380
Mailing Address Number and Street	City	State	Zip Code

Operator should receive Regional Board correspondence (check): [X] Yes [ ] No

C. LEGAL OWNER NAME: Machado, Tony Telephone no.: Landline (209) 761-9322 Cellular

3303 S Washington RD	Turlock	CA	95380
Mailing Address Number and Street	City	State	Zip Code

Owner should receive Regional Board correspondence (check): [X] Yes [ ] No

D. CONTACT NAME: Sousa, Manuel Telephone no.: Landline (209) 238-3151 Cellular

Title: Professional Engineer

P.O. Box 1613	Oakdale	CA	95361
Mailing Address Number and Street	City	State	Zip Code

CONTACT NAME: Ramos, Joe Telephone no.: Landline (209) 250-2471 Cellular (209) 226-2375

Title: Technical Service Provider

2857 Geer RD, STE A	Turlock	CA	95382
Mailing Address Number and Street	City	State	Zip Code

Waste Management Plan Report
General Order No. R5-2007-0035, Attachment B
July 1, 2010 deadline

HERD AND MILKING EQUIPMENT

A. HERD AND MILKING

The milk cow dairy is currently regulated under individual Waste Discharge Requirements.

Total number of milk and dry cows combined as a baseline value in response to the Report of Waste Discharge (ROWD) request of October, 2005:

3,487 milk and dry cows combined (regulatory review is required for any expansion)

Type of Animal	Present Count	Maximum Count	Daily Flush Hours	Avg Live Weight (lbs)
Milk Cows	3,050	3,050	20	1,400
Dry Cows	437	437	6	1,450
Bred Heifers (15-24 mo.)	750	750	24	900
Heifers (7-14 mo.)	1,000	1,000	24	600
Calves (4-6 mo.)	500	500	6	
Calves (0-3 mo.)	0	0	0	

Predominant milk cow breed:	Holstein
Average milk production:	72 pounds per cow per day
Average number of milk cows per string sent to the milkbarn:	300 milk cows per string
Number of milkings per day:	2.0 milkings per day
Number of times milk tank is emptied/filled each day:	5.0 per day
Number of hours spent milking each day:	22.0 hours per day

B. MILKBARN EQUIPMENT AND FLOOR WASH

Bulk tank wash and sanitizing:	4.0 run cycles/wash
Bulk tank wash vat volume:	50 gallons/cycle
Bulk tank wash wastewater:	1,000.0 gallons/day
Pipeline wash and sanitizing:	3.0 run cycles/wash
Pipeline wash vat volume:	100 gallons/cycle
Pipeline wash wastewater:	600.0 gallons/day
Reused / recycled water is the source of parlor floor wash water:	[X] Yes [ ] No
Milkbarn / parlor floor wash volume:	10,000 gallons/day
Plate coolers type:	Well Water Cooled (Water Reused/Recycled)
Plate coolers volume:	54,617 gallons/day
Vacuum pumps / air compressors / chillers type:	Mechanically/Air Cooled
Vacuum pumps / air compressors / chillers volume:	0 gallons/day
Milkbarn and equipment wastewater volume generated daily:	64,992 gallons/day

C. OTHER WATER USES

Reused/recycled water is the source of herd drinking water: [ ] Yes [X] No

	Milk Cows	Dry Cows	Bred Heifers (15-24 mo.)	Bred Heifers (7-14 mo.)	Calves (4-6 mo.)	Calves (0-3 mo.)
Number of cows drinking from reusable water:	0	0	0	0	0	0
	of 3,050	*of 437*	*of 750*	*of 1,000*	*of 500*	*of 0*
Gallons per head per day:	0	0	0	0	0	0

Total reusable water consumed by herd: 0 gallons/day

Reused/recycled water is the source of sprinkler pen water: [X] Yes [ ] No

Number of sprinklers in the holding pen: 175 sprinklers

Duration of each sprinkler cycle: 1.0 minutes

Number of sprinkler pen runs/milking: 3 cycles/milking

Flow rate for each sprinkler head: 5.0 gallons/minute

Total sprinkler pen wastewater volume: 53,392 gallons/day

Total fresh water used in manure flush lane system(s): 0 gallons/day

D. MISCELLANEOUS EQUIPMENT

No miscellaneous equipment entered.

E. MILKBARN AND EQUIPMENT SUMMARY

Number of days in storage period: 120 days

Water available for reuse/recycle: 54,617 gallons/day

Recycled water reused: 63,392 gallons/day

Recycled water leaving system: 0 gallons/day

Reusable water balance: 0 gallons/day

Volume of milkbarn and equipment wastewater generated for storage period: 7,799,040 gallons/storage period

MANURE AND BEDDING SOLIDS

A. IMPORTED AND FACILITY GENERATED BEDDING

Bedding Type	Imported or Generated (tons)	Density (lbs/cu. ft.)	Applied Separation Efficiency (default)	Solids to Pond (cu. ft./period)
Almond shells	100	20.0	85%	1,500
Facility generated bedding	366	40.0	50%	9,150
			Total:	10,650

B. SOLIDS SEPARATION PROCESS

Combined manure solids separation efficiency (weight basis): 50 %

Description of all solids separation equipment used in flushed lane manure management systems:

Multiple Mechanical separators with six solid separation basins.

C. MANURE AND BEDDING SOLIDS SUMMARY

	cubic feet		gallons	
	day	storage period	day	storage period
Manure generated by the herd (pre-separation):	9,111.61	1,093,393	68,159.59	8,179,151
Manure generated by the herd sent to pond(s):	6,156.92	738,830	46,056.93	5,526,832
Manure generated by the herd sent to dry lot(s):	1,677.54	201,305	12,548.89	1,505,867
Manure solids (herd) removed by separation:	618.26	74,192	4,624.94	554,993
Liquid component in separated solids not send to pond(s):	658.89	79,067	4,928.83	591,459
Imported and facility generated bedding sent to pond(s):	88.75	10,650	663.90	79,668
Total manure and bedding sent to pond(s):	6,245.67	749,480	46,720.83	5,606,500
Residual manure solids and bedding sent to pond(s) w/factor:	353.51	42,421	2,644.42	317,330
	cubic feet per year		gallons per year	
Residual manure solids and bedding sent to pond(s) w/factor:		129,030		965,213

RAINFALL AND RUNOFF

A. RAINFALL ESTIMATES

Rainfall station nearest the facility: Turlock

25 year/24 hour storm event (default NOAA Atlas 2, 1973): 2.50 inches/storage period

25 year/24 hour storm event (user-override): _____ inches/storage period

Storage period rainfall (default DWR climate data): 8.56 inches/storage period

Storage period rainfall (user-override): _____ inches/storage period

Flood zone: Zone X

B. IMPERVIOUS AREAS

Name	Surface Area (sq. ft.)	Quantity	25yr/24hr Storm Runoff Coefficient	Storage Period Runoff Coefficient	Runoff Destination
Barn 10 Feed Lane	18,960	1	0.97	0.50	Drains into pond(s).
Barn 2 Feed and Flush Lanes	15,400	1	0.97	0.50	Drains into pond(s).
Barn 3 Feed Lane	5,859	1	0.97	0.50	Drains into pond(s).
Center Control Lane	4,813	1	0.97	0.50	Drains into pond(s).
Concrete Feed Area	196,140	1	0.97	0.50	Drains into pond(s).
Existing Manure Stacking Pad	60,000	1	0.97	0.50	Drains into pond(s).
Existing Separator Pad	20,230	1	0.97	0.50	Drains into pond(s).

Heifer Feed and Flush Lanes	12,293	1	0.97	0.50 Drains into pond(s).
Milk Barn Parking and Side Yards	67,479	1	0.97	0.50 Drains into pond(s).
North Control Lane	1,829	1	0.97	0.50 Drains into pond(s).
Proposed Manure Stacking Pad	134,000	1	0.97	0.50 Drains into pond(s).
Proposed Separator Pad Extension	150,000	1	0.97	0.50 Drains into pond(s).
South Control Lane	1,295	1	0.97	0.50 Drains into pond(s).
South Feed Alley and Flush Lane	36,313	1	0.97	0.50 Drains into pond(s).
Sprinkler/Crowd Pens	5,110	1	0.97	0.50 Drains into pond(s).

Surface area that does not run off into pond(s):	0 sq. ft.
Surface area that runs off into pond(s):	729,721 sq. ft.
Total surface area:	729,721 sq. ft.
Runoff from normal storage period rainfall:	1,946,934 gallons/storage period
Runoff from normal storage period rainfall with 1.5 factor:	2,920,400 gallons/storage period
25 year/24 hour storm event runoff:	1,103,111 gallons/storage period
Total surface area runoff:	3,050,044 gallons/storage period
Total surface area runoff with 1.5 factor:	4,023,511 gallons/storage period

C. ROOF AREAS

Name	Surface Area (sq. ft.)	Quantity	Runoff Destination
Barn 1	72,879	1	Wastewater pond
Barn 10	58,607	1	Wastewater pond
Barn 11	8,752	1	Wastewater pond
Barn 12	4,428	1	Wastewater pond
Barn 13	12,938	1	Wastewater pond
Barn 14	1,100	1	Wastewater pond
Barn 15	19,704	1	Wastewater pond
Barn 16	19,483	1	Wastewater pond
Barn 19	14,785	1	Wastewater pond
Barn 2	21,737	1	Wastewater pond
Barn 3	32,811	1	Wastewater pond
Barn 4	58,178	1	Wastewater pond
Barn 5	10,639	1	Wastewater pond
Barn 6	12,325	1	Wastewater pond
Barn 7	10,115	1	Wastewater pond
Barn 8	29,331	1	Wastewater pond
Barn 9	125,459	1	Wastewater pond

Proposed Barn 19	26,750	1	To Field
Proposed Barns 17 and 18	74,900	2	To Field

Surface area that does not run off into pond(s):	176,550 sq. ft.
Surface area that runs off into pond(s):	513,271 sq. ft.
Total surface area:	689,821 sq. ft.
Runoff from normal storage period rainfall:	2,738,867 gallons/storage period
Runoff from normal storage period rainfall with 1.5 factor:	4,108,301 gallons/storage period
25 year/24 hour storm event runoff:	799,903 gallons/storage period
Total surface area runoff:	3,538,770 gallons/storage period
Total surface area runoff with 1.5 factor:	4,908,204 gallons/storage period

D. EARTHEN AREAS

Name	Surface Area (sq. ft.)	Quantity	25yr/24 Storm Coefficient	Storage Period Coefficient	Runoff Destination
Earthen Areas subtracting Roof and Concrete	820,475	1	0.35	0.20	Drains into pond(s).
Earthen Areas subtracting Roof and Concrete	826,475	1	0.35	0.20	Drains into pond(s).

Surface area that does not run off into pond(s):	0 sq. ft.
Surface area that runs off into pond(s):	1,646,950 sq. ft.
Total surface area:	1,646,950 sq. ft.
Runoff from normal storage period rainfall:	1,757,659 gallons/storage period
Runoff from normal storage period rainfall with 1.5 factor:	2,636,489 gallons/storage period
25 year/24 hour storm event runoff:	898,336 gallons/storage period
Total surface area runoff:	2,655,996 gallons/storage period
Total surface area runoff with 1.5 factor:	3,534,825 gallons/storage period

E. TAILWATER MANAGEMENT

No fields with tailwater entered.

Waste Management Plan Report
General Order No. R5-2007-0035, Attachment B
July 1, 2010 deadline

LIQUID STORAGE

A. POND OR BASIN DESCRIPTION: Pond 1

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions

Earthen Length (EL):	923 ft.	Earthen Depth (ED):	17 ft.
Earthen Width (EW):	193 ft.	Side Slope (S):	1.8 ft. (h:1v)
Free Board (FB):	2 ft.	Dead Storage Loss (DS):	2.0 ft.

Calculations

Liquid Length (LL):	916 ft.	Storage Volume Adjusted for Dead Storage Loss:	1,886,408 cu. ft.
Liquid Width (LW):	186 ft.		
Pond Surface Area:	178,139 sq. ft.	Pond Marker Elevation:	14.4 ft.
Storage Volume:	2,120,767 cu. ft.	Evaporation Volume:	908,197 gals/period
		Adjusted Surface Area:	168,916 sq. ft.

POND OR BASIN DESCRIPTION: Pond 2

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions

Earthen Length (EL):	1,452 ft.	Earthen Depth (ED):	14 ft.
Earthen Width (EW):	194 ft.	Side Slope (S):	1.4 ft. (h:1v)
Free Board (FB):	2 ft.	Dead Storage Loss (DS):	2.0 ft.

Calculations

Liquid Length (LL):	1,446 ft.	Storage Volume Adjusted for Dead Storage Loss:	2,498,759 cu. ft.
Liquid Width (LW):	188 ft.		
Pond Surface Area:	281,688 sq. ft.	Pond Marker Elevation:	11.4 ft.
Storage Volume:	2,944,961 cu. ft.	Evaporation Volume:	1,457,639 gals/period
		Adjusted Surface Area:	271,088 sq. ft.

POND OR BASIN DESCRIPTION: SSB 3

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions

Earthen Length (EL):	224 ft.	Earthen Depth (ED):	3 ft.
Earthen Width (EW):	68 ft.	Side Slope (S):	1.7 ft. (h:1v)
Free Board (FB):	1 ft.	Dead Storage Loss (DS):	1.9 ft.

Calculations

Liquid Length (LL):	221 ft.	Storage Volume Adjusted for Dead Storage Loss:	1,420 cu. ft.
Liquid Width (LW):	65 ft.		
Pond Surface Area:	15,232 sq. ft.	Pond Marker Elevation:	1.3 ft.
Storage Volume:	26,593 cu. ft.	Evaporation Volume:	74,962 gals/period
		Adjusted Surface Area:	13,942 sq. ft.

POND OR BASIN DESCRIPTION: SSB 4

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions

Earthen Length (EL):	97 ft.	Earthen Depth (ED):	4 ft.
Earthen Width (EW):	63 ft.	Side Slope (S):	1.6 ft. (h:1v)
Free Board (FB):	1 ft.	Dead Storage Loss (DS):	2.9 ft.

Calculations

Liquid Length (LL):	94 ft.	Storage Volume Adjusted for Dead Storage Loss:	558 cu. ft.
Liquid Width (LW):	60 ft.		
Pond Surface Area:	6,111 sq. ft.	Pond Marker Elevation:	2.3 ft.
Storage Volume:	14,708 cu. ft.	Evaporation Volume:	29,304 gals/period
		Adjusted Surface Area:	5,450 sq. ft.

POND OR BASIN DESCRIPTION: SSB 5

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions

Earthen Length (EL):	97 ft.	Earthen Depth (ED):	2 ft.
Earthen Width (EW):	63 ft.	Side Slope (S):	1.9 ft. (h:1v)
Free Board (FB):	1 ft.	Dead Storage Loss (DS):	0.9 ft.

Calculations

Liquid Length (LL):	93 ft.	Storage Volume Adjusted for Dead Storage Loss:	649 cu. ft.
Liquid Width (LW):	59 ft.		
Pond Surface Area:	6,111 sq. ft.	Pond Marker Elevation:	0.3 ft.
Storage Volume:	5,233 cu. ft.	Evaporation Volume:	28,643 gals/period
		Adjusted Surface Area:	5,327 sq. ft.

POND OR BASIN DESCRIPTION: SSB 6

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions

Earthen Length (EL):	1,108 ft.	Earthen Depth (ED):	4 ft.
Earthen Width (EW):	100 ft.	Side Slope (S):	2.5 ft. (h:1v)
Free Board (FB):	1 ft.	Dead Storage Loss (DS):	2.9 ft.

Calculations

Liquid Length (LL):	1,103 ft.	Storage Volume Adjusted for Dead Storage Loss:	10,449 cu. ft.
Liquid Width (LW):	95 ft.		
Pond Surface Area:	110,800 sq. ft.	Pond Marker Elevation:	2.4 ft.
Storage Volume:	287,625 cu. ft.	Evaporation Volume:	553,223 gals/period
		Adjusted Surface Area:	102,894 sq. ft.

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July 1, 2010 deadline

POND OR BASIN DESCRIPTION: SSB 7

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions

Earthen Length (EL):	1,108 ft.	Earthen Depth (ED):	4 ft.
Earthen Width (EW):	100 ft.	Side Slope (S):	2.5 ft. (h:1v)
Free Board (FB):	1 ft.	Dead Storage Loss (DS):	2.9 ft.

Calculations

Liquid Length (LL):	1,103 ft.	Storage Volume Adjusted for Dead Storage Loss:	10,449 cu. ft.
Liquid Width (LW):	95 ft.		
Pond Surface Area:	110,800 sq. ft.	Pond Marker Elevation:	2.4 ft.
Storage Volume:	287,625 cu. ft.	Evaporation Volume:	553,223 gals/period
		Adjusted Surface Area:	102,894 sq. ft.

POND OR BASIN DESCRIPTION: SSB 8

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions

Earthen Length (EL):	1,103 ft.	Earthen Depth (ED):	4 ft.
Earthen Width (EW):	229 ft.	Side Slope (S):	2.3 ft. (h:1v)
Free Board (FB):	1 ft.	Dead Storage Loss (DS):	2.9 ft.

Calculations

Liquid Length (LL):	1,098 ft.	Storage Volume Adjusted for Dead Storage Loss:	24,618 cu. ft.
Liquid Width (LW):	224 ft.		
Pond Surface Area:	252,587 sq. ft.	Pond Marker Elevation:	2.4 ft.
Storage Volume:	712,251 cu. ft.	Evaporation Volume:	1,315,224 gals/period
		Adjusted Surface Area:	244,619 sq. ft.

Potential storage losses (due to dead storage):	1,966,553.0 cubic feet - or -	14,710,838.0 gallons
Liquid storage surface area:	924,086 sq. ft.	
Rainfall onto retention pond(s):	5,130,493 gallons/storage period	
Rainfall runoff into retention pond(s):	6,443,460 gallons/storage period	
Normal rainfall onto retention pond(s) with 1.5 factor:	7,695,740 gallons/storage period	
Normal rainfall runoff into retention pond(s) with 1.5 factor:	9,665,190 gallons/storage period	
Storage period evaporation (default):	11.50 inches/storage period	
Storage period evaporation (user-override):	inches/storage period	
Storage period evaporation volume:	4,920,315 gallons/storage period	
Manure and bedding sent to pond(s):	5,606,500 gallons/storage period	

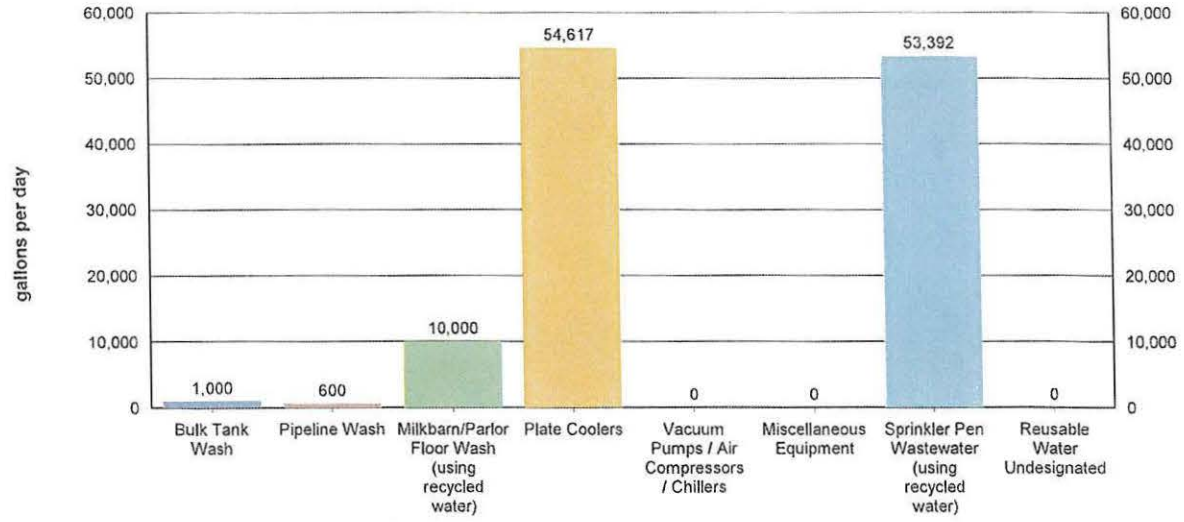
Milkbarn water sent to pond(s): 7,799,040 gallons/storage period

Fresh flush water for storage period: 0 gallons/storage period

Waste Management Plan Report
General Order No. R5-2007-0035, Attachment B
July 1, 2010 deadline

CHARTS

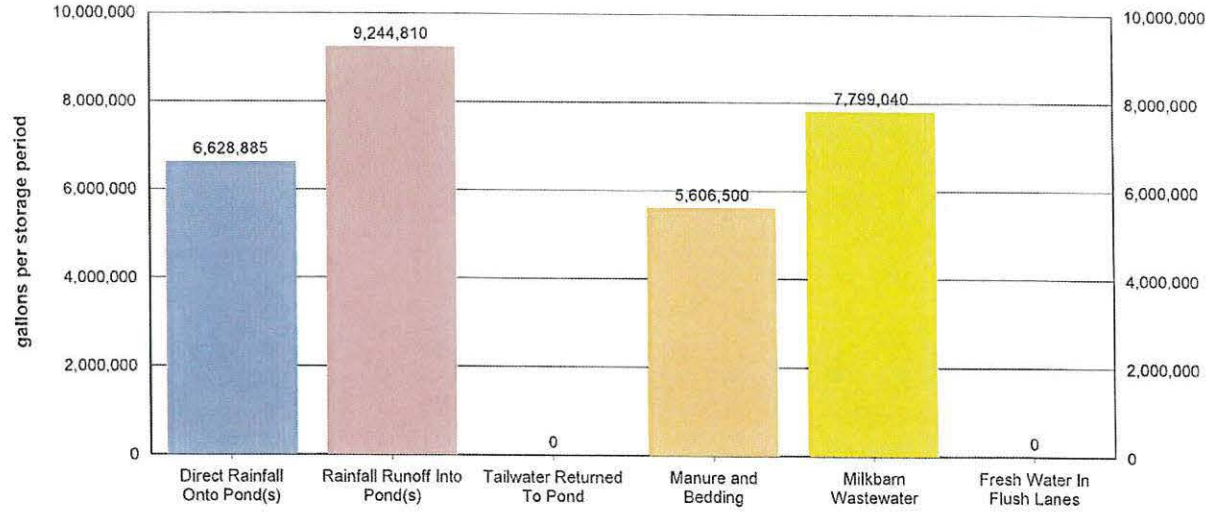
A. MILKBARN WASTEWATER SENT TO POND(S)



Values shown in chart are approximate values per day.

Total milkbarn wastewater generated daily:	64,992 gallons/day
Total milkbarn wastewater generated per period:	7,799,040 gallons/storage period

B. PROCESS WASTEWATER (NORMAL PRECIPITATION)

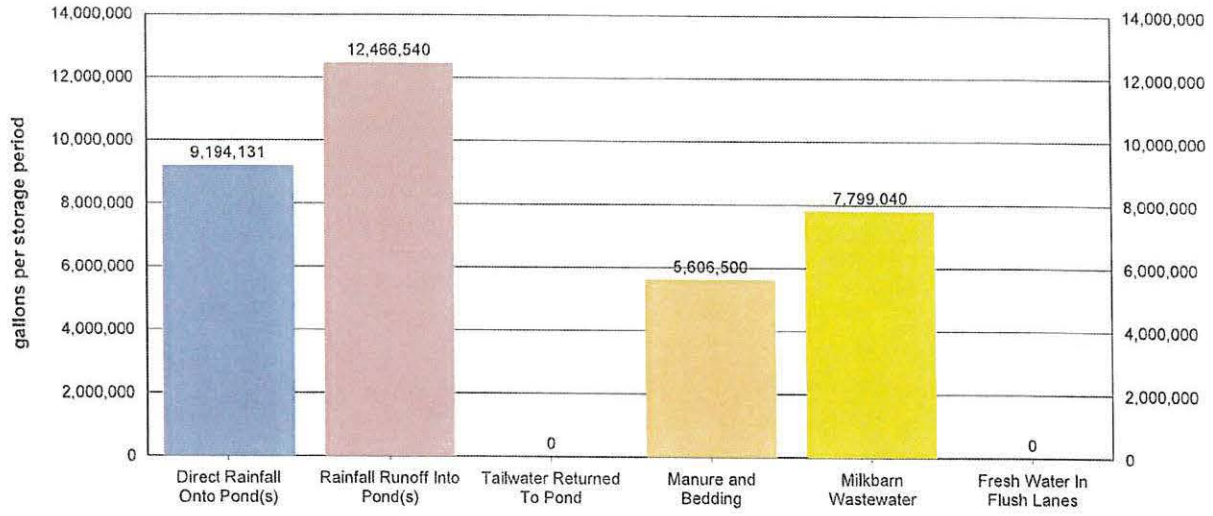


Values shown in chart are approximate values for storage period.

Storage period:	120	days
Total process wastewater generated daily:	243,994	gallons/day
Total process wastewater generated per period:	29,279,235	gallons/storage period
Total process wastewater removed due to evaporation:	4,920,315	gallons/storage period
Total storage capacity required:	24,358,920	gallons
	3,256,314	cu. ft.
Existing storage capacity (adjusted for dead storage loss):	33,162,714	gallons
	4,433,210	cu. ft.

Considering normal precipitation, existing capacity meets estimated storage needs: [X] Yes [ ] No

C. PROCESS WASTEWATER (NORMAL PRECIPITATION WITH 1.5 FACTOR)

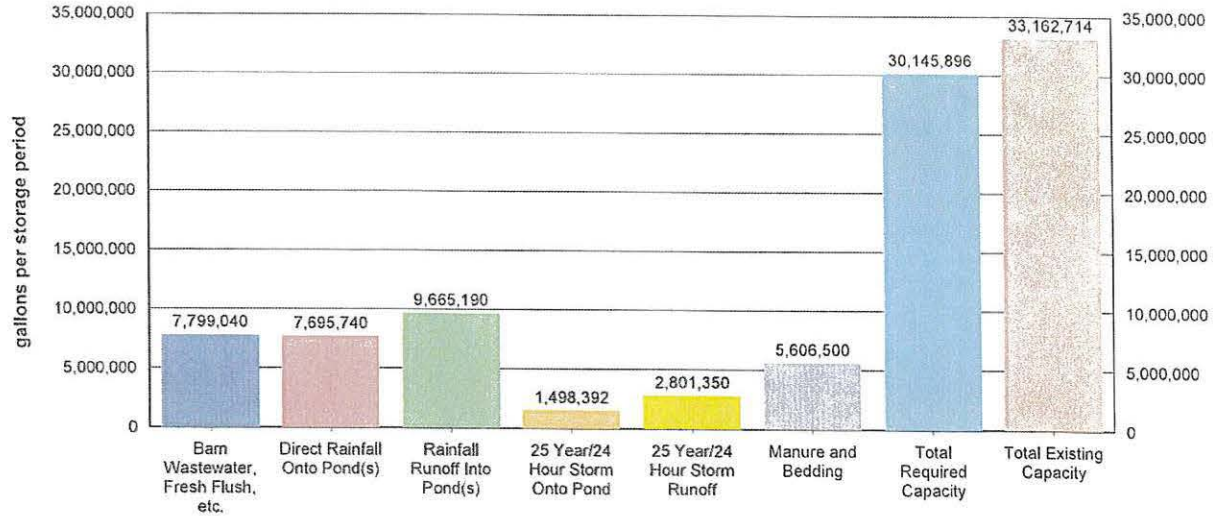


Values shown in chart are approximate values for storage period.

Storage period:	120 days
Total process wastewater generated daily:	292,218 gallons/day
Total process wastewater generated per period:	35,066,211 gallons/storage period
Total process wastewater removed due to evaporation:	4,920,315 gallons/storage period
Total storage capacity required:	30,145,896 gallons
	4,029,920 cu. ft.
Existing storage capacity (adjusted for dead storage loss):	33,162,714 gallons
	4,433,210 cu. ft.

Considering factored precipitation, existing capacity meets estimated storage needs: [X] Yes [ ] No

D. STORAGE VOLUME ASSESSMENT (NORMAL PRECIPITATION WITH 1.5 FACTOR)



Values shown in chart are approximate values for storage period.

Storage period:	120 days
Barn wastewater, fresh flush water, and tailwater:	7,799,040 gallons/storage period
Manure and bedding sent to pond:	5,606,500 gallons/storage period
Precipitation onto pond:	7,695,740 gallons/storage period
Precipitation runoff:	9,665,190 gallons/storage period
25 year/24 hour storm onto pond:	1,498,392 gallons/storage period
25 year/24 hour storm runoff:	2,801,350 gallons/storage period
Residual solids after liquids have been removed (liquid equivalent):	317,330 gallons/storage period
Total process wastewater removed due to evaporation:	4,920,315 gallons/storage period
Total required capacity:	30,145,896 gallons/storage period
Total existing capacity:	33,162,714 gallons/storage period
Existing capacity meets estimated storage needs:	[X] Yes [ ] No

OPERATION AND MAINTENANCE PLAN

The goal of the Operation and Maintenance Plan is to eliminate discharges of waste or storm water to surface waters from the production area and the protection of underlying soils and ground water.

A. POND MAINTENANCE

i. FREEBOARD MONITORING

1. Freeboard will be monitored monthly from June 1 through September 1 (dry season) and weekly from October 1 through May 31 (wet season). The results will be recorded on a Dairy Production Area Visual Inspection Form.
2. Freeboard will be monitored during and after each significant storm event and the results recorded on a Production Area Significant Storm Event Inspection Form.
3. Ponds will be photographed on the first day of each month. Pond photos will be labeled and maintained with the dairy's monitoring records.

ii. PREPARATION FOR MAINTAINING WINTER STORAGE CAPACITY

1. The retention pond(s) will begin to be lowered to the minimum operating level on or before a designated date each year.
2. The minimum operating level will include the necessary storage volume as identified in Section II.A in Attachment B of the General Order.

iii. OTHER POND MONITORING

1. At the time of each monitoring for freeboard, the pond(s) will be inspected for evidence of excessive odors, mosquito breeding, algae, or equipment damage; and issues with berm integrity, including cracking, slumping, erosion, excess vegetation, animal burrows, and seepage. Any issues identified and corrective actions performed will be recorded on a Dairy Production Area Visual Inspection Form - Other Pond Monitoring.
2. At the time of each monitoring during and after each significant storm event, the ponds will be inspected for evidence of any discharge and issues with berm integrity, including cracking, slumping, erosion, excess vegetation, animal burrows, and seepage. Any issues identified and corrective actions performed will be recorded on a Production Area Significant Storm Event Inspection Form.

iv. SOLIDS REMOVAL PROCEDURES

1. The average thickness of the solids accumulated on the bottom of the pond(s) will be measured on the designated interval using the owner, operator, and/or designer specified procedure.
2. Once solids/sludge on the bottom of the pond(s) reach the owner, operator, and/or designer specified critical thickness, solids/sludge will be removed so that adequate capacity is maintained.
3. When necessary, solids/sludge will be removed using the owner, operator, and/or designer specified methods for protecting any pond liner.

OPERATIONS AND MAINTENANCE PLAN FOR POND: Pond 1

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 2.0 feet above the pond invert beginning in April of each year.

Sludge accumulation will be measured annually.

The following method will be used to measure solids/sludge accumulation:

Sludge accumulation should be measured at pond drawdown with a probe that can indicate sludge thickness

When solids/sludge accumulate to a thickness of 7.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

Water is added throughout the year to dilute solids. Solids can be transferred to SSB's 6-8 for drying or pumped out directly during irrigations. If necessary, storage can also be agitated and pumped into slurry wagons or directly excavated for Spring and/or Fall application. If excavation is required, cleaning equipment operator will be informed as to overall depth of storage and instructed to remain 6-12 inches from the floor.

OPERATIONS AND MAINTENANCE PLAN FOR POND: Pond 2

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 2.0 feet above the pond invert beginning in April of each year.

Sludge accumulation will be measured annually.

The following method will be used to measure solids/sludge accumulation:

Sludge accumulation should be measured at pond drawdown with a probe that can indicate sludge thickness.

When solids/sludge accumulate to a thickness of 4.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

Water is added throughout the year to dilute solids. Solids can be transferred to SSB's 6-8 for drying or pumped out directly during irrigations. If necessary, storage can also be agitated and pumped into slurry wagons or directly excavated for Spring and/or Fall application. If excavation is required, cleaning equipment operator will be informed as to overall depth of storage and instructed to remain 6-12 inches from the floor.

OPERATIONS AND MAINTENANCE PLAN FOR POND: SSB 4

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 0.0 feet above the pond invert beginning in April of each year.

Sludge accumulation will be measured annually.

The following method will be used to measure solids/sludge accumulation:

Sludge accumulation should be measured at pond drawdown with a probe that can indicate sludge thickness.

When solids/sludge accumulate to a thickness of 3.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

SSB is dewatered and solids are allowed to dry. Manure is then typically removed from the basin using a front end loader.

OPERATIONS AND MAINTENANCE PLAN FOR POND: SSB 6

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 0.0 feet above the pond invert beginning in April of each year.

Sludge accumulation will be measured annually.

The following method will be used to measure solids/sludge accumulation:

Sludge accumulation should be measured at pond drawdown with a probe that can indicate sludge thickness.

When solids/sludge accumulate to a thickness of 3.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

SSB is dewatered and solids are allowed to dry. Manure is then typically removed from the basin using a front end loader.

OPERATIONS AND MAINTENANCE PLAN FOR POND: SSB 7

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 0.0 feet above the pond invert beginning in April of each year.

Sludge accumulation will be measured annually.

The following method will be used to measure solids/sludge accumulation:

Sludge accumulation should be measured at pond drawdown with a probe that can indicate sludge thickness.

When solids/sludge accumulate to a thickness of 3.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

SSB is dewatered and solids are allowed to dry. Manure is then typically removed from the basin using a front end loader.

OPERATIONS AND MAINTENANCE PLAN FOR POND: SSB 8

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 0.0 feet above the pond invert beginning in April of each year.

Sludge accumulation will be measured annually.

The following method will be used to measure solids/sludge accumulation:

Sludge accumulation should be measured at pond drawdown with a probe that can indicate sludge thickness.

When solids/sludge accumulate to a thickness of 3.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

SSB is dewatered and solids are allowed to dry. Manure is then typically removed from the basin using a front end loader.

OPERATIONS AND MAINTENANCE PLAN FOR POND: SSB 3

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 0.0 feet above the pond invert beginning in April of each year.

Sludge accumulation will be measured annually.

The following method will be used to measure solids/sludge accumulation:

Sludge accumulation should be measured at pond drawdown with a probe that can indicate sludge thickness.

When solids/sludge accumulate to a thickness of 2.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

SSB is dewatered and solids are allowed to dry. Manure is then typically removed from the basin using a front end loader.

OPERATIONS AND MAINTENANCE PLAN FOR POND: SSB 5

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 0.0 feet above the pond invert beginning in April of each year.

Sludge accumulation will be measured annually.

The following method will be used to measure solids/sludge accumulation:

SSB is dewatered and solids are allowed to dry. Manure is then typically removed from the basin using a front end loader.

When solids/sludge accumulate to a thickness of 1.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

Sludge accumulation should be measured at pond drawdown with a probe that can indicate sludge thickness.

B. RAINFALL COLLECTION SYSTEM MAINTENANCE

i. Annually, rainfall collection systems will be assessed to ensure:

1. Conveyances are free of debris and operating within designer/manufacturer specifications.
2. Components are properly fastened according to designer/manufacturer specifications.
3. All downspouts and related infrastructure are connected to conveyances that divert water away from manured areas.
4. Water from the rainfall collection system(s) is diverted to an appropriate destination.

Buildings with rooftop rainfall collection systems	Quantity	Surface Area (sq. ft.)
Barn 1	1	72,879
Barn 10	1	58,607
Barn 11	1	8,752
Barn 12	1	4,428
Barn 13	1	12,938
Barn 14	1	1,100
Barn 15	1	19,704
Barn 16	1	19,483
Barn 19	1	14,785
Barn 2	1	21,737
Barn 3	1	32,811
Barn 4	1	58,178
Barn 5	1	10,639
Barn 6	1	12,325
Barn 7	1	10,115

Barn 8	1	29,331
Barn 9	1	125,459
Proposed Barn 19	1	26,750
Proposed Barns 17 and 18	2	149,800

Assessment for buildings with rooftop rainfall collection systems will occur on or before: 1st of October

Assessment for other rainfall collections systems will occur on or before: 1st of October

Description of how rainfall collection systems will be assessed:

Gutters and downspouts will be cleaned and repaired as needed to prevent unneeded overland flow of runoff.

C. CORRAL MAINTENANCE

i. Monthly from June 1st through September 30th (dry season) and weekly from October 1st through May 31st (wet season), the perimeter of the corrals and pens will be assessed to ensure that runon and runoff controls such as berms are functioning correctly, and that all water that contacts waste is collected and diverted into the wastewater retention pond(s). Any issues identified and corrective actions performed will be recorded on a Dairy Production Area Visual Inspection Form - Corrals.

ii. The corrals will be assessed by the designated date to determine:

1. Whether manure needs to be removed from the corrals based on the owner, operator, and/or designer specified conditions.

2. Whether there are depressions within the corrals that should be filled/groomed to prevent ponding.

iii. Removal of manure and/or regrading, when necessary, will be completed on or before the designated month/day of each year.

Day of the month dry season assessment will occur: 5th of each month

Day of the week wet season assessment will occur: Monday

Solid manure removal and regrading assessment will occur on or before: 1st of October

Conditions requiring manure removal and/or regrading:

Corral conditions should be assessed by October 1 of each year to allow the owner/operator the opportunity to regrade and add fill material to the corrals. The corrals should be graded to prevent accumulation of wastewater in the corrals for longer than 48 hours. Well maintained/scraped corrals should provide adequate drainage at 1% to 1 1/2% slope.

Solid manure removal and/or regrading will occur on or before: 1st of November

D. FEED STORAGE AREA MAINTENANCE

i. During the dry season and prior to the wet season, the perimeter of storage areas will be assessed to ensure all runon and runoff controls such as berms are functioning correctly and runoff and leachate from the areas are collected and diverted into the wastewater pond(s). Any issues identified and corrective actions performed will be recorded on a Dairy Production Area Visual Inspection Form - Manure and Feed Storage Areas.

ii. During the wet season, feed storage area(s) will be assessed to determine if there are depressions within any feed storage area that should be filled or repaired to prevent ponding.

iii. Any necessary regrading/resurfacing and berm/conveyance maintenance will be completed on an annual basis.

Day of the month dry season assessment will occur: 1st of each month

Day of the week wet season assessment will occur: Monday

Regrading/resurfacing and berm maintenance assessment will occur on or before: 1st of October

Regrading/resurfacing and berm maintenance completion will occur on or before: 1st of November

E. SOLID MANURE STORAGE AREA MAINTENANCE

i. During the dry season and prior to the wet season, the perimeter of manure storage areas will be assessed to ensure all runon and runoff controls such as berms are functioning correctly and runoff and leachate from the areas are collected and diverted into the wastewater pond(s). Any issues identified and corrective actions performed will be recorded on a Dairy Production Area Visual Inspection Form - Manure and Feed Storage Areas.

ii. During the wet season, manure storage area(s) will be assessed to determine if there are depressions within any manure storage area that should be filled to prevent ponding.

iii. Any necessary regrading/resurfacing and berm/conveyance maintenance will be completed on an annual basis.

Day of the month dry season assessment will occur: 1st of each month

Day of the month wet season assessment will occur: Monday

Regrading/resurfacing and berm maintenance assessment will occur on or before: 1st of October

Regrading/resurfacing and berm maintenance completion will occur on or before: 1st of November

F. ANIMAL HOUSING AND FLUSH WATER CONVEYANCE SYSTEM MAINTENANCE

i. A map will be attached that identifies critical points for monitoring the animal housing and flush water conveyance system to verify that water is being managed as identified in this Waste Management Plan. These points will be maintained at owner, operator, and/or designer specified intervals.

Animal housing area assessment will occur on or before: 1st of October

Animal housing drainage system maintenance will occur on or before: 1st of November

Animal housing area drainage system assessment and maintenance methods:

Debris is removed from flush lanes, drains, and corral drains as needed. Pumps are monitored daily. Corrals are regraded and soil is added as needed to insure drainage. The critical animal housing/flush conveyance points to monitor are all drains. These drains should be checked before every storm and during each flush event to insure that drain/conveyance clogging has not occurred.

G. MORTALITY MANAGEMENT

i. Dead animals will be stored, removed, and disposed of properly.

Rendering company or landfill name: Kows R Us

Rendering company or landfill telephone number: (559) 668-3805

H. ANIMALS AND SURFACE WATER MANAGEMENT

i. A system will be in place, monitored, and maintained to prevent animals from entering any surface waters when a stream or other surface water crosses or adjoins the corral(s).

Does a stream or any other surface water cross or adjoin the corrals? [ ] Yes [X] No

I. MONITORING SALT IN ANIMAL RATIONS

i. The combined quantity of minerals as salt in animal drinking water and feed rations will be reviewed by a qualified nutritionist on a routine basis to verify that minerals are limited to the amount required to maintain animal health and optimum production. As feed rations change, mineral content may change.

Assessment interval: Monthly

J. CHEMICAL MANAGEMENT

i. Chemicals and other contaminants handled at the facility will not be disposed of in any manure or process wastewater, storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants.

Chemical Name	Quantity	Units	Frequency	Usage Area	Destination (Used Chemical / Container)	Disposal Company Name	Disposal Company Phone	Collection Frequency
G.R. 100 chlorinated detergent	165	gallons	month	Milk Barn	Returned to supplier	TDR	(209) 667-6455	as needed
G.R. 200 CIP Acid Cleaner	65	gallons	month	Milk Barn	Returned to supplier	TDR	(209) 667-6455	as needed
HASA 12.5% Hypo Chloride	30	gallons	month	Milk Barn	Returned to supplier	TDR	(209) 667-6455	as needed

REQUIRED ATTACHMENTS

The following list, based upon user selections and data entries, describes the minimum required attachments that must be submitted with the Waste Management Plan for the reporting schedule of 'July 1, 2010'.

A. SITE MAP(S)

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of the features of the production area including the following in sufficient detail: structures used for animal housing, milk parlor, and other buildings; corrals and ponds; solids separation facilities (settling basins or mechanical separators); other areas where animal wastes are deposited or stored; feed storage areas; drainage flow directions and nearby surface waters; all water supply wells (domestic, irrigation, and barn wells) and groundwater monitoring wells.

Production area map reference number: Figures 2A & 2B

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of the features of all land application areas (land under the Discharger's control, 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) including the following in sufficient detail: a field identification system (Assessor's Parcel Number; field by name or number; total acreage of each field; crops grown; indication if each field is owned, leased, or used pursuant to a formal agreement); indication of what type of waste is applied (solid manure only, wastewater only, or both solid manure and wastewater); drainage flow direction in each field, nearby surface waters, and storm water discharge points; tailwater and storm water drainage controls; subsurface (tile) drainage systems (including discharge points and lateral extent); irrigation supply wells and groundwater monitoring wells; sampling locations for discharges of storm water and tailwater to surface water from the field.

Application area map reference number: Figure 3

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of all cropland (land that is part of the dairy but not used for dairy waste application) including the following in sufficient detail: Assessor's Parcel Number, total acreage, crops grown, and information on who owns or leases the field. The Waste Management Plan shall indicate if such cropland is covered under the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Order No. R5-2006-0053 for Coalition Group or Order No. R5-2006-0054 for Individual Discharger, or updates thereto).

Non-application area map reference number: NA

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of all off-property domestic wells within 600 feet of the production area or land application area(s) associated with the dairy and the location of all municipal supply wells within 1,500 feet of the production area or land application area(s) associated with the dairy.

Well area map reference number: Figures 2A, 2B & 3

Provide a site map (or maps) of appropriate scale to show property boundaries and a vicinity map, north arrow and the date the map was prepared. The map shall be drawn on a published base map (e.g., a topographic map or aerial photo) using an appropriate scale that shows sufficient details of all facilities.

Vicinity map reference number: Figure 1

B. PROCESS WASTEWATER MAP(S)

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of the features of the production area including the following in sufficient detail: process wastewater conveyance structures, discharge points, and discharge /mixing points with irrigation water supplies; pumping facilities and flow meter locations; upstream diversion structures, drainage ditches and canals, culverts, drainage controls (berms/levees, etc.), and drainage easements; and any additional components of the waste handling and storage system.

Production infrastructure system area map reference number: Figures 3a, 3b & 4

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of the features of all land application areas (land under the Discharger's control, 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) including the following in sufficient detail: 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.

Land application infrastructure system area map reference number: Figure 4

C. EXCESS PRECIPITATION CONTINGENCY REPORT

There were no attachment references entered or required for this attachment section.

D. OPERATION AND MAINTENANCE PLAN

Attach a map that identifies critical points for monitoring the system to verify that water is being managed as identified in this Waste Management Plan (see Attachment B, Pg B-7 V.F, V.G, and V.H for additional requirements).

Animal housing assessment map reference number: Figure 2A

E. FLOOD PROTECTION / INUNDATION REPORT

Provide a published flood zone map that shows the facility is outside the relevant flood zones.

Flood zone map and/or document reference number: 06099C0800E

F. BACKFLOW PROTECTION

Attach documentation from a trained professional (i.e. a person certified by the American Backflow Prevention Association, an inspector from a state or local governmental agency who has experience and/or training in backflow prevention, or a consultant with such experience and/or training), as specified in Required Reports and Notices H.1 of Waste Discharge Requirements General Order No. R5-2007-0035, that there are no cross-connections that would allow the backflow of wastewater into a water supply well, irrigation well, or surface water as identified on the Site Map.

Backflow documentation reference number: Backflow Certificate

Waste Management Plan Report
General Order No. R5-2007-0035, Attachment B
July 1, 2010 deadline

CERTIFICATION

A. DAIRY FACILITY INFORMATION

Name of dairy or business operating the dairy: Couco Creek Dairy Inc.

Physical address of dairy:

3303 S Washington RD	Turlock	Stanislaus	95380
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

B. DOCUMENTATION OF QUALIFICATIONS AND PLAN DEVELOPMENT

I have reviewed the portion of the waste management plan that is related to storage capacity facility and design specifications in accordance with Item II, Attachment B of the Waste Discharge Requirements General Order for Existing Milk Cow Dairies - Order No. R5-2007-0035 and certify that this plan was prepared by, or under the responsible charge of, and certified by a civil engineer who is registered pursuant to California law or other person as may be permitted under the provisions of the California Business and Professions Code to assume responsible charge of such work.

Storage capacity is:

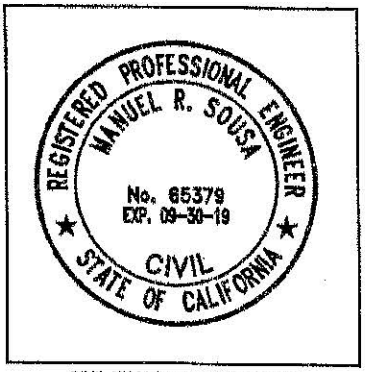
Insufficient

☐ Retrofitting Plan/Schedule/Design Criteria attached in accordance with Attachment B, II.B. 1-5 and Attachment B, II. C.

Sufficient

☒ Certification 1 - Certified in accordance with Attachment B, II. A. 1-8. (no contingency plan)

☐ Certification 2 - Certified in accordance with Attachment B, II. A. 1-8, II. C. (with contingency plan attached)



CIVIL ENGINEER'S WET STAMP

Digitally signed by Manny Sousa, PE
Date: 2018.04.20 08:26:20 -07'00'

4/20/2018

SIGNATURE OF CIVIL ENGINEER — DATE

Manuel Sousa
PRINT OR TYPE NAME

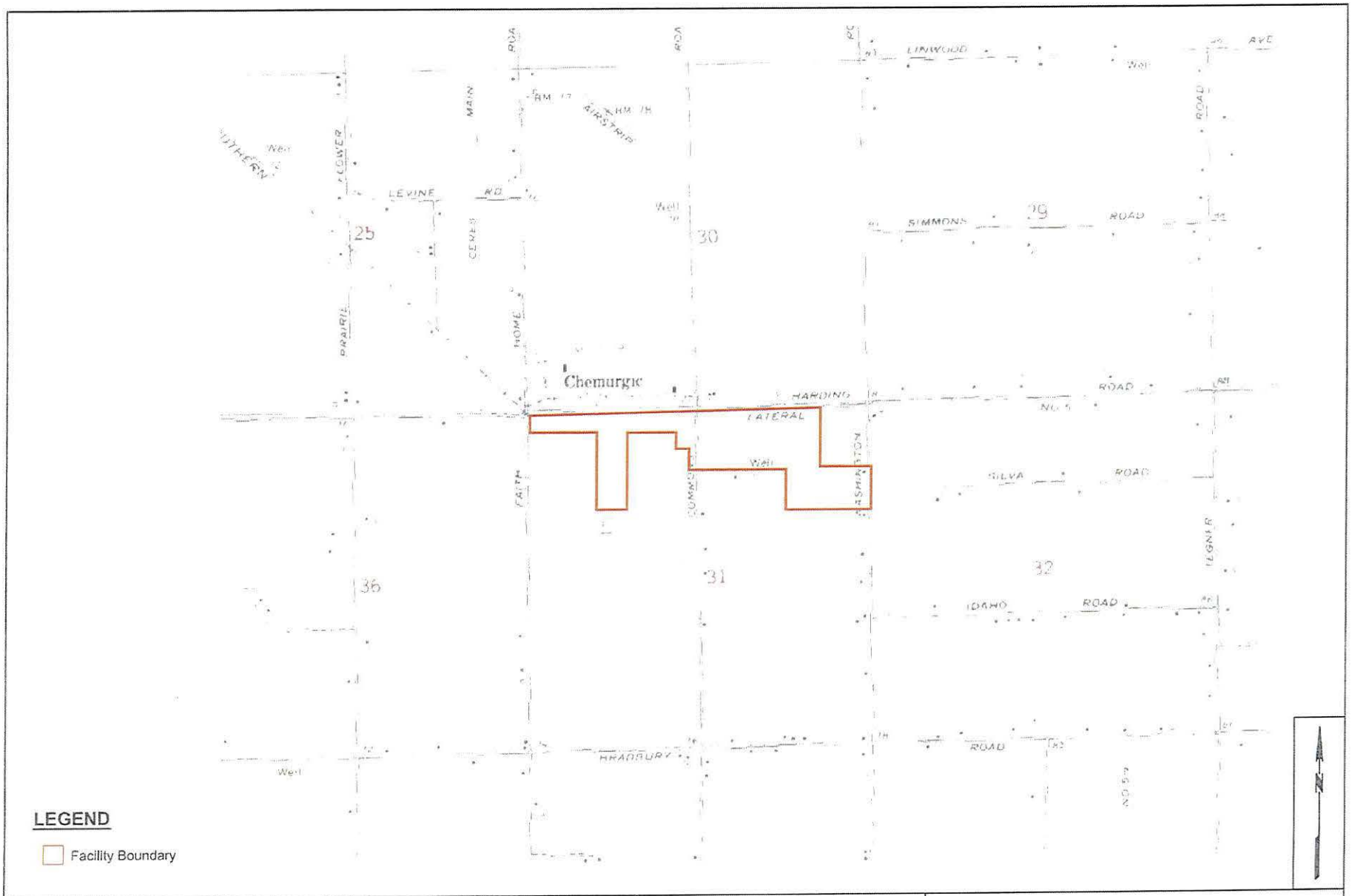
P.O. Box 1613; Oakdale, CA 95361
MAILING ADDRESS

(209) 238-3151
PHONE NUMBER

C. OWNER AND/OR OPERATOR 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.

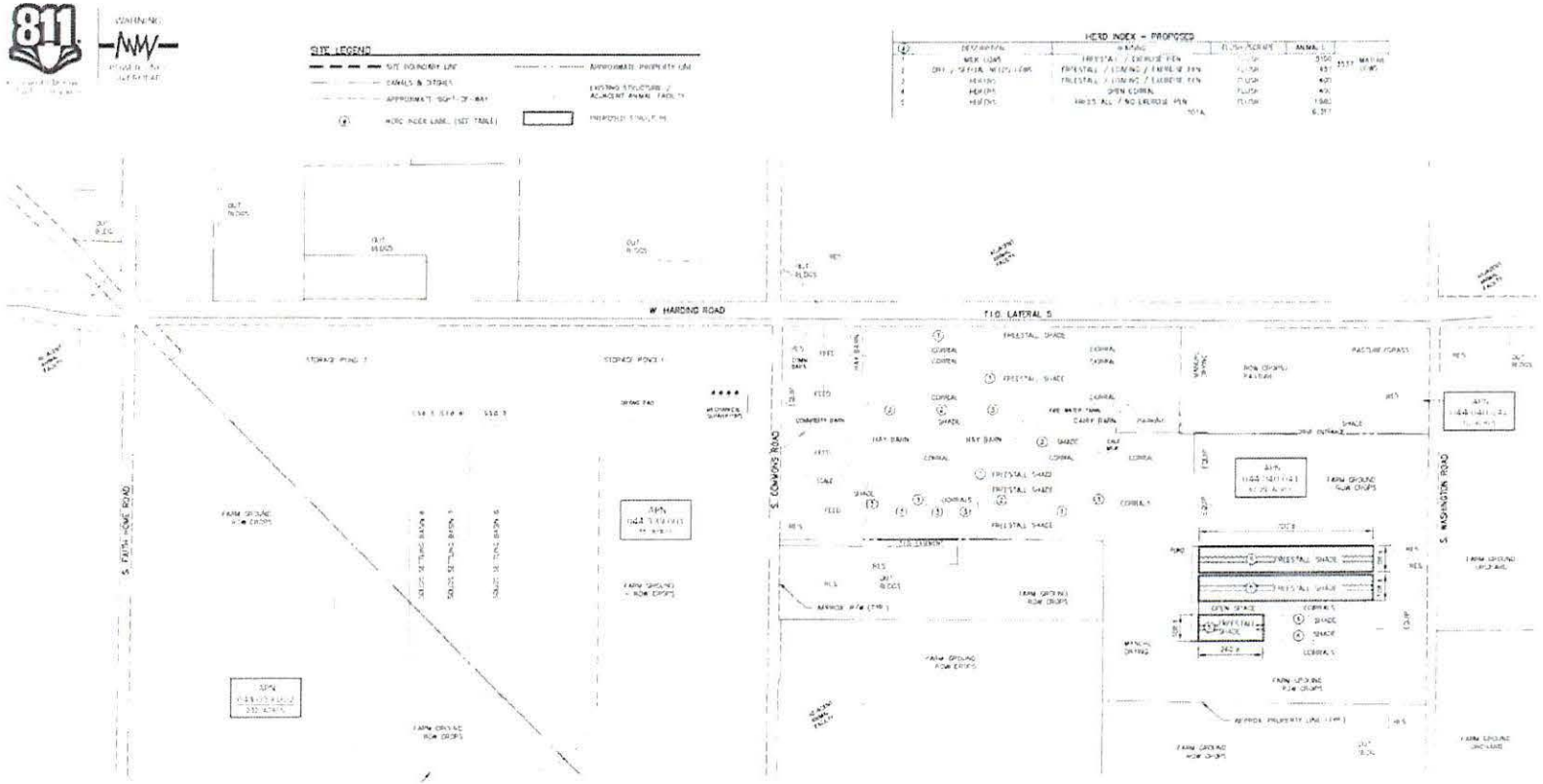
SIGNATURE OF OWNER	SIGNATURE OF OPERATOR
Tony Machado	
PRINT OR TYPE NAME	PRINT OR TYPE NAME
4/21/16	
DATE	DATE



LEGEND

Facility Boundary

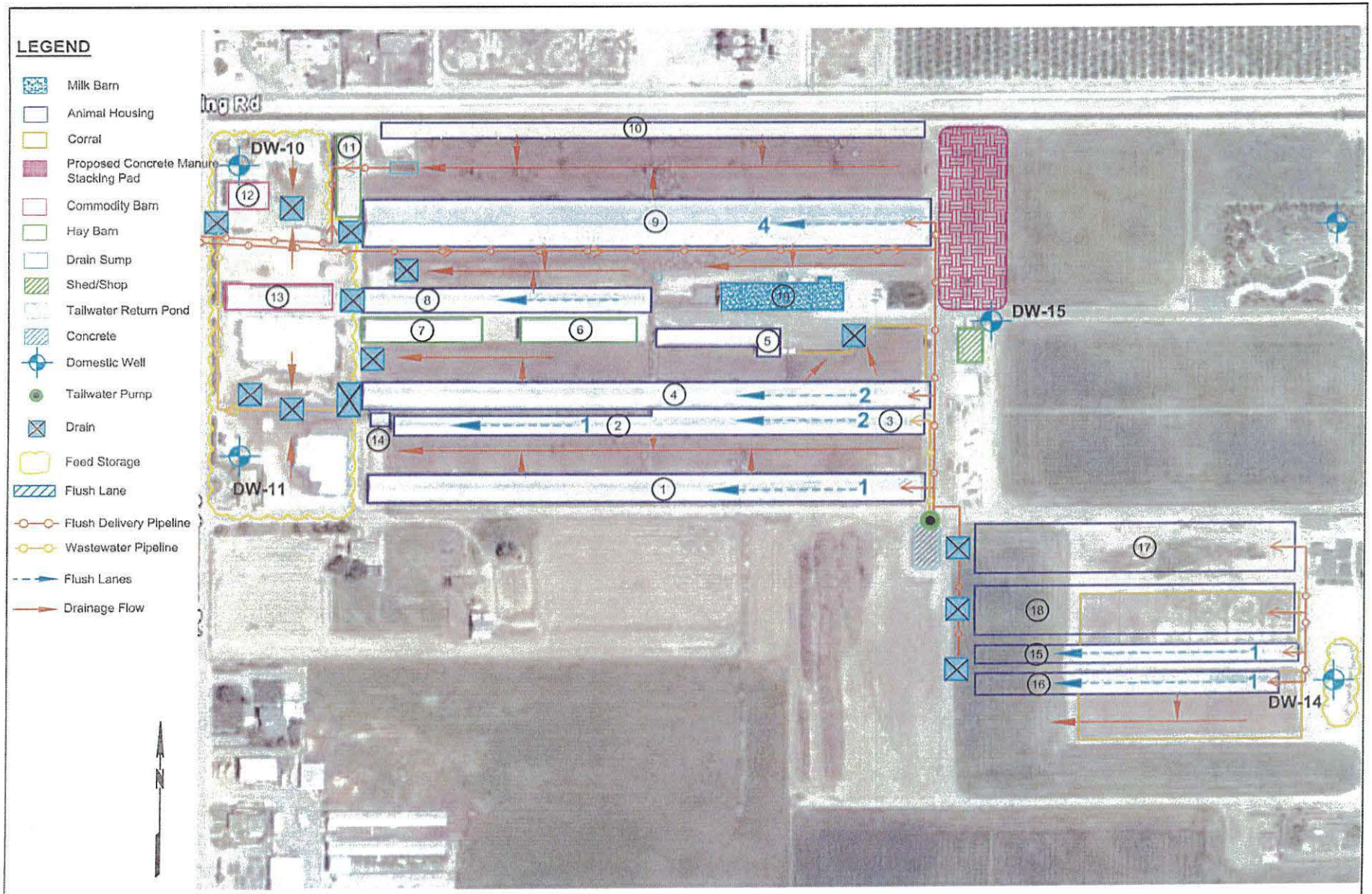
FR Ag Services, Inc.	SCALE: 0 4000 8000 APPROXIMATE SCALE IN FEET	COUCO CREEK DAIRY TURLOCK, CA			**FIGURE 1** TOPOGRAPHIC MAP
	PROJECT NO. FRA-00	DATE: 5/1/14	DRAWN BY: SB	APP. BY: JR	COUCO Creek topomap



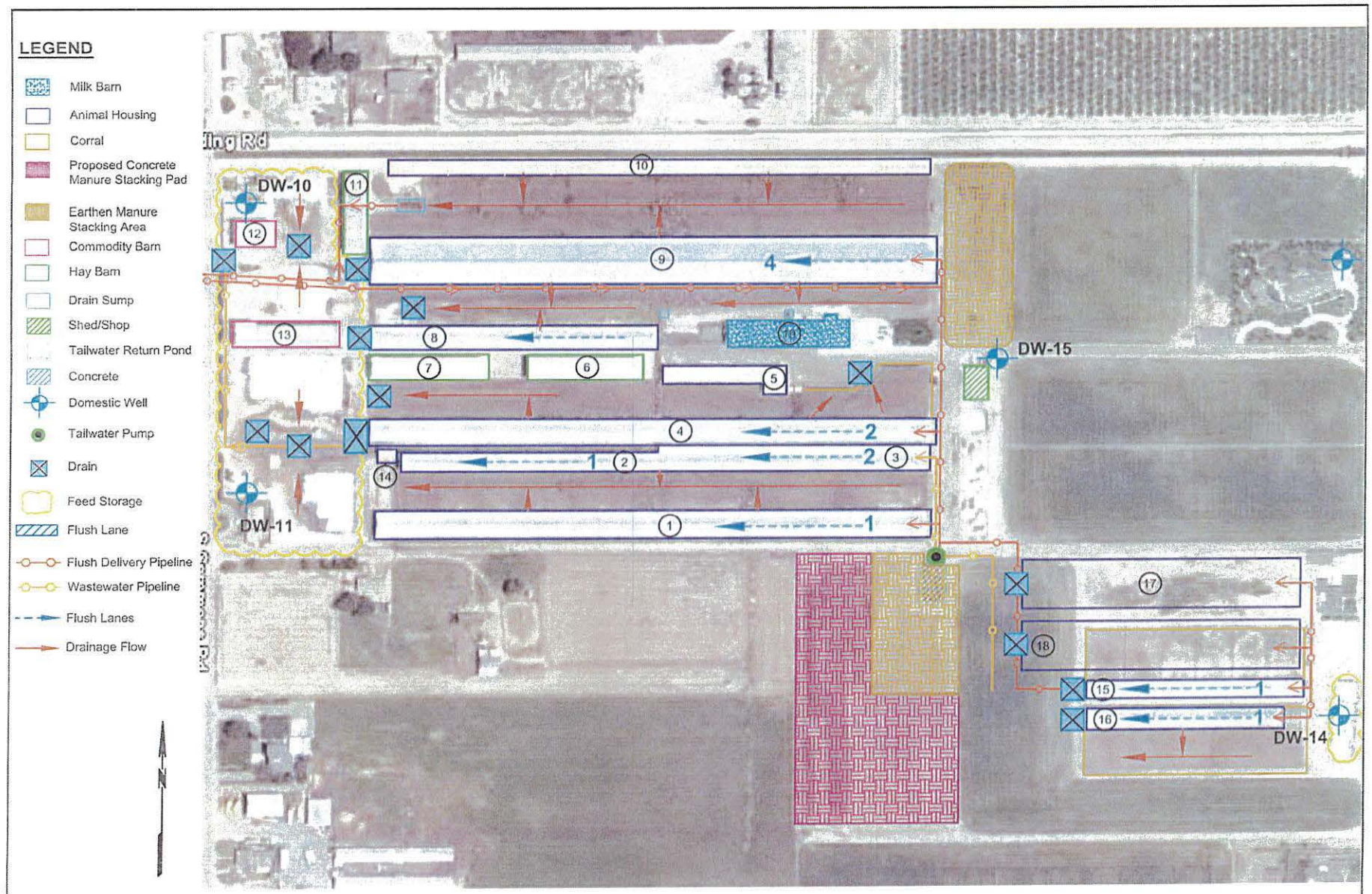
SCALE:			
0 700 1500 APPROXIMATE SCALE IN FEET	COUCO CREEK DAIRY TURLOCK, CA	**FIGURE 2** PROPOSED SITE PLAN	
PROJECT NO. FRA-00	DATE: 4/12/18	DRAWN BY: SB	APP. BY: JR

Ag Services, Inc.

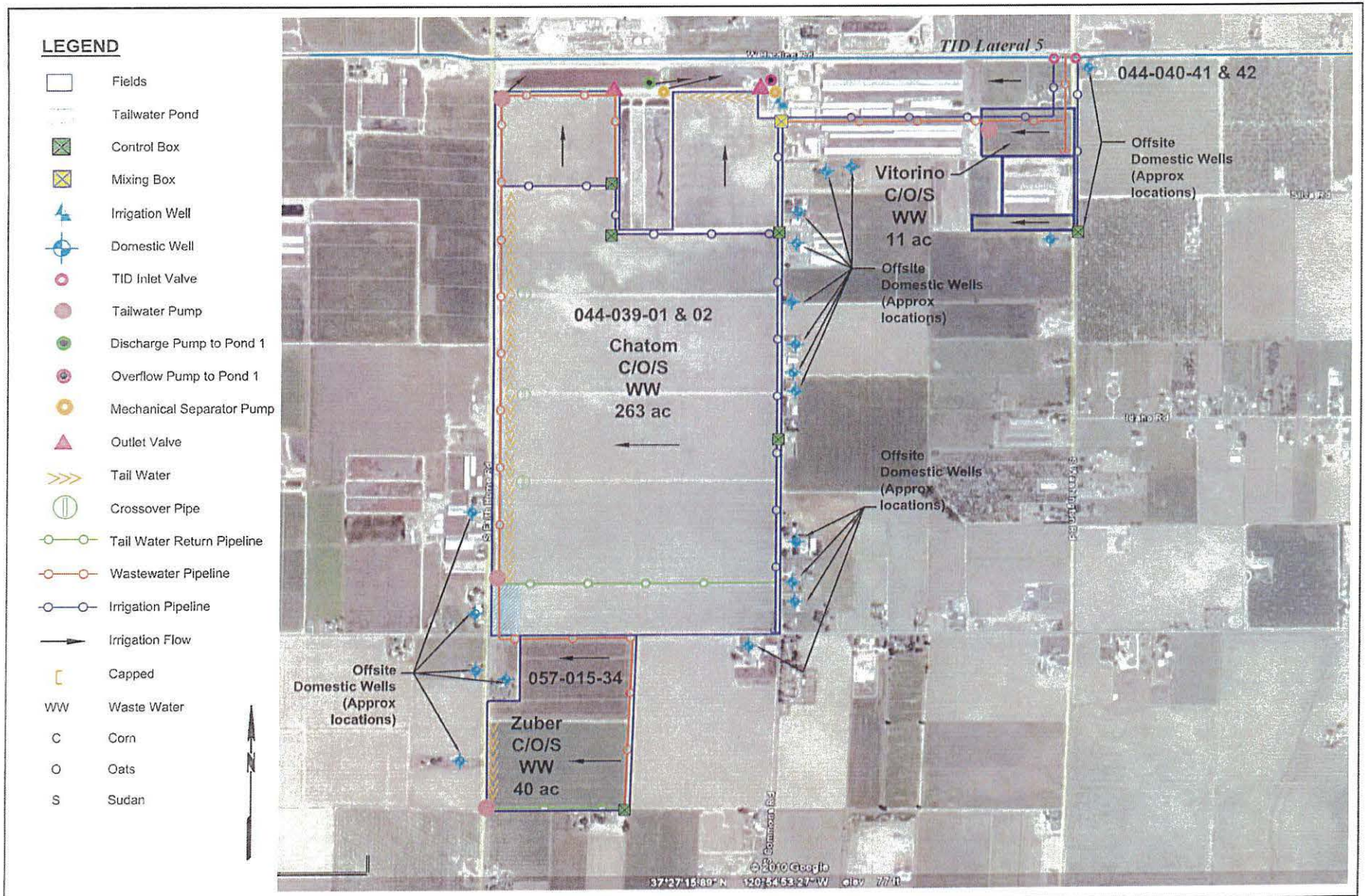
COUCO fields and Facility



Ag Services, Inc.	SCALE: 0 300 600 APPROXIMATE SCALE IN FEET	COUCO CREEK DAIRY TURLOCK, CA			**FIGURE 3A** DAIRY FACILITY
	PROJECT NO. FRA-00	DATE: 3/31/18	DRAWN BY: SB	APP. BY: JR	COUCO fields and Facility



Ag Services, Inc.	SCALE: 0 300 600 APPROXIMATE SCALE IN FEET	COUCO CREEK DAIRY TURLOCK, CA			**FIGURE 3B** DAIRY FACILITY
	PROJECT NO. FRA-00	DATE: 3/31/18	DRAWN BY: SB	APP. BY: JR	COUCO fields and Facility



Ag Services, Inc.

SCALE:

0 1200 2400

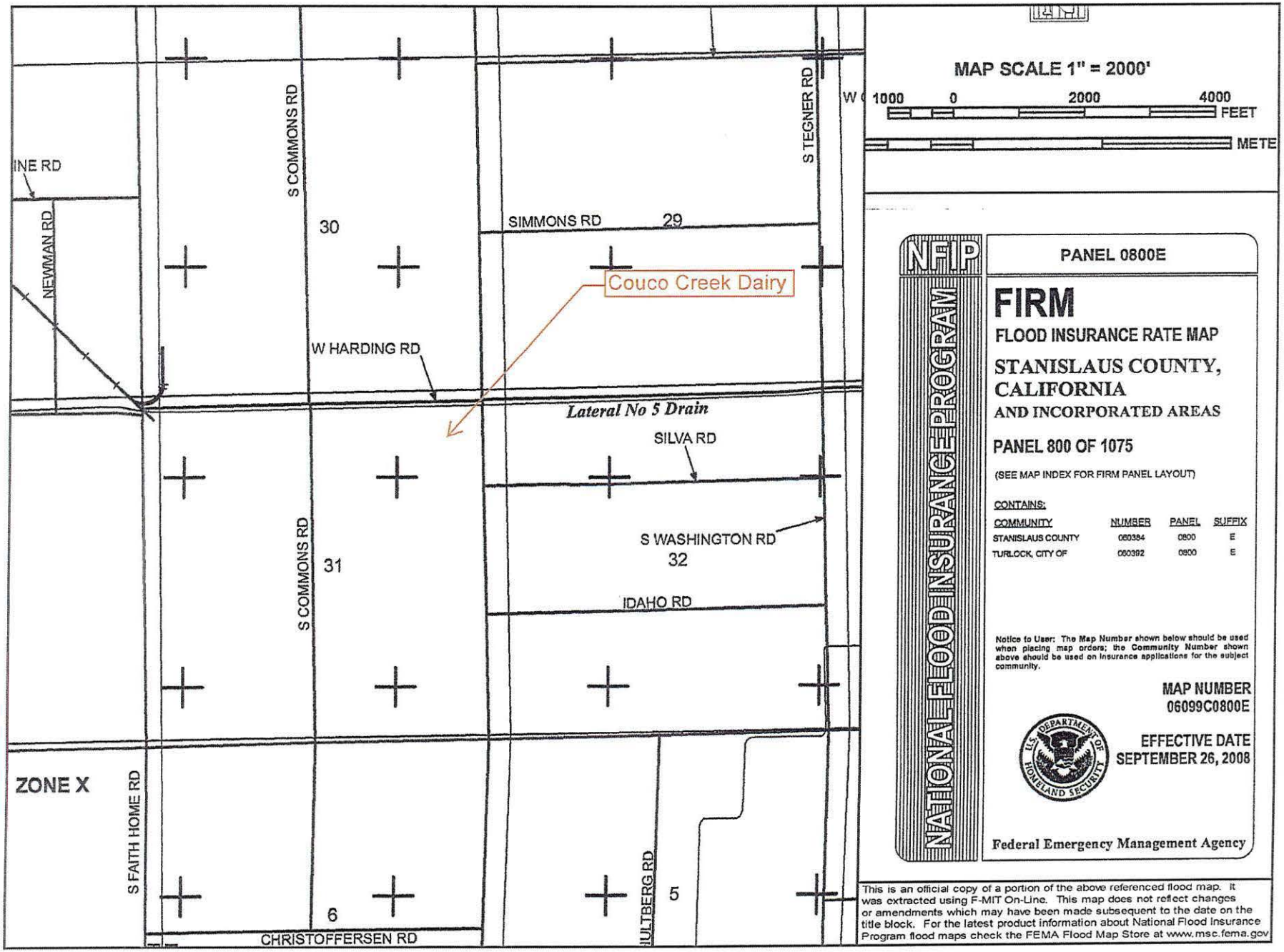
APPROXIMATE SCALE IN FEET

COUCO CREEK DAIRY
TURLOCK, CA

FIGURE 4
DAIRY FIELDS

PROJECT NO.	DATE:	DRAWN BY:	APP. BY:
FRA-00	3/31/18	SB	JR

COUCO fields and Facility


MAP SCALE 1" = 2000'
1000 0 2000 4000
FEET
METE
INE RD
NEWMAN RD
S COMMONS RD
30
SIMMONS RD
29
S TEGNER RD
Couco Creek Dairy
W HARDING RD
Lateral No 5 Drain
SILVA RD
S COMMONS RD
31
S WASHINGTON RD
32
IDAHO RD
ZONE X
S FAITH HOME RD
6
CHRISTOFFERSEN RD
ULTBERG RD
5
NATIONAL FLOOD INSURANCE PROGRAM
PANEL 0800E
FIRM
FLOOD INSURANCE RATE MAP
STANISLAUS COUNTY, CALIFORNIA
AND INCORPORATED AREAS
PANEL 800 OF 1075
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:
COMMUNITY NUMBER PANEL SUFFIX
STANISLAUS COUNTY 060384 0800 E
TURLOCK, CITY OF 060392 0800 E
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.
MAP NUMBER
06099C0800E
EFFECTIVE DATE
SEPTEMBER 26, 2008
Federal Emergency Management Agency
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

ATTACHMENT C:

UPDATED FACILITY MAPS

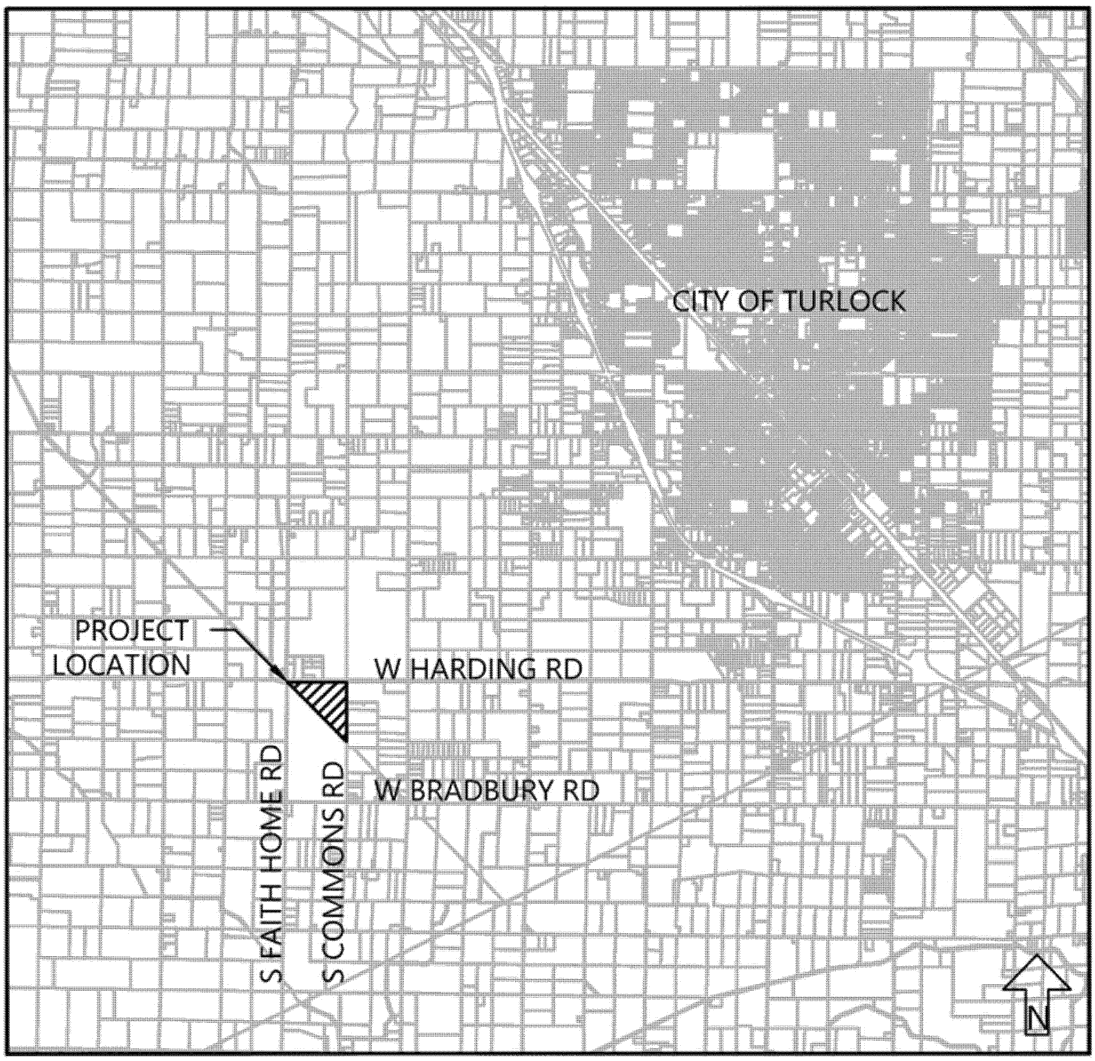


Figure 2: Vicinity Map

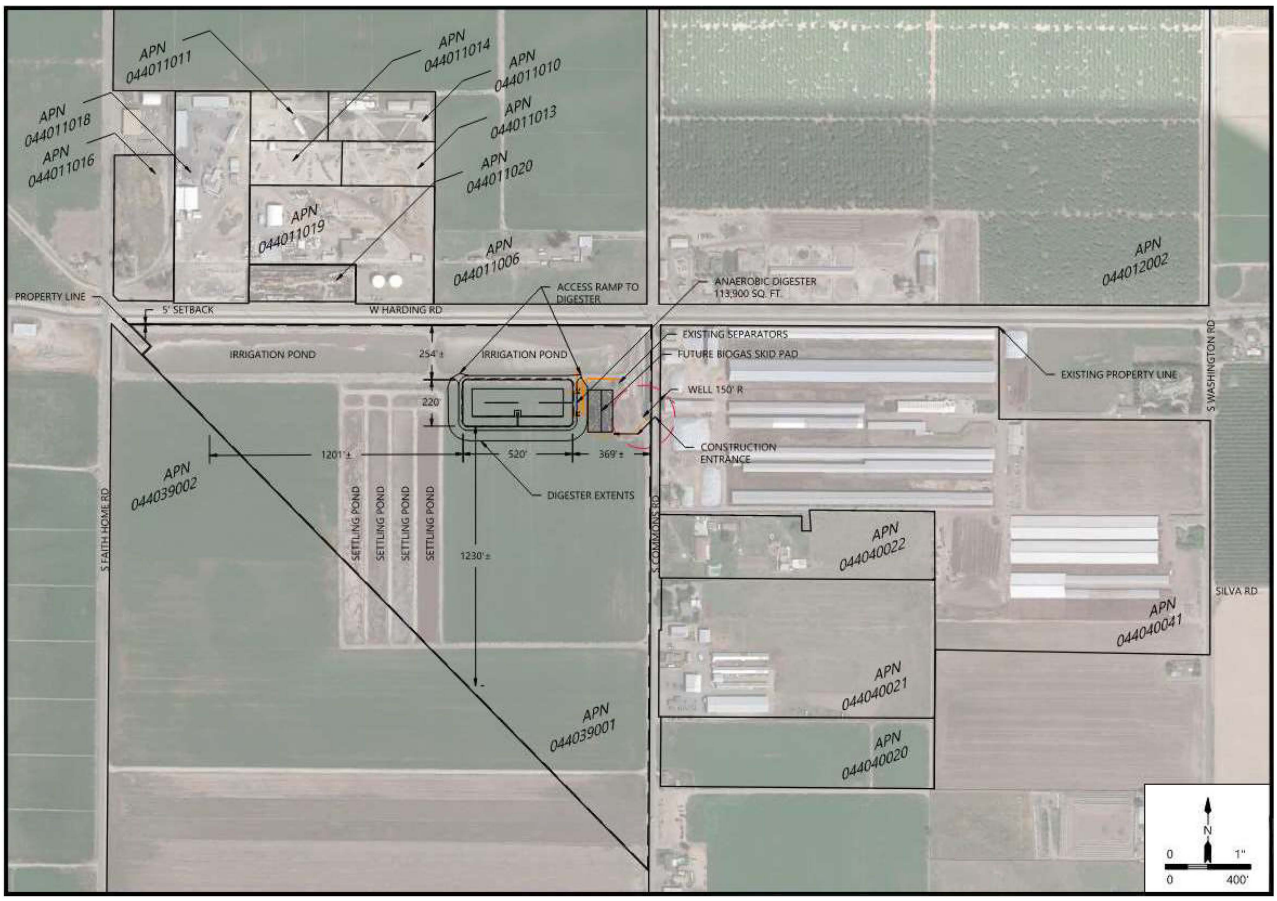


Figure 3: Waste Management Plan Modifications

ATTACHMENT D:

FLOOD STUDY

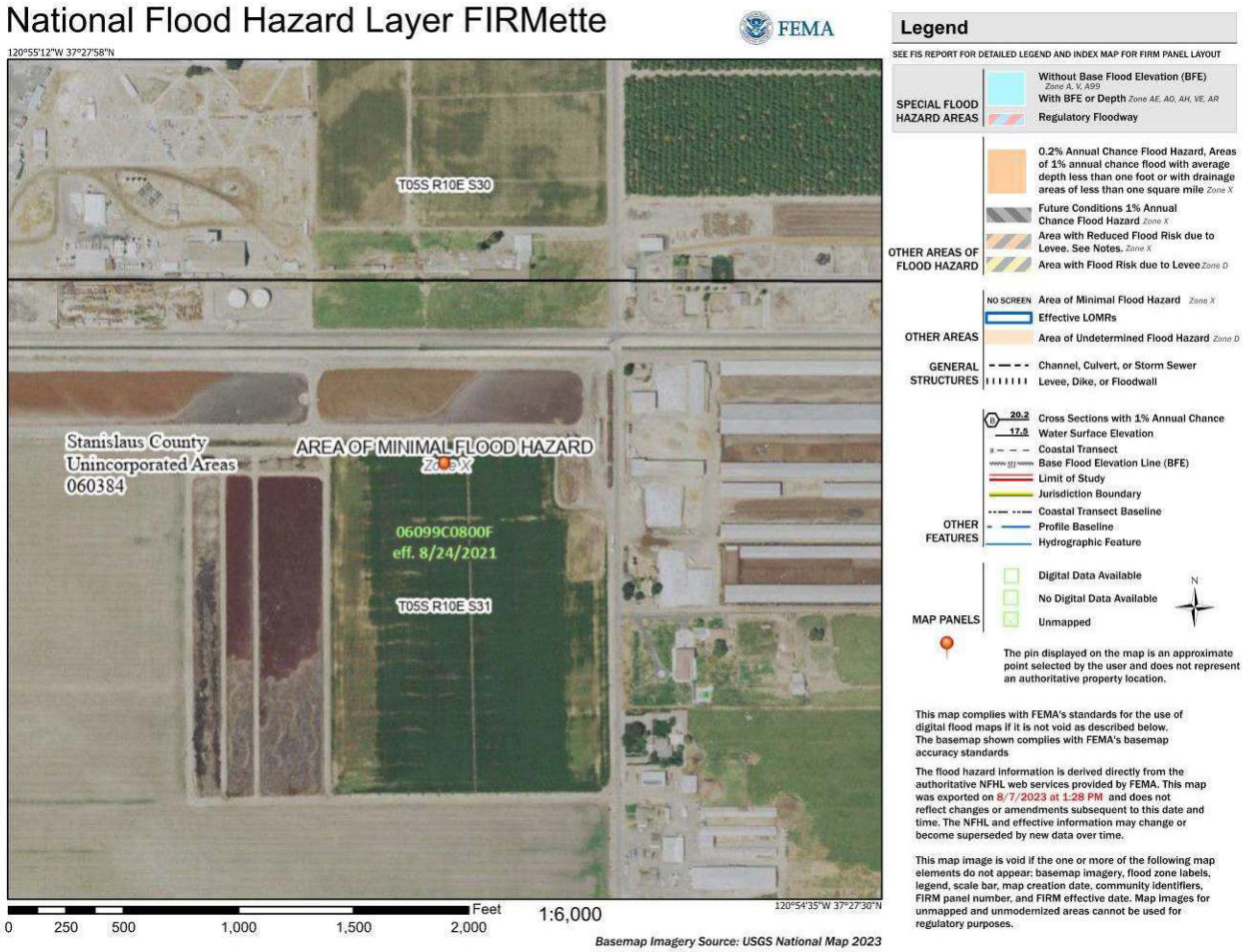


Figure 4: FEMA FIRMette Map