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## Staff Report to the Zoning Administrator

Application Number: **06-0077**

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**Applicant:** Collette Cassidy  
**Owner:** Ron Garthwaite  
**APN:** 050-031-29

**Agenda Date:** February 16, 2007  
**Agenda Item:** 0.2  
**Time:** After 8:30 a.m.  
**Continued from Jan. 19, 2007**

**Project Description:** Proposal to develop a commercial dairy with 60 cows and to construct a milking parlor of 2,777 square feet, free stall barn of approximately 7,000 square feet, hay barn of 1,024 square feet, composting barn of 7,120 square feet, interior remodel of the existing processing plant under Building Permit application 58573G, install a septic system, construct ~~corral~~ fencing and access driveway and parking improvements, and approximately 420 cubic yards of grading.

**Location:** Property located on the east side of Kliewer Lane, immediately south of Green Valley Road, at 345 Kliewer Lane in Watsonville.

**Supervisory District:** Second District (District Supervisor: Pine)

**Permits Required:** Commercial Agricultural Development Permit, Environmental Review, Preliminary Grading Approval.

### Staff Recommendation:

- Certification of the Mitigated Negative Declaration under the California Environmental Quality Act.
- Approval of Application 06-0077, based on the attached findings and conditions.

### Exhibits

- A. Project plans
- B. Findings
- C. Conditions
- D. Initial Study
- E. Correspondence from David Avila dated 23 May 2006

### Parcel Information

Parcel Size: 11.9 acres  
Existing Land Use - Parcel: Single-family residential, dairy  
Existing Land Use - Surrounding: Commercial agriculture, residential  
Project Access: Green Valley Road  
Planning Area: Pajaro Valley

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County of Santa Cruz Planning Department  
701 Ocean Street, 4<sup>th</sup> Floor, Santa Cruz CA 95060

Land Use Designation: A (Agriculture)  
Zone District: A (Agriculture)  
Coastal Zone:      Inside   X   Outside

### Environmental Information

Geologic Hazards: Mapped/no physical evidence on site  
Soils: Pinto loam, Watsonville loam  
Fire Hazard: Not a mapped constraint  
**Slopes:** 0-2 percent  
Env. Sen. Habitat: Not mapped/no physical evidence on site  
Grading: Approximately 420 cubic yards proposed  
Tree Removal: No trees proposed to be removed  
Scenic: Not a mapped resource  
Drainage: Existing drainage adequate  
Archaeology: Mapped/no physical evidence on site

### Services Information

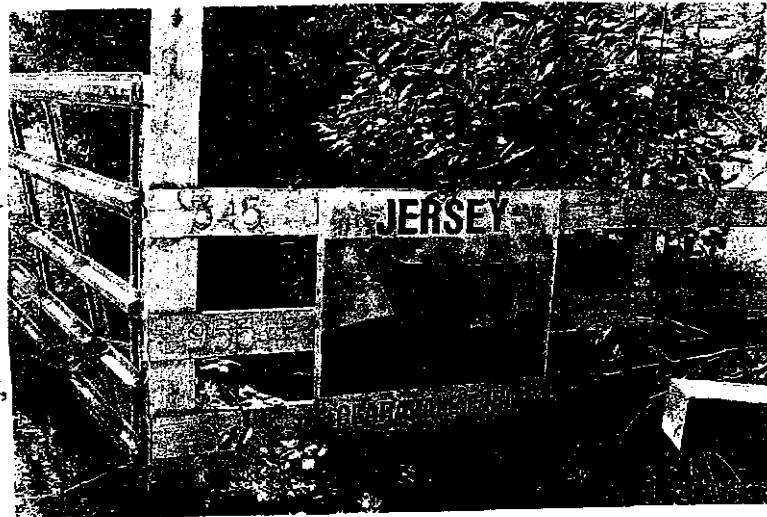
Urban/Rural Services Line:      Inside   X   Outside  
Water Supply: Private well  
Sewage Disposal: Private septic system  
Fire District: Pajaro Valley Fire Service Area  
Drainage District: Zone 7A

### History

A Commercial Development Permit **for** the dairy was approved as Application **97-0700** but was not exercised. A Building Permit for reconstruction of the **milk** processing building is in process as Application **585736**. An electrical **permit** for the septic system equipment functioning **has** been issued **as** Building Permit **145757**. The project was reviewed by the Environmental Coordinator on November **27,2006** and a Mitigated Negative Declaration was issued.

### Project Setting

The subject property is located on Kliever Lane, a private road, off Green Valley Road in Watsonville. The existing 11.9-acre farm site is developed with a 1,460 square foot single-family dwelling with a private well and septic system, cattle barn, milk processing barn, chicken coop, pond, orchard and vineyard. The parcel is surrounded by agricultural and rural residential uses to the north, east and west, and by a mobile home park and Pinto County Lake to the south.



Agriculture (A)	Front Setback	Side/rear setbacks	Height SFD	Height Ag bldgs
13.10.313	20 feet	20/20 feet	28 feet	40 feet
Proposed	120 feet	50/150 feet	20 feet	35 feet

Environmental review has been required for the proposed project per the requirements of the California Environmental Quality Act (CEQA). The project was reviewed by the County's Environmental Coordinator on November 27, 2007. A preliminary determination to issue a Negative Declaration with Mitigations (Exhibit D) was made on November 28, 2007. The mandatory public comment period expired on January 4, 2007, with no comments received.

The environmental review process focused on the potential impacts of the project in the areas of maintaining riparian setbacks, preserving drainage on site, and erosion control. The environmental review process generated mitigation measures that will reduce potential impacts from the proposed development and adequately address these issues.

## Conclusion

As proposed and conditioned, the project is consistent with all applicable codes and policies of the Zoning Ordinance and General Plan/LCP. Please see Exhibit "B" ("Findings") for a complete listing of findings and evidence related to the above discussion.

## Staff Recommendation

- Certification that the proposal is exempt **from** further Environmental Review under the California Environmental Quality Act.
- APPROVAL of Application Number **06-0077**, based on the attached findings and conditions.

Supplementary reports and information referred to in this report are on **file** and available for viewing at the Santa Cruz **County** Planning Department, and are hereby made a part of the administrative record for the proposed project.

The County Code and General Plan, as well as hearing agendas and additional information are **available** online at: [www.co.santa-cruz.ca.us](http://www.co.santa-cruz.ca.us)

Report Prepared By: Joan **Van** der Hoeven  
Santa Cruz County Planning Department  
701 Ocean Street, 4th Floor  
Santa Cruz CA 95060  
Phone Number: (831) 454-5174  
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## Development Permit Findings

1. That the proposed location of the project and the conditions under which it would be operated or maintained will not be detrimental to the health, safety, or welfare of persons residing or working in the neighborhood or the general public, and will not result in inefficient or wasteful use of energy, and will not be materially injurious to properties or improvements in the vicinity.

This finding can be made, in that the project is located in an area designated for commercial agriculture uses and is not encumbered by physical constraints to development. Construction for the farm buildings will comply with prevailing building technology, the Uniform Building Code, and the County Building ordinance to insure the optimum in safety and the conservation of energy and resources. The proposed commercial dairy will not deprive adjacent properties or the neighborhood of light, air, or open space, in that the structure meets all current setbacks that ensure access to light, air, and open space in the neighborhood.

Wastewater from the dairy is to be treated with an AdvanTex onsite wastewater treatment system (Exhibit A and Exhibit D, Initial Study, Attachment 13) which treats wastewater into clear, odorless effluent which is to be recycled on site to irrigate pasture. The Regional Water Quality Control Board has reviewed the system design and does not object to the design (Exhibit D, Attachment 11). Santa Cruz County Mosquito and Vector Control CSA 53 has reviewed and approved the dairy's plan (Initial Study, Exhibit D, Attachment 10). Odor from cattle manure is minimized as cattle are fed hay and grains rather than silage and all manure is composted and sold locally.

2. That the proposed location of the project and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the zone district in which the site is located.

This finding can be made, in that the proposed location of the commercial dairy and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the A (Agriculture) zone district in that the primary use of the property will be one commercial dairy that meets all current site standards for the zone district. The project is consistent with all requirements of the Environmental Health Service including an approved septic system and manure management plan. The project shall comply with all riparian setbacks from the existing pond as per County Code Section 16.30.040.

3. That the proposed use is consistent with all elements of the County General Plan and with any specific plan which has been adopted for the area.

This finding can be made, in that the proposed commercial agriculture use is consistent with the use and density requirements specified for the Agriculture (A) land use designation in the County General Plan.

The proposed Commercial dairy will not adversely impact the light, solar opportunities, air, and/or open space available to other structures or properties, and meets all current site and development standards for the zone district as specified in Policy 8.1.3 (Residential Site and Development Standards Ordinance), in that the commercial dairy will not adversely shade adjacent properties, and

will meet current setbacks for the zone district that ensure access to light, air, and open space in the neighborhood. The project has an approved vector control plan and manure management plan (Attachment 10, Initial Study document, Exhibit D). Limited grading of approximately 420 cubic yards is required for the milk parlor foundation, driveway enhancement and corrals (Exhibit A).

The proposed commercial dairy will not be improperly proportioned to the parcel size or the character of the neighborhood as specified in General Plan Policy 8.6.1 (Maintaining a Relationship Between Structure and Parcel Sizes), in that the proposed commercial dairy will comply with the site standards for the Agriculture (A) zone district (including setbacks and height) and will result in structures consistent with a design that could be approved on any similarly sized parcel in the vicinity.

The proposed project is consistent with General Plan Policy 5.13.13, Composting Agricultural Wastes, in that the composting of agricultural wastes and the use of composts in agricultural production, as a means of reducing irrigation water demand and reducing solid waste disposal requirements is implemented with the project.

A specific plan has not been adopted for this portion of the County.

4. That the proposed use will not overload utilities and will not generate more than the acceptable level of traffic on the streets in the vicinity.

This finding can be made, in that the proposed commercial dairy is to be constructed on an existing developed farm. The expected level of traffic generated by the proposed project is anticipated to be 13.85 trips per day (Exhibit E), such an increase will not adversely impact existing roads and intersections in the surrounding area. The intersection of Kliewer Lane and Green Valley Road is to be improved to a paved width of 18 feet for a distance of 90 feet as per Exhibit A.

5. That the proposed project will complement and harmonize with the existing and proposed land uses in the vicinity and will be compatible with the physical design aspects, land use intensities, and dwelling unit densities of the neighborhood.

This finding can be made, in that the proposed dairy with all related agricultural structures is located in a mixed neighborhood containing a variety of agricultural and residential uses, and the proposed commercial dairy is consistent with the land use intensity and density of the neighborhood.

6. The proposed development project is consistent with the Design Standards and Guidelines (sections 13.11.070 through 13.11.076), and any other applicable requirements of this chapter.

This finding can be made, in that the proposed commercial dairy will be of an appropriate scale and type of design that will enhance the aesthetic qualities of the surrounding properties and will not reduce or visually impact available open space in the surrounding area.

## Conditions of Approval

Exhibit **A** Project Plans, 9 Sheets by Western Dairy Design Associates Inc. dated 5-16-06, revised 10-18-06.

- I. This permit authorizes the construction of a commercial dairy including a lactating cow parlor, freestall barn, manure composting barn, hay storage, cattle corrals, parking and sewage system. Prior to exercising any rights granted by this permit including, without limitation, any construction or site disturbance, the applicant/owner shall:
  - A. Sign, date, and return to the Planning Department one copy of the approval to indicate acceptance and agreement with the conditions thereof.
  - B. Obtain a Building Permit from the Santa Cruz County Building Official. Building Permit Application 58573G for the milk processing building shall be obtained.
  - C. Obtain a Grading Permit from the Santa Cruz County Building Official.
  - D. Obtain an Encroachment Permit from the Department of Public Works for all off-site work performed in the County road right-of-way.
- II. Prior to issuance of a Building Permit the applicant/owner shall:
  - A. Submit proof that these conditions have been recorded in the official records of the County of Santa Cruz (Office of the County Recorder) within 30 days of project approval.
  - B. Submit final architectural plans for review and approval by the Planning Department. The final plans shall be in substantial compliance with the plans marked Exhibit "A" on file with the Planning Department. Any changes from the approved Exhibit "A" for this development permit on the plans submitted for the Building Permit must be clearly called out and labeled by standard architectural methods to indicate such changes. Any changes that are not properly called out and labeled will not be authorized by any Building Permit that is issued for the proposed development. The final plans shall include the following additional information:
    1. Identify finish of exterior materials and color of roof covering for Planning Department approval. Any color boards must be in 8.5" x 11" format.
    2. Grading, drainage, and erosion control plans. Prior to issuance of the grading permit a detailed erosion control plan shall be prepared which includes a clearing and grading schedule, clearly marked disturbance envelope, re-vegetation specifications, construction entry stabilization, and details of temporary drainage control and sediment barriers.
    3. Comply with all Public Works Drainage requirements. There shall be no increase in pre-development rates of runoff from the site and that post

development runoff will not exceed predevelopment runoff for a minimum 10 year storm. Best management practices shall be employed.

4. For any structure proposed to be within 2 feet of the maximum height limit for the zone district, the building plans must include a roof plan and a surveyed contour map of the ground surface, superimposed and extended to allow height measurement of all features. Spot elevations shall be provided at points on the structure that have the greatest difference between ground surface and the highest portion of the structure above. **This** requirement is in addition to the standard requirement of detailed elevations and cross-sections and the topography of the project site which clearly depict the total height of the proposed structure.
  5. Details showing compliance with Pajaro Valley Fire Service Area requirements, including installation of a fire hydrant on Kliever Lane and installation of a 5,000 gallon water tank.
  6. Comply with all Accessibility requirements for employee work areas and restrooms and areas open to the public.
  7. Fencing shall maintain a 100-foot setback from the pond to keep animals out of the riparian area.
  8. Paddocks shall not be located closer than 20 feet from adjacent property lines.
  9. A minimum 50-foot separation shall be maintained between structures used for human habitation and structures used for livestock.
- C. Submit four copies of the approved Discretionary Permit with the Conditions of Approval attached. The Conditions of Approval shall be recorded prior to submittal, if applicable.
- D. Meet all requirements of and pay Zone 7A drainage fees to the County Department of Public Works, Drainage. Drainage fees will be assessed on the net increase in impervious area.
- E. Obtain an Environmental Health Clearance for this project from the County Environmental Health **Service**, including approval of the manure management plan.
- F. Meet all requirements and pay any applicable plan check fee of the Pajaro Valley Fire Service District.
- G. Provide required off-street parking for five cars. Parking spaces must be 8.5 feet wide by 18 feet long and must be located entirely outside vehicular rights-of-way. Parking must be clearly designated on the plot plan.



- III. All construction shall be performed according to the approved plans for the Building Permit. Prior to final building inspection, the applicant/owner must meet the following conditions:
- A. All site improvements shown on the final approved Building Permit plans shall be installed.
  - B. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official.
  - C. The project must comply with all recommendations of the approved soils reports.
  - D. Pursuant to Sections 16.40.040 and 16.42.100 of the County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this development, any artifact **or** other evidence of an historic archaeological resource or a Native American cultural site is discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the Sheriff-Coroner if the discovery contains human remains, or the Planning Director if the discovery contains no human remains. The procedures established in Sections 16.40.040 and 16.42.100, shall **be** observed.
  - E. Klierer Lane shall be paved to a width of 18-feet for a distance of 90 feet from the intersection with Green Valley Road
- IV. Operational Conditions
- A. In the event that future County inspections of the subject property disclose noncompliance with **any** Conditions of this approval or any violation of the County Code, the owner shall pay to the County the full cost **of** such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.
  - B. Implement the approved mosquito and vector control plan approved by the County CSA 53. No *Gambusia affinis* (Mosquito Fish) are to be used in the pond for mosquito control.
  - C. Comply with all requirements of the Environmental Health **Service** approved manure management plan and **written** documentation that the AdvanTex water treatment system is adequately sized to process all wastewater, floor washing and storm water runoff.
  - D. Comply with all requirements of the California Regional Water Resources Control Board for confined animal facilities and waste discharge requirements.

#### IV. Mitigation Monitoring Program

The mitigation measures listed under this heading have been incorporated in the conditions of approval for **this** project in order to mitigate or avoid significant effects on the environment. As required, by Section 21081.6 of the California Public Resources Code, a monitoring and reporting program for the above mitigation is hereby adopted as a condition of approval for this project. This program is specifically described following each mitigation measure listed below. The purpose of this monitoring is to ensure compliance with the environmental mitigations during project implementation and operation. Failure to comply with the conditions of approval, including the terms of the adopted monitoring program, may result in permit revocation pursuant to section 18.10.462 of the Santa Cruz County Code.

##### A. Mitigation Measure: Riparian setback (Condition II.B.7)

Monitoring Program: In order to mitigate potential impacts to water quality and riparian vegetation and to comply with the General Plan, fencing shall be installed to keep animals out of the 100-foot setback around the existing pond. **An** exception to the setback is the controlled movement of **the** animals along the path at the south end of the pond when they are moving between the corrals and the milking/processing facility.

##### B. Mitigation Measure: Water quality and drainage control (Conditions II.B.3, IIE)

1. Monitoring Program: To protect water quality and ensure proper drainage control:
  - a. The drainage plan shall show all processing waste water, floor washing, and storm water runoff shall be channeled into the Advantex water treatment system, along with written documentation from the Environmental Health Service that the system is adequately sized to accommodate that volume.
  - b. Plans shall demonstrate that clean roof runoff routed to the existing pond is consistent with Public Works drainage calculations that show the pond is adequately sized to receive runoff associated with a **minimum** 10-year storm.
  - c. Provide calculations for the review and approval of the Department of Public Works drainage staff that demonstrate that post development runoff will not exceed pre development runoff for a **minimum** 10 year storm.

##### C. Mitigation Measure: Erosion Control (Condition IIB.2).

1. Monitoring Program: In order to prevent erosion and sedimentation the applicant shall prepare a detailed erosion control plan for review and approval by Environmental Planning staff prior to issuance of a grading permit. The plan shall include a clearing and grading schedule, clearly marked disturbance envelope, revegetation specifications, construction entry stabilization, and details of temporary drainage control and sediment barriers.

- V. As a condition of this development approval, the holder of this development approval (“Development Approval Holder”), is required to defend, indemnify, and hold harmless the COUNTY, its officers, employees, and agents, from and against any claim (including attorneys’ fees), against the COUNTY, its officers, employees, and agents to attack, set aside, void, or annul this development approval of the COUNTY or any subsequent amendment of this development approval which is requested by the Development Approval Holder.
- A. COUNTY shall promptly notify the Development Approval Holder of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. COUNTY shall cooperate fully in such defense. If COUNTY fails to notify the Development Approval Holder within sixty (60) days of any such claim, action, or proceeding, or fails to cooperate fully in the defense thereof, the Development Approval Holder shall not thereafter be responsible to defend, indemnify, or hold harmless the COUNTY if such failure to notify or cooperate was significantly prejudicial to the Development Approval Holder.
- B. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:
1. COUNTY bears its own attorney’s fees and costs; and
  2. COUNTY defends the action in good faith.
- C. Settlement. The Development Approval Holder shall **not** be required to pay or perform any settlement unless such Development Approval Holder has approved the settlement. When representing the County, the Development Approval Holder shall not enter into **any** stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the County.
- D. Successors Bound. “Development Approval Holder” shall include the applicant and the successor(s) in interest, transferee(s), and assign(s) of the applicant.

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Minor variations to *this* permit which do not affect the overall concept or density may be approved by the Planning Director at the request of the applicant or staff in accordance with Chapter 18.10 of the County Code.

**Please note: This permit expires on the expiration date listed below unless you obtain the required permits and commence construction.**

Approval Date: \_\_\_\_\_

Effective Date: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

Application # 06-0077  
APN: 050-031-29  
Owner: Ron Garthwaite

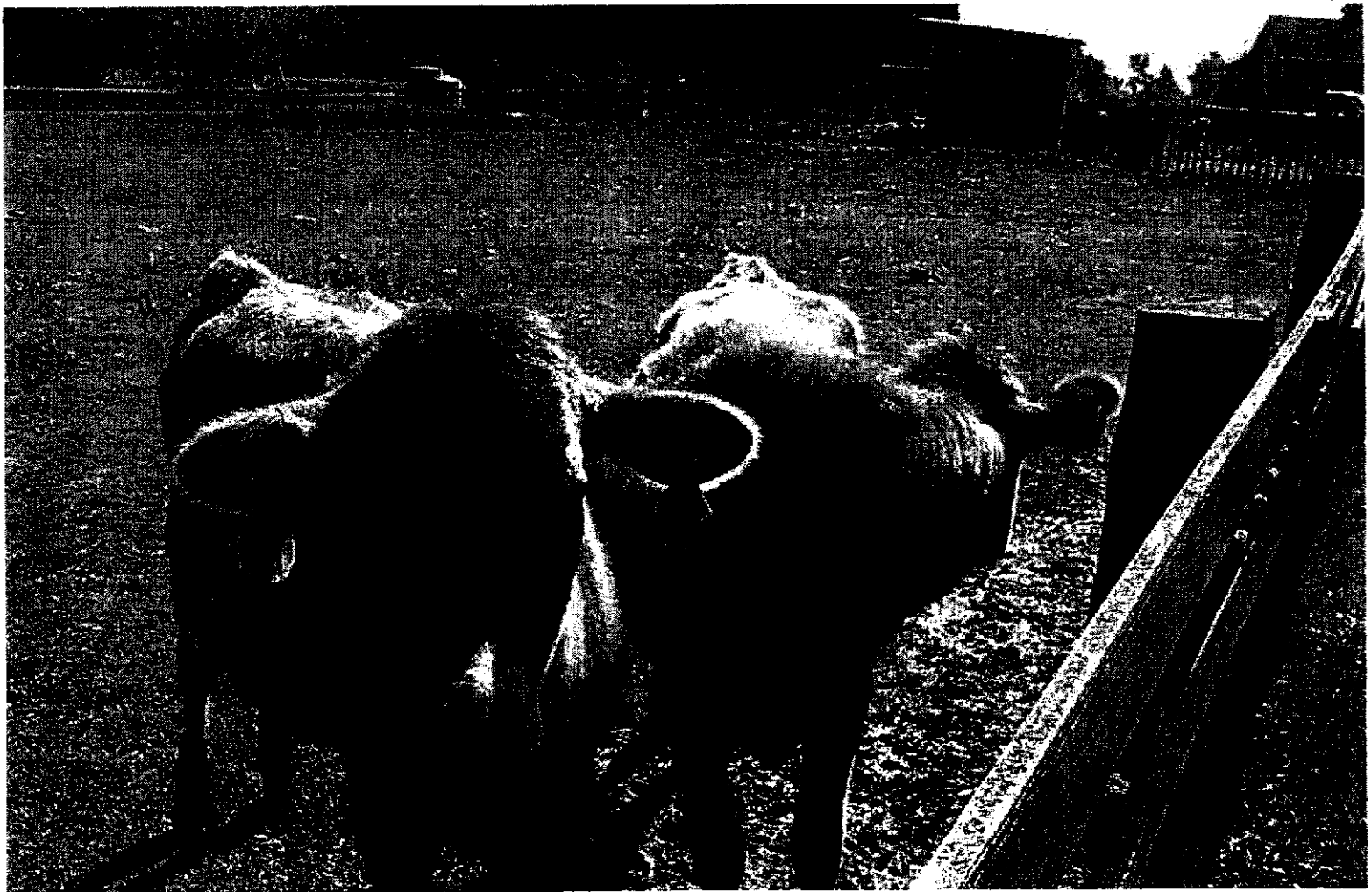
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**Don Bussey**  
**Deputy Zoning Administrator**

**Joan Van der Hoeven**  
**Project Planner**

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**Appeals: Any property owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Zoning Administrator, may appeal the act or determination to the Planning Commission in accordance with chapter 18.10 of the Santa Cruz County Code.**





# COUNTY OF SANTA CRUZ

## PLANNING DEPARTMENT

701 OCEAN STREET, 4<sup>TH</sup> FLOOR, SANTA CRUZ, CA 95060  
(831)454-2580 FAX: (831)454-2131 TDD: (831)454-2123

TOM BURNS, PLANNING DIRECTOR

### NOTICE OF ENVIRONMENTAL REVIEW PERIOD

#### SANTA CRUZ COUNTY

APPLICANT: Collette Cassidy, for Ron Garthwaite

APPLICATION NO.: 06-0077

APN: 050-031-29

The Environmental Coordinator has reviewed the Initial Study for your application and made the following preliminary determination:

XX Negative Declaration

(Your project will not have a significant impact on the environment.)

XX Mitigations will be attached to the Negative Declaration.

\_\_\_\_\_ No mitigations will be attached

\_\_\_\_\_ Environmental Impact Report

(Your project may have a significant effect on the environment. An EIR must be prepared to address the potential impacts.)

As part of the environmental review process required by the California Environmental Quality Act (CEQA), this is your opportunity to respond to the preliminary determination before it is finalized. Please contact Paia Levine, Environmental Coordinator at (831) 454-3178, if you wish to comment on the preliminary determination. Written comments will be received until 5:00 p.m. on the last day of the review period.

Review Period Ends: **January 4, 2007**

Joan Van der Hoeven

Staff Planner

Phone: 454-5174

Date: November 28, 2006

NAME: Western Dairy Design for Garthwaite and Cassidy  
APPLICATION: 06-0077  
A.P.N: 050-031-29

### **NEGATIVE DECLARATION MITIGATIONS**

1. In order to mitigate potential impacts to water quality and riparian vegetation and to comply with the General Plan, prior to the public hearing the applicant shall revise the plans to show fencing that will keep animals out of the 100 foot setback around the existing pond. An exception to the setback is the controlled movement of the animals along the path at the south end of the pond when they are moving between the corrals and the milking/processing facility.
2. In order to mitigate potential impacts to water quality and to ensure proper control of drainage, prior to the scheduling the public hearing the applicant shall:
  - a. Provide a drainage plan that shows all processing waste water, floor washing, and storm water run off being channeled into the Advantex water treatment system, along with written documentation from the Environmental Health Services Department that the system is adequately sized to accommodate that volume.
  - b. Alternatively, the plan may show that clean roof runoff is routed to the existing pond if the Department of Public Works drainage staff reviews and accepts calculations that show the pond has adequate capacity to receive run off associated with a minimum 10 year storm.
  - c. Provide calculations for the review and approval by Department of Public Works drainage staff that demonstrate that post development runoff will not exceed pre development runoff for a minimum 10 year storm.
3. In order to prevent erosion and sedimentation the applicant shall prepare a detailed erosion control plan for review and approval by Environmental Planning staff prior to issuance of a grading permit. The plan shall include a clearing and grading schedule, clearly marked disturbance envelope, revegetation specifications, construction entry stabilization, details of temporary drainage control and sediment barriers.



# Environmental Review Initial Study

Application Number: **06-0077**

**Date:** November 27, 2006  
**Staff Planner:** Joan Van der Hoeven

## **I. OVERVIEW AND ENVIRONMENTAL DETERMINATION**

**APPLICANT:** Collette Cassidy                      **APN:** 050-031-29

**OWNERS:** Ron Garthwaite, C. Cassidy              **SUPERVISORAL DISTRICT:** Second

**LOCATION:** Property located on the east side of Kliewer Lane, about 1600 feet south of the intersection of Pioneer Road and Green Valley Road, at 345 Kliewer Lane in Watsonville.

**SUMMARY PROJECT DESCRIPTION:** Proposal to develop a commercial dairy with 60 cows and to construct a milking parlor of 2,777 square feet, free stall barn of approximately 7,000 square feet, hay barn of 1,024 square feet, composting barn of 7,120 square feet, interior remodel of the existing processing plant under a separate building permit, install septic system, construct corral fencing and access driveway and parking improvements, and approximately 420 cubic yards of grading. Requires a Commercial Development Permit, Environmental Review, and Preliminary Grading Approval.

(The project was previously approved as Application #97-0700 but was not exercised).

**ALL OF THE FOLLOWING POTENTIAL ENVIRONMENTAL IMPACTS ARE EVALUATED IN THIS INITIAL STUDY. CATEGORIES THAT ARE MARKED HAVE BEEN ANALYZED IN GREATER DETAIL BASED ON PROJECT SPECIFIC INFORMATION.**

- |  |   |
|--|---|
| <input type="checkbox"/> Geology/Soils                                   | <input type="checkbox"/> Noise                              |
| <input checked="" type="checkbox"/> Hydrology/Water Supply/Water Quality | <input type="checkbox"/> Air Quality                        |
| <input type="checkbox"/> Biological Resources                            | <input type="checkbox"/> Public Services & Utilities        |
| <input type="checkbox"/> Energy & Natural Resources                      | <input type="checkbox"/> Land Use, Population & Housing     |
| <input type="checkbox"/> Visual Resources & Aesthetics                   | <input type="checkbox"/> Cumulative Impacts                 |
| <input type="checkbox"/> Cultural Resources                              | <input type="checkbox"/> Growth Inducement                  |
| <input type="checkbox"/> Hazards & Hazardous Materials                   | <input type="checkbox"/> Mandatory Findings of Significance |

County of Santa Cruz Planning Department  
701 Ocean Street, 4<sup>th</sup> Floor, Santa Cruz CA 95060

\_\_\_\_\_ Transportation/Traffic

**DISCRETIONARY APPROVAL(S) BEING CONSIDERED**

General Plan Amendment	✓	Grading Permit
Land Division		Riparian Exception
Rezoning		Other:
✓ Development Permit	_____	
Coastal Development Permit	_____	

**NON-LOCAL APPROVALS**

Other agencies that must issue permits or authorizations:

**ENVIRONMENTAL REVIEW ACTION**


On the basis of this Initial Study and supporting documents:

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

✓ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the attached mitigation measures have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.

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

  
\_\_\_\_\_  
Paia Levine

  
\_\_\_\_\_  
Date

For: Ken Hart  
Environmental Coordinator



## II. BACKGROUND INFORMATION

### EXISTING SITE CONDITIONS

Parcel Size: 11.9 acres  
Existing Land Use: agriculture, single-family dwelling  
Vegetation: grasses, fruit trees  
Slope in area affected by project: ✓ 0 - 30%  
Nearby Watercourse: Ephemeral stream drains to Pinto Lake  
Distance To: Adjacent on east property line

### ENVIRONMENTAL RESOURCES AND CONSTRAINTS

Groundwater Supply: Good quality, poor quantity	Liquefaction: Low potential
Water Supply Watershed: None	Fault Zone: CFZ
Groundwater Recharge: Outside recharge area	Scenic Corridor: N/A
Timber or Mineral: N/A	Historic: N/A
Agricultural Resource: N/A	Archaeology: no resources on site (Exhibit 8)
Biologically Sensitive Habitat: Riparian	Noise Constraint: N/A
Fire Hazard: N/A	Electric Power Lines: N/A
Floodplain: N/A	Solar Access: Adequate
Erosion: N/A	Solar Orientation: Adequate
Landslide: N/A	Hazardous Materials: None

### SERVICES

Fire Protection: Pajaro Valley	Drainage District: Zone 7A
School District: PVUSD	Project Access: Green Valley Road
Sewage Disposal: Private septic	Water Supply: Well

### PLANNING POLICIES

Zone District: Agriculture - A	Special Designation: None
General Plan: Agriculture - A	
Urban Services Line: <u>    </u> Inside	<u>  X  </u> Outside
Coastal Zone: <u>    </u> Inside	<u>  X  </u> Outside

### PROJECT SETTING AND BACKGROUND:

The subject property is located on a private road, Kliewer Lane, off Green Valley Road in Watsonville, in the Pajaro Valley Planning Area. The existing 11.9-acre farm site is developed with a **1,460** square foot single-family dwelling with a well and septic system, cattle barn, processing room of 1,200 square feet, a pond, chicken coop, orchard, and vineyard. North of the buildings, the property is bisected by a northwest to southeast trending drainage swale, which terminates at the man-made pond.

The parcel is surrounded by agricultural/rural residential uses to the north, east and west and a mobile home park and Pinto County Lake to the south. Soils on the site are predominantly Tierra Watsonville complex over marine terrace, which is characterized by low permeability, low velocity runoff, high shrink/swell potential with a minimal hazard of erosion. Vegetation consists of pasture grasses and shrubs with fruit trees and grape vines.

#### **DETAILED PROJECT DESCRIPTION:**

This proposal is to relocate an existing dairy farm operation from rented space at the Monterey Bay Academy in La Selva Beach to the property owner's farm at 345 Kliewer Lane in Watsonville. Claravale Farm has operated since 1927 and it specializes in raw milk production, using traditional milking methods. The 60-head dairy herd is made up of Jersey cows, which produce milk with higher protein and butterfat content than Holstein cows do, which are used predominantly in the dairy industry.

The existing processing plant shall be internally remodeled for use as the milk bottling and storage facility. A new milking parlor of approximately 2,777 square feet will be constructed adjacent to the processing plant. A 7,000 square foot free stall barn, 1,024 square foot hay barn, and 7,120 square foot composting barn are also proposed. A new septic system is proposed as part of the waste management plan. Wash and rinse water from the operation will be treated regularly with microorganisms designed to eliminate algae and odors. After treatment, the water is recycled to irrigate pastures. Fencing, parking and road improvements will also be included. A 5,000 gallon water storage tank dedicated to fire prevention shall be installed and a fire hydrant located on the left side of the Kliewer lane right of way.

**III. ENVIRONMENTAL REVIEW CHECKLIST**

**A. Geology and Soils**

Does the project have the potential to:

- |  |   |
|--|---|
| 1. Expose people or structures to potential adverse effects, including the risk of material loss, injury, or death involving:  | X |
| A. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or as identified by other substantial evidence? | X |
| B. Seismic ground shaking?   | X |
| C. Seismic-related ground failure, including liquefaction?   | X |
| D. Landslides?   | X |

All of Santa Cruz County is subject to some hazard from earthquakes. However, the project site is not located within or adjacent to a county or State mapped fault zone. The project site is about 2.5 miles southwest of the San Andreas Fault zone. A geotechnical investigation for the proposed project was performed by Haro, Kasunich & Associates, Inc., March 1998 (Attachment 7). The report concluded that the risk of substantial structural damage from earthquakes appears relatively low for well built structures which incorporate lateral shear bracing and modern building code requirements into their design and construction.

- |   |   |
|---|---|
| 2. Subject people or improvements to damage from soil instability as a result of on- or off-site landslide, lateral spreading, to subsidence, liquefaction, or structural collapse? | X |
|---|---|

The geotechnical report cited above did not identify a significant potential for damage

caused by any of these hazards.

3. Develop land with a slope exceeding 30%? \_\_\_\_\_ X

4. Result in soil erosion or the substantial loss of topsoil? \_\_\_\_\_ X

Some potential for erosion exists during the construction phase of the project, and the ultimate receptor of sediment is nearby Pinto Lake. However, this potential is less than significant because standard erosion controls are a required condition of the project. Prior to approval of a grading or building permit, the project must have an approved Erosion Control Plan, which will specify detailed erosion and sedimentation control measures. The plan will include provisions for disturbed areas to be planted with ground cover and to be maintained to minimize surface erosion. The potential for erosion due to the 60 cows on the site is reduced because the cattle are kept largely on dry lots and in free stall barns and are allowed to graze only occasionally.

5. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code(1994), creating substantial risks to property? \_\_\_\_\_ X

The geotechnical report for the project did not identify any elevated risk associated with expansive soils.

6. Place sewage disposal systems in areas dependent upon soils incapable of adequately supporting the use of septic tanks, leach fields, or alternative waste water disposal systems? \_\_\_\_\_ X

The proposed project **will** use an onsite sewage disposal system for restrooms, discharge from the processing and bottling operation, and runoff from barns and corrals. County Environmental Health Services has determined that site conditions are appropriate to support such a system.

7. Result in coastal cliff erosion? \_\_\_\_\_ X

**B. Hydrology, Water Supply and Water Quality**

Does the project have the potential to:

1. Place development within a 100-year \_\_\_\_\_ X

flood hazard area? \_\_\_\_\_

According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Rate Map, dated April 15, 1986, no portion of the project site lies within a 100-year flood hazard area.

2. Place development within the floodway resulting in impedance or redirection of flood flows? \_\_\_\_\_ X

According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Rate Map, dated April 15, 1986, no portion of the project site lies within a 100-year flood hazard area.

3. Be inundated by a seiche or tsunami? \_\_\_\_\_ X

4. Deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit, or a significant contribution to an existing net deficit in available supply, or a significant lowering of the local groundwater table? \_\_\_\_\_ x

The project will rely on a private well for water supply. Water supply is mapped as being good quality, poor quantity. The project is not located in a mapped groundwater recharge area.

The dairy operation will require approximately 2,000 gallons of water per day per cow, 400 gallons of water per day for the single-family dwelling, and about 35,000 gallons per month for processing. This is the equivalent of 1,284,000 gallons per year or about the average use of 6-8 new single-family dwellings. Use of wastewater for recycling will significantly reduce the amount of water needed to irrigate pasture. With no recycling, irrigation could utilize up to 11 acre-feet of water per year, the equivalent of 24 single-family dwellings.

5. Degrade a public or private water **supply?** (Including the contribution of urban contaminants, nutrient enrichments, or other agricultural chemicals or seawater intrusion). \_\_\_\_\_ x

Runoff from the barns and corral areas will be treated in the new septic system. A report of Waste Discharge is required to be filed with the Regional Water Resources Control Board (Attachment 11), to ensure that no on-site activities will generate a

significant amount of contaminants to a public or private water supply. The parking and driveway associated with the project will incrementally contribute urban pollutants to the environment; however, the contribution will be minimal given the size of the driveway and 6-stall parking area. Potential siltation from the proposed project will be mitigated through implementation of erosion control measures.

See also A-4.

6. Degrade septic system functioning? \_\_\_\_\_ X

There is no indication that existing septic systems in the vicinity would be affected by the project. (Attachment 9).

7. Alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which could result in flooding, erosion, or siltation on or off-site? \_\_\_\_\_ X

The proposed project is located near Pinto Lake, but will not alter the existing overall drainage pattern of the site. Runoff flows from the north to the swale and the pond, then to Pinto Lake. Department of Public Works Drainage Section staff has reviewed and approved the proposed drainage plan (Attachment 9).

8. Create or contribute runoff which would exceed the capacity of existing or planned storm water drainage systems, or create additional sources of polluted runoff? \_\_\_\_\_ X

Department of Public Works Drainage staff has reviewed the project and have determined that existing storm water facilities are adequate to handle the increase in drainage associated with the project. Any increase will be held on site such that post development runoff will not exceed predevelopment runoff.

9. Contribute to flood levels or erosion in natural water courses by discharges of newly collected runoff? \_\_\_\_\_ X

No additional storm water runoff that could contribute to flooding or erosion should occur as runoff and wash water is to be treated in the new septic system and applied to crops on the site (Attachment 12).

See also B-8.

10. Otherwise substantially degrade water supply or quality? \_\_\_\_\_ X

An "Advantex" on-site wastewater treatment system will be installed as part of the waste management plan (Attachment 13). Wash and rinse water from the dairy operation will be treated regularly with microorganisms to eliminate algae and odor. After treatment, the water is re-used to irrigate pastures on site. A Manure Management Plan and Vector Control Plan have been reviewed and approved by the County (Attachment 9). See also II.A.4 above.

**C. Biological Resources**

Does the project have the potential to:

1. Have an adverse effect on any species identified as a candidate, sensitive, or special status species, in local or regional plans, policies, or regulations, or by the California Department of Fish and Game, or U.S. Fish and Wildlife Service? \_\_\_\_\_ **x**

According to the California Natural Diversity Data Base (CNDDDB), maintained by the California Department of Fish and Game, there are no known special status plant or animal species in the site vicinity, and there were no special status species observed in the project area.

The use of mosquito fish "Gambusia affinis" to control mosquitos in the existing pond has been eliminated from the Vector Management Plan (Attachment 10).

2. Have an adverse effect on a sensitive biotic community (riparian corridor), wetland, native grassland, special forests, intertidal zone, etc.)? \_\_\_\_\_ **x**

The existing pond is a designated riparian area. Cattle are to be fenced out of the area within 100 feet of the pond.

3. Interfere with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native or migratory wildlife nursery sites? \_\_\_\_\_ **x**

The proposed project does not involve any activities that would interfere with the movements or migrations of fish or wildlife, or impede use of a known wildlife nursery site.

4. Produce nighttime lighting that will illuminate animal habitats? \_\_\_\_\_ X \_\_\_\_\_

The subject property is located in an urbanized area and is surrounded by existing residential development that currently generates nighttime lighting. There are no sensitive animal habitats within or adjacent to the project site.

5. Make a significant contribution to the reduction of the number of species of plants or animals? \_\_\_\_\_ X \_\_\_\_\_

Refer to C-1 and C-2 above.

6. Conflict with any local policies or ordinances protecting biological resources (such as the Significant Tree Protection Ordinance, Sensitive Habitat Ordinance, provisions of the Design Review ordinance protecting trees with trunk sizes of 6 inch diameters or greater)? \_\_\_\_\_ X \_\_\_\_\_

The project will not conflict with any local policies or ordinances. The 100-foot setback from the existing wetland shall be maintained.

7. Conflict with the provisions of an adopted Habitat Conservation Plan, Biotic Conservation Easement, or other approved local, regional, or state habitat conservation plan? \_\_\_\_\_ X \_\_\_\_\_

**D. Energy and Natural Resources**

Does the project have the potential to

1. Affect or be affected by land designated as "Timber Resource" by the General Plan? \_\_\_\_\_ X \_\_\_\_\_

2. Affect or be affected by lands currently utilized for agriculture, or designated in the General Plan for agricultural use? \_\_\_\_\_ X \_\_\_\_\_

The project site is currently being used for agriculture and agricultural uses exist in the



surrounding vicinity. The dairy is an allowed use in the Agriculture (A) General Plan district.

3. Encourage activities that result in the use of large amounts of fuel, water, or energy, or use of these in a wasteful manner? X
- 

Water will be conserved by infrastructure and practices that are part of the project. Wastewater will be treated, and the use of wastewater for recycling will significantly reduce the amount of water needed to irrigate pasture on site. Refer to section B-4 for a brief analysis of water use.

4. Have a substantial effect on the potential use, extraction, or depletion of a natural resource (i.e., minerals or energy resources)? X
- 

#### E. Visual Resources and Aesthetics

Does the project have the potential to:

1. Have an adverse effect on a scenic resource, including visual obstruction of that resource? X
- 

The project will not directly impact any public scenic resources, as designated in the County's General Plan (1994), or obstruct any public views of these visual resources.

2. Substantially damage scenic resources, within a designated scenic corridor or public view shed area including, but not limited to, trees, rock outcroppings, and historic buildings? X
- 

The project site is not located along a County designated scenic road or within a designated scenic resource area.

3. Degrade the existing visual character or quality of the site and its surroundings, including substantial change in topography or ground surface relief features, and/or development on a ridge line? X
- 

The existing visual setting is rural agricultural land. The proposed project is designed

to fit into this setting. Additional orchard and vineyard plantings enhance the agricultural vista afforded by the subject property.

4. Create a new source of light or glare which would adversely affect day or nighttime views in the area? \_\_\_\_\_ X

The project will create an incremental increase in night lighting. However, this increase will be small, and will be similar in character to the lighting associated with the surrounding existing uses.

5. Destroy, cover, or modify any unique geologic or physical feature? \_\_\_\_\_ X

There are no unique geological or physical features on or adjacent to the site that would be destroyed, covered, or modified by the project.

**F. Cultural Resources**

Does the project have the potential to:

1. Cause an adverse change in the significance of a historical resource as defined in CEQA Guidelines 15064.5? \_\_\_\_\_ X

The existing structure(s) on the property is not designated as a historic resource on any federal, State or local inventory.

2. Cause an adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines 15064.5? \_\_\_\_\_ X

According to the Santa Cruz County Archeological Society site assessment, dated 3 Dec 1997 (Attachment 8), there is no evidence of pre-historic cultural resources. However, pursuant to Section 16.40.040 of the Santa Cruz County Code, if archeological resources are uncovered during construction, the responsible persons shall immediately cease and desist from all further site excavation and comply with the notification procedures given in County Code Chapter 16.40.040.

3. Disturb any human remains, including those interred outside of formal cemeteries? \_\_\_\_\_ X

Pursuant to Section 16.40.040 of the Santa Cruz County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this project, human remains are discovered, the responsible persons shall immediately cease and

desist from all further site excavation and notify the sheriff-coroner and the Planning Director. If the coroner determines that the remains are not of recent origin, a full archeological report shall be prepared and representatives of the local Native California Indian group shall be contacted. Disturbance shall not resume until the significance of the archeological resource is determined and appropriate mitigations to preserve the resource on the site are established.

4. Directly or indirectly destroy a unique paleontological resource or site? \_\_\_\_\_ X

G. Hazards and Hazardous Materials

Does the project have the potential to:

1. Create a significant hazard to the public or the environment as a result of the routine transport, storage, use, or disposal of hazardous materials, not including gasoline or other motor fuels? \_\_\_\_\_ X

No hazardous materials are to be stored on the site. Iodine disinfectants are used.

2. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? \_\_\_\_\_ X

3. Create a safety hazard for people residing or working in the project area as a result of dangers from aircraft using a public or private airport located within two miles of the project site? \_\_\_\_\_ X

4. Expose people to electro-magnetic fields associated with electrical transmission lines? \_\_\_\_\_ X

5. Create a potential fire hazard? \_\_\_\_\_ X

The project design incorporates all applicable fire safety code requirements including a new fire hydrant, and will include tire protection devices as required by the local fire agency.

6. Release bio-engineered organisms or chemicals into the air outside of project buildings? \_\_\_\_\_ X

**H. Transportation/Traffic**

Does the project have the potential to:

1. Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? \_\_\_\_\_ X

The project will create a small incremental increase in traffic on nearby roads and intersections. However, given the small number of new trips created by the project, 13.85 trips per day, this increase is less than significant. Further, the increase will not cause the Level of Service at any nearby intersection to drop below Level of Service D.

2. Cause an increase in parking demand which cannot be accommodated by existing parking facilities? \_\_\_\_\_ X

The project meets the code requirements for the required number of parking spaces and therefore new parking demand will be accommodated on site.

3. Increase hazards to motorists, bicyclists, or pedestrians? \_\_\_\_\_ X

The proposed project will comply with current road requirements to prevent potential hazards to motorists, bicyclists, and/or pedestrians. The intersection with Green valley Road is to be improved to a width of 18 feet for a distance of 90 feet as per Public Works Road Engineering.

4. Exceed, either individually (the project alone) or cumulatively (the project combined with other development), a level of service standard established by the county congestion management agency for designated intersections, roads or highways? \_\_\_\_\_ X

See response H-1 above.

**I. Noise**

Does the project have the potential to:

1. Generate a permanent increase in ambient noise levels in the project vicinity above levels existing without the project? X
- 

The project will create an incremental increase in the existing noise environment. However, this increase will be small, and will be similar in character to noise generated by the surrounding existing uses. The bottling and milking operations will be indoors.

2. Expose people to noise levels in excess of standards established in the General Plan, or applicable standards of other agencies? X
- 

Per County policy, average hourly noise levels shall not exceed the General Plan threshold of 50 Leq during the day and 45 Leq during the nighttime. Impulsive noise levels shall not exceed 65 db during the day or 60 db at night. Processing of dairy products will be within existing and proposed buildings on site. These buildings and the method of processing will not increase noise above the standards established in the General Plan.

3. Generate a temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? X
- 

Noise generated during construction will increase the ambient noise levels for adjoining areas. Construction will be temporary, however, and given the limited duration of this impact it is considered to be less than significant.

**J. Air Quality**

Does the project have the potential to:  
(Where available, the significance criteria established by the MBUAPCD may be relied upon to make the following determinations).

1. Violate any air quality standard or contribute substantially to an existing or projected air quality violation? X
-

The North Central Coast Air Basin does not meet State standards for ozone and particulate matter (PM10). Therefore, the regional pollutants of concern that would be emitted by the project are ozone precursors (Volatile Organic Compounds [VOCs] and nitrogen oxides [NOx]), and dust.

Given the 14 daily new trips that will be generated by the project there is no indication that new emissions of VOCs or NOx will exceed Monterey Bay Unified Air Pollution Control District (MBUAPCD) thresholds for these pollutants and therefore there will not be a significant contribution to an existing air quality violation.

Project construction may result in a short-term, localized decrease in air quality due to generation of dust. However, standard dust control best management practices, such as periodic watering, will be implemented during construction to reduce impacts to a less than significant level.

2. Conflict with or obstruct implementation of an adopted air quality plan? \_\_\_\_\_ X

The project will not conflict with or obstruct implementation of the regional air quality plan. See J-1 above.

3. Expose sensitive receptors to substantial pollutant concentrations? \_\_\_\_\_ X

Cattle are kept largely on dry lots and in a free stall barn so that manure can be harrowed and turned regularly to break it up and allow it to dry in a roofed facility. In a dry, composted state the manure does not emit a significant odor. The manure is sold and is not kept on site.

4. Create objectionable odors affecting a substantial number of people? \_\_\_\_\_ X  
See 1.3 above

#### **K. Public Services and Utilities**

Does the project have the potential to:

1. Result in the need for new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:
- a. Fire protection? \_\_\_\_\_ X

- |   |            |
|---|------------|
| b. Police protection?   | X<br>_____ |
| c. Schools?   | X<br>_____ |
| d. Parks or other recreational activities?                      | X<br>_____ |
| e. Other public facilities; including the maintenance of roads? | X<br>_____ |

While the project represents an incremental contribution to the need for services, the increase will be minimal. Moreover, the project meets all of the standards and requirements identified by the Pajaro Valley Fire Protection District, and school, park, and transportation fees to be paid by the applicant will be used to offset the incremental increase in demand for school and recreational facilities and public roads.

- |   |            |
|---|------------|
| 2. Result in the need for construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | X<br>_____ |
|---|------------|

Department of Public Works Drainage staff have reviewed the drainage information and have determined that downstream storm facilities are adequate to handle the increase in drainage associated with the project (Attachment 9).

- |  |            |
|--|------------|
| 3. Result in the need for construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | X<br>_____ |
|--|------------|

The project will rely on an individual well for water supply. Public water delivery facilities will not have to be expanded.

The project will be served by an on-site sewage disposal system, which will be adequate to accommodate the relatively light demands of the project.

- |   |            |
|---|------------|
| 4. Cause a violation of wastewater treatment standards of the Regional Water Quality Control Board? | X<br>_____ |
|---|------------|

The RWQCB has not indicated that they do not object to the proposed water treatment system. The applicant is required to obtain a Report of Waste Discharge with the Regional Board prior to discharging any waste. (Attachment 10).

5. Create a situation in which water supplies are inadequate to serve the project or provide fire protection? \_\_\_\_\_ X

The water mains serving the project site provide adequate flows and pressure for fire suppression. Additionally, the local fire agency has reviewed and approved the project plans, assuring conformity with fire protection standards that include minimum requirements for water supply for fire protection. A new 5,000 gallon water tank dedicated to fire protection is required to be installed and a new fire hydrant installed (Attachment 9).

6. Result in inadequate access for fire protection? \_\_\_\_\_ X

The project's road access meets County standards and has been approved by the local fire agency or California Department of Forestry, as appropriate. Pavement width shall be improved to 18-feet from the subject property to Green Valley Road.

7. Make a significant contribution to a cumulative reduction of landfill capacity or ability to properly dispose of refuse? \_\_\_\_\_ X

The project will make an incremental contribution to the reduced capacity of regional landfills in that some waste will be generated from the single-family dwelling on site that cannot be recycled. However, this contribution will be relatively small and will be of similar magnitude to that created by existing land uses around the project. Note that the manure is fully recycled into compost, and sold to be used off site.

8. Result in a breach of federal, state, and local statutes and regulations related to solid waste management? \_\_\_\_\_ X

All manure generated by cattle on site is sold locally as fertilizer (Attachment 12).

#### **I. Land Use, Population, and Housing**

Does the project have the potential to:

1. Conflict with any policy of the County adopted for the purpose of avoiding or \_\_\_\_\_ X



mitigating an environmental effect? \_\_\_\_\_

The proposed project does not conflict with any regulations adopted for the purpose of avoiding or mitigating an environmental effect. The required 100-foot wetland setback from the pond to the north is maintained. Agricultural setbacks are respected in that no habitable structures are located within 200 feet of adjacent commercial agricultural land.

2. Conflict with any County Code regulation adopted for the purpose of avoiding or mitigating an environmental effect? \_\_\_\_\_ X

The proposed project does not conflict with any policies adopted for the purpose of avoiding or mitigating an environmental effect.  
See L-1.

3. Physically divide an established community? \_\_\_\_\_ X

The project will not include any element that will physically divide an established community.

4. Have a potentially significant growth inducing effect, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? \_\_\_\_\_ X

The proposed project *is* designed at the density and intensity of development allowed by the General Plan and zoning designations for the parcel. Additionally, the project does not involve extensions of utilities (e.g., water, sewer, or new road systems) into areas previously not served. Consequently, it is not expected to have a significant growth-inducing effect.

While Kliewer Lane will be widened to 18 feet for a distance of 90 feet, the proposed project will not extend the road or increase its capacity.

5. Displace substantial numbers of people, or amount of existing housing, necessitating the construction of replacement housing elsewhere? \_\_\_\_\_ X

**M. Non-Local Approvals**

Does the project require approval of federal, state, or regional agencies? Yes X No

California Regional Water Resources Control Board responsible to issue an Order which specifies waste discharge requirements (Attachment 11).

**N. Mandatory Findings of Significance**

- |    |  |           |    |   |
|----|--|-----------|----|---|
| 1. | Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant, animal, or natural community, or eliminate important examples of the major periods of California history or prehistory? | Yes       | No | X |
| 2. | Does the project have the potential to achieve short term, to the disadvantage of long term environmental goals? (A short term impact on the environment is one which occurs in a relatively brief, definitive period of time while long term impacts endure well into the future)   | Yes       | No | X |
| 3. | Does the project have impacts that are individually limited, but cumulatively considerable ("cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, and the effects of reasonably foreseeable future projects which have entered the Environmental Review stage)?  | Yes _____ | No | X |
| 4. | Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?   | Yes       | No | X |

**TECHNICAL REVIEW CHECKLIST**

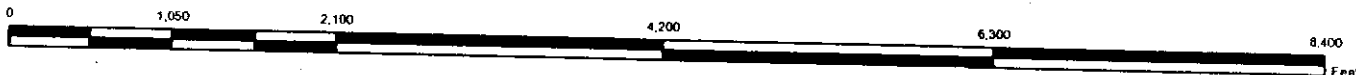
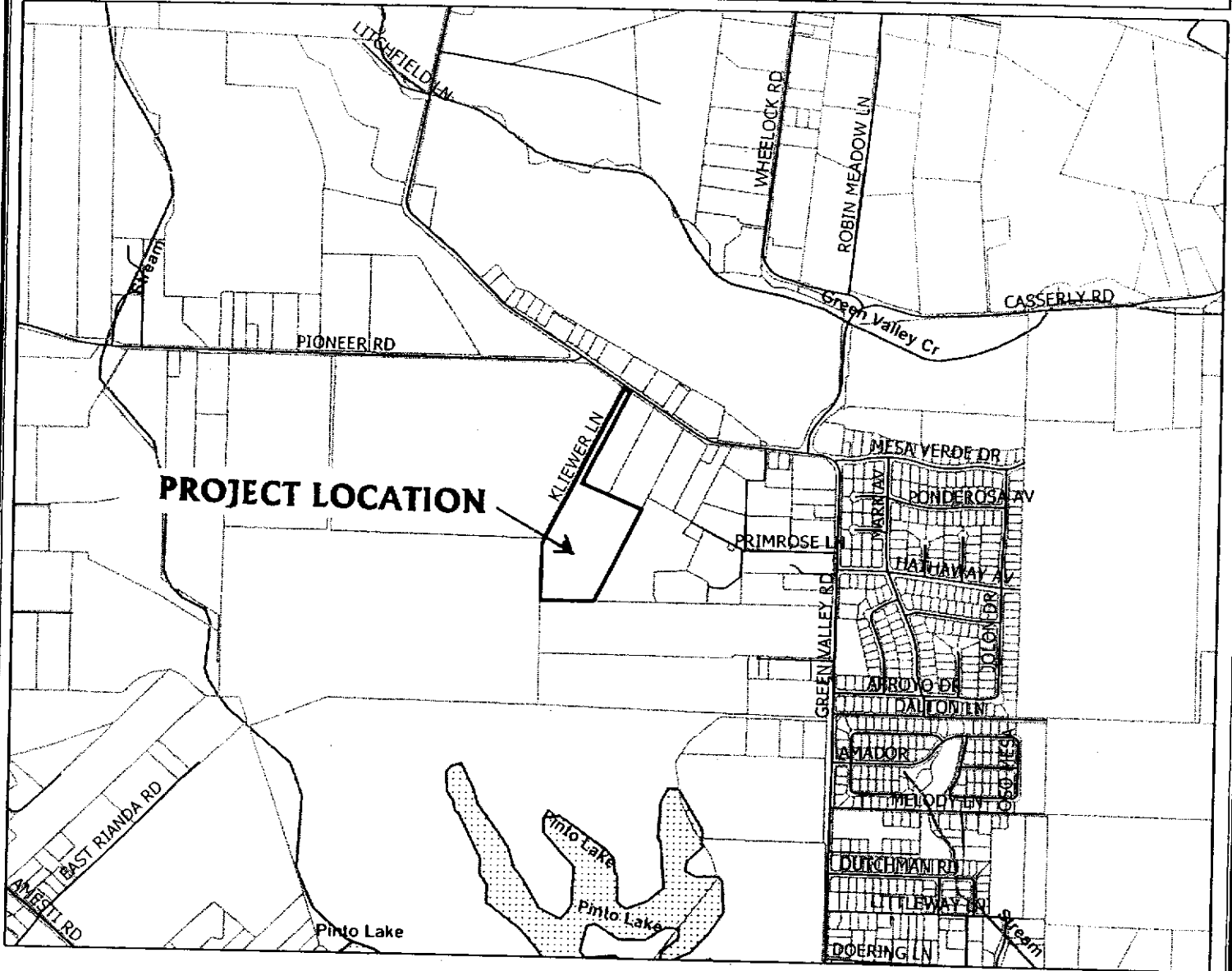
	<u>REQUIRED</u>	<u>COMPLETED'</u>	<u>N/A</u>
Agricultural Policy Advisory Commission (APAC) Review			
Archaeological Review	✓	12/3/97	
Biotic Report/Assessment			
Geologic Hazards Assessment (GHA)			
Geologic Report			
Geotechnical (Soils) Report Update	✓	March 1998	
Riparian Pre-Site	J	7/13/06	
Septic Lot Check	✓	6/8/06	
Other: Regional Water Quality Review Board	✓	11/17/06	

**Attachments:**




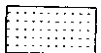
1. Vicinity Map
2. Map of Zoning Districts
3. Map of General Plan Designations
4. Project Plans
5. Assessors Parcel Map
6. Geotechnical Review Letter prepared by Haro, Kasunich & Assoc. Inc., dated 13 July 2006
7. Geotechnical Investigation (Conclusions and Recommendations) prepared by Haro, Kasunich & Assoc. Inc. dated March 1998
8. Archeological Reconnaissance Survey Letter prepared by Santa Cruz Archaeological Society, dated 3 Dec 1997
9. Discretionary Application Comments, dated July 24, 2006
10. Vector Control Plan by Western Dairy Design Associates dated April 14, 2006
11. Letter from California Regional Water Resources Control Board dated 13 June 2006, 11-17-06
12. Project narrative
13. Orenco Systems: AdvanTex Onsite Wastewater Treatment systems



# Location Map



## Legend

-  Assessor's Parcels
-  Streets
-  INTERMITTENT STREAM
-  Lakes

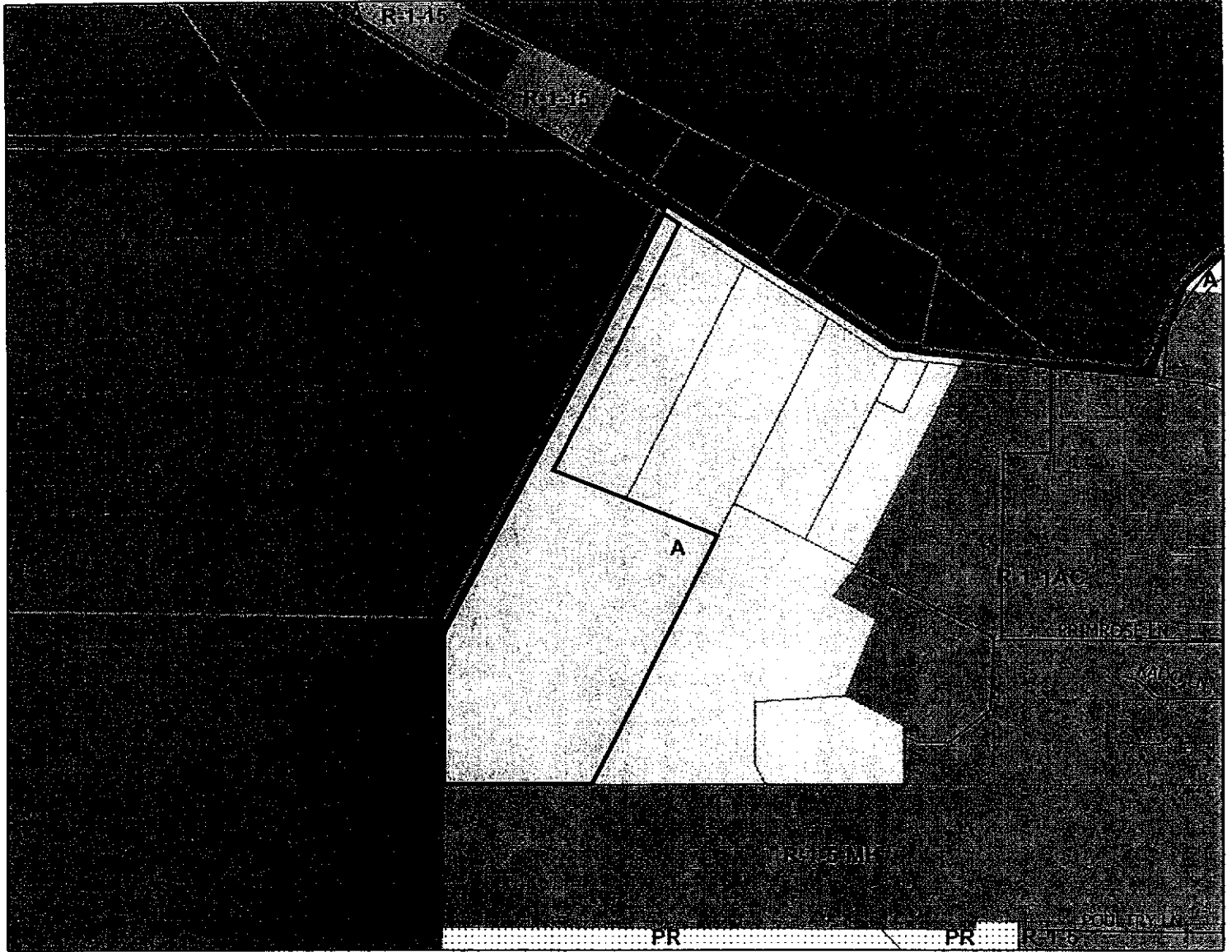
N  
W E  
Environmental Review Initial Study

**ATTACHMENT I**  
**APPLICATION** 06-0077




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County of Santa Cruz  
Planning Department  
May 2006

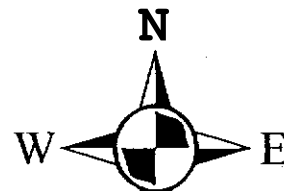


# Zoning Map



## Legend

-  APN 050-031-29
-  Streets
-  Assessors Parcels
-  AGRICULTURE (A)
-  RESIDENTIAL-SINGLE FAMILY (R-1)
-  AGRICULTURE COMMERCIAL (CA)
-  PARK (PR)

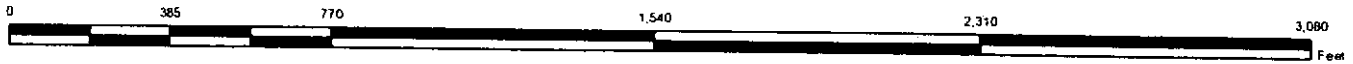
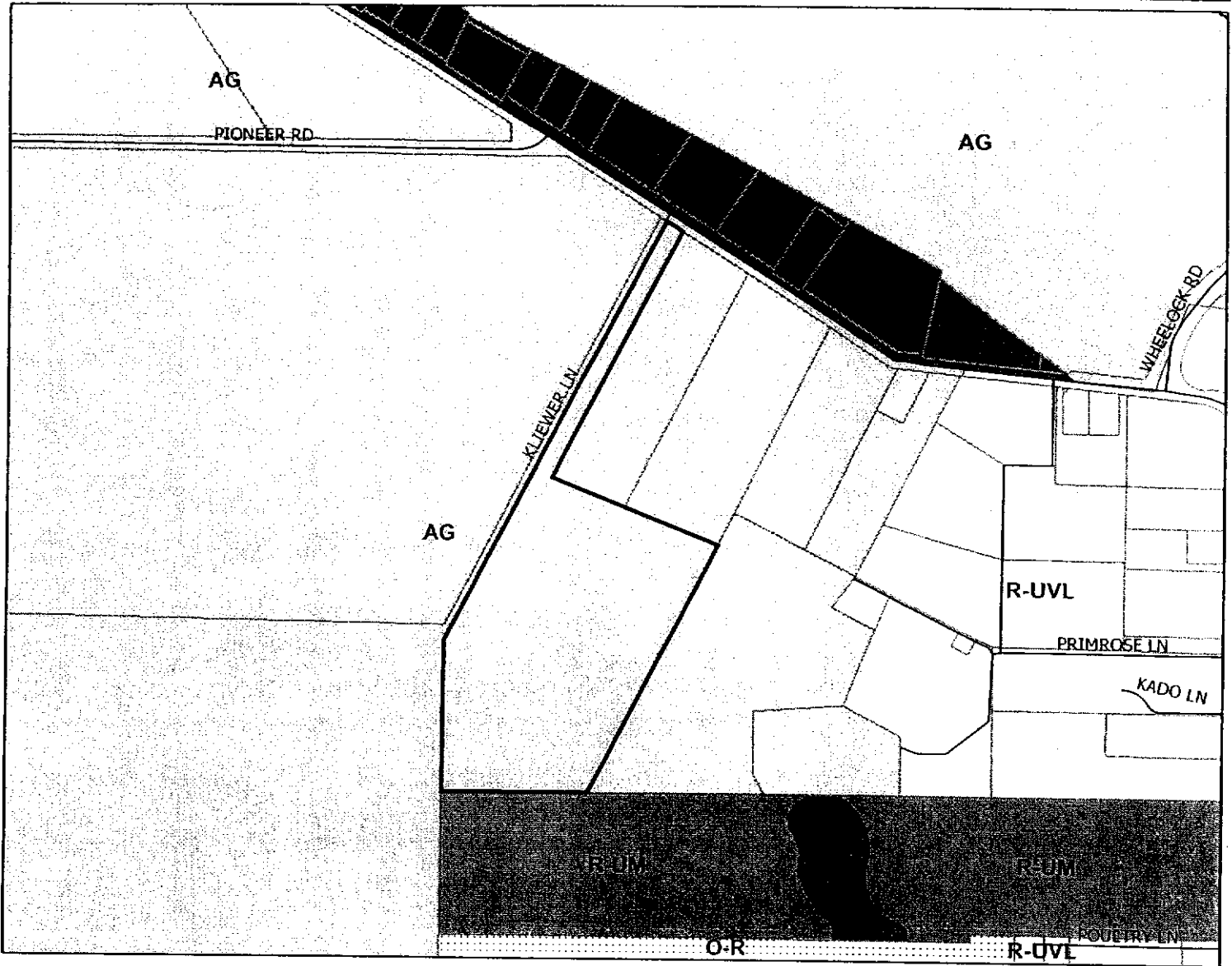


Environmental Review Initial Study  
 ATTACHMENT 2  
 APPLICATION 06-0077

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 May 2006



# General Plan Designation Map



## Legend

- APN 050-031-29
- Streets
- Assessors Parcels
- Agriculture (AG)
- Residential- Urban Medium Density (R-UM)
- Urban Open Space (O-U)
- Residential-Suburban (R-S)
- Residential- Urban Very Low Density (R-UVL)
- Parks and Recreation (O-R)

N  
W E

Environmental Review Initial Study  
ATTACHMENT 3  
APPLICATION 06-0077

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Planning Department  
May 2006



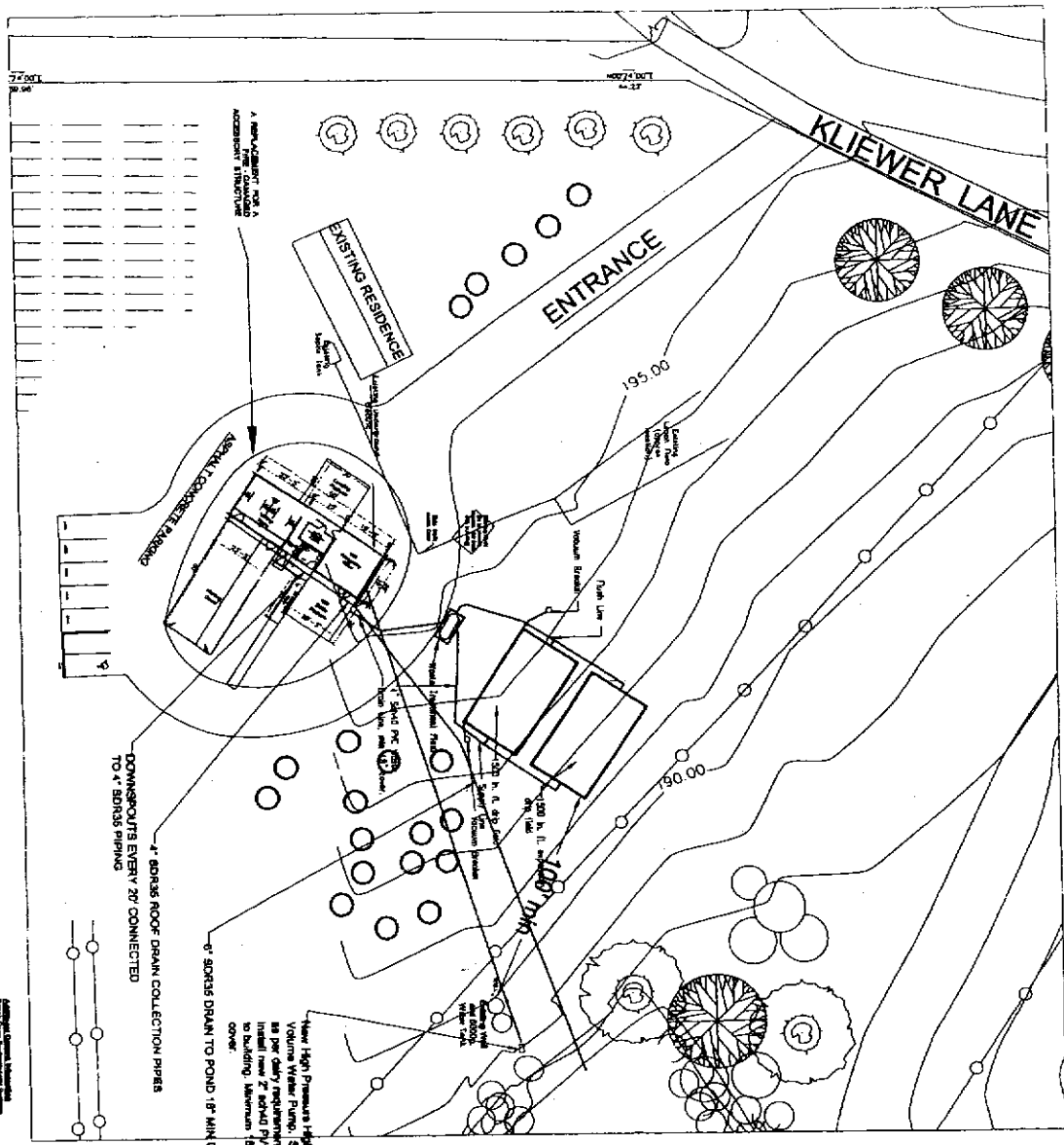
A CONTOUR LINES & AERIAL PHOTO

VACANT MOBILE  
HOUSING  
ESSTATE

Environmental Review Initial Study

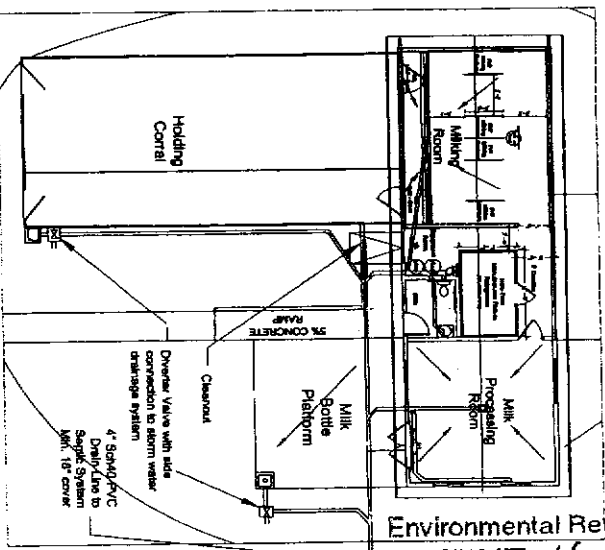
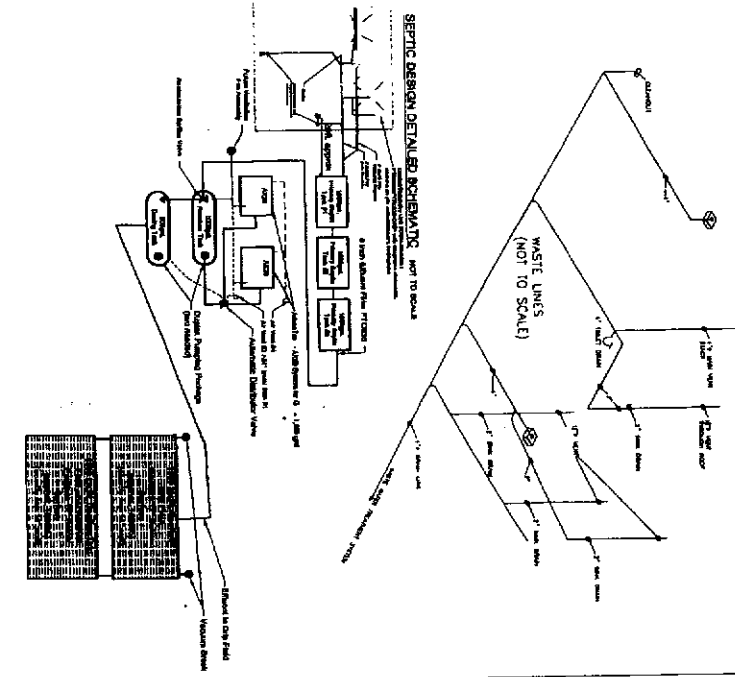
ATTACHMENT 4 of 6  
APPLICATION 06-0072





SEPTIC AND DRAINAGE SITE PLAN  
SCALE 1" = 20'-0"

**SEPTIC SYSTEM COMPONENTS**  
 4" BONDS ROOF DRAIN COLLECTION PAPERS TO 4" BONDS PIPING  
 6" BONDS DRAIN TO POND 18" MIN COVER  
 NEW 1500 POUNDS HIGH VOLUME WELER PUMP. Size as per daily requirements. Install new 2" 40'x40" PVC to Building. Minimum 18" cover.



Environmental Review Initial Study  
 ATTACHMENT 4, 2 of 6  
 APPLICATION 06-0077

**AG-SEPTIC**  
 10101000  
 Author: A.J. Brown  
 Version: 04/17/23  
 Job: 2008-04

**AG-SEPTIC**  
 10101000  
 Author: A.J. Brown  
 Version: 04/17/23  
 Job: 2008-04

- 40 -

**Claravale Farm**  
 A Replacement for a Fire Damaged Accessory Structure

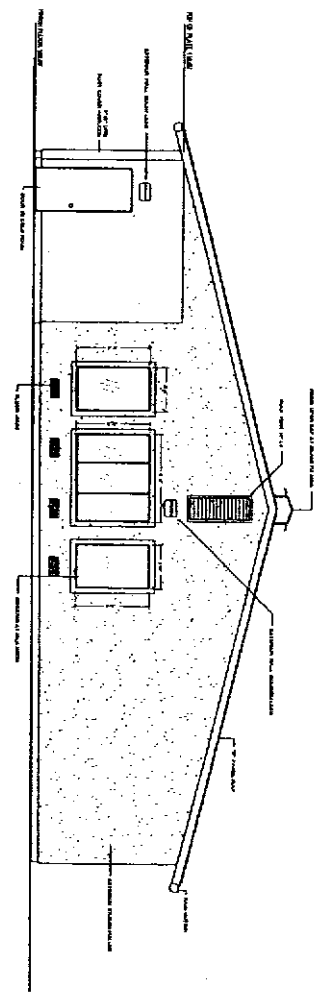
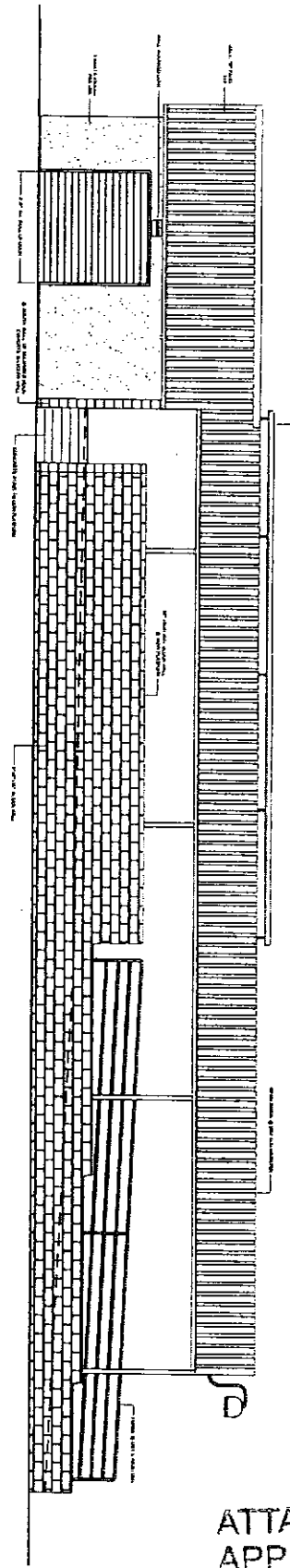
EXHIBIT C





1 NORTH ELEVATION

SCALE 1/4" = 1'-0"



Environmental Review Initial Study  
 ATTACHMENT 4, 4 of 6  
 APPLICATION 06-0077

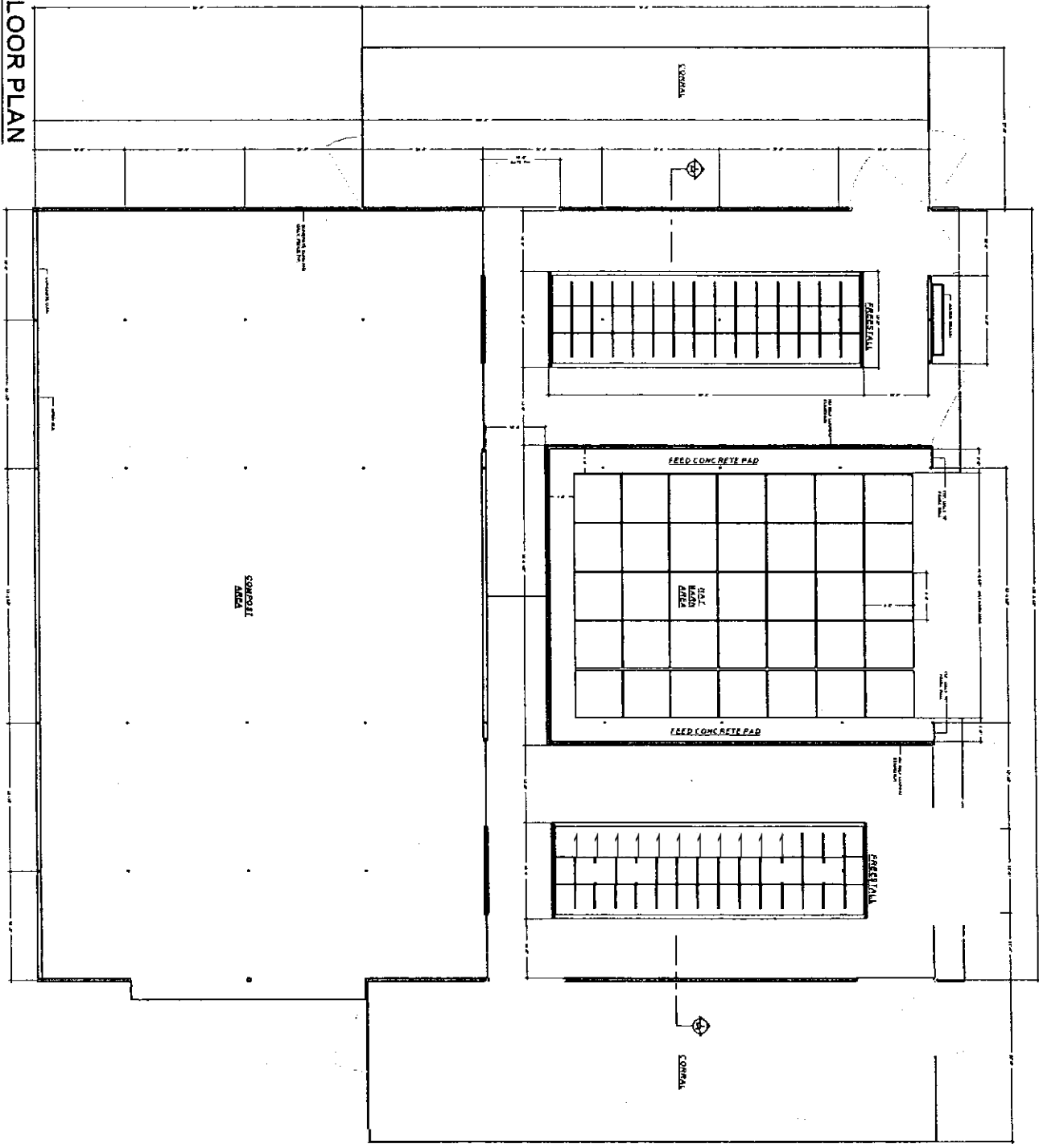
DESIGNER:  
 M. J. KORN GARTHWALL  
 1000 W. 10th Street  
 Waukesha, WI 53186  
 PHONE: 262-533-1111  
 FAX: 262-533-1112  
 WWW: www.mjkorn.com

CLIENT:  
 COLLETTI CASANO  
 1000 W. 10th Street  
 Waukesha, WI 53186

DATE: 08-28-11  
 DRAWING NO.: 11-01  
 SCALE: AS SHOWN  
 PROJECT: LEADERSHIP  
 JOB NO.: 11-01

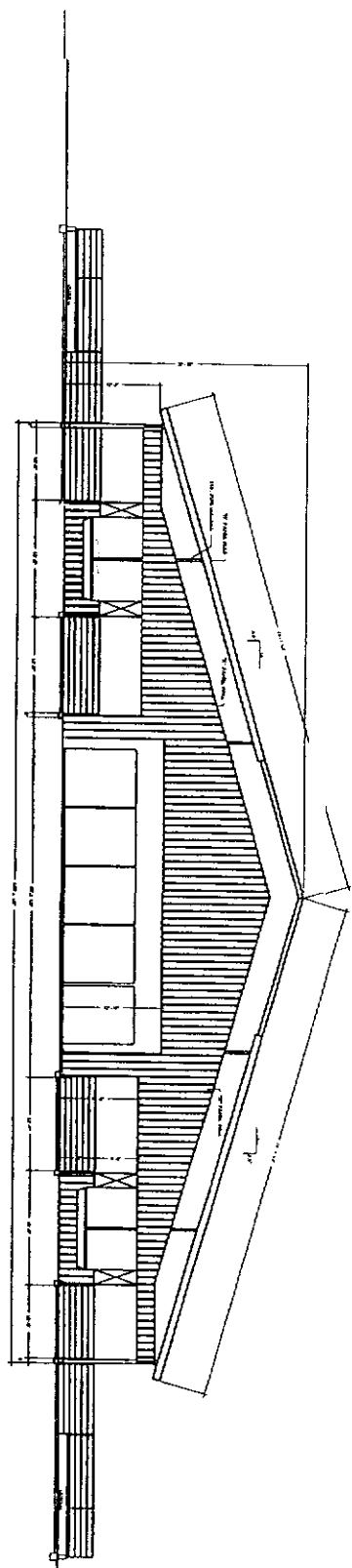
SHEET: 8  
 TOTAL SHEETS: 11

1 FLOOR PLAN  
SCALE 1/8" = 1'-0"

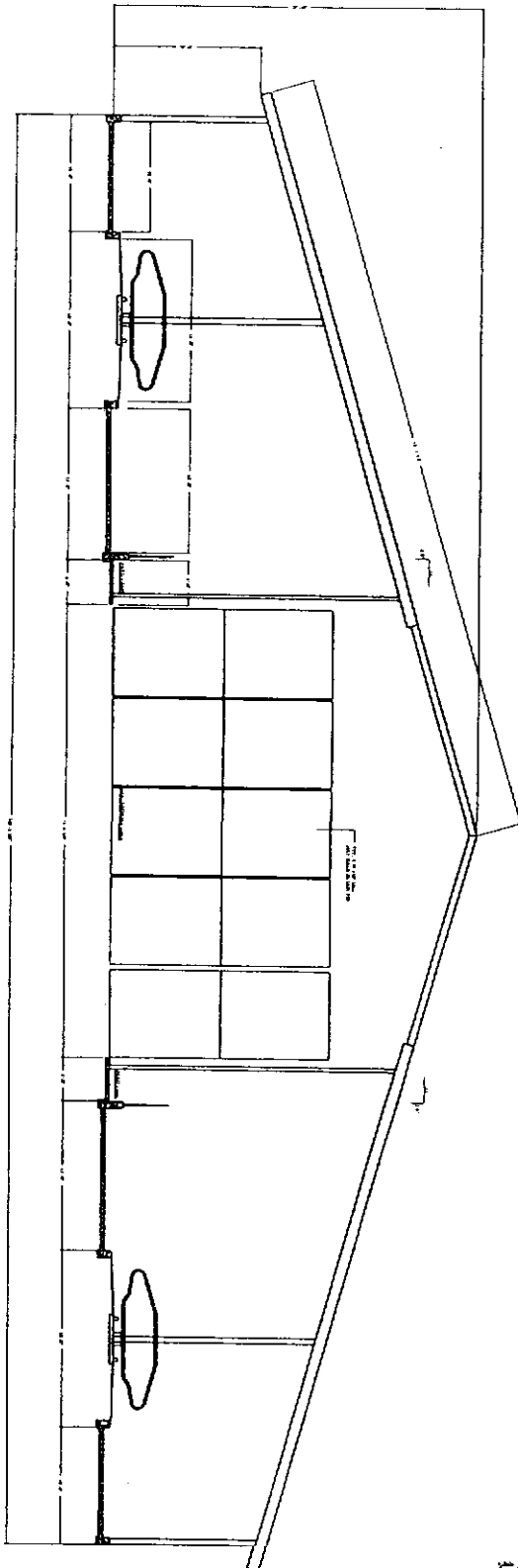


Environmental Review Initial Study  
ATTACHMENT 4, 5 of 6  
APPLICATION 06-0077

SHEET NO. 4.1  
 PROJECT: FREESTALL BARP (J COWS)  
 DRAWN BY: [Name]  
 CHECKED BY: [Name]  
 DATE: 10/1/06  
 SCALE: AS SHOWN  
 IN SET: 06-0077-1  
 PROJECT LOCATION: [Address]  
 COUNTY: [County]  
 CITY: [City]  
 STATE: [State]  
 ZIP: [Zip]



1 ELEVATION  
SCALE 1/8" = 1'-0"



2 CROSS SECTION  
SCALE 3/16" = 1'-0"

Environmental Review Initial Study  
 ATTACHMENT H, b d c  
 APPLICATION 06-0077

**FRONT ELEVATION & CROSS SECTION**

- 44 - ESTALL BARI (3 COWS)

**Waters Design Services**  
 10000 10th Street  
 Houston, TX 77036  
 281-410-1000  
 www.watersdesign.com

DATE: 06-01-11  
 SCALE: As Shown  
 DRAWN: E. J. MOORE  
 APPR: M. D. B.

Project # **49**

Project	06-11
Date	06-01-11
Scale	As Shown
Drawn	E. J. MOORE
Appr	M. D. B.

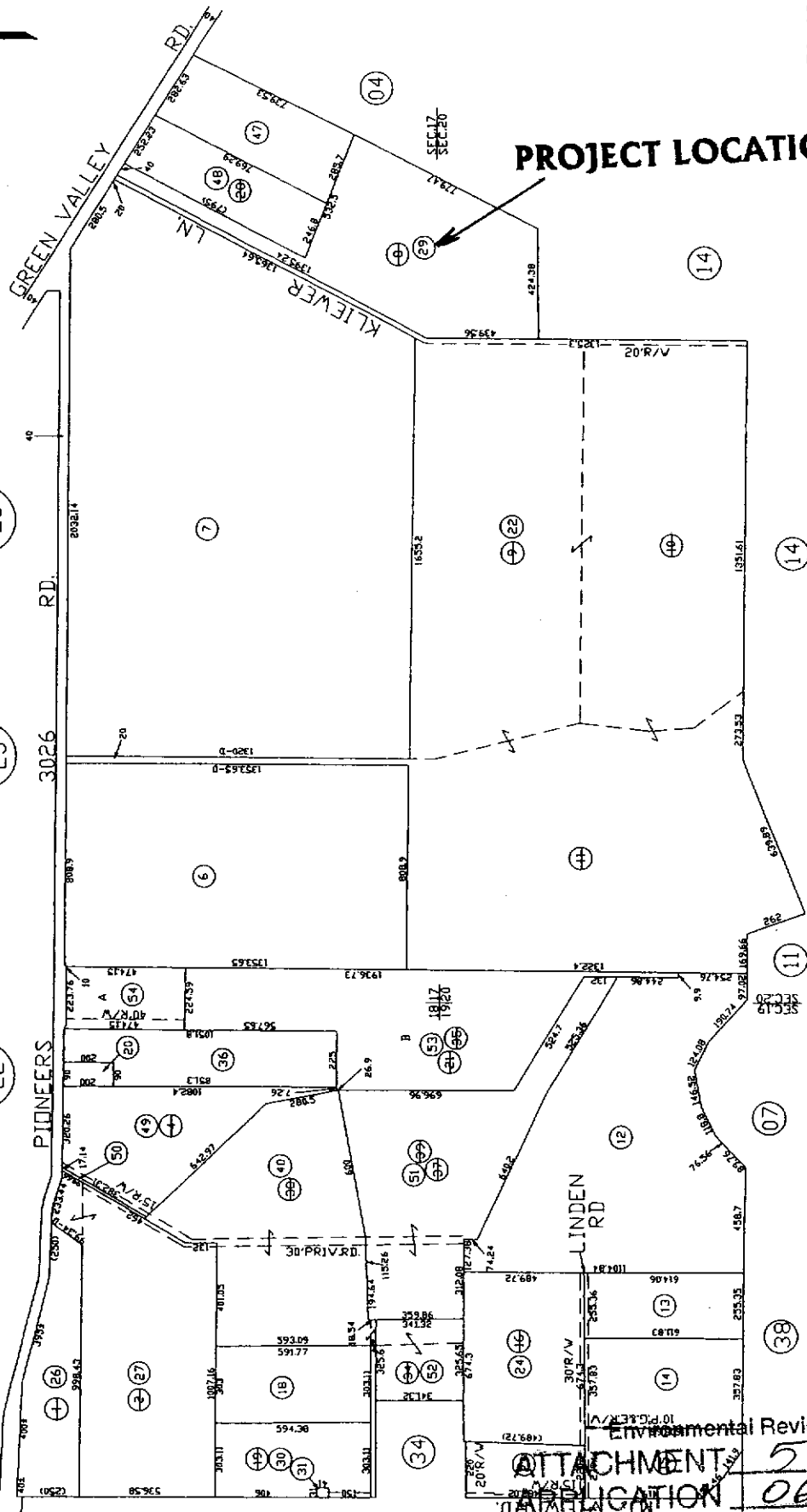
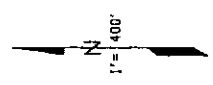
**EXHIBIT D**

FOR TAX PURPOSES ONLY  
THE ASSESSOR MAKES NO GUARANTEE AS TO MAP ACCURACY NOR ASSUMES ANY LIABILITY FOR OTHER USES. NOT TO BE REPRODUCED. ALL RIGHTS RESERVED.  
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POR. RANCHO DE LOS CORRALITOS  
SECS. 17-18-19 & 20, T.11S., R.2E., M.D.B. & M.

Tax Area Code  
69-258

50-03

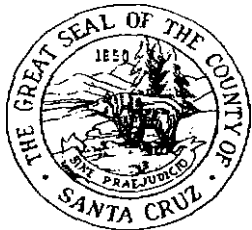


PROJECT LOCATION

Assessor's No. 50-03  
County of Santa Cruz, Calif.  
January, 1997

Note - Assessor's Parcel & Block Numbers Shown in Circles.

Environmental Review Initial Study  
ATTACHMENT 5  
NOTIFICATION 06-0077



# COUNTY OF SANTA CRUZ

## PLANNING DEPARTMENT

701 OCEAN STREET, 4<sup>TH</sup> FLOOR, SANTA CRUZ, CA 95060  
(831)454-2580 FAX (831)454-2131 TDD (831)454-2123

TOM BURNS, PLANNING DIRECTOR

July 19, 2006

Mr. Ron Garthwaite  
345 Kliewer Lane  
Watsonville, CA 95076

Subject: Geotechnical Report by Haro, Kasunich and Associates, Dated March 4, 1998 Project # SC6057, and review letter dated July 13, 2006, **APN050-031-29, Application #: 06-0077**

Dear Ron Garthwaite,

The purpose of this letter is to inform you that the Planning Department has accepted the subject report and the following items are required:

1. All construction shall comply with the recommendations of the report
2. Final plans shall reference the report and include a statement that the project shall conform to the

After building permit issuance the soils engineer *must* remain involved *with* the project during construction. Please review the Notice to Permit Holders (attached).

Our acceptance of the report is limited to its technical content. Other project issues such as zoning, fire safety, septic or sewer approval, etc. may require resolution by other agencies.

Please call the undersigned at (831) 454-3175, or email [pln829@co.santa-cruz.ca.us](mailto:pln829@co.santa-cruz.ca.us) if we can be of any further assistance,

Sincerely,

Joseph L. Hanna CEG 1313  
County Geologist

Cc: Haro, Kasunich and Associates  
Western Dairy Design Associates, Inc

Environmental Review Initial Study  
ATTACHMENT 6.1 of 6  
APPLICATION 06-0077

NOTICE TO PERMIT HOLDERS WHEN A **SOILS** REPORT HAS BEEN PREPARED, REVIEWED AND ACCEPTED FOR THE PROJECT

After issuance of the building permit, the County requires your soils engineer to be involved during construction. Several letters or reports are required to be submitted to the County at various times during construction. They are as follows:

1. When a project has engineered fills and / or grading, a letter from your soils engineer must be submitted to the Environmental Planning section of the Planning Department prior to foundations being excavated. This letter must state that the grading has been completed in conformance with the recommendations of the soils report. Compaction reports or a summary thereof must be submitted.
2. Prior to placing concrete for foundations, a letter from the soils engineer must be submitted to the building inspector and to Environmental Planning stating that the soils engineer has observed the foundation excavation and that it meets the recommendations of the soils report.
3. At the completion of construction, a *final letter* from your soils engineer is required to be submitted to Environmental Planning that summarizes the observations and the tests the soils engineer has made during construction. The final letter must also state the following: "Based upon our observations and tests, the project has been completed in conformance with our geotechnical recommendations."

If the final soils letter identifies any items of work remaining to be completed or that any portions of the project were not observed by the soils engineer, you will be required to complete the remaining items of work and may be required to perform destructive testing in order for your permit to obtain a final inspection.

Environmental Review Initial Study  
ATTACHMENT 6, 2 of 6  
APPLICATION 06-0077

**HARO, KASUNICH AND ASSOCIATES, INC.**

CONSULTING GEOTECHNICAL &amp; COASTAL ENGINEERS

Project No. SC6057  
13 July 2006MR. RON GARTHWAITE  
345 Kliewer Lane  
Watsonville, California 95076

Subject: Update to Geotechnical Investigation and Plan Review

Reference: Proposed Dairy Farm Barns  
APN 050-031-029  
345 Kliewer Lane  
Santa Cruz County, California

Dear Mr. Garthwaite:

As requested, this letter presents the results of our update to the Geotechnical Investigation report for the referenced project, dated 4 March 1998, and review of project plans. Project plans for the Lactating Cow Parlor, Freestall Barn, Hay Barn, and Compost Barn, dated 17 April 2006 through 18 May 2006 and revised 27 April 2006 and 22 May 2006 June 2005 were prepared by Western Dairy Design Associates, Inc. Project site plans indicate a new pond will be graded in the western half of the parcel adjacent to Kliewer Lane. This pond is not considered as part of our review.

The purpose of our update investigation was to evaluate if the conclusions and recommendations presented in the report are valid for construction of the proposed improvements and present supplemental conclusions and recommendations, if necessary. The intent of our plan review was to confirm that the plans were prepared in conformance with the geotechnical criteria and recommendations presented in the report and this update letter.

The scope of our work included: review of our Geotechnical report dated 4 March 1998; correspondence with the project engineer; review of the plans for the proposed project; and preparation of this letter.

**Site Location and Conditions**

The project site is located on Kliewer Lane, off Green Valley Road in Watsonville, California. The subject site is currently improved with a single family residence, parking area, and processing building. A paved driveway provides access from Kliewer Drive. A natural drainage swale currently bisects the 11.6 acre property west to east. East and west facing slopes descend to the swale which feeds into a man-made pond. The existing buildings are situated in the southwest quadrant of the parcel. Site descriptions, distances and directions presented in this report are based on the site reconnaissance by the engineer, review of the project plans, and review of the original geotechnical investigation.

Environmental Review Initial Study  
ATTACHMENT 6, 3 of 6  
APPLICATION 06-0077



Mr. Ron Garthwaite  
 Project No. SC6057  
 345 Kliewer Lane  
 13 July 2006  
 Page 2

**Project Description**

Our firm was hired to develop geotechnical design criteria for a small addition to the north end of the existing processing building, a new stanchion barn and washwater recycling pond. Our recommendations are presented in our Geotechnical Investigation of 4 March 1998.

It is our understanding that four new structures are proposed. The new Lactating Cow Parlor (LCP) to be founded on continuous spread footings with slabs on grade, will be situated east of the existing structures. Interior walls of the LCP are retaining walls which support engineered fill for raised interior slab sections. The wall heights vary from a 5 1/2 feet high to a maximum of 7 feet high.

The Freestall Barn, Hay Barn and Compost Barn will be located in the northeast quadrant of the property. All three proposed stanchion barns will be founded on isolated 2-foot diameter concrete footing, embedded a minimum of 3 1/2 feet into undisturbed native soil. Slabs on grade are proposed.

**Conclusions and Recommendations**

1. Based on our site observations and review of the geotechnical investigation, it is our opinion the conclusions and recommendations presented in the 1998 report are still valid and the report may be relied upon for the proposed project provided the recommendations of this letter are also incorporated into the final design.
2. The near surface soil at the site consists of loose silty sand and silt to a depth of 3 feet below grade. Spread footings for the proposed LCP should be founded in 18 inches of removed and recompacted engineered fill. The geotechnical engineer should be present during construction to perform required observation and testing.
3. The 1997 Uniform Building Code provides updated guidelines for seismic design of structures. Based on those guidelines, we provide the following updated site soil type, near source factors, and seismic coefficients selecting the San Andreas Fault (located about 6 km northeast of the site) as the seismic source fault:

- A. Soil Profile Type = S<sub>D</sub>
- B. Near Source Factor (N) = 1.3
- C. Seismic Coefficient (C<sub>s</sub>) = 0.57
- D. Near Source Factor (N<sub>v</sub>) = 1.7
- E. Seismic Coefficient (C<sub>v</sub>) = 1.1

Environmental Review Initial Study  
 ATTACHMENT 6, 4 of 6  
 APPLICATION 06-0077

Mr. Ron Garthwaite  
 Project No. SC6057  
 345 Kliewer Lane  
 13 July 2006  
 Page 3

4. The conclusions and recommendations presented in this update letter should be closely followed during project design, plan preparation and construction. Except where superseded by recommendation presented in this letter, all recommendations in the **1998** Geotechnical Investigation should also be followed.

#### **Plan Review**

Project plans for the Lactating Cow Parlor, Freestall Barn, Hay Barn, and Compost Barn, dated 17 April 2006 through 88 May 2006 and revised 27 April 2006 and 22 May 2006 June 2005 were prepared by Western Dairy Design Associates, Inc.

The new Lactating Cow Parlor (LCP) will be founded on continuous spread footings penetrating 12 inches into redensified native soil. Continuous spread footings should bear on engineered fill as recommended in our report (see "Foundations – Conventional Spread Footings", page 11). Interior footings of the LCP act as retaining walls. The backfilled walls will support raised interior slab floors. The retaining wall heights vary from a 5 ½ feet high, to a maximum of 7 feet high. Retaining walls which act as interior walls should be waterproofed.

The Freestall Barn, Hay Barn and Compost Barn will be situated in the northeast quadrant of the property. As proposed, all three proposed stanchion barns will be founded on isolated 2-foot diameter concrete footings, embedded a minimum of 3 1/2 feet and a maximum of 4 ½ feet into undisturbed native soil. Sheet 1 of the Compost Barn plan set calls for subgrade to consist of **18"** minimum of compacted soil below the bottom of slabs.

Rain runoff from the proposed structures appears to be collected and conveyed to the existing drainage swale and pond.

Based on our review, the referenced plans are in general conformance with the geotechnical recommendations presented in the 4 March **1998** Limited Geotechnical Investigation, provided the recommendations presented in our report and this letter are incorporated into the final design. The review of plans is performed solely for the purpose of assisting our clients in quality control and because this is subject to interpretation, our opinions do not represent warranties, either expressed or implied, of the adequacy of the plans for their intended purposes or for any other purpose whatsoever.

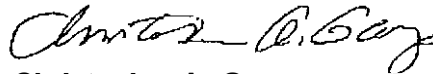
Environmental Review Initial Study  
 ATTACHMENT 6, 5 of 6  
 APPLICATION 06-0077

Mr. Ron Garthwaite  
Project No. SC6057  
345 Kliewer Lane  
13 July 2006  
Page 4

If you have any questions concerning this letter, please contact our office.

Very truly yours,

HARO, KASUNICH & ASSOCIATES, INC.



Christopher A. George  
C.E. 50871

SV/CAG/jm

Copies: 3 to Addressee  
1 to County of Santa Cruz Planning Department  
Attn: Joan Van deHoven

Environmental Review Initial Study  
ATTACHMENT 6, 6 of 6  
APPLICATION 06-0077

**GEOTECHNICAL INVESTIGATION**  
**for**  
**APN 050-31-29**  
**955 GREEN VALLEY ROAD**  
**Watsonville, California**

**Prepared for**  
**MR. AND MRS. GARTHWAITE**  
**Monte Sereno, California**

**Prepared By**  
**HARO, KASUNICH & ASSOCIATES, INC.**  
**Geotechnical & Coastal Engineers**  
**Project No. SC6057**  
**March 1998**

3

Environmental Review Initial Study  
ATTACHMENT # 1 of 9  
APPLICAT 06-0077

Project No. SC6057  
4 March 1998

MR. AND MRS. GARTHWAITE  
18170 Bicknell Road  
Monte Sereno, California 95030

Subject: Geotechnical Investigation

Reference: Proposed Dairy Farm Addition and Improvements  
APN 50-031-29  
955 Green Valley Road  
Watsonville, California

Dear Mr. and Mrs. Garthwaite:

In accordance with your authorization, we have performed a Geotechnical Investigation for the proposed dairy building addition and washwater recycling pond area for the planned organic dairy at 955 Green Valley Road.

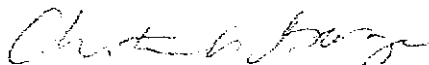
The accompanying report presents our conclusions and recommendations, and the results of the geotechnical investigation on which they are based.

If you have any questions concerning this report, please call our office

Very truly yours,

**HARO, KASUNICH & ASSOCIATES, INC.**

Dale Kessler  
Staff Engineer

  
Christopher A. George  
C.E. 50871

DK/sq  
Copies: 1 to Addressee  
3 to Mr. John McKelvey

Environmental Review Initial Study  
ATTACHMENT 7, 2 of 9  
APPLICATION 06-0077

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

Based on the results of our investigation, the proposed milking parlor addition, pond grading, stanchion barn and exterior-improvements appear compatible with the site, provided the geotechnical criteria and recommendations presented in this report are incorporated into the design and construction of the proposed project

The following recommendations should be used as guidelines for preparing project plans and specifications:

The primary geotechnical consideration at the site is the loose condition of the near surface soil. To reduce, the conipressibility and settlement potential of foundation zone soil, we recommend the top 18 inches of soil in the addition site be removed and replaced as engineered fill. Conventional spread footings are recommended for the addition.

Site Grading

1. The geotechnical engineer should be notified at least **four (4) working days** prior to **any** site clearing or grading so that the work in the field can be coordinated with the grading contractor, and arrangements for testing and observation services can be made.

The recommendations of this report are based on the assumption that the geotechnical engineer will perform the required testing and observation services during grading and construction. It is the owner's responsibility to make the necessary arrangements for these required services.

2. Where referenced in this report, Percent Relative Compaction and Optimum Moisture Content shall be based on ASTM Test Designation D1557-91.

3. Areas to be graded should be cleared of all obstructions including loose fill, trees not designated to remain, and other unsuitable material. Existing depressions or voids created during site clearing should be backfilled with engineered fill

4. Cleared areas should then be stripped of organic-laden topsoil. Stripping depth is typically from 2 to 6 inches. Actual depth of stripping should be determined in the field by the geotechnical engineer. Strippings should be wasted off-site or stockpiled for use in landscaped areas if desired.

5. The building pad for the milking parlor addition should be sub-excavated to a minimum depth of 18 inches below proposed subgrade elevation. The subexcavated zone should extend 2 feet beyond the proposed addition. The bottom of the excavation should be

scarified to a depth of 8 inches, moisture conditioned (or allowed to dry, as necessary) and compacted to a minimum of 90 percent relative compaction. Engineered fill should be placed in the excavation until subgrade elevation is achieved

6. The exposed surface soil in the corral slab area and pond excavation should be scarified 6 inches, moisture conditioned (or allowed to dry, as necessary) and compacted to a minimum of 90 percent relative compaction.

7. The washwater recycling pond will be constructed by cut and fill grading. Pond embankments should be compacted as engineered fill. The pond exterior embankment slope should have a maximum gradient of 3:1 and the interior embankment slope should have a maximum slope gradient of 2:1 provided the pond is lined with an impermeable membrane.

8. Engineered fill should be placed in thin lifts (not to exceed 8 inches in loose thickness), moisture conditioned, and compacted to at least 90 percent relative compaction,

9. On-site soil is generally acceptable for use as engineered fill. Materials for engineered fill should be essentially free of organic materials, and contain no rocks or clods greater than 6 inches in diameter, with no more than 15 percent larger than 4 inches.



10. Following grading, all exposed slopes should be planted as soon as possible with erosion-resistant vegetation.

**Foundations - Conventional Spread Footings**

11. The proposed milking parlor addition may be supported on continuous spread footings bearing on engineered fill, placed in accordance with the recommendations outlined within the Site Grading section of this report. The footings should be a minimum of 12 inches deep below the lowest adjacent grade, and a minimum of 12 inches wide. The footings should be reinforced as required by the structural designer based on the actual loads transmitted to the foundation.

12. The foundation trenches should be kept moist and be thoroughly cleaned of all slough or loose materials prior to pouring concrete. In addition, all footings located adjacent to other footings or utility trenches should have their bearing surfaces founded below an imaginary 1.5:1 (horizontal to vertical) plane projected upward from the bottom edge of the adjacent footings or utility trenches.

13. Foundations designed in accordance with the above may be designed for an allowable soil bearing pressure of 1,800 psf for dead plus live loads. This value may be increased by one third to include short-term seismic and wind loads.

14. Lateral load resistance for conventional and isolated spread footings may be developed in friction between the foundation bottom and the supporting subgrade. A friction coefficient of 0.35 is considered applicable.

Foundations - Stanchion Barn

15. The roof for the proposed stanchion barn will be supported by isolated metal or wood poles. We recommend that stanchions planned as structural elements for supporting roof members be embedded a minimum of 6 feet below the adjacent grade. An allowable skin friction of 400 psf per lineal foot plus a one-third increase for wind and seismic loads may be used for design of the poles. To resist lateral forces, a passive lateral resistance equivalent to a fluid weighing 325 pcf may be assumed to act on 1% times the pole diameter (or the total post hole diameter, where stanchions are set in poured concrete). The upper two feet of soil should be neglected for skin friction and passive resistance.

Slabs-on-Grade

16. We recommend the addition concrete slab-on-grade floor be supported on redensified native soil which extends to a depth of 18 inches below the bottom of the slab. Prior to construction of the slab, the subgrade surface should be proof-rolled to provide a smooth, firm, uniform surface for slab support. Slab reinforcement should be provided in accordance with the anticipated use and loading of the slab. As a minimum, we

recommend the use of number 3 bars placed within the slab at 18 inches on center. Slab joints should be spaced no more than 10 feet on center to minimize random cracking. While some movement of slabs is likely, a well-prepared subgrade including premoistening prior to pouring concrete, adequately spaced expansion joints, and good workmanship should minimize cracking and movement.

17. In areas where floor wetness would be undesirable, a blanket of 4 inches of free-draining gravel should be placed beneath the floor slab to act as a capillary break. In order to minimize vapor transmission, an impermeable membrane should be placed over the gravel. The membrane should be covered with 2 inches of sand or rounded gravel to protect it during construction. The sand or gravel should be lightly moistened just prior to placing the concrete to aid in curing the concrete.

#### Site Drainage

18. Proper control of drainage will be essential to the project.

19. Surface drainage should include positive gradients so that surface runoff is not permitted to pond adjacent to the addition foundation. Surface drainage should be directed away from the addition foundation.

20. Rain gutters and downspouts should be placed on roof eaves. Discharge from the rain gutters should be conveyed away from the addition site.

21. The migration of water or spread of extensive root systems below foundations, slabs, or pavements may cause undesirable differential movements and subsequent damage to these structures. Landscaping should be planned accordingly.

**Plan Review, Construction Observation. and Testing**

22. Haro, Kasunich and Associates should be provided an opportunity to review project plans prior to construction to evaluate if our recommendations have been properly interpreted and implemented. We should also provide foundation excavation observations and earthwork observations and testing during construction. This allows us to confirm anticipated soil conditions and evaluate conformance with our recommendations and project plans. If we do not review the plans or provide observation and testing services during the earthwork phase of the project, we assume no responsibility for misinterpretation of our recommendations.

EXHIBIT E

SANTA CRUZ ARCHAEOLOGICAL SOCIETY

1305 East Cliff Drive, Santa Cruz, California 95062

PRELIMINARY PREHISTORIC CULTURAL RESOURCE RECONNAISSANCE REPORT

Parcel AP # 97-0700 SCAS Project # SE-97-663  
Planning Permit # \_\_\_\_\_ Parcel Size 12  
Applicant COLLETTE ROSENTHALL  
Nearest Recorded Prehistoric Sites 0.7 MILES SOUTH ON  
PINTE LAKE

On DEC 3, 1997 ( 1 ) members of the Santa Cruz Archaeological Society spent a total of TWO ( 2 ) hours on the above described parcel for the purpose of ascertaining the presence or absence of prehistoric cultural resources on the surface. Though the parcel was traversed on foot at regular intervals and diligently examined, the society cannot guarantee the surfaced absence of prehistoric resources where soil was obscured by grass, underbrush, or other obstacles. No core samples, test pits, or any subsurface analysis was made. A standard field form indicating survey methods used, type of terrain, soil visibility, closest fresh water, and presence or absence of historic evidence was completed and filed with this report at the Santa Cruz County Planning Department.

The preliminary field reconnaissance did not reveal any evidence of prehistoric cultural resources on the parcel. The proposed project would, therefore, have no direct impact on prehistoric resources. If subsurface evidence of such resources should be uncovered during construction the County Planning Department should be notified.

Further details regarding this reconnaissance are available from the Santa Cruz County Planning Department or from SIM FICUETT OR MICHAEL GLENN, Chairman of the Reconnaissance Committee, Santa Cruz Archaeological Society, at SANTA CRUZ California, 95060, Telephone (408) 479-1786.

Additional Notes:

Environmental Review Initial Study  
ATTACHMENT 6  
APPLICATION 06-0077

Environmental Review Initial Study  
ATTACHMENT 3  
APPLICATION 97-0700

C O U N T Y   O F   S A N T A   C R U Z  
D I S C R E T I O N A R Y   A P P L I C A T I O N   C O M M E N T S

Project Planner: Joan Van Der Hoeven  
Application No.: 06-0077  
APN: 050-031-29

Date: July 24, 2006  
Time: 10:30:10  
Page: 1

Environmental Planning Completeness Comments

===== REVIEW ON MARCH 9, 2006 BY ROBERT S LOVELAND =====

1. The civil engineer completing the grading plan needs to provide an assessment of the existing road crossing the existing manmade pond. Is the existing road suitable for the intended use or will it need to be upgraded? If the road is to be upgraded, clearly identify the work to be completed.

2. Please identify exactly where all the fill material will be deposited on the parcel and include the depth of material. To ensure the agricultural viability of the existing parcel soil profile, please have a soil scientist complete an evaluation as to whether the fill material to be spread on site will have a negative effect on the agricultural viability. Please submit that evaluation for review.

3. NOTE TO PLANNER: A riparian exception may be required depending on the results of the questions above.

===== UPDATED ON MARCH 10, 2006 BY JOSEPH L HANNA =====

A Soils Report and Soils Report Review are required. A copy of the County's Guidelines for soils investigation is included for the applicant's information. The soils report must address the pond and proposed grading

An engineered grading plan is required. All fills shall have a 2:1 or flatter. The plan must use conventional designations, the grading must show the proposed final contours, limits of cuts and fills in plan view, and must indicate limits of disturbance.

===== UPDATED ON MAY 4, 2006 BY JOSEPH L HANNA =====

The second routing included only an additional copy of the geotechnical report. The comments remain the same. ===== UPDATED ON MAY 11, 2006 BY JOSEPH L HANNA =====

The third routing included a letter from the designer that indicates that a new grading plan was attached. The plan is not included in the routing. ===== UP- DATED ON MAY 19, 2006 BY JOSEPH L HANNA =====

1. The geotechnical engineer must review the plans and provide an update letter to their report.

2. An engineered grading plan is required. The plan must address the previous comments from Robert Loveland. The project may need a Riparian Exception. ===== UP- DATED ON MAY 23, 2006 BY ROBERT S LOVELAND =====

3rd routing contained only a written response to the comments listed above. Please provide the information listed above. ===== UPDATED ON JULY 7, 2006 BY ROBERT S LOVELAND =====

4th Routing: ===== UPDATED ON JULY 10, 2006 BY ROBERT S LOVELAND =====

Item 1 from 3/9/06: still needs to be addressed

Item 2 from 3/9/06: The grading and drainage plan has been accepted for completeness

Environmental Review Initial Study

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EXHIBIT D

Discretionary Comments - Continued

Project Planner: Joan Van Der Hoeven  
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purposes (dated 6/24/06). Please provide a copy of the ag. viability study requested

Item 3 from 3/9/06: Based on the plans submitted. it does not appear that a riparian exception will be required for this project

Item 1 above from the County Geologist (3/10/06) still needs to be addressed.

----- UPDATED ON JULY 21, 2006 BY JOSEPH L HANNA -----

The geotechnical engineer report has been accepted. See comments above for issues to be resolved by the project civil engineer

Environmental Planning Miscellaneous Comments

----- REVIEW ON MARCH 9, 2006 BY ROBERT S LOVELAND -----

----- UPDATED ON MARCH 10, 2006 BY JOSEPH L HANNA -----

Project Review Completeness Comments

LATEST COMMENTS HAVE NOT YET BEEN SENT TO PLANNER FOR THIS AGENCY

----- REVIEW ON MARCH 10, 2006 BY JOAN VAN DER HOEVEN -----

Project still needs comments from the Regional Water Control Board and County Ag Commission Vector Control. ----- UPDATED ON APRIL 28, 2006 BY JOAN VAN DER HOEVEN -----

Vector control clear 4-28-06. Environmental Health clear 4-27-06. 2-page letter from Western Dairy design dated 3-21-06 and received 4-21-06 has been forwarded to Pajaro Valley Fire for review. Please contact Environmental Planning and Public Works road engineering for follow up.

----- UPDATED ON APRIL 28, 2006 BY JOAN VAN DER HOEVEN -----

NO COMMENT

Project Review Miscellaneous Comments

LATEST COMMENTS HAVE NOT YET BEEN SENT TO PLANNER FOR THIS AGENCY

----- REVIEW ON MARCH 10, 2006 BY JOAN VAN DER HOEVEN -----

NO COMMENT

----- UPDATED ON APRIL 28, 2006 BY JOAN VAN DER HOEVEN -----

NO COMMENT

Environmental Review Initial Study

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Dpw Drainage Completeness Comments

LATEST COMMENTS HAVE NOT YET BEEN SENT TO PLANNER FOR THIS AGENCY

----- REVIEW ON JUNE 2, 2006 BY CARISA R DURAN -----

Not enough drainage information has been given to consider acceptance of this application. To be approved by this division at the discretionary application stage, all potential off-site impacts and mitigations must be determined and a complete project drainage system presented complying with the County Design Criteria and County General Plan policies (g.p.p.). Proposed projects must conclusively

Discretionary Comments - Continued

Project Planner: Joan Van Der Hoeven  
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4) If it is determined that the increase in runoff from the proposed development cannot be handled on-site, an offsite analysis by an engineer is required. Such determinations (unfeasibility) should be included in documentation or plans submitted for this application. Offsite analysis includes making use of any existing offsite drainage systems. All existing and proposed drainage systems and connections must be shown. Amount of runoff to be added to the existing offsite drainage system, along with the system path, condition, and adequacy should be clarified.

5) Please describe the condition and adequacy to convey runoff flows for both the double culvert under Kliever Road and the 2' culvert from the storage pond to the pond in the adjacent parcel

6) Two new sump pumps are shown on the plans. Using sump pumps to handle on-site runoff should be considered for use only after it is determined that no other method is suitable. From information given on the plans, it seems that gravity flow to the lagoon and pond is possible. Please clarify if gravity flow drainage systems are feasible for this site. If so, consider revising plans.

From Program Statement:

7) Pond Capacity description did not include the estimated 43 acres from upstream

Environmental Review Initial Study

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Discretionary Comments - Continued

Project Planner: Joan Van Der Hoeven  
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areas. Please clarify if the capacity is adequate for all flows being directed to the pond and if the 2' of freeboard will still be maintained.

8) Both the pond and lagoon will accept water from the milking parlor and bottling operations. Please clarify which will accept roof runoff and effluent and revise statement as necessary.

9) Per the lagoon statement. runoff from the freestall barn and corral areas will be pumped to the lagoon: however, the plans do not show such a feature. Please confirm runoff routing and revise plans to match.

10) Both the pond and lagoon description state that runoff from the freestall barn and corral areas will be accepted. Please confirm if runoff from these areas will be routed to both locations and revise plans to match.

Until further information is submitted addressing the above comments, a thorough review of this application cannot be completed. Once submitted, additional items may need to be addressed before the application can be deemed complete

This application is for development in the Zone 7A Flood Control District; therefore, for increases in impervious area. a drainage fee will be assessed. The fees are currently \$0.90 per square foot.

All subsequent submittals for this application must be done through the Planning Department. Submittals made directly to Public Works will result in delays.

Please call or visit the Dept. of Public Works, Stormwater Management Division, from 8:00 am to 12:00 pm if you have any questions. ===== UPDATED ON JULY 5, 2006 BY CARISA R DURAN =====  
2ND ROUTING - 7/5/06

Revised project drawings dated 05/16/06 were received. However, the drainage plan submitted for the increase in runoff from the proposed project has been superseded by David Avila by phone on 6/20/06 and confirmed by memorandum received by email on 6/21/06 to be maintained on-site. Per the memorandum. the irrigation pond is sized for water "...from the milk bottle washing operation, the milk line cleaning operation, floor washing and cow holding corral floor washing." The pond will also accommodate runoff from a 24-hour 25- year storm.

The application is deemed complete for the Discretionary review stage

Please see Miscellaneous Comments for an additional item

Dpw Drainage Miscellaneous Coments

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

===== REVIEW ON JUNE 2, 2006 BY CARISA R DURAN =====

No comment. ===== UPDATED ON JULY 5, 2006 BY CARISA R DURAN =====

For the building application, please submit the drainage path of affected parcels and structures for overflow from the irrigation pond that would result from facility

Environmental Review Initial Study

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EXHIBIT D

Discretionary Comments - Continued

Project Planner: Joan Van Der Hoeven  
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failure or storms exceeding the design storm

**Dpw Road Engineering Completeness Comments**

===== REVIEW ON MARCH 28, 2006 BY GREG J MARTIN =====

Kliwer Lane is recommended to be paved 24 feet wide as it serves a commercial operation and other parcels with homes on them. The road section is recommended at 3 inches of asphalt concrete over 9 inches of aggregate base. Standard 20 foot returns are recommended at the intersection of Kliwer Lane and Green Valley Road. A stop sign, stop bar, and stop legend are required as well.

If you have any questions please call Greg Martin at 831-454-2811. ===== UPDATED ON JUNE 12, 2006 BY GREG J MARTIN =====  
No comment.

**Dpw Road Engineering Miscellaneous Comments**

===== REVIEW ON MARCH 28, 2006 BY GREG J MARTIN =====

===== UPDATED ON JUNE 12, 2006 BY GREG J MARTIN =====

**Environmental Health Completeness Comments**

===== REVIEW ON FEBRUARY 28, 2006 BY JIM G SAFRANEK ===== The applicant's septic application from '98 was never approved and finalled (a '97 septic pumper's report indicated a failing system). An approved septic permit application will be required. Call R Sanchez 454-2751. If any retail dairy sales will occur onsite the applicant should contact Roger Houston of EHS for plan and permitting requirements: 454 2734

===== UPDATED ON MARCH 3, 2006 BY JIM G SAFRANEK ===== A more detailed manure management plan will be required. Call 454-2022 to obtain plan requirements handout from EHS.

===== UPDATED ON JUNE 8, 2006 BY JIM G SAFRANEK ===== Septic issues have been resolved according to the district EHS staff. A revised manure management plan has been submitted and will now be considered a Misc condition (linked to EHS building permit clearance). EHS disc. permit reqs now satisfied. I was just informed today by EH management that a 25' setback between the existing onsite septic and the proposed cow liquid waste pond will be required. The pond will be reviewed and approved by PW, but a winter GW test will be needed to show setback of pond bottom to seasonal high ground water. J. Safraneck

===== UPDATED ON JUNE 20, 2006 BY JIM G SAFRANEK =====

===== UPDATED ON JUNE 21, 2006 BY JIM G SAFRANEK ===== Please note EHS has revised pond to septic setback to only 25'

**Environmental Health Miscellaneous Comments**

===== REVIEW ON MARCH 3, 2006 BY JIM G SAFRANEK =====

NO COMMENT

===== UPDATED ON JUNE 8, 2006 BY JIM G SAFRANEK ===== Approval of the manure management plan prior to building permit issuance is now a Misc condition. Review of this plan is on-going.

Environmental Review Initial Study  
ATTACHMENT 9, 5 of 10  
APPLICATION 06-0077



PAJARO VALLEY FIRE DISTRICT  
OFFICE OF THE FIRE MARSHAL  
6059 HIGHWAY 9, P.O. DRAWER F-2, FELTON, CA 95018, (831) 335-6748

728-5484  
521-7526

JOHN FERREIRA  
FIRE CHIEF

February 27, 2006

Western Dairy Design  
316 West F St. Suite 100  
Oakdale, CA 95361

Sirs,

The plans for the proposed dairy at 345 Kliever Lane have been reviewed in order to determine the Fire Districts requirements. Please add the following notes to the plans when applying for a building permit in order to expedite the plan check process.

1. Add the appropriate NOTES and DETAILS showing this information on your plans and RESUBMIT, with annotated copy of this letter.
2. NOTE on the plans that these plans are in compliance with California Building and Fire Codes (2001) as amended by the Authority Having Jurisdiction.
3. Each APN (lot) shall have separate submittals for building and sprinkler system plans.
4. The job copies of the building and fire systems plans and permits must be on-site during inspections.
5. NOTE on the plans the OCCUPANCY CLASSIFICATION, BUILDING CONSTRUCTION TYPE-FIRE RATING and SPRINKLERED as determined by the building official and outlined in Chapters 3 through 5 of the 2001 California Building Code (e.g., R-3, Type V-N, Sprinklered).
6. *The FIRE FLOW requirement for the subject property is 1500 gallons per minute.* NOTE, on the plans, the required FIRE FLOW and the available FIRE FLOW. This information can be obtained from the water company upon request.
7. SHOW on the plans a public fire hydrant, meeting the minimum required fire flow for the building, within 250 feet of any portion of the building.
8. The fire hydrant shall be painted in accordance with the State of California Health and Safety Code.
9. NOTE on the plans that all buildings shall be protected by an approved automatic sprinkler system complying with the edition of NFPA 13 currently adopted in Chapter 35 of the California Building Code.

10. If the existing building is equipped with an automatic fire sprinkler system, the addition must be equipped with an automatic fire sprinkler system...NOTE that the designer/installer shall submit three (3) sets of plans and calculations for the underground and overhead Automatic Sprinkler System to this agency for approval. Installation shall follow our guide sheet.

11. NOTE on the plans that an UNDERGROUND FIRE PROTECTION SYSTEM WORKING DRAWING must be prepared by the designer/installer. NOTE that the WORKING DRAWINGS shall comply with the District UNDERGROUND FIRE PROTECTION SYSTEM

12. SHOW where address numbers will be posted and maintained, plainly visible from the street. Numbers shall be a minimum of four (4) inches in height and of a color contrasting to their background.

13. NOTE on the plans that the roof coverings to be no less than Class " B rated roof,

14. NOTE on the plans that a 100-foot clearance will be maintained with non-combustible vegetation around all structures.

15. SHOW location of Knox Box and key. If a security gate is to be installed on the property, it must also comply with the districts access requirements

16. SHOW on the plans DETAILS of compliance with the Access Standards of the Santa Cruz County General plan (Objective 6.5 Fire Hazards)

17. The access road shall be 20 feet minimum width and a maximum of twenty (20%) percent slope.

18. The access road shall be in place to the following standards prior to any framing construction, or the construction will be stopped:

Access road surface shall be "all weather", a minimum 6" of compacted aggregate base rock, class 2 or equivalent, certified by a licensed engineer to 95% compaction and shall be maintained.

ALL WEATHER SURFACE: shall be a minimum 6" of compacted class 2 base rock for grades up to and including 5%, oil and screened for grades up to and including 15% and asphaltic concrete for grades exceeding 15% but in no case exceeding 20%.

The maximum grade of an access road shall not exceed 20%, with grades greater than 15% not permitted for distances of more than 200feet at a time.

The access road shall have a vertical clearance of 14 feet for its entire width and length, including turnouts.

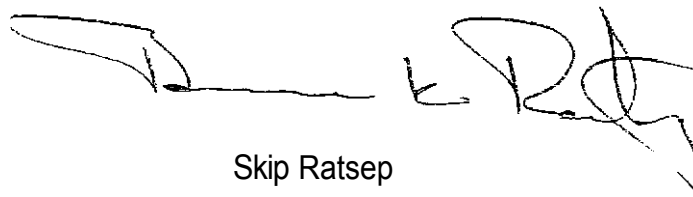
A turnaround that meets the requirements of the fire department shall be provided for access roads and driveways in excess of 150 feet in length.

Drainage details for the road or driveway shall conform to current engineering practices, including erosion control measures.

All private access roads, ~~driveways~~, turn-around and bridges are the responsibility of the owner(s) of record and shall be maintained to ensure the fire department safe and expedient passage at all times.

If you have any questions, you may contact me at 831 728-5484.

Sincerely,



Skip Ratsep

Deputy Fire Marshal

Environmental Review Initial Study  
ATTACHMENT 9, 8 of 10  
APPLICATION 06-0077

**Pajaro Valley Fire Protection District**

562 Casserly Road, Watsonville, CA 95076  
Telephone: (831) 728-5484 Fax: (831) 722-3722



September 6, 2006

To: Joan Van der Hoeven  
Dave Avila  
From: Branson k Ratsep  
Pajaro Valley Fire District  
Fire Marshal Office

Subject: Dairy

As per the meeting Thursday August 31<sup>st</sup> it was agreed upon that the fire hydrant will be installed on Kliewer lane on the left side of the road way on Kliewer lane, as per county guidelines which will require Watsonville city to bore under the road to install it. The trade off for this was the fire dept. would not require road way upgrades on Kliewer lane. And the hydrant could be located at Kliewer lane and green Valley not as per counties guidelines within 250 feet of any portion of the buildings. Also all access roads ie Drive ways shall meet county standards if in excess of 150 feet in length ie width length turn outs and turn around show on the plans details of compliance with the access standards of the Santa Cruz general plan as a side note all private access roads, driveways, turn-around are the responsibility of the owner(s) of record and shall be maintained to ensure the fire department safe and expedient passage at all times.

Second due to the property being in local responsibility, the county ordinance is only 5,000 gal on site Water for each parcel, a total of 10,000 on site water. If the property was in state responsibility that would require 10,000 each parcel.

Hope this helps

A handwritten signature in black ink, appearing to read "Branson k Ratsep".

Branson k Ratsep  
Pajaro Valley Fire District  
Fire Marshal Office

COOPERATIVE FIRE PROTECTION PROVIDED BY CDF

Accessibility: Preliminary Project Comments for Development Review  
County of Santa Cruz Planning Department

Date: 2/22/06

Application Number: 06-0077

APN: 050-031-29

Dear Joan Van der Hoeven,

A preliminary review of the above project plans was conducted to determine accessibility issues. The following comments are to be applied to the project design.

Please have the applicant refer to the attached brochure entitled Accessibility Requirements - Building Plan Check which can also be found at the County of Santa Cruz Planning Department website:

<http://www.sccoplanning.com/brochures/accesscheck.htm>

This document is an information source for the designer when preparing drawings for building plan check.

Project Description: New Construction – Commercial Agricultural

Determination of Occupancy: Please specify the occupancy classifications in the project data, using the 2001 California Building Code. The occupancy classification(s) appear to be F-2 (milking parlor) and U-3 (barns).

CBC Section 1103B – Building Accessibility

Accessibility to buildings or portions of buildings shall be provided for all occupancy classifications except as modified by this section. Occupancy requirements in this chapter may modify general requirements, but never to the exclusion of them. Employee work areas and restrooms serving employees need to be accessible. If there are any areas open to the public, these areas need to be accessible.

CBC 1114B.1.2 Accessible Route of Travel

At least one accessible route within the boundary of the site shall be provided from public transportation stops, accessible parking and accessible passenger loading zones, and public streets or sidewalks, to the accessible building entrance they serve. Refer also to 1127B for Exterior Routes of Travel. Where more than one route is provided, all routes shall be accessible. The plans do not show path of travel from the site boundary, at the accessible parking space, or between accessible building entrances. Please revise the plans to show these accessible paths. Provide path widths, path material specifications, slopes, curb cuts and ramps (as necessary).

CBC 11298 Accessible Parking Required

Each lot or parking structure where parking is provided for the public as clients, guests or employees, shall provide accessible parking as required by this section. An accessible parking space is identified on Sheet C.1 of the plans. The plans for the building permit application will need to detail this space.

Path of Travel Verification Form (refer to brochure mentioned in the beginning part of this letter)

To be submitted at the time of Building Permit application.

CBC 1133B General Accessibility for Entrances, Exits and Paths of Travel

Provide an Egress Plan showing maneuvering clearances at all doorways, passageways, and landings. This may be shown on the plans for the building permit application.

Plumbing Fixture Requirements – Accessible Restrooms

Please refer to the 2001 California Plumbing Code, Table 4-1 for plumbing fixture requirements for these occupancies. Current plans do not locate nor specify restrooms.

Please note that this is only a preliminary review to determine major accessibility issues. This is not a complete accessible plan check. A complete accessible plan check will be conducted at the time of building permit application review. The plans submitted for building plan check review will need to include complete details and specifications for all of the accessible issues in the California Building code.

Therefore, there may be additional comments when applying for a building permit and responding to the Building Plan Check process.

Please contact me with any questions regarding these comments.

Laura Brinson  
Building Plans Examiner / Assistant in Civil Engineering  
County of Santa Cruz Planning Department  
(831) 454-7579  
pln631@co.santa-cruz.ca.us

Environmental Review Initial Study  
ATTACHMENT 9, 9 of 10  
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**Joan Vanderhoeven**

06-0077

**From:** Paul Binding  
**Sent:** Friday, April 28, 2006 9:42 AM  
**To:** Joan Vanderhoeven  
**cc:** 'davidavila@dairydesigners.com'  
**Subject:** Claravale Dairy VCP

Joan,  
I have looked over Claravale Dairy's Vector Control Plan for their Kiewer Lane (APN 050-031-29) expansion (50 cows) and it looks very good, very thorough for both flies and mosquitoes. Rats aren't addressed specifically but it mentions cleanup of feed several places and there will be no silage fed. This plan is acceptable to us.

Paul Binding, Manager  
Santa Cruz County Mosquito and Vector Control CSA 53  
831-454-2590

Environmental Review Initial Study  
ATTACHMENT 9, 10 of 10  
APPLICATION 06-0077



**VECTOR CONTROL PLAN  
For a Dairy Relocation Project**

for

**Claravale Dairy**  
345 Kliewer Lane  
Watsonville, CA 95076  
Located on APN 050-031-29

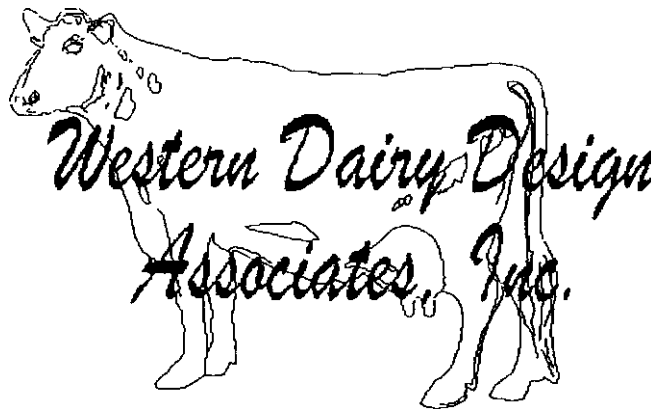
Submitted to:

**Santa Cruz County  
Agriculture Commissioner  
Mosquito and Vector Control Department**

640 Capitola Road  
Santa Cruz, California 95062  
831-454-2590  
Paul Binding

April 14, 2006

Prepared by:



316 West F Street, Suite 100  
Oakdale, CA 95361  
(209) 848-8674 Fax (209) 848-8654

A handwritten signature in cursive script, appearing to read "David Avila".

**David Avila, President**  
Western Dairy Design Associates, Inc.

Environmental Review Initial Study  
ATTACHMENT 10, 1 of 7  
APPLICATION 06-0077

## ***Vector Control Plan – Claravale Dairy***

Site Address: 345 Kliewer Lane  
Watsonville, CA 95076

APN: 050-031-29

Owner: Mr. Ron Garthwaite  
345 Kliewer Lane  
Watsonville, CA 95076

This VCP includes, but is not limited to, measures that ensure good drainage of manured areas, clean-up and maintenance along fence lines, and prompt repair of all leaking pipes and fixtures.

This VCP complies with typical guidelines provided by Mosquito Vector Control Districts (MVCDs) for the construction and management of dairy housing, corrals; nutrient water systems, and feed storage to prevent significant mosquito or fly production.

### ***Mosquitoes***

The following measures will be implemented at Claravale Dairy to address mosquito problems:

- The dairy nutrient water holding pond will have an access road at least 14 feet in width on three sides. The pond is narrow enough for spray system coverage if required. The road will be accessible at all times to provide for the use of vehicle mounted mosquito control equipment;
- **All** fencing around nutrient water ponds will be placed on the outside of the 14 foot lanes and gated to provide easy access;
- No drainage lines will by-pass the holding pond, except those which provide for normal, clean roof water run-off, **All** drain inlets will be sufficiently grated to prevent solids accumulation in the holding pond;
- Floatage of any solid substance which could provide harborage for immature mosquito stages will be kept out of the nutrient water holding pond;
- Vegetative growth will be prevented in ditches, and all areas of the nutrient water pond. This includes access lanes, interior pond embankments and any weed growth which may establish on the pond surface.

- Pasture will be regularly inspected and maintained to keep it properly graded for irrigation and drainage. Maintenance will be undertaken if broken checks, a need for re-leveling or reconstruction of levees are found;
- Pasture will be irrigated with a sprinkler type system which allows for more proper applications to limit puddling. The fields will be irrigated only as frequently as is needed to maintain proper soil moisture. The irrigator will apply only enough water to wet the soil to the depth of rooting;
- Cattle are kept largely on dry lots and in the freestall barn and are allowed to graze only occasionally. Grazing will be managed to keep animals off the pasture while the soil is soft. Keeping animals off wet pasture protects the soil and roots of the forage grasses as well as preventing water – filled hoof prints which could become mosquito larvae habitat. Since all the manure from the freestall and drylot areas is sold, contamination of tail water by overfertilization is not likely to be a problem;
- Dairy nutrient water discharged for irrigation purposes will be managed so that it does not stand for more than three days. Discharges which stand for more than three days could cause severe mosquito emergence;
- No nutrient water will be allowed to stand for longer than four days. This includes water in ruts or unnecessary containers;
- Solid manure mats will not be permitted to form on the surface of the pond water. This will prevent the formation of sheltered micro environments which could host mosquito larvae;

## *Flies*

The following measures will be implemented to address fly problems:

- Daily inspections of water supply systems to ensure that any leaks are promptly repaired. These inspections shall include all watering troughs to ensure that mechanisms for controlling water level are operating effectively and are protected from damage;
- Regular cleanup of feeding lanes and stalls in freestall barns and corrals to ensure that spilled feed is promptly removed and disposed;
- Regular harrowing and turning of manure in corrals and freestall barn to break it up and allow it to dry. This will destroy fly breeding sites and thus minimize the potential for development of fly populations on manure;

- Manure from the dairy is dried as described above, then coinposted and sold. The entire year's production of manure is sold every year to private individuals and farmers so that it does not build up. This, too, will minimize the potential for development of fly populations on manure;
- Regular inspection of corral areas for low, moist, or puddled areas. These will be properly filled and leveled.
- Weekly inspection of feed storage areas to ensure proper covering, drainage, and removal of any spoiled feed;
- Weekly inspection of fence lines of corrals and other "edge" areas and removal of any accumulated manure;
- Periodic monitoring of stable flies by direct observation and counting of the number of stable flies on the legs of a representative number, minimum of two percent, of the support stock herd;
- All exterior doors and windows in milk rooms have screens that are inspected monthly to determine if they are working properly and to identify rips in the screening. Ripped or otherwise damaged screens are repaired or replaced immediately;
- If necessary, flytraps are set throughout the barn at strategic locations. The traps are inspected monthly, or more frequently if necessary, and replaced when saturated with captured flies.

In addition to fly management practices in the cattle housing and milking areas of dairy facilities, the following sanitation practices are implemented to control fly populations:

- Dead animals are stored in a secured area at the dairy facility and off-site rendering plant operators are immediately notified for pickup of carcasses;
- Residual feed is removed from infrequently used feeding areas;
- All garbage is disposed of in closed dumpsters that are regularly emptied by a contracted nutrient management service for off-site disposal;
- Grass and other landscape clippings are removed from the site for off-site disposal or reuse (as feed or soil amendment).

In the event of complaints after implementation of these measures, a determination of the severity of a fly population will be made by the Department of Environmental Health during an inspection. The County will evaluate the affected herd, identify sources of the

fly population, and evaluate weather conditions. In general; an infestation would be indicated by insect pests found on over 25 percent of the animals sampled during monitoring, or by the presence of substantial breeding areas. In the event of infestation causing a nuisance: the County will impose additional control measures on a site-specific basis and/or take enforcement action. Additional measures that may be applicable on a site specific basis are as follows:

### *Biological Pest Control*

Parasitoids are arthropods that parasitize their hosts. Natural populations of beneficial fly parasitoids (including *Muscidifurax*, *Naonia*, and *Spalangia*) are supported and encouraged through protection of nests and avoidance of the use of insecticides that are lethal to them. The most effective of these insects selectively kill larvae within fly pupae then oviposit eggs within the pupae. When the egg hatches, the parasitoid eats the dead larvae. These insects are very selective regarding their hosts and, therefore, do not harm humans or dairy cattle. If a sufficient population of parasitoids does not develop naturally, the population is augmented by purchasing additional parasitoids from licensed suppliers.

Another biological control method involves the use of bacteria such as *Bacillus thuringiensis israelensis* (Bti) or *Bacillus sphaericus* (Bs). Formulations of (Bti) include a sprayable liquid, granules that can sift through vegetation, and as floating briquettes for mosquito control in small bodies of water. Effectiveness varies depending on mosquito species and stage of maturity. Neither (Bti) or (Bs) is effective against mosquito pupae. They can kill mosquitoes for days or up to several weeks, depending on amounts and conditions.

### *Odor*

At the Claravale Dairy, cattle are fed hay and grains rather than silage. Silage is the most common source of odors on modern dairies, and is eliminated on Claravale Farm.

The entire year's production of manure is dried, composted, and sold every year to private individuals and farmers so that it does not build up. This, too, will minimize the potential for odor.

Environmental Review Initial Study  
ATTACHMENT 10, 5 of 7  
APPLICATION 06-0077

## ***Retention Pond***

The pond is 220 feet long, and has a width varying from 72 to 110 feet. It provides good width and wind exposure, considering its small capacity and the space it has to fit into.

There is no mechanical separator or settling pond, but this pond will only be handling manure excreted during the time the 10% of the time the 50 cows are being milked. The manure in the dry lots and freestalls will be handled dry, composted, and sold.

If solids become present in the pond they will be broken down by the application of microbial agents. For one microbial treatment option, see [www.proactmicrobial.com](http://www.proactmicrobial.com). The pro-act microbial treatment system uses proprietary microbes along with a surface aeration system to produce a three-stage digestion system in a dairy retention pond. The bottom is anaerobic, the middle layer contains facultative bacteria which break down solids, and the top aerobic layer acts as an odor cap. Since the pond is only 7 feet deep, it could approach closer to aerobic conditions than the typical anaerobic lagoon.

## ***Wetland***

Irrigation drain water and / or offsite drainage flows through an existing small wetland before draining to adjacent property. This wetland provides cleanup mitigation of nutrients in the water, ~~and will be stocked with mosquitofish to prevent mosquito emergence.~~ No change is proposed to be made to the wetland in the Claravale Dairy relocation proposal. Since the wetland already exists, and the facility has not been the subject of any great volume of complaints, it is probable that the wetland is in balance and not likely to become a problem in the future.

Environmental Review Initial Study  
ATTACHMENT 10, 6 and 7  
APPLICATION 06-0077

## ***Conclusion***

Claravale Farm is California's only remaining example of a small, local dairy; using traditional small-scale methods in the production of dairy products.

Claravale Farm's use of traditional methods of soil and liquid nutrient management, which differ significantly from contemporary methods, eliminate many of the sources of flies, mosquitoes, and vectors associated with typical contemporary dairies. The fact that the vast majority of manure is harrowed and treated dry, then composted and sold every year to private individuals and local farmers, eliminates most of the fly breeding potential associated with typical dairies.

By feeding the cattle hay and grains rather than silage; the most common source of odors on modern dairies is eliminated on Claravale Farm.

Claravale Farm's relocation to this site represents a unique opportunity to bolster the agricultural base of the area with an established; unique, small-scale dairy enterprise. The area already boasts several high-quality agricultural operations that would complement the dairy's presence and benefit from it as well.

Environmental Review Initial Study  
ATTACHMENT 10, 7 of 7  
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**California Regional Water Resources Control Board**  
**Central Coast Region**



Linda S. Adams  
 Secretary for  
 Environmental Protection

Internet Address <http://www.waterboards.ca.gov/centralcoast>  
 895 Aerovista Place - Suite 101, San Luis Obispo, CA 93401-7906  
 Phone (805) 549-3147 FAX (805) 543-0397

Arnold Schwarzenegger  
 Governor

June 13, 2006

Ron Garthwaite  
 345 Kliewer Lane  
 Watsonville, CA 95076

Dear Mr. Garthwaite:

**REQUEST FOR REPORT OF WASTE DISCHARGE, CLARAVALE DAIRY FARM,  
 SANTA CRUZ COUNTY**

On June 5, 2006, we received the fourth routing of your Development Permit Application (NO. 06-0077) to the County of Santa Cruz to develop the Claravale Dairy Farm at 345 Kliewer Lane in Watsonville, Santa Cruz County. According to the Application, you propose to develop a commercial dairy with 60 dairy cows, a milking barn, and a wastewater pond.

In accordance with California Water Code section 13260, you are required to file a Report of Waste Discharge (ROWD) with the Regional Board. The ROWD is a technical report describing the waste characteristics, proposed treatment and disposal, and how you will ensure the discharge does not pollute groundwater or surface water. You can find the ROWD forms at the Regional Board's website at [www.swrcb.ca.gov/rwqcb3/applications](http://www.swrcb.ca.gov/rwqcb3/applications). Please provide all technical information specified in the Appendix to the ROWD form, including waste flow rates and characteristics, depth to groundwater, pond design and pond liner design, and proposed disposal measures.

In addition, your proposed wastewater treatment and disposal system must comply with design requirements specified in the California Code of Regulations, Title 27, Division 2, Subdivision 1, Chapter 7, Subchapter 2, Article 1. SWRCB - Confined Animal Facilities. After Regional Board staff has reviewed your complete ROWD, we shall draft waste discharge requirements (WDRs) for public review and for the Board's consideration at a regularly scheduled public meeting. Allow approximately 120 days from your submittal of the ROWD to the Board's adoption of the proposed WDRs.

The Regional Board's request for a ROWD is made pursuant to Sections 13260 and 13267 of the California Water Code. Pursuant to Section 13261 and 13268 of the Water Code, violation of a request made pursuant to Water Code Section 13260 or 13267 may subject you to civil liability of up to \$1,000 per day for each day in which the violation occurs

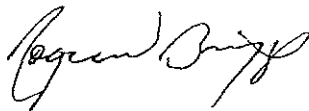
Environmental Review Initial Study  
 ATTACHMENT 11, 1 of 3  
 APPLICATION 06-



The Regional Board needs the required information to ensure your waste discharge does not pollute groundwater or surface water. You are required to submit this information because you propose to discharge waste from the Claravale Dairy Farm, and based on the information available you are responsible for the discharge.

Any person affected by this action of the Regional Board may petition the State Water Resources Control Board (State Board) to review the action in accordance with Section 13320 of the California Water Code and Title 23, California Code of Regulations, Section 2050. The petition must be received by the State Board, Office of Chief Counsel, P. O. Box 100 Sacramento, 95812 within 30 days of the date of this order. Copies of the law and regulations applicable to filing petitions will be provided upon request.

Sincerely,



Roger W. Briggs  
Executive Officer

cc:

Joan van der Hoeven  
County of Santa Cruz  
Planning Department  
701 Ocean Street, 4<sup>th</sup> Floor  
Santa Cruz, CA 95060

David Avila  
Western Dairy Design Associates  
316 West F Street, Suite 100  
Oakdale, CA 95361

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Environmental Review Initial Study  
ATTACHMENT 11, 2 of 3  
APPLICATION 06-0077

## Joan Vanderhoeven

---

**From:** Mike Higgins [Mhiggins@waterboards.ca.gov]  
**Sent:** vrijdag 17 november 2006 14:37  
**To:** ruben.sanchez.t@co.santa-cruz.ca.us  
**cc:** Joan Vanderhoeven; collettecassidy@yahoo.com  
**Subject:** Claravale Dairy wastewater treatment system

Hello Ruben

I've reviewed the treatment system and disposal system designs, certified by Registered Civil Engineer **John Schultz**. We do not object to the designs. We will draft an order specifying waste discharge requirements or enroll the system under a general Order in the next few weeks. As you'll recall from our phone discussion a couple of weeks ago, from our perspective, Claravale Farm Company may begin to construct the systems immediately.

Collette, You sent too much: the fee is \$872. We'll send your other check back when we get the second one. Mike

Environmental Review Initial Study  
ATTACHMENT 14, 3 of 3  
APPLICATION 06-0077

# Revised Proposal for the Relocation of the Claravale Farm Dairy

Owner: Mr. Ron Garthwaite  
345 Kliewer Ln.  
Watsonville, CA 95076

Site Address: 345 Kliewer Ln

APN: 050-031-29

Parcel Area: 11.9 Acres

Existing Improvements: 1,460 sq. ft. Residence  
1,200 sq. ft. Processing Plant  
Well  
Septic System  
Pond  
Calf Shed 150 sq. A.  
Chicken Coop 250 sq. ft.

Proposed Improvements: Approx. 2777 sq. A. Lactating Cow Barn  
Fencing and Corrals  
Freestall Barn (7000 sq. ft), Hay Barn (1024 sq. ft),  
Composting Barn (7120 sq. ft)  
~~Water Reclamation Pond.~~

## Project Narrative

### Introduction

Claravale Farm is California's only remaining example of a small, local, dairy. Using traditional small-scale methods in the production of dairy products, cows are milked one at a time using 1930's era equipment. The facility has operated at its current location in La Selva Beach since 1998 but has recently lost its lease, necessitating relocation of the operation.

The farm focuses on natural, unadulterated dairy products from Jersey cows, which produce milk of a higher quality, containing higher levels of protein and butterfat than Holsteins (the major contributors of all other milk produced in California). Dairy products produced at Claravale Farm appeal to people who are concerned about the quality and purity of their food and who are opposed to factory farming and highly processed foods. The milk is packaged in glass bottles using hand-operated bottlers.

The farm's products are sold through retail grocery stores, and other food service businesses, being transported bi-weekly (Monday & Thursday) using two refrigerated vans. Van traffic will be limited to 4 vans per week.

At maximum production at the new site, we will milk approximately 50 cows (keeping approximately 60 head total on the site). These 50 cows will produce approximately 340 gallons of milk per day which will be marketed as fluid milk and cream. Eventually, after the completion of a master plan, we may expand into the production of cheeses and ice cream. At the maximum production we will employ a dairy manager and two additional employees. Hours of operation are 7 days a week from approx. 5:30 a.m. to 12:00 p.m. and 5:30 p.m. to 7:30 p.m.

### Project Site

Located at 345 Kliewer Ln. in the Corralitos area of Santa Cruz County, the site consists of 11.9 acres of gently sloping (0-5%) land previously used as pasture and orchard. Existing improvements on the site include a 1,460 sq. ft. single-family dwelling, a 1,200 sq. ft. processing plant previously used for baking and canning, a year-round artesian spring-fed pond used for irrigation, a well, and a septic system. A seasonal drainage swale bisect the property, running from north-west to south-east, and terminating at the pond.

The parcel is abutted on all sides except one by agricultural/rural residential uses, including a turkey farm, an organic produce farm, apple orchard, a berry farm and pasture land. The remaining neighbor is a mobile home park, which abuts the southern-most property line, and which in turn is adjacent to a portion of the Pinto Lake County Park.

The geology of the site, according to the Santa Cruz County Soil Survey published by the USDA Natural Resources Conservation Service (1980), consists mainly of Tierra-Watsonville Complex (174) over marine terrace. This soil type is generally characterized by low permeability, low-velocity runoff, high shrink-swell potential, and minimal hazard of erosion.

Vegetation consists mainly of pasture grasses, with a small copse of Willow and other riparian trees and shrubs surrounding the pond, as well as the remnants of an apple orchard located along the Kliewer Lane frontage.

Vehicle access from Kliewer Lane with the driveway leading past the residence and terminating with an emergency turn-around at the loading area, adjacent to the processing room. Additionally, parking for approximately six vehicles is located to the west of the loading area and adjacent to the processing room. Additional parking is available along the entry drive itself.

Environmental Review Initial Study  
ATTACHMENT 12, 2 of 4  
APPLICATION 06-0077

## Project Scope

As previously stated, the site has recently been in use for similar agricultural and food processing functions, although in order to operate the dairy on the new property several improvements will need to be made. They are described below.

### Improvements to Existing Structures

The existing processing plant will need to be internally modified for use as a milk bottling and storage facility. This modification consists of the concrete slab foundation, resurfacing the interior walls, the relocation of refrigeration and bottling equipment (most of which is currently in use at the current site) and upgrading the building utilities to accommodate the equipment.

### New Construction

Adjacent to this processing plant, a new Lactating Cow **Barn** of approximately 2777 sq. ft. will be constructed (see Site Plan and Sheet 2). This room is where the milking of the cows occurs, and from where the milk is transported for refrigeration and bottling. **A** combination 7,000 sq. ft. Freestall Barn and a 7,120 sq. ft. Manure Composting Barn will be constructed for winter cow housing and manure management.

### Waste Management System

Claravale Farm uses traditional methods of soil and liquid waste management which differ significantly from contemporary methods. Cattle are kept largely on dry lots and in the Freestall barn and are allowed to graze only occasionally. The vast majority of manure falls on the dry lots, and in the barn where it is harrowed and turned regularly to break it up and allowed to dry. The manure is then composted and sold. The entire year's production of manure is sold every year to private individuals and local farmers so that it does not build up. The manure, in the dry and composted state, does not emit a significant odor.

A lined water recycling pond will be constructed as part of the waste management plan. Wash and rinse water from the operation will drain into the recycling pond where it is treated regularly with microorganisms designed to eliminate algae and odors. After treatment, the water is re-used for irrigation of the pastures.

Cattle are fed hay and grains rather than silage, so that this common source of odors on modern dairies is eliminated also. Flies are controlled by harrowing the corrals regularly (thus destroying their breeding sites) and by using fly traps and parasitic wasps.

### Miscellaneous Improvements

The property will need additional fencing for the purpose of creating several corrals and pastures in order to facilitate herd management, erosion control, and waste management (see Site Plan).

Gravel roads will be laid from Kiewer Lane to the Freestall barn and from the Freestall barn to the milking parlor as well as around the existing processing plant giving access to the milking parlor.

### **Conclusion**

Claravale Farm's relocation to this site represents a unique opportunity to bolster the agricultural base of the area with an established, unique, small-scale dairy enterprise. The area already boasts several high-quality agricultural operations that would complement the dairy's presence and benefit from it as well. For example, preliminary discussions have been initiated with an adjacent organic produce grower regarding an exchange of the farm's compost for organic feed for the dairy operation. These types of relationships strengthen the agricultural community as well as the dairy operation, and our aim is to continue a tradition of providing natural dairy products of the highest quality while becoming an integral part of the agricultural and community life of the Corralitos area of Santa Cruz County.

Environmental Review Initial Study  
ATTACHMENT 12, 4 of 4  
APPLICATION 06-0077

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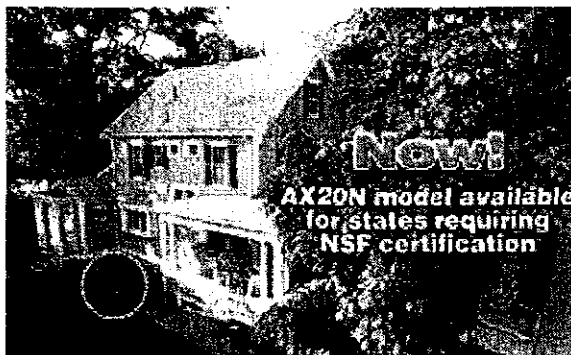
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ATTACHMENT 13, Lot 3  
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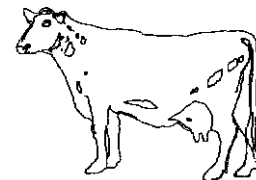
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316 West F Street, Ste 100  
Oakdale, CA 95361  
(209) 848-8674  
www.dairydesigners.com



23 May 2006  
23 May 2006

Santa Cruz Planning Department  
701 Ocean Street, 4<sup>th</sup> Floor  
Santa Cruz, California 95060  
Attention: Joan Van der Hoeven

Claravale Farms  
345 Kliewer Lane  
Watsonville, California 95076

CUP application 06-0077  
Correction list from March 10, 2006

Dear Joan;  
We have addressed all the issues raised in the "Incomplete Application- Additional Information Required" notice. I will discuss what steps were taken to resolve the issues below.

The Pajaro Valley Fire District comments have been reviewed several times with Skip Ratsep. We have come to agreements as follows:

- The water supply issue has been resolved by proposing the City of Watsonville install a new fire hydrant to the south side of Green Valley Road with is the same side as the site. They will have to bore under the road to accomplish this. This improvement is shown on the updated site plan.
- The issue with sprinklers has been resolved by splitting the single large freestall/hay/composting barn into three separate buildings with the appropriate separation. The design and site location has been reviewed by Skip and he has given us his tentative approval. His final approval will come with the review of our updated documents you will forward to him as normal.
- The width and improvements of Kliewer Lane are not an issue with the fire department. Their only concern is the culvert pipe bridge on Kliewer Lane. They want a civil engineer to evaluate it to be sure it can withstand a 25 ton load traveling over it. Collette will hire a local engineer to provide a certificate of sorts for the fire department.
- Note for addresses and other items have been added to the site plan.
- As for the lactating cow barn, we have moved it to allow 60 feet separation from any other building.
- Reference the list of changes to the plans at the separate sheet of corrections for the fire department.

The ADA issues raised by Laura Brinson of the Santa Cruz Planning Department have been addressed as required for parking and building access. Note the list of changes to the plans at the separate sheet of corrections for the "Accessibility".

The issue of the Vector Plan was addressed by preparing a Vector Plan and forwarding it onto Paul Binding of the Santa Cruz County Agricultural Commissioner's office. Paul has since approved the plan.

The issues raised by the March 9 comments by Robert Loveland of the Environmental Planning Department have been addressed as follows:

- The manmade pond road has been evaluated with a field visit and probe.
- The fill material and other materials issues at the Grading Plan have been addressed and the Grading Plan has been changed accordingly. Reference new plan drawing.
- An analysis of the agricultural viability was prepared by our office.
- A report has been sent to Mr. Loveland which addresses these issues.

The issues raised by the March 11 comments by Joseph Hanna of the Environmental Planning Department have been addressed as follows:

- Collette Cassidy had a report for the prior CUP application in 1997. The site obviously has not changed and the project has not changed **so** we used the report.
- The soils report was reviewed and the data was used for the design criteria for the work and buildings at the site.
- The outside slopes of the pond have been changed to the minimum of 2:1 slope as suggested.
- We have revised the Grading Plan to address these issues and have had **our** registered engineer stamp the drawings.

The issues raised by the March 28 comments by Greg Martin of the Santa Cruz County Public Works Department have been addressed as follows:

- I called Mr. Martin to inquire about his concerns. He requested a Trip Report for the project and we produced it and sent it to him for his review.
- Collene and I met with Mr. Martin to negotiate the road issue for he was insisting on widening to 18 feet Kliever Lane **from** Green Valley Road to the site's main driveway even **though** they have no authority over "private roads". From the meeting, Collette and I decided to compromise and improve the intersection of Kliever Lane and Green Valley Road to widen it to 18 feet to a distance approximately 90 feet from the edge of Green Valley Road to negotiate the complete widening of Kliever Lane.
- I believe at this point Mr. Martin has not changed his requirements. I have talked to Kathy Graves of the Planning Department and has lead me to believe the intersection improvement may be all that will be required **for** the approval of this permit.

The issues raised by the March 19 comments by Joseph Hanna of the Santa Cruz County Planning Department have been addressed as follows:

- I have contacted Mr. Christopher George of Haro, Kasunich & Associates, Inc.. We reviewed his report comments and data. We agreed to my analysis of the water table elevation which was that it is lower than the 10 feet he thought it might be. Reference my letter to him for more detail.
- I have sent a letter of comments and plans for the **four** proposed buildings **for** this project for his review.
- I suspect he will return comment sooner rather than later.
- I have sent to you a copy of the letter to him **from** me for your review and records.

The issues raised by the March 9 comments by Joan **Van** der Hoeven of the Santa Cruz County Planning Department have been addressed as follows:

- We have contacted Mike Higgins of the Central Coast Regional Water Quality Control Board to discuss the project. He said he is not concerned with such a small project. I told him we would be sending a Report of Waste Discharge and a Comprehensive Nutrient Management Plan in the future and his was satisfied. We have produced most of the information for the reports **to** date and will be sending it to Mr. Higgins soon.

The issues raised by the 28 February comments by Jim Safranek of the Environmental Health Department have been addressed as follows:

- The septic system has been field examined by a department representative and approved. Collette Cassidy handled this item direct and I believe you are aware.

The issues raised by the 3 March comments by Jim Safranek **of** the Environmental Health Department have been addressed **as** follows:

- A complete report of nutrient management has been prepared and mailed to Mr. Safranek as of 24 May, 2006.
- A copy of the information package has also been sent to you for your records and review.

I believe this to be all the issues and I believe we have addressed them all to date. If there are any questions, please contact me as **soon** as possible!

Thank you,

David Avila

Enclosures:

Revised application package.

12 sets of revised plans.

Copy of information sent to Mr. Christopher George

Copy **of** information sent to Mr. Jim Safranek

**EXHIBIT E**

*Western Dairy Design  
Associates, Inc.*  
316 West F Street, Ste 100  
Oakdale, CA 95361  
(209) 8484674  
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Santa Cruz County Public Works Department  
701 Ocean Street, Rm 410  
Santa Cruz, California 95060  
831-454-2160  
Greg Martin

Reference Conditional Use Permit application # 06-0077; Assessor's Parcel # 050-031-29  
Upgrading existing cattle pasture farm to a milking facility for 50 cows and support heifers.

Dear Greg;

This letter is to address your concerns about Kliewer Lane which is the access road to 345 Kliewer Lane, the parcel listed above.

As you may recall, Kliewer Lane is a private road which is owned by the Kliewer family. This road has been used as an access road to 345 Kliewer Lane for the 8 years Mr. Garthwaite has owned parcel 050-031-29 as well as the prior owners of the property. There apparently is no recorded easement for this use. Mr. Garthwaite is currently consulting an attorney that is familiar with "prescriptive rights" to obtain an access easement from the use of the road.

As to our conversation of 28 March 2006, I believe your idea of a 20 feet wide road section of Kliewer Lane along with a county approved approach at Green Valley Road is a great solution to the access to Kliewer Lane from Green Valley Road. I have designed this into the revised site plan. As the approach is designed, it is 40 feet wide at the existing edge of pavement at Green Valley Road which following the Santa Cruz County Figure DW-5 for approaches. The approach tapers to 20 feet wide according to DW-5 and extends at the 20 feet width to 90 feet from the existing edge of pavement at Green Valley Road. This design will allow room for a car or truck to enter or exit as another car or truck attempts to enter or exit to or from Green Valley Road or Kliewer Lane.

I read the code section you referenced as your authority. Chapter 13.11 Site, Architectural and Landscape Design Review; 13.11.074 Access, circulation and parking;(1) Vehicle access of multi-family residential, commercial and industrial project. As I read (1), this project is neither of these categories. This is an agricultural project in an agricultural zoning. I confirmed this with Kathy Graves of the Santa Cruz Planning Department. As I understand, we will work with you for an equitable approach at the intersection of Kliewer Lane and Green Valley Road, as it makes

very good sense to provide a safe transition from one road to the other. I have enclosed a plan view of the planned approach for your review and comments.

There are two driveways to be used for access to the daily farm operations. The first driveway which will be used by commodity delivery trucks for feeds is only 770 feet from the entry approach at Green Valley Road. The second farm driveway which is the current driveway to the residence and **milk** processing building will be used by the employees and the bottled milk pickup vans. This driveway is **1365** feet from the entry approach at Green Valley Road and only 595 feet from the commodity delivery truck driveway (turnout). Again the visibility is excellent for Kliewer Lane is straight and relatively level to and beyond both driveways.

I am in contact with Skip Ratsep of the Pajaro Valley Fire District to determine exactly what they are going to want as far as a road is concerned. We will also be providing a new fire hydrant **38** feet from the center line of GVR on Mr. Garthwaite's property.

I have enclosed several traffic trip reports to give you an idea of how little traffic there is and how little there will be in the future.

I would like to make a note that only until approximately two years ago, there were chickens being raised in two brooder buildings at the ranch at the end of Kliewer Lane, southwest of Mr. Garthwaite's property. This operation used Kliewer Lane while in operation. I do not know if this will make any difference in your decision making but an operation of approximately 150,000 chicken raising facility requires far more traffic for employees and feed than Mr. Garthwaite's small dairy. Claravale Dairy will have only 129 animal units while a chicken operation of the size that was operating would be 450 animal units, or 3 ½ times the operation! To Mr. Garthwaite's knowledge, there were no complaints or accidents reported. Maybe you can enlighten us on that information!

All in all, considering the type of traffic and low frequency of traffic, I judge the widening of the approach to Green Valley Road for the 70 feet stretch will allow for free traffic flow on Green Valley Road.

Thank you,

*Copy*

David Avila

**Cc:** Joan Van der Hoeven  
Enclosed **approach plan; vehicle trip report**

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Claravale Farms  
 345 Killewer Lane  
 Watsonville, California 95076  
 Santa Cruz County CUP application #06-0077

Trip calculations for existing site and project development and operation.

Current Trips for facilities at site prior to improvements:

Veterinarian. one 3/4 ton truck, once every other month:	0.02 Trips per day average
Owner who lives at dairy, car.	10.00 Trips per day
Mosequito abatement truck. one ton, Once per month:	0.03 Trips per day average
<b>Total trips for current facilities at site prior to Improvements:</b>	<b>10.05 Trips per day average</b>

Operation Information:

Number of Milk Cows:	<b>50</b>
Gallons Milk Per Cow:	7
Total animal units:	129
Number of Families onsite:	1
Calf & Cow feeder:	1
Herdsman:	0 (Owner)
Farming:	0 (Owner)
Milker:	1
<b>TOTAL EMPLOYEES:</b>	<b>2</b>

Additional Trips for dally operations during excavation:

This excavation project should last approximately three week (15 work days) at an extreme. There will be a large scraper type excavator. a track tractor with a dozer and a compactor on site for excavating and proper compaction of the nutrient water storage pond. new road areas, new cow lane areas and the building pads.

		Average trips:
Low boy truck and low boy trailer rig, four trips in and four out-	8 Project trips	0.53 Daily trips
Water truck-	2 Project trips	0.13 Daily trips
Testing laboratory representative for compaction testing-	4 Project trips	0.27 Daily trips
County field inspector-	4 Project trips	0.27 Daily trips
Engineer of record field visits-	4 Project trips	0.27 Daily trips
Fuel and maintenance truck, once per evening-	1 Trips per day average	
Forman visit, once per day-	1 Trips per day average	
Worker truck trips- 3 employees, 15 days	12 Trips per day average	
Low boy truck and low boy trailer rig, four trips in and four out-	0.53 Trips per day average	
Water truck-	0.13 Trips per day average	
Testing laboratory representative for compaction testing-	0.27 Trips per day average	
County field inspector-	0.27 Trips per day average	
Engineer of record field visits-	0.27 Trips per day average	
<b>Total additional trips for dally operations during excavation:</b>	<b>15.47 Trips per day average</b>	

Additional trips *for* daily operations during construction:  
 The estimated construction project should take 4 months (80 work days)

Materials deliveries in large trucks will be only at the beginning of construction.

Estimated trips:		Average trips:
Dairy equipment. 1 load-	2 Project trips	0.03 Dailytrips
Milk storage cold box delivery. 1 load-	2 Project trips	0.03 Dailytrips
Building roofing materials. 1 load-	2 Project trips	0.03 Dailytrips
Building structural steel and reinforcing steel, 1 load-	2 Project trips	0.03 Dailytrips
Block delivery. one load-	2 Project trips	0.03 Dailytrips
Miscellaneous building material deliveries. 7 loads-	14 Project trips	0.18 Dailytrips
Ready mix concrete deliveries, approximately 200 yards, estimate 30	60 Project trips	0.75 Dailytrips
Road base materials. approximately 768 yards. estimate 77 loads-	154 Project trips	1.93 Dailytrips
County field inspector-	16 Project trips	0.20 Dailytrips
Engineer of record field trips	16 Project trips	0.20 Dailytrips

Construction employees. estimate 4 employees, two 1 ton trucks-	8 Trips per day average
Construction employees. estimate 2 employees, two cars-	8 Trips per day average
Construction foreman-	4 Trips per day average
Dairy equipment 1 load-	0.03 Trips per day average
Milk storage cold box delivery. 1 load-	0.03 Trips per day average
Building roofing materials, 1 load-	0.03 Trips per day average
Building structural steel and reinforcing steel. 1 load-	0.03 Trips per day average
Block delivery. one load-	0.03 Trips per day average
Miscellaneous building material deliveries, 7 loads-	0.18 Trips per day average
Ready mix concrete deliveries, approximately 200 yards, estimate 30	0.75 Trips per day average
Road base materials, approximately 768 yards, estimate 77 loads-	1.93 Trips per day average
County field inspector-	0.20 Trips per day average
Engineer of record field trips	0.20 Trips per day average

Additional trips for daily operations during construction: 23.38 Trips per day average

Additional trips for daily operations at site:	
Bottled milk pickup Truck, 1 ton- twice a week:	0.57 Trips per day average
Bottled milk pickup Van. 3/4 ton- twice a week:	0.57 Trips per day average
Baled hay delivery Truck, 20 ton, one per month:	0.03 Trips per day average
Bagged grain delivery truck. 5 ton truck. one per month:	0.03 Trips per day average
Veterinarian. one 3/4 ton truck, once every other month	0.02 Trips per day average
State health inspector, car. once per month	0.03 Trips per day average
State Veterinarian, car, four times per year:	0.01 Trips per day average
Employees, car. 4 trips per Day:	8.00 Trips per day
Scheduled equipment maintenance truck. 1 ton, Once per month:	0.03 Trips per day average
Sales Representatives. car, three per week:	0.43 Trips per day average
Visitors, car:	4.00 Trips per day
Calf Purveyor	0.00 Trips per day
Cattle Rendering Truck, 5 ton, twice per year:	0.01 Trips per day average
Cattle sales pickup truck. one ton truck & gooseneck trailer, six times	0.02 Trips per day average
Emergency repair vehicle, one ton, once per month:	0.03 Trips per day average
Manure compost truck pickup, 5 ton truck. once per month:	0.03 Trips per day average
Mosquito abatement truck. one ton. once per month:	0.03 Trips per day average
Total additional trips for daily operations at site:	13.85 Trips per day average

*Sent pull  
24x36*

