



October 4<sup>th</sup>, 2010

MEMO TO: Ag Advisory Board

FROM: Joshua Mann, Associate Planner  
Department of Planning and Community Development

SUBJECT: **ALTERNATIVE AGRICULTURAL BUFFER - USE PERMIT APPLICATION  
NO. 2010-06 - CENTRAL VALLEY AG GRINDING**

The Stanislaus County Department of Planning and Community Development has received an application to allow an existing agricultural grinding business to expand. The business, Central Valley Ag Grinding (CVAG), was originally established under Use Permit No. 99-11. The activities conducted on-site include the processing of agricultural/organic waste and seasonal solar drying of food by-product waste such as peach and olive pits. Ultimately these materials are used by CVAG to produce new organic products including livestock feed and animal bedding. The activities conducted by CVAG are considered to be a Tier I use in the A-2 zoning district. The 70± acre site is located at 5507 Langworth Road, north of Claribel Road and south of Patterson Road, in the Riverbank/Oakdale area. The applicant has proposed an alternative to the Agricultural buffer standards which requests a reduced setback and alternative vegetative screen. The applicant's proposal and the County's Buffer and Setback Guidelines are outlined below:

#### **Stanislaus County Buffer & Setback Guidelines Requirements**

- Expansion of existing uses must provide fencing and vegetative screening in the area available and a 150-foot minimum building setback is required.
- The buffer shall incorporate a solid wall (6-feet high) and a vegetative screen consisting of two staggered rows of trees and shrubs extending along the length of the facility/use. No fence is required if trespassing is determined to not be an issue. *(as supported for Tier I & II Uses on September 8, 2008 by the Agricultural Advisory Board)*

#### **Applicant's Proposal**

- Planning Staff has determined that no fencing will be required due to the fact that the general public will not be accessing the property and the applicant will have control over all employees on-site. Please note that there is an existing fence around the perimeter of the project site, although it's less than 6-feet in height as required.
- The western and eastern property lines meet the 150' setback for the expansion area.
- The southern and northern property lines will be setback 60' with no vegetative screening along the expansion area. Portions of the previously approved / existing area contains a limited amount of vegetative screening as noted on the attached maps.

- The applicant is proposing a reduced setback (60-feet) for the northern and southern property lines (of the expansion area) based off their belief that the activities occurring in these areas is of low-human intensity and would have no impact to the adjoining agricultural operations. The applicant believes that an existing berm along the northern and southern property lines would provide similar protection as that provided by vegetative screening.

Attachments:

Exhibit A - Maps  
Exhibit B - Applicant's Alternative Ag Buffer Proposal & Project Description

**UP 2010-06  
CENTRAL VALLEY AG GRINDING  
AREA MAP**

**EXHIBIT "A"**

**CITY  
OF  
OAKDALE**

**CITY  
OF  
RIVERBANK**

**CITY  
OF  
MODESTO**

**SITE**



MESA DR

CRANE RD

PATTERSON RD

CALIFORNIA AVE

LANGWORTH RD

BENTLEY RD

ALBERS RD

CLARIBEL RD

ELEANOR AVE

RICE RD

KEMPER RD

MILNES RD

108

TERMINAL AVE

OAKDALE RD

**UP 2010-06**  
**CENTRAL VALLEY AG GRINDING**  
**GENERAL PLAN DESIGNATION**

**CITY**

**UT**

PATTERSON RD

**AG**

**SITE**

ELEANOR AVE

LANGWORTH RD

**CITY**

**AG**

**UT**

CLARIBEL RD

**AG**

**PD**

UP 2010-06  
**CENTRAL VALLEY AG GRINDING  
ZONING DESIGNATION**

**CITY**

**A-2-10**

**A-2-3**

PATTERSON RD

**A-2-40**

ELEANOR AVE

**SITE**

LANGWORTH RD

**A-2-40**

CLARIBEL RD

**A-2-40**

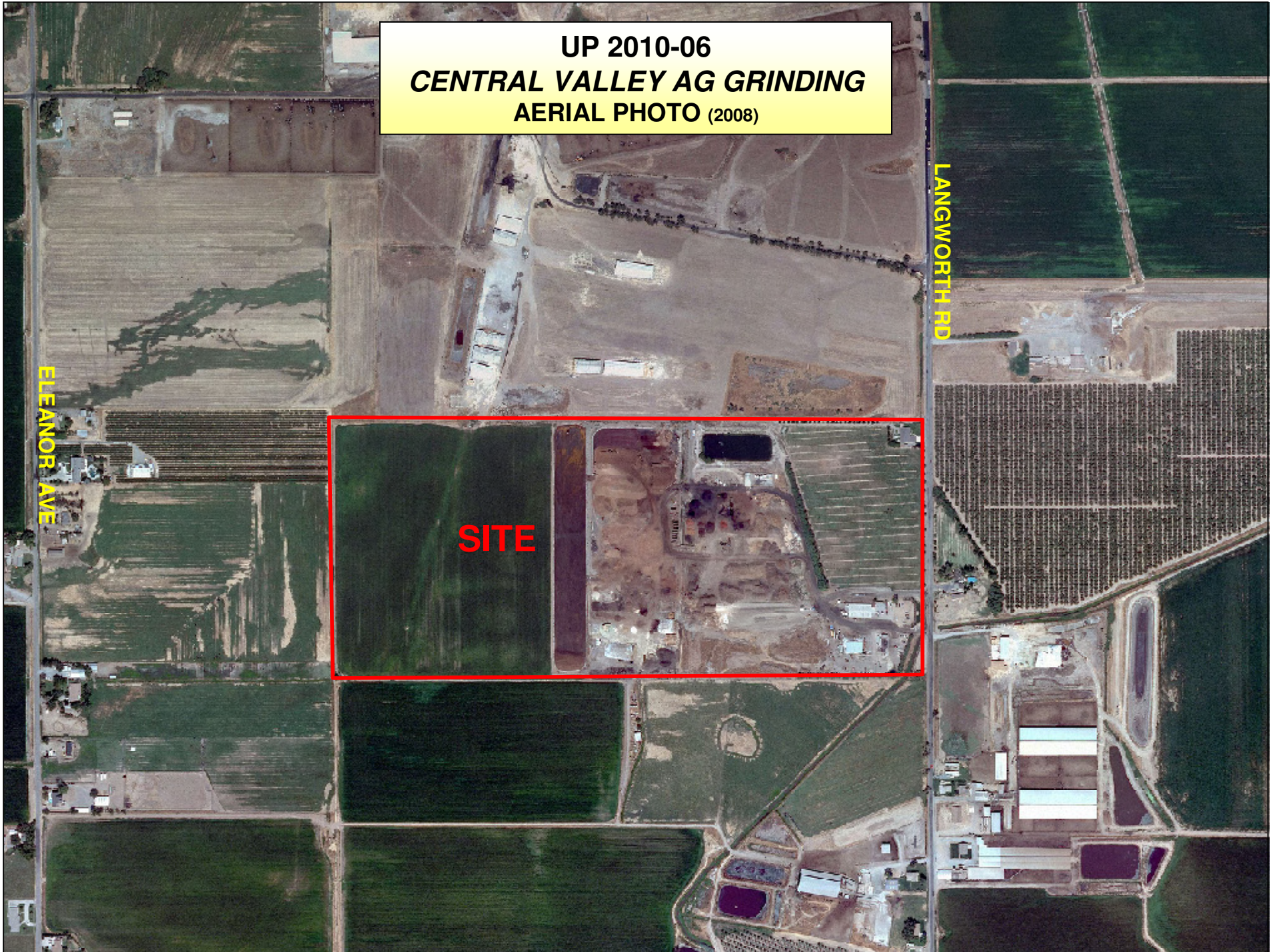


UP 2010-06  
***CENTRAL VALLEY AG GRINDING***  
AERIAL PHOTO (2008)

LANGWORTH RD

ELEANOR AVE

**SITE**





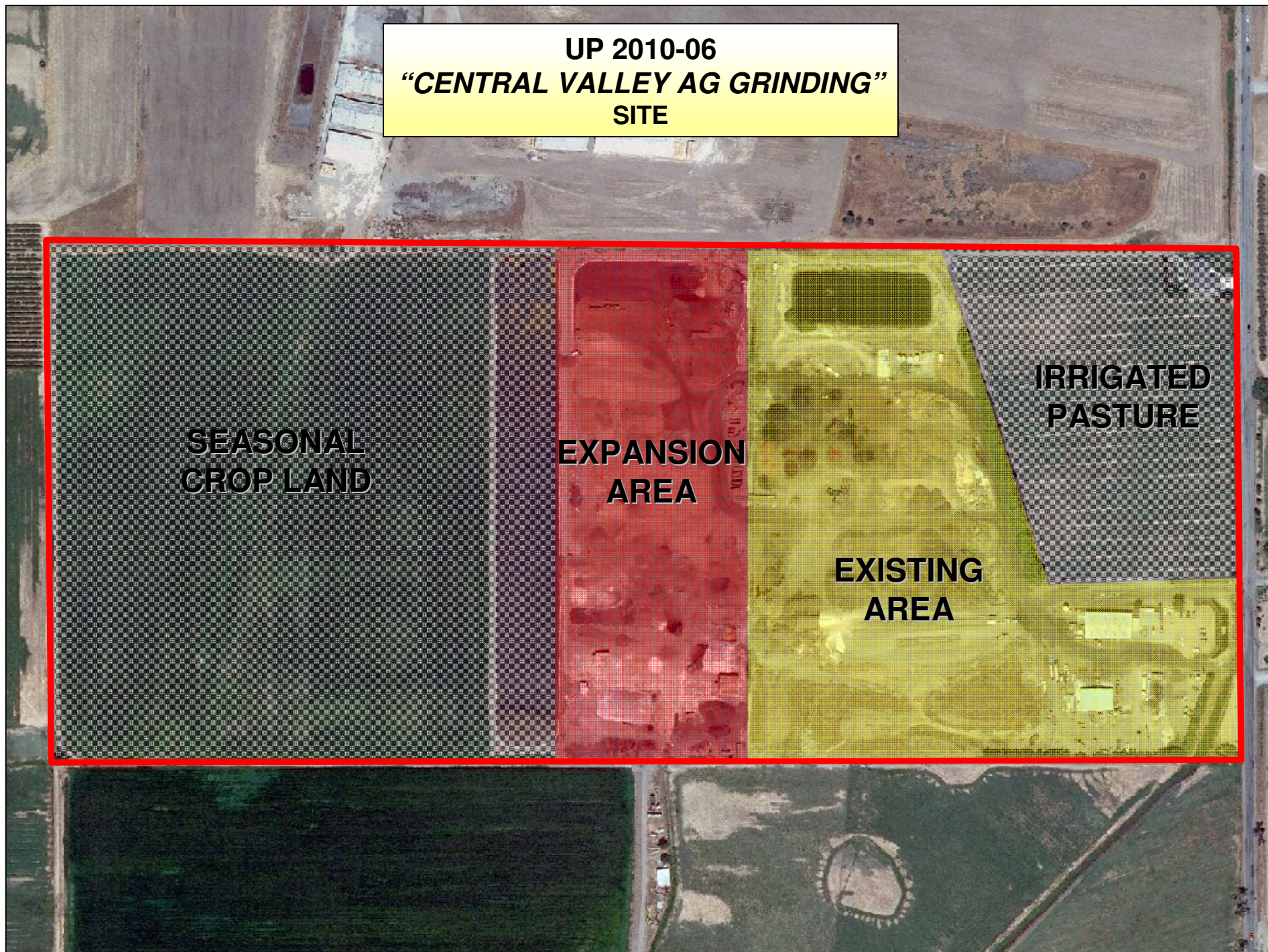
UP 2010-06  
***"CENTRAL VALLEY AG GRINDING"***  
SITE

SEASONAL  
CROP LAND

EXPANSION  
AREA

EXISTING  
AREA

IRRIGATED  
PASTURE





UP 2010-06  
"CENTRAL VALLEY AG GRINDING"  
PROPOSED ALT. BUFFER

AREA IN  
QUESTION

EXISTING  
TREES

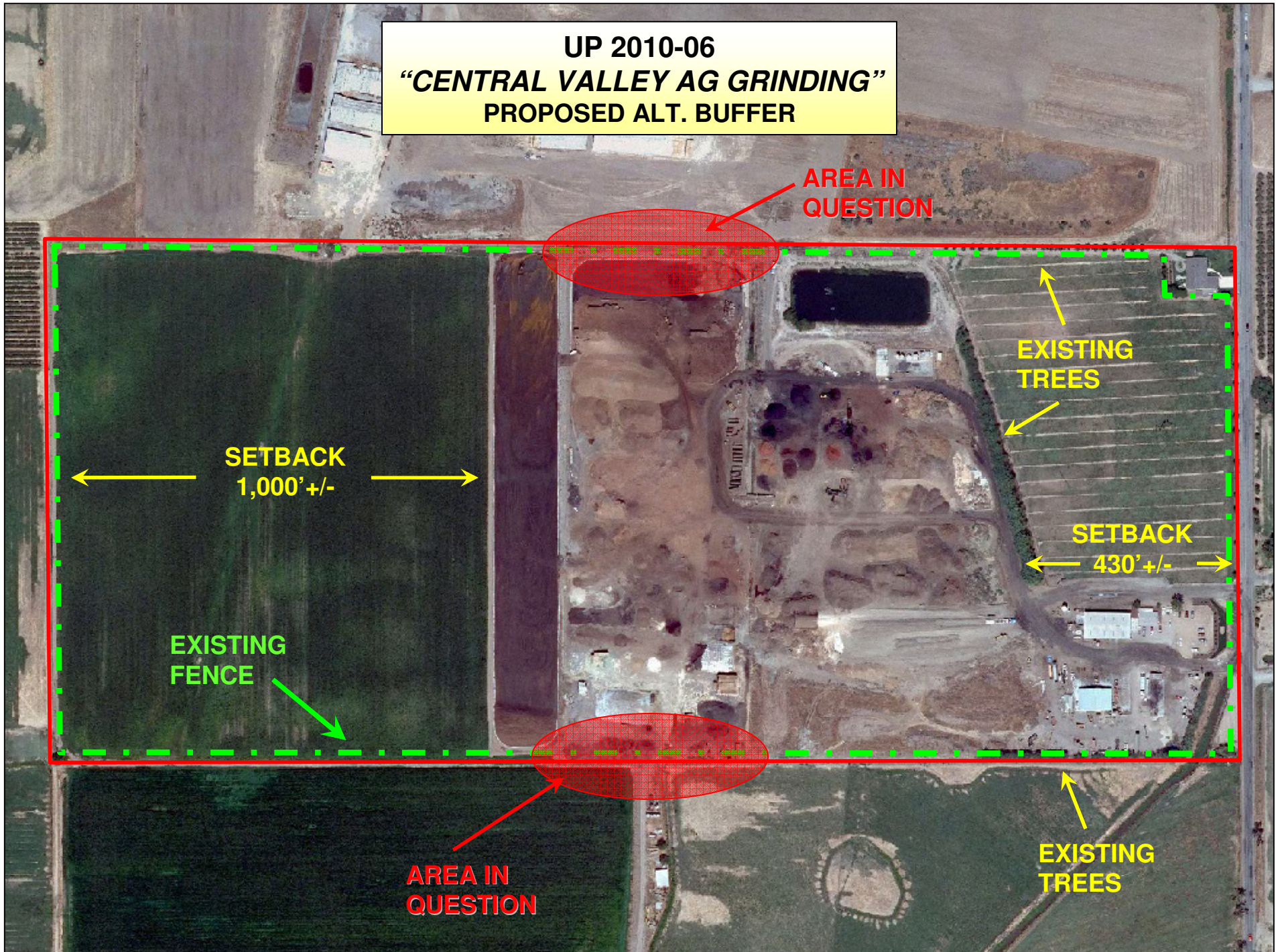
SETBACK  
1,000' +/-

SETBACK  
430' +/-

EXISTING  
FENCE

AREA IN  
QUESTION

EXISTING  
TREES





**USE PERMIT NO. 2010-06 - CENTRAL VALLEY AG GRINDING****APPLICANT'S ALTERNATIVE BUFFER PROPOSAL**

The purpose of the setback and buffer provisions set forth in the Agricultural Element of the County General Plan is to minimize the conflicts between agricultural and non-agricultural development (as defined in the Agricultural Element). CVAG anticipates few if any conflicts with adjacent agricultural operations; their operations are low human intensity uses, include some of the same activities as agricultural operations, and, in part, will be used to complement the adjacent dairy facility operated by the owners of CVAG. Over half of the site will remain in traditional agricultural uses, producing crops and providing irrigated pasture for cattle.

**Existing Buffers and Setbacks.** A fence surrounds the property. An irrigated pasture in the northeast corner of the property, lined with willow trees to the west and redwood trees to the north, provides a buffer in excess of 150 feet and vegetative screening. The existing office/building site will not accommodate a 150-foot buffer to the south, but the willow trees south of the office/building site already provide vegetative screening. The remaining existing area encompasses the clean water storage pond, material yard, and a compacted soil pad for solar drying. This portion of the property will not accommodate either the buffer or vegetative screening. However, equivalent protection to adjacent properties is provided by the berm on the south boundary. Much of the area encompassing the existing allowed uses will not accommodate a 150-foot buffer.

**Proposed Buffer and Setback Requirements.** As an "Expanding Non-Agricultural Use" for the analysis of buffer requirements, a Tier 1 use permit operation, and an operation compatible with adjacent agriculture, CVAG proposes these alternative buffer requirements as measures that will provide an equivalent level of protection to the agricultural uses adjacent to the site:

1. Require a 150-foot setback in the expansion between new buildings and adjacent agricultural property.
2. Waive the 6-foot fence requirement since a shorter fence already surrounds the property and people on-site are limited to employees, truck drivers and vendors who are unlikely to wander onto adjacent agricultural property. Trespassing on adjacent properties is not an issue.
3. Recognize that additional setbacks and buffers are not necessary. The storage areas, material yard, drying pad and water pond serve as adequate setback areas and buffers because these uses are low human intensity uses that do not impact adjacent agriculture and are similar to agricultural uses. The transfer of the grinding operations into an enclosed building (meeting the 150-foot setback requirement) reduces noise and dust and negates the need for additional buffering measures. Existing landscaping and berms also act as buffers.
4. Recognize that the buffer and setback requirements do not apply to the portion of the Site dedicated to storage for the adjacent dairy operated by the owners of CVAG since this is a related agricultural use.

## **APPLICANT'S PROJECT DESCRIPTION**

Central Valley Agricultural Grinding, Inc. (CVAG) operates an onsite and mobile livestock product grinding and processing service pursuant to Use Permit 99-11 and subsequent staff approvals. CVAG processes agricultural and organic waste and byproducts into various "re-uses" that serve the agricultural industry by reducing waste and byproducts of food production into new organic products used by the agricultural industry, such as livestock feed and bedding. The primary public benefit is that a large amount of the raw materials utilized by CVAG are diverted directly from the ordinary landfill waste stream. The CVAG operation significantly contributes to the County's ability to discharge its state mandate to divert waste from landfills.

A use permit modification is requested because CVAG desires to add approximately nine (9) acres to the permit area that is currently used for material storage and to clarify the allowable uses under the use permit.

### **I. EXISTING USES – Use Permit 99-11 and Subsequent Staff Approvals.**

Use Permit 99-11 created CVAG's use as a Tier One use on agricultural land. Permitted uses identified within the use permit, and staff approvals 2002-01, 2004-23 and 2004-138 and supporting materials, include the unloading, storage and grinding "of various livestock related products, such as almond shells and wood chips," grinding of wood for livestock bedding and dry grain for livestock feed, on-site storage for "raw and processed products (almond hulls, orchard prunings, rice, corn, hay, etc.)," "forage crop farming & wood recycling," parking of equipment, and a storage pond for clean water.

Use Permit 99-11 identified 15 acres to be used for the operations, including an almost 10-acre area for unloading, storage and grinding. Staff Approval 2004-138 approved a 500' x 365' expansion on the southwest side of the existing operations, bringing the total size of the existing operations to almost 20 acres.

Structures include an office, a shop, two storage buildings, a residence, a concrete pad, a water tank and a material processing shed under construction as of the date this application was filed. The material processing shed will house electric grinders to allow indoor grinding, which decreases air pollution from the previously used diesel grinders, limits the spread of dust created by grinding and decreases the noise emitted by the grinders. The mobile diesel grinders will only be used on-site as back-up.

The working area is sloped, conforming to the 1999 Paving, Grading and Drainage Report. Elevated roads surround the sloped working area and direct run-off. Landscaping, berms and space not used for grinding and processing buffer adjacent on all side from the grinding and processing impacts. Ample employee and visitor parking exists near the office.

### **II. PROPOSED USE PERMIT MODIFICATION.**

This modification to Use Permit 99-11 will add approximately nine (9) acres to the permit area that is being used for material storage, recognize a cogeneration unit that CVAG desires to build to supply energy to their grinders, and clarify the uses that are within the scope of the Use Permit.

#### **IIA. EXPANDED OPERATIONS AREA.**

CVAG proposes to add to the permit operations to an area of approximately 500' x 792' on the northwest side of their existing operations, and north of the Staff Approval 2004-138 expansion. This area is identified on the site plan as "CVAG Storage."



The area will be used for the storage of raw and processed materials for the CVAG operations. The remainder of the expanded storage area will be combined with the 2004-138 expansion and used for storage, mostly for livestock materials for the adjacent dairy operated by the owners of CVAG

The proposed expansion consists of approximately 9 acres, bringing the total CVAG operations acreage to almost 29 acres. The remaining 40 acres will continue to be used for growing crops and providing irrigated pasture for livestock.

## **IIB. PROPOSED COGENERATION UNIT.**

CVAG desires to install a 1,000 KW cogeneration unit to provide renewable energy near the material processing shed that is under construction. The cogeneration unit will convert agricultural waste material into a synthetic natural gas ("syngas"). The syngas will then be used to run a syngas genset (an electric generator). The electricity will provide power to the material processing shed and the electric grinders housed in the shed. Electricity in excess of CVAG's requirements will be sold to PG&E.

## **IIC. EXPLANATION OF USES.**

CVAG's on-site operations and processes are very diverse, utilizing a wide array of organic inputs and creating many outputs. CVAG estimates that it is currently producing about 6,800 tons per month of outputs, or approximately 81,600 tons per year. It anticipates its output growing to 8,334 tons per month, or approximately 100,000 tons per year.

Though the main focus of the operations is the production and recycling of agricultural materials, some non-agricultural organic products are produced or recycled as supplemental materials. This allows the operations to remain steady since some inputs and outputs are seasonal agricultural materials whose availability or demand fluctuates. Such evening out is necessary for CVAG to provide the recycling services to the County's agricultural industry. Below are summaries of these operations, including the inputs processed, outputs created and other information necessary to understand the operations:

### **1. Grinding (and Mixing) Operations.**

Inputs for grinding include many organic materials such as grains (corn, rice, wheat, barley), hays (alfalfa and hay), straws, and organic waste products (woods such as orchard prunings and removed orchard trees, nut hulls and shells, fruit pits, manure, soiled animal bedding, mulch and Christmas trees). Some organic waste products that are not strictly agricultural are used to supplement the product flow during seasonal periods when the volume of agricultural materials received is lower (for example, dimensional lumber may be ground during the winter season since most agricultural waste wood is produced during summer season). Maintaining flexibility in regards to inputs allows CVAG to keep production levels stable and operations viable.

After the inputs are ground, the ground material is sorted by size and often mixed. Outputs from the grinding and mixing processes are primarily animal forages/feeds; non-fertilizer soil amendments applied to vineyards and orchards; livestock bedding; recycled agricultural waste transformed into raw products for off-site users; and landscape materials (i.e., mulches, some of which are colored on-Site).

Most of the output is re-used by local agriculture operations. Approximately 60% of the output is used by the livestock industry, largely as bedding and feed. Approximately 33% of the output is directed to Duraflame (the inputs of this material were agricultural products). The remaining 7% of the output consists of soil amendments, landscaping materials and the material that will be used in the cogeneration facilities.

Maintaining flexibility in outputs is important because different sizes of ground material are put to different uses, and there are seasonal fluctuations in the demand and supply of certain products. For example, after the materials are ground, they are screened by size. Ground material that is too fine cannot be used for livestock because it could cause respiratory problems in the animals; instead, the fine material is often used in soil amendments. Mulch production varies inversely to the demand for livestock bedding; i.e., livestock bedding is in demand in the fall and winter, so mulch production is higher in spring and summer to even out product flow. Mulch also utilizes the ground material that is too large to use as livestock bedding.

## **2. Recovery of Organic Products for Animal Feed/Forages.**

“Wet” byproducts during cannery season are delivered in bulk for use in animal feed/forages. Also, wet organic matter is recovered from canned goods that are expired, damaged or otherwise unfit for human consumption. The byproduct materials are mixed with other forages stored at the CVAG site (such as corn silage and oat silage) to create a blended livestock feed. These activities support the agricultural community by providing nutritious livestock feed and by re-using canning industry by-products that would otherwise be sent to the landfill.

## **3. Dehydration Operations.**

The moisture content of many of the input materials (such as fruit pits and orchard prunings) is high, and those materials must be dried before grinding and mixing for re-use. To dry, the material is spread out in a thin layer on the solar pad to dry. The internal temperature of the layers is constantly monitored. As the material dries, it is aerated with a hydraulic scraper.

Though currently utilizing only solar drying, CVAG may desire to use mechanical dehydrator(s) in the future.

## **4. Storage, Loading, Distribution Operations.**

The storage and material yard provide space for the storage of material, loading and unloading, transport and distribution operations for the above. The portion of the Site marked as “K.B. Storage” and “Concrete Pad” will be used to store material for the adjacent dairy operation that is leased and operated by the owners of CVAG.

## **5. Buildings and Parking.**

Other buildings may be needed in the future to improve operations.

Parking for employees and visitors (vendors) is located near the driveway and office. There are approximately 27 parking spaces, a number exceeding the employees, vendors and any visitors on-site at any time.

## **6. Prohibited Operations.**

Operations prohibited by this use permit modification are the resizing of dimensional lumber and the use of non-agricultural organic waste to provide non-agricultural products.