



January 10, 2011

MEMO TO: Agricultural Advisory Board

FROM: Department of Planning and Community Development

SUBJECT: USE PERMIT APPLICATION NO. 2010-15 & WILLIAMSON ACT CANCELLATION NO. 2010-02 - COPPER MOUNTAIN SOLAR-ALTERNATIVE AGRICULTURAL BUFFER AND SETBACKS

The Stanislaus County Department of Planning and Community Development has received an application to establish a photovoltaic (PV) solar energy farm creating an aggregate peak power capacity of 13 megawatts (MW) of electricity on 127± acres of a 4,147± acre site, located west of the guard shack on Diablo Grande Parkway, north of the Diablo Grande Development, in the Diablo Grande area. Electricity generated by the project will enter the electrical grid through the Turlock Irrigation District's transmission lines currently serving Diablo Grande. Copper Mountain Solar will be composed of two generally linear areas improved with 120± arrays in varying sizes and shapes to fit the contour of the hills. Area 1 will be 60± acres and Area 2 will be 67± acres. Solar trackers at full tilt will be approximately 16 feet tall. Additional site improvements include: all weather access roads; 13 inverter/transformer enclosures; and cattle fencing. Also, 8.8± miles of new local distribution lines, step-up transformers and meters will be installed to interconnect the proposed solar arrays to the existing TID transmission lines. The applicant has proposed an alternative to the Agricultural Buffer and Setback Guidelines. The applicant's proposal and the County's Buffer and Setback Guidelines are outlined below:

Stanislaus County Buffer & Setback Guideline Requirements for New Non-Agricultural Uses:

- A minimum 150-foot wide buffer, measured from the property line of any adjoining property located in the A-2 zoning district, shall be incorporated. All buffers shall include solid fencing and vegetative screening consistent with the guidelines. In general, vegetative screen shall consist of two staggered rows of trees and shrubs characterized by evergreen foliage extending from the base of the plant to the crown.
- Fencing: The Agricultural Advisory Board, in September of 2008, supported a general alternative clarifying the intent of the fencing requirement is to prevent trespassing. As part of the general alternative, fencing is not required to be made up of a solid material, but is required to be at least 6-feet in height. Fencing may be installed around the perimeter of the non-agricultural use rather than the perimeter of the property lines containing the use.

Applicant's Proposal

The applicant is proposing an alternative buffer consisting of 10-feet from the property line to edge of array along the southwestern project boundary lines of Area 2. The balance of project Areas 1 and 2 will exceed the 150-foot wide buffer. No vegetative screening is being proposed. Fencing will consist of customary cattle fencing (post and wire).

- The applicant feels the use, as proposed, is consistent with the current Agriculture designation of the project and the current adjacent agricultural land uses.
- The low impact and minimal employees of the Solar Farm suggest that an agricultural buffer is not warranted.
- The balance of the project site will remain as grazing land for cattle.
- Only a small portion of the project site (400± feet) will not meet the 150-foot required buffer.
- The site's remote location, small scale, and minimal employees serve to minimize potential conflicts that may result from proposed new development and normal agricultural practices.

Staff's Comments

The project site is currently fenced with post and wire fencing and is utilized for cattle grazing. Planning staff has some concerns regarding security as a cyclone security fence is not being proposed; however, the minimal 10-foot buffer and cattle fencing will have a lesser impact on the biological and agricultural uses in the area. The balance of the site and surrounding area are characterized by steep to rolling terrain (grazing land), oak woodlands, and limited access. Residential development exists to the south in the Diablo Grande Community; however, the project site and the Resort Community are under common ownership. Interior lot line setbacks have not been addressed due to the nature of the proposed development and the project site's single common ownership. Beyond the construction phase, the potential for impacts associated with on-site employees and related activities should be minimal.

Recommendation

Planning staff believes that given the non-intensive nature of the project, the terrain, and the use of the area as grazing land, the Agricultural Advisory Board could support the proposed Alternative Agricultural Buffer.

On November 2, 2009 the Stanislaus County Agricultural Advisory Board considered and motioned to support the following Agricultural Buffer Alternatives as providing equal or greater protection than the Buffer and Setback Guidelines adopted in December of 2007 as Appendix 'A' of the Stanislaus County General Plan - Agricultural Element.

AGRICULTURAL BUFFER ALTERNATIVES

The December 2007 update to the Agricultural Element of the Stanislaus County General Plan established a buffer requirement for all new or expanding non-agricultural uses within or adjoining the A-2 zoning district. Appendix A of the Agricultural Element lays out guidelines for these buffers, which includes the following:

- ✓ A 150 ft buffer (300 feet for people intensive outdoor activities) from all property lines.
- ✓ A 6 ft high solid fence along the perimeter where a project adjoins agricultural property and 2 rows of vegetative screening (including evergreen trees and shrubs).
- ✓ Expansion of existing uses must provide fencing and vegetative screening in the area available and a 150-foot minimum building setback is required.

Any alternative to the currently adopted buffer standards must be reviewed and supported by the Stanislaus County Agricultural Advisory Board prior to Planning Commission consideration. ***These alternative standards shall be determined to provide equal or greater protection.***

*Planning staff would like the Agricultural Advisory Board to review and give its support to the following buffer alternative applicable to **all expanding non-agricultural uses** within the A-2 General Agriculture zoning district:*

- ✓ Allow the expansion of an existing non-agricultural use without a 150-foot setback or vegetative screening provided the expansion does not intensify the on-site activity.
- ✓ Allow riparian areas adjacent to rivers to serve as setbacks and vegetative screening.
- ✓ Allow permitted non-agricultural uses (including but not limited to legal non-conforming uses and homesites) adjoining the subject property to serve as part of the required setback area, provided the adjoining use is of a permanent nature which is not likely to be returned to agriculture. The overall distance from the requested use and the nearest agricultural operation (as defined by the Stanislaus County General Plan Agricultural Element) must be equal to or greater than the required setback distance. Vegetative screening shall not be required provided the minimum setback to the nearest agricultural operation is provided.

Additional alternative standards may be presented to the Agricultural Advisory Board for review and for a recommendation of approval to the Planning Commission. Ultimate approval will be based upon a determination of equal or greater protection.

On September 8, 2008 the Stanislaus County Agricultural Advisory Board considered and motioned to support the following Agricultural Buffer Alternatives as providing equal or greater protection than the Buffer and Setback Guidelines adopted in December of 2007 as Appendix 'A' of the Stanislaus County General Plan - Agricultural Element.

AGRICULTURAL BUFFER ALTERNATIVES

The December 2007 update to the Agricultural Element of the Stanislaus County General Plan established a buffer requirement for all new or expanding non-agricultural uses within or adjoining the A-2 zoning district. Appendix A of the Agricultural Element lays out guidelines for these buffers, which includes the following:

- ✓ A 150 ft buffer (300 feet for people intensive outdoor activities) from all property lines.
- ✓ A 6 ft high solid fence along the perimeter where a project adjoins agricultural property and 2 rows of vegetative screening (including evergreen trees and shrubs).
- ✓ Expansion of existing uses must provide fencing and vegetative screening in the area available and a 150-foot minimum building setback is required.

Any alternative to the currently adopted buffer standards must be reviewed and supported by the Stanislaus County Agricultural Advisory Board prior to Planning Commission consideration. ***These alternative standards shall be determined to provide equal or greater protection.***

*Planning staff would like the Agricultural Advisory Board to review and give its support to the following buffer alternative applicable to **all non-agricultural uses** within the A-2 General Agriculture zoning district:*

- ✓ Fencing is not required to be made up of a solid material, but shall be required to be at least 6 feet in height. The intent of the fencing requirement is to prevent trespassing.
- ✓ As a point of clarification, fencing may be installed around the perimeter of the non-agricultural use, rather than the perimeter of the property lines containing the use.
- ✓ Vegetative screening along road frontages shall only be required to the greatest extent possible giving consideration to driveways and other existing hardscape.
- ✓ Buffer and Setback standards shall not apply to projects located on a site surrounded by a minimum of 150-feet of residential type uses (including parcels of 3-acres or less in size), parks, schools or other similar non-agricultural uses.

*In addition, Planning staff would like the Agricultural Advisory Board to support the following buffer alternative, applicable to **Tier 1 and Tier 2 uses** such as nut hulling, shelling, dehydrating, grain warehousing, ag processing facilities (without incidental tasting rooms or sales) and other similar low people intensive uses:*

- ✓ When trespassing onto neighboring property is determined not to be an issue, the fencing requirement may be waived.
- ✓ Expansions of existing non-agricultural uses that are intended to improve efficiency and are not increasing exposure risk to spray, shall not be required to meet the 150 foot setback.
- ✓ Provided an overall distance of 150 feet or greater exists between the proposed use and the property line, no vegetative screening shall be required.

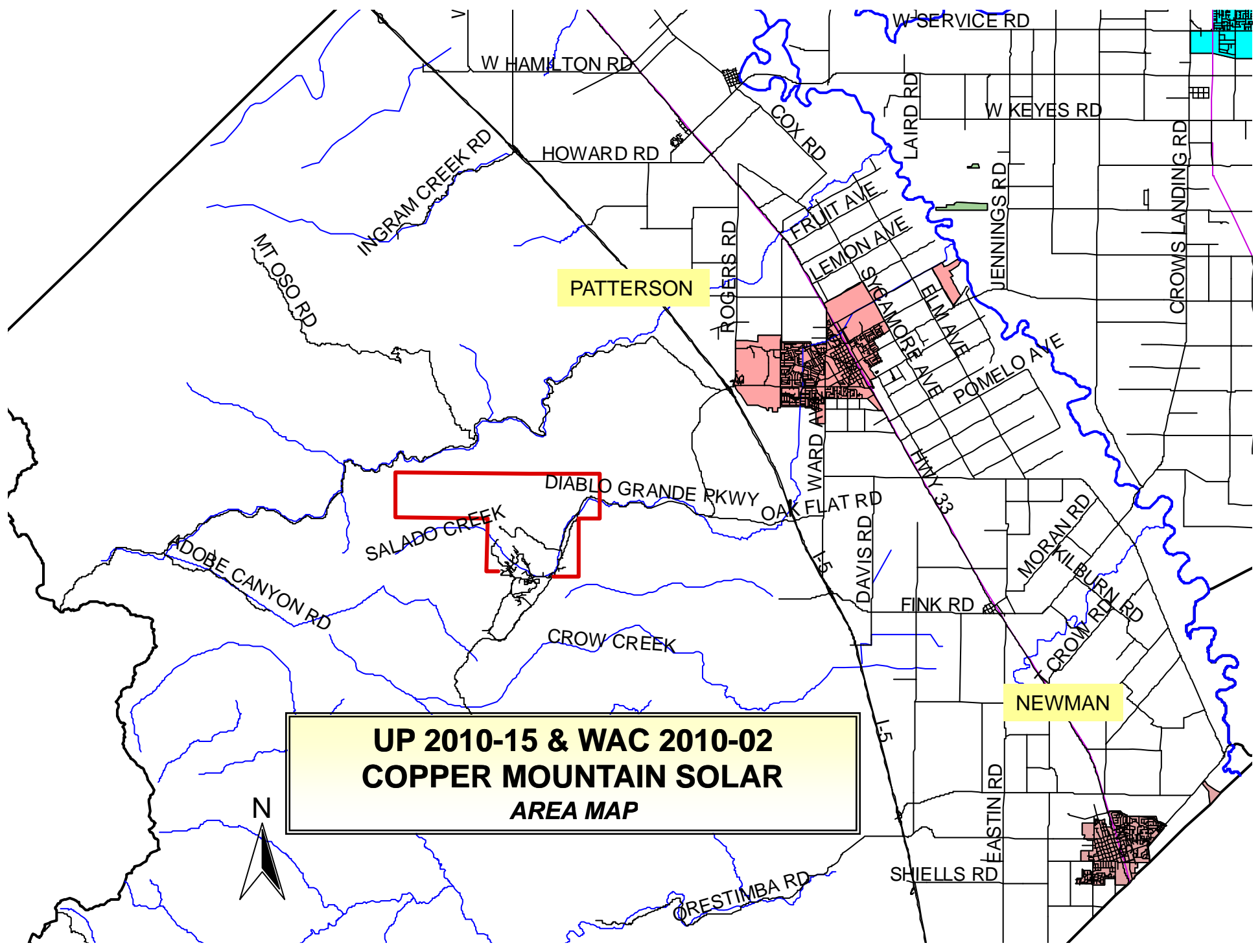
Additional alternative standards may be presented to the Agricultural Advisory Board for review and for a recommendation of approval to the Planning Commission. Ultimate approval will be based upon a determination of equal or greater protection.

Statement of Compliance – Buffer and Setback Guidelines

The application is for a solar farm which is a relatively light use on land with no significant human work or residential population existing at the project site on any appreciable time schedule. In addition, the agricultural use of the land is for cattle grazing. The factual underpinnings of the application create a situation where the two land uses do not inherently conflict thus removing or minimizing the need for a buffer between agricultural and non-agricultural uses. Consequently, applicant proposes a minimal alternative buffer and setback standard of 10' to separate the largely non-conflicting uses and to maintain the maximum amount of land in an agricultural use. Such an alternative standard complies with the purpose and intent of the buffer and setback guidelines.

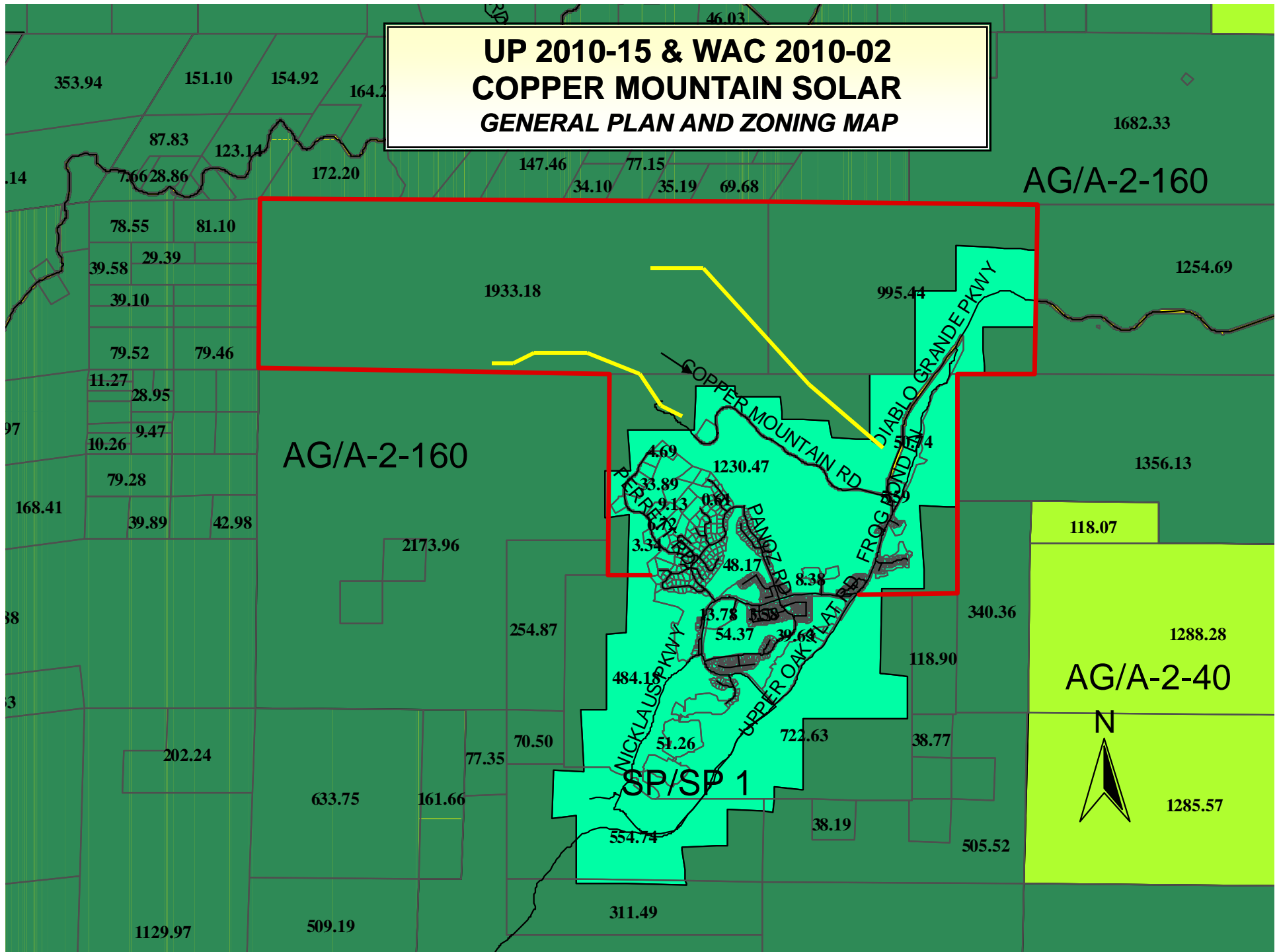
The purpose and intent is “to protect the long-term health of local agriculture by minimizing conflicts resulting from normal agricultural practices as a consequence of new or expanding non-agricultural uses approved in or adjacent to the A-2 (General Agriculture) zoning district. The intent of these guidelines is to establish standards for the development and maintenance of buffers and setbacks designed to physically and biologically avoid conflicts between agricultural and non-agricultural uses.”

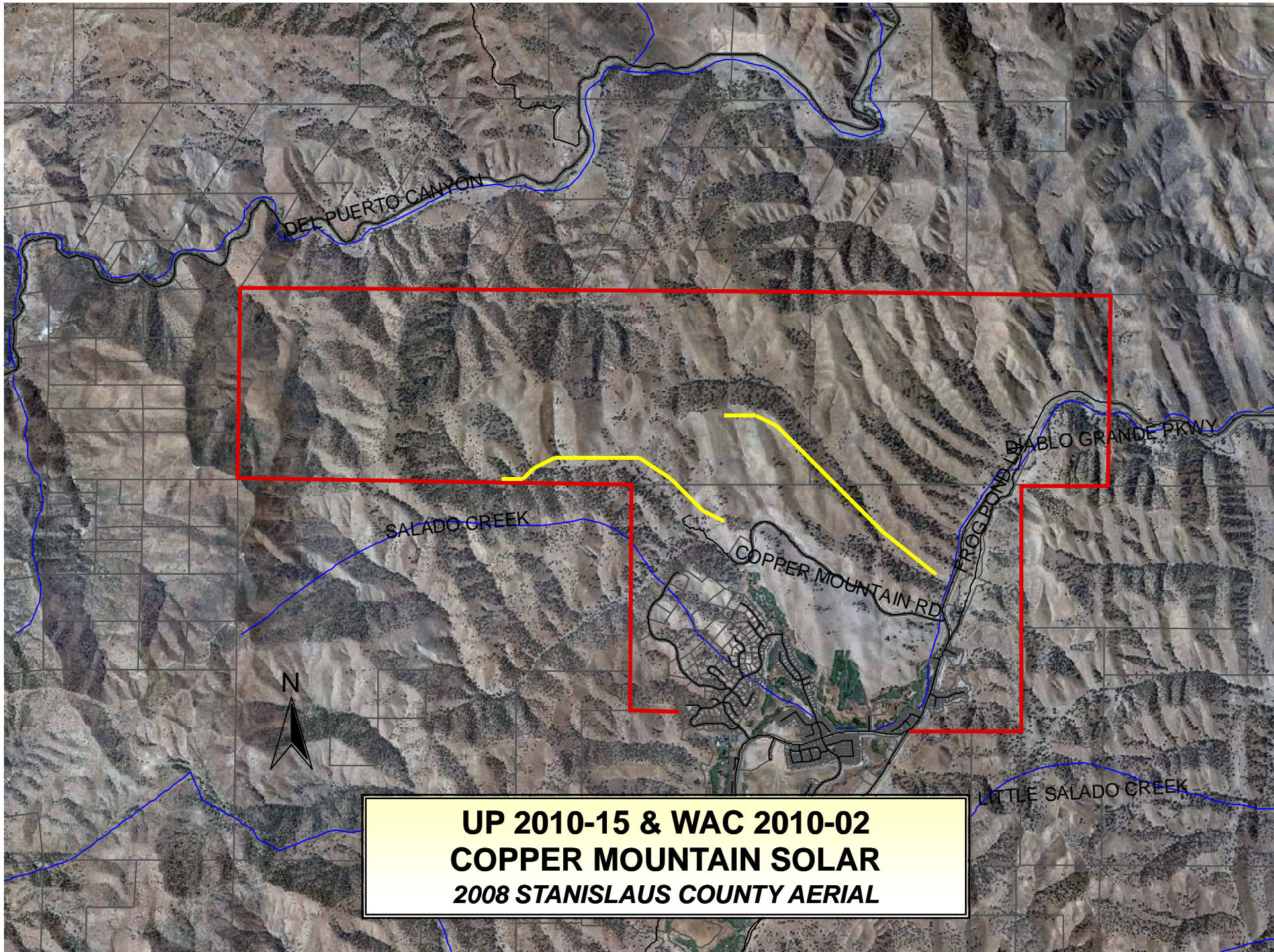
As noted above, the property is presently used for cattle grazing. The proposed use permit is to allow a solar farm in the A-2 zone, adjacent to the existing cattle grazing use. The two uses- that of cattle grazing and a solar farm- will be separated by customary cattle fencing to physically and biologically avoid conflicts between the uses. Each use is low-intensity and will not impact the other, adjacent use. A physical separation of 10' will provide adequate setback, while still retaining use of the land for a minimum footprint for the renewable energy project and a maximum footprint for agricultural purposes. In this instance, the standard buffer requirement is inconsistent with the purpose and intent of protecting the “long-term health of local agriculture” as it would permanently reduce the amount of available acreage for agriculture purposes (ie: cattle grazing).

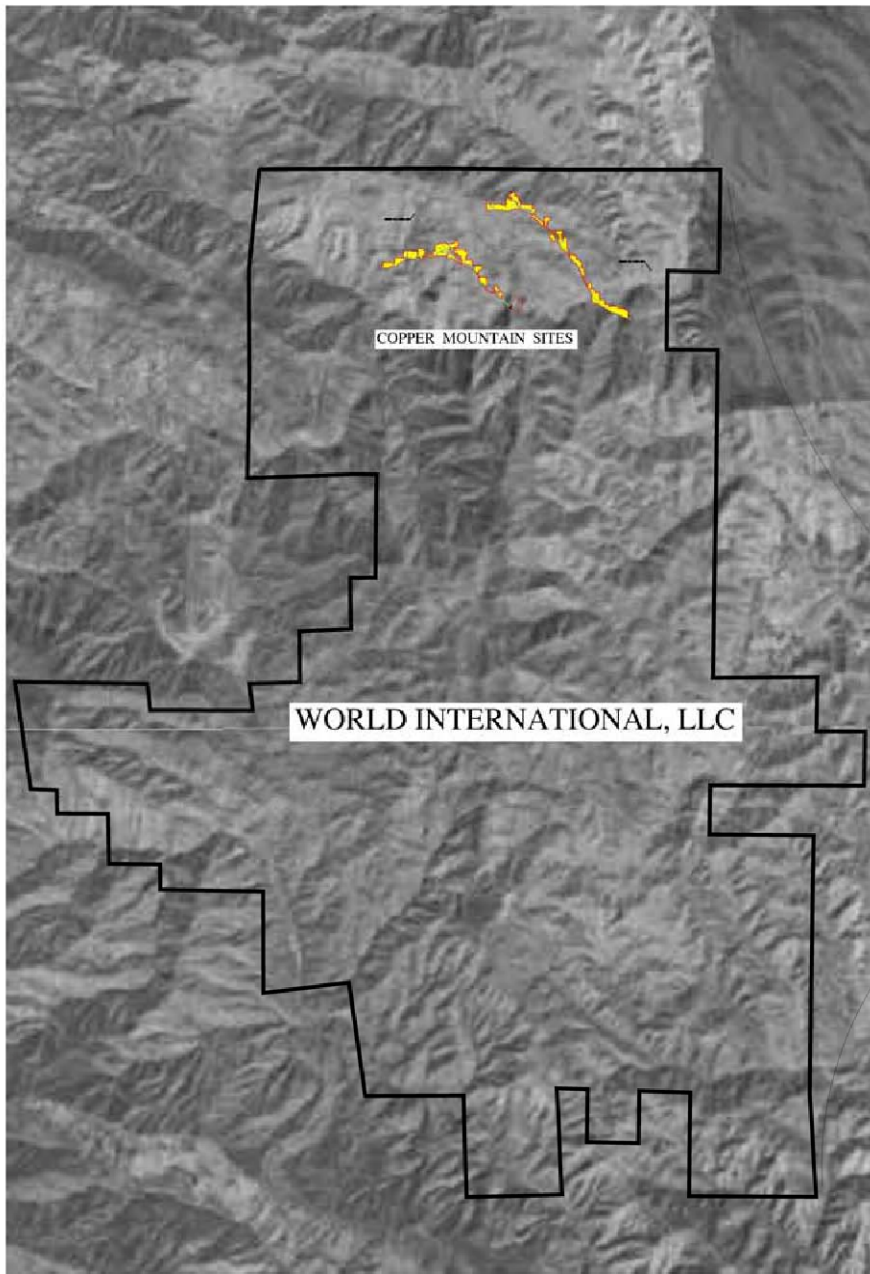


**UP 2010-15 & WAC 2010-02
COPPER MOUNTAIN SOLAR
AREA MAP**

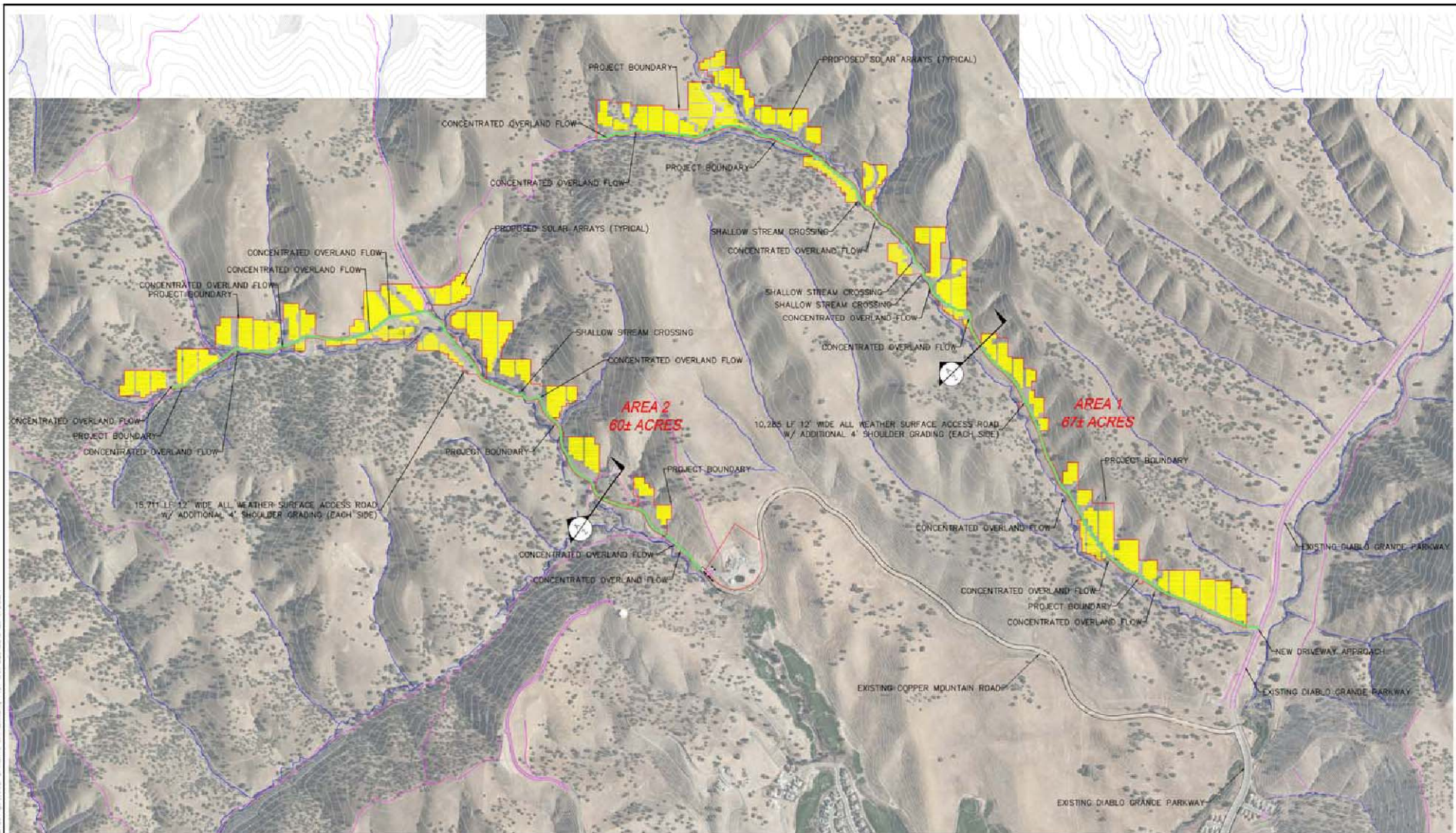
**UP 2010-15 & WAC 2010-02
COPPER MOUNTAIN SOLAR
GENERAL PLAN AND ZONING MAP**







**UP 2010-15 & WAC 2010-02
COPPER MOUNTAIN SOLAR
APPLICANT'S AREA MAP**



NOTES

THE PROJECT AREA IS LOCATED IN PORTIONS OF STANISLAUS COUNTY ASSESSOR'S PARCELS 025-005-006, 025-004-002, 025-039-012.

EXISTING TRAILS WILL RECEIVE MINOR GRADING TO CLEANUP EXISTING TRAIL PROFILES, CROSS SECTIONS AND DITCH PROFILES WHERE APPROPRIATE. EARTHWORK WILL BE MINOR AND WILL BE BALANCED WITHIN THE EXISTING TRAIL LIMITS. EARTHWORK QUANTITIES ARE ESTIMATED AT APPROXIMATELY 10,000 CUBIC YARDS PER MILE AND WILL BE LIMITED TO RESHAPING EXISTING TRAIL SYSTEMS LOCATED WITHIN THE PROJECT LIMITS. (SEE FOREST SERVICE DETAIL 3 & 4 ON SHEET 3)

EXISTING NATURAL DRAINAGE TRAIL CROSSINGS WILL BE IMPROVED IN ACCORDANCE WITH FOREST SERVICE DETAIL 2 ON SHEET 3.

SHALLOW STREAM CROSSING WILL BE IMPROVED IN ACCORDANCE WITH DETAIL 1 SHOWN ON SHEET 3.

ARRAY LAYOUTS ARE PRELIMINARY AND SUBJECT TO CHANGE BASED ON FINAL SOLAR EQUIPMENT SELECTION.

EARTHWORK CALCULATION

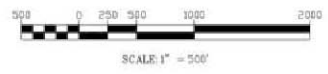
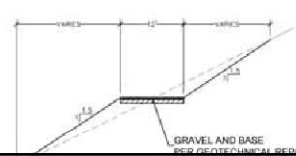
COPPER MOUNTAIN ROAD:
 7,676 LF OR 1.43 MILES @ 10,000 CY PER MILE=14,338 CY
 DISTURBED AREA: WITH 12' WIDE ROAD & 4' SHOULDERS (EACH SIDE)=3.52 ACRES

NORTH TRAIL ACCESS ROAD:
 10,285 LF OR 1.95 MILES @ 10,000 CY PER MILE=19,479 CY
 DISTURBED AREA: WITH 12' WIDE ROAD & 4' SHOULDERS (EACH SIDE)=4.72 ACRES

TOTAL AMOUNT OF EARTHWORK: 34,017 CY
 TOTAL AMOUNT OF DISTURBED AREAS: 8.25 ACRES

LEGEND

- SOLAR ARRAY
- PROJECT LIMIT
- 12' WIDE ALL WEATHER SURFACE ACCESS TRAIL
- EXISTING BODY OF WATER
- EXISTING ROADWAY



**UP 2010-15 & WAC 2010-02
 COPPER MOUNTAIN SOLAR
 APPLICANT'S GRADING MAP**