



PLANNING & DEVELOPMENT DEPARTMENT
OFFICE OF LONG RANGE PLANNING
TRANSMITTAL MEMO

DATE: February 27, 2009
TO: SunPAC Members
FROM: Derek Johnson, Deputy Director
Rosie Dyste, Senior Planner
Lucy Pendl, Planner
SUBJECT: SunPAC Meeting #19

The items noted below have been included or referenced in preparation of the March 4, 2009 meeting.

1. **Meeting Agenda.** The meeting agenda for the March 4, 2009 meeting has been provided for your review. For further explanation, please see discussion below. (Attachment 1)
2. **Meeting Minutes.** Action Minutes from the February 4, 2009 meeting are included for your review and approval. (Attachment 2)
3. **Passive Solar Design Guidelines (Summerland Design Guidelines).** This section, which was stricken from the Draft Residential Guidelines, has been included for your review and discussion. (Attachment 3)
4. **Passive Solar Building Design Guidelines and Recognition Program (City of Santa Barbara).** These Guidelines, proposed and adopted by the City of Santa Barbara in December 2006, are an example of recent 'green' guidelines for your review. (Attachment 4)
5. **Solar Panels (Land Use & Development Code).** Regarding Solar Panels (as distinct from Passive Solar), the LUDC states the following:
 - 35.30.160 - Solar Panels
 - A. Solar panels located on the roof of an existing structure do not require planning permit approval.
 - B. Solar panels located on the ground shall be classified as accessory structures, and shall require the issuance of a Coastal Development Permit in compliance with Section 35.82.050 (Coastal Development Permits) or a Land Use Permit in compliance with Section 35.82.110 (Land Use Permits).

Planning and Development is proposing changes to this section, as shown in the attached Planning Commission Staff Report for the hearing scheduled for March 4; more information will be available after that hearing. (Attachment 5)

Please refer to Transmittal materials provided to you for recent meetings and the August 2008 Draft Residential Design Guidelines. You may also download the materials at the following webpage:

<http://longrange.sbcountyplanning.org/planareas/summerland/sunPAC.php>

In order to avoid any confusion caused by last-minute changes, the PowerPoint slides will be distributed at the meeting.

MEETING AGENDA FOR MARCH 4, 2009

Agenda Item 1

Pledge of Allegiance and Roll Call

Agenda Item 2

Public Comment period – This time is set aside to allow public testimony on items not on today's agenda. The time allocated to each speaker will be set at the discretion of the Chair.

Agenda Item 3

Meeting Minutes – Review and approval of the February 4, 2009 meeting minutes.

Agenda Item 4

Carpinteria-Summerland Fire Protection District Presentation – Presentation on the latest developments regarding fire protection in the Wildland-Urban Interface as well as the residential environment.

Agenda Item 5

Continued discussion of Chapter 4 – the remaining sections for discussion are:

- Height – At Meeting 18, the SunPAC voted to define existing grade as the “existing grade from the previously approved building permit.” Staff performed analysis and encountered several obstacles, both short term and long term, which will need to be discussed and addressed:
 - The existing grade at the time the previous permit was approved will be very difficult to determine for older buildings where the County does not have plans that document the previously existing grade.
 - One option is to establish the existing grade for all lots in Summerland at the time of adoption of the updated Community Plan and Residential Design Guidelines to use as the existing grade going forward, which would require an intensive survey of the entire area.

Staff will draft alternative-language options to be presented at Meeting 19.

- Plate height – The language in the Draft Residential Design Guidelines regarding plate heights is equivocal and mirrors that found in the Commercial Design Guidelines:
 - *Plate heights should be consistent with the surrounding neighborhood, and second or upper floors should generally*

provide a plate height less than that of the floor below. This reduces the apparent size of second or upper floors.

A related issue that was addressed in the Draft Commercial Design Guidelines but omitted in the Draft Residential Design Guidelines is a reduction in Floor Area Ratio (FAR) for excessively high interior space. Please consider whether the following language should be included in the Draft Residential Guidelines:

- *Interior space exceeding sixteen (16) feet in height shall be counted twice. This applies only to single story structures.*
- Duplex FAR – In the Draft Residential Design Guidelines, the FAR for duplexes has remained 0.27, and the maximum duplex size shall be 3,600 sq. ft. of the total living area, for both units in the duplex. As this section was not addressed in past discussions of FAR, it will be reviewed at this meeting.
- Solar Design – The Passive Solar Design section from the 1992 Summerland Design Guidelines has been omitted from the Draft Residential Design Guidelines. Building site and orientation have been acknowledged as important aspects of sustainable development, so this section has been provided for discussion, along with the City of Santa Barbara’s Passive Solar Design Guidelines. (As suggested at Meeting 18, the California Solar Control Act contains exemptions for trees that: were planted prior to installation of a solar system, replace existing trees, or produce commercial agricultural products.)

Agenda Item 6

Discussion of Chapter 6 – Building Details: Building details help establish and define a building’s character and visually unify the neighborhood. Similar to Chapter 5, this chapter identifies exterior materials that are acceptable, conditionally acceptable and unacceptable. Chapter 6 also includes guidelines for firewise exterior materials and construction (consistent with the County’s Building Code for construction in Very High and High Fire Hazard Severity Zones), building color, architectural details, and windows and doors.

Agenda Item 7

Discussion of Chapter 7 – Garage Conversions: Converting a garage can add habitable space to a residential property. This chapter contains guidelines to ensure that garage conversions comply with the Summerland character and the Residential Design Guidelines.

Agenda Item 8

Discussion of Chapter 8 – Residential Second Units (RSUs): RSUs are another way to add habitable space to a residential property. This chapter contains guidelines to ensure that RSUs comply with the Summerland character, the Residential Design Guidelines, and the main dwelling.

Agenda Item 9

Discussion of Chapter 9 – Landscaping, Hardscape, Fencing and Outdoor Lighting: These elements of a property impact site drainage, affect the project site and surroundings, and should be appropriate for the neighborhood.

Agenda Item 10

Long term schedule discussion: Meeting #20 is the last scheduled SunPAC meeting. This item is on the agenda to determine if there is a need to schedule additional meetings to finish review of the Residential Design Guidelines. Please bring your calendar with you so that we can set aside some meeting dates.

Adjourn

Next meeting: SunPAC Community Plan Update Meeting #20

Topic: Continued Review of the Draft Residential Design Guidelines
Wednesday, April 1, 2009, 5:00 PM
Board of Supervisors Hearing Room, 4th Floor

CC: Jeremy Tittle, Executive Assistant, 1st District Office
John McInnes, Director, Office Long of Range Planning

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Notice of Public Meeting

Summerland Planning Advisory Committee (SunPAC) Meeting #19

Date: Wednesday, March 4, 2009

Time: 5:00 pm

Location: Board of Supervisors Hearing Room
123 East Anapamu Street, 4th Floor, Santa Barbara

Attendees: SunPAC Members, County Staff and Public Participants

Purpose/Discussion: Review of the Draft Residential Design Guidelines

Material to read: Draft Summerland Residential Design Guidelines
1992 Board of Architectural Review Design Guidelines for Summerland

Material to bring: SunPAC Meeting Materials

Agenda Item	Discussion Topic
	CALL TO ORDER
# 1	Pledge of Allegiance & Roll Call
# 2	Public Comment Period: <i>The Public Comment period is set aside to allow public testimony on items not on today's agenda. The time allocated to each speaker will be set at the discretion of the Chair.</i>
# 3	Meeting Minutes from February 4, 2009
# 4	Presentation – Carpinteria-Summerland Fire District Representative
# 5	Continued Discussion of Draft Residential Design Guidelines – Chapter 4 (Building Scale and Form) <ul style="list-style-type: none"> ▪ Height ▪ Plate height ▪ Duplex FAR ▪ Passive Solar Design & California Solar Shade Control Act
# 6	Discussion of Draft Residential Design Guidelines – Chapter 6 (Building Details) <ul style="list-style-type: none"> ▪ Exterior Materials ▪ Firewise Materials and Construction ▪ Building Color ▪ Architectural Details ▪ Windows and Doors
# 7	Discussion of Draft Residential Design Guidelines – Chapter 7 (Garage Conversions)

Questions or comments about the Community Plan Update may be directed to Derek Johnson at 805-568-2072 or djohnson@sbcao.org and further information may be obtained on the following web site: <http://countyofsb.org/plandev/comp/planareas/summerland>

Attendance and participation by the public is invited and encouraged. In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Hearing Support Staff (805) 568-2000. Notification at least 48 hours prior to the meeting will enable the Hearing Support Staff to make reasonable arrangements.

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| # 8 | Discussion of Draft Residential Design Guidelines – Chapter 8 (Residential Second Units) |
| # 9 | Discussion of Draft Residential Design Guidelines – Chapter 9 (Landscaping, Hardscape, Fencing and Outdoor Lighting)) |
| # 10 | Meeting Schedule Discussion |
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Adjourn

Next Meeting

SunPAC Meeting # 20
Topic: Chapters 10 (Additions and Alterations to Buildings of Potential Historic or Architectural Merit) and 11 (Supplemental Materials)
Wednesday, April 1, 2009, 5:00 PM
Board of Supervisors Hearing Room
123 Anapamu Street, 4th Floor, Santa Barbara

Questions or comments about the Community Plan Update may be directed to Derek Johnson at 805-568-2072 or djjohnson@sbcao.org and further information may be obtained on the following web site: <http://countyofsb.org/plandev/comp/planareas/summerland>

Attendance and participation by the public is invited and encouraged. In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Hearing Support Staff (805) 568-2000. Notification at least 48 hours prior to the meeting will enable the Hearing Support Staff to make reasonable arrangements.

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SUMMERLAND Planning Advisory Committee (SunPAC)

February 4, 2009 Meeting #18 – Minutes

1. **Meeting Called to Order:** By Chair Donaldson at 5:09 pm.

2. **Roll Call**

SunPAC Members Present: Robert (Robin) Donaldson, David (Tom) Evans, Betty Franklin, Paul Franz, David Hill, Nancy Kimsey, Suzanne Perkins, and Wickson (Reeve) Woolpert.

SunPAC Members Absent: Jennifer Fairbanks, Mary Holzhauer.

County Staff Present: Office of Long Range Planning: Deputy Director Derek Johnson, Senior Planner Rosie Dyste, and Planner Lucy Pendl.

Welcome: Chair Donaldson and Deputy Director Johnson welcomed participants.

3. **Public Comment:** Barbara McClain expressed gratitude to the committee and urged the SunPAC Members to remember and consider the input provided by the community at previous workshops.

Cindy Sapienza also expressed gratitude to the committee and asked if there could be a briefing of the Summerland Citizens Association and the Summerland Board of Architectural Review, once the Summerland Design Guidelines are complete. Deputy Director Johnson suggested that Member Woolpert could be a point of contact between the SunPAC and the Summerland Citizens' Association.

4. **Minutes of January 21, 2009 SunPAC Meeting #17:**

ACTION: Member Perkins moved, Member Woolpert seconded, to approve the January 21, 2009 SunPAC Meeting #17 Minutes with amendments to the language for the Floor Area Ratio (FAR) 'step' and correction of vote count for the final motion of Meeting 17; motion carried by a vote of 8-0.

Yea: Donaldson, Evans, Franklin, Franz, Hill, Kimsey, Perkins, Woolpert

Nay: None

Absent: Fairbanks, Holzhauer

5. **Staff Presentation:**

Staff presented some information previously requested by the SunPAC: residential parking requirements, number of lots under 2500 sq. ft. and within

the FAR 'step', FAR calculations taken from the interior of exterior walls, a Story Pole Guidelines illustration, and summary tables of the new FAR Standards.

ACTION: Member Franz moved, Member Franklin seconded, to approve the proposed findings on Slide 11 (to allow up to 15,000 sq. ft. on lots greater than 40 acres) with amendments to incorporate "associated development", encourage native plants, and minimize visibility of the structure through building design and siting; motion carried by a vote of 8-0.

Yea: Donaldson, Evans, Franklin, Franz, Hill, Kimsey, Perkins, Woolpert

Nay: None

Absent: Fairbanks, Holzhauer

ACTION: Member Hill moved, Member Evans seconded, to approve the proposed language for additions to nonconforming structures and to have staff propose language to use the existing grade from the previously approved building permit; motion carried by a vote of 8-0.

Yea: Donaldson, Evans, Franklin, Franz, Hill, Kimsey, Perkins, Woolpert

Nay: None

Absent: Fairbanks, Holzhauer

ACTION: Member Franz moved, Member Perkins seconded, to approve the suggested findings for Height Limit exemptions and suggested rural Height exception language, using the existing grade from the previously approved building permit; motion carried by a vote of 8-0.

Yea: Donaldson, Evans, Franklin, Franz, Hill, Kimsey, Perkins, Woolpert

Nay: None

Absent: Fairbanks, Holzhauer

6. Discussion of Chapter 4:

ACTION: Member Perkins moved, Member Kimsey seconded, to conceptually approve Guidelines 4-8 through 4-10 with amended language, including deletion of 4-11 regarding basements, and to have staff propose language to adjust FAR for excessive plate height; motion carried by a vote of 8-0.

Yea: Donaldson, Evans, Franklin, Franz, Hill, Kimsey, Perkins, Woolpert

Nay: None

Absent: Fairbanks, Holzhauer

7. Discussion of Chapter 5:

ACTION: Member Perkins moved, Member Franklin seconded, to approve Chapter 5 as amended, including deletion of Guideline 5-4; motion carried by a vote of 8-0.

Yea: Donaldson, Evans, Franklin, Franz, Hill, Kimsey, Perkins, Woolpert

Nay: None

Absent: Fairbanks, Holzauer

8. **Adjournment:** Member Hill moved, Member Franklin seconded, to adjourn the meeting; motion carried by a vote of 8-0.

Yea: Donaldson, Evans, Franklin, Franz, Hill, Kimsey, Perkins, Woolpert

Nay: None

Absent: Fairbanks, Holzauer

Meeting adjourned at 9:07 pm.

Next Meeting: Wednesday, March 4, 2009, 5:00pm
123 East Anapamu Street, Santa Barbara
Board of Supervisors Conference Room, 4th Floor

Topic: Continued Review of the Draft Residential Design Guidelines

Minutes Approved:

Robert (Robin) Donaldson, Chair

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8. Passive Solar Design

The BAR recognizes the desirability and encourages the use of passive solar principles in the design of energy efficient buildings. Integration of south-facing glass, thermal storage, shading, insulation devices and other elements of passive design can result in an attractive building that also provides heating and cooling. Consequently, selection and location of the building materials used for solar design as they relate to the surrounding neighborhood will be considered in the review process. For example, reflective materials utilized in a solar design should not reflect the sun's rays towards a neighbor's house. The following shall be considered in reviewing all passive solar designs:

- a. Man made materials on any building elevation shall be used with restraint in order to preserve the residential character of Summerland, including its commercial neighborhoods.
- b. Installations shall employ landscaping or other screening where practical.
- c. Other functions of the building must not be displaced by the installation (i.e. ventilation, usable outside open space, landscape area, etc. must still meet minimum standards).
- d. Enclosed areas will be counted in the FAR.
- e. Visibility from other parts of the community and the reflective qualities of any glazing will be a consideration of approval.
- f. The practicality and function as a solar device may be a factor in approval.

Note: The use of solar greenhouses or other more visible elements for passive solar gain are acceptable as long as they are integrated into the design of the structure and the above findings can be made by a 2/3 vote of the BAR members present.

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Passive Solar Building Design Guidelines and Recognition Program



EXHIBIT B

**December 2006 Proposal
Prepared by
City of Santa Barbara
Community Development Department**

ADOPTED DECEMBER 2006

Purpose of These Guidelines

These guidelines provide guidance to property owners, architects, contractors and others who may be interested in creating a passive solar building to save energy and create a more comfortable home environment. The guidelines include techniques for designing passive solar buildings that use solar energy. The guidelines have the following goals:

- Encourage passive solar designs compatible with the surrounding neighborhood and preserve the City's historic and visual resources
- Implement the Solar Recognition Program to publicly recognize effective and aesthetically designed passive solar buildings which voluntarily comply with these guidelines.
- Promote early design consideration for integration of passive solar energy system concepts in new structures and additions.

How to Use These Guidelines

ARE THE GUIDELINES MANDATORY OR VOLUNTARY?

These guidelines are voluntary. They are not intended to prohibit, restrict or condition the use of any passive solar energy techniques or to mandate passive solar techniques. The City encourages thoughtful consideration of these passive solar guidelines to achieve the goals listed above. Applicants who follow these guidelines can qualify for special recognition from the City Council.

ARE THE GUIDELINES FOR RESIDENTIAL BUILDINGS ONLY OR FOR ALL USES?

The guidelines and the Solar Recognition Program are for all uses, including both residential and commercial.

ARE THE GUIDELINES CITYWIDE OR FOR CERTAIN NEIGHBORHOODS OR ZONES?

These guidelines and the Solar Recognition Program can be applied citywide.

ARE THERE ALSO GUIDELINES AND AN AWARD RECOGNITION FOR ACTIVE SOLAR ENERGY SYSTEMS?

Yes, visit the Planning and Zoning Counter at 630 Garden Street or www.santabarbaraca.gov/Resident/Home/Forms/design_guidelines.htm to obtain a copy of the City's Solar Energy System Design Guidelines and Recognition Program.

Introduction

While solar energy systems such as photovoltaic installations are a great alternative to using fossil fuels for energy, the most sustainable energy technique is to conserve as much as possible. Passive solar building design can aid energy conservation efforts because building design is directly related to energy use. Buildings with passive solar building designs naturally use the sun for free heating, cooling and lighting. This reduces the need to consume energy from other sources and provides a comfortable environment inside. The principles of passive solar design are compatible with diverse architectural styles and building techniques. This approach can also complement active solar energy systems such as photovoltaic arrays and solar hot water systems.

Quality construction techniques to minimize unintended building openings are also important compliments to passive heating and cooling. Local building codes require seals around doors, plugs and windows and a minimum amount of insulation. Consider exceeding local building code requirements for insulation and other items as part of your passive solar design project.

In addition to the principles and techniques in these guidelines, see the City's Solar Energy references and resources handout at www.SantaBarbaraCA.gov/Resident/Home/Forms/planning.htm for more information about how to incorporate passive solar building design into projects. Also, after the building is occupied, be sure to take steps to conserve energy by using energy-efficient appliances and equipment and by avoiding unnecessary energy usage.

The following nine techniques are generally from the Santa Barbara County Green Building Guidelines. Each technique is an item on the checklist for the City of Santa Barbara's Solar Design Recognition Program. Projects that meet all of the principles on the checklist can qualify for recognition in the "Passive Solar Building Design" category.

Passive Solar Heating

- 1 Building Orientation
- 2 Window Selection and placement
- 3 Using Thermal Mass to Moderate Temperature
- 4 Meet remaining heating load with an efficient back-up system

Passive Cooling

- 5 Minimize direct sun exposure and heat absorption
- 6 Allow cool air to enter the building
- 7 Give hot air a way out of the building

Natural Lighting

- 8 Maximize natural light
- 9 Special glazing and automated controls

Follow the check mark symbols throughout the document to design an effective passive solar building eligible for the City's Solar Recognition Program. Award winners receive an appreciation certificate and a traditionally styled exterior wall plaque in the shape of a sun symbol similar to the image on the cover of this document. The certificate and plaque are presented to award winners publicly each June at a City Council hearing.

Passive Solar Heating Techniques

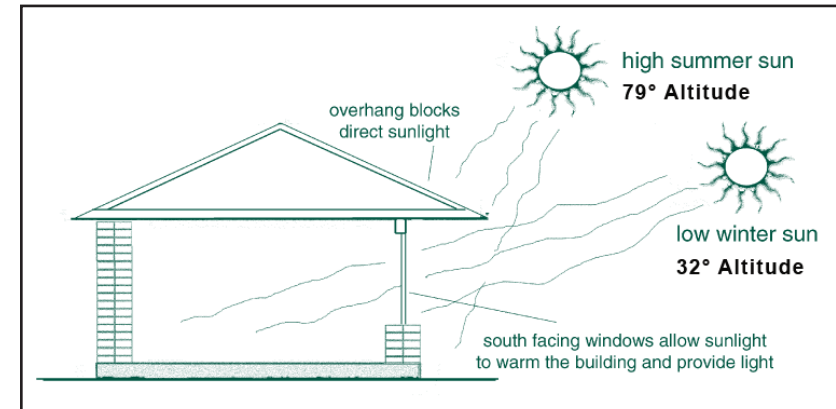
1. ORIENT BUILDINGS OR ADDITIONS TO MAXIMIZE WINTER SUN EXPOSURE.

- Place buildings or additions on the site where they receive the most winter sun and are blocked from cold winter winds.
- Elongate the building or addition on its east-west axis for increased winter sun exposure.
- Minimize north-side building or addition exposure.
- Place habitable rooms on the south side and rooms with minimal heating and lighting requirements (closets, corridors, laundry, garage, utility rooms, etc.) along the north side.



HAVE YOU ORIENTED BUILDINGS OR ADDITIONS TO MAXIMIZE WINTER SUN EXPOSURE?

2. CHOOSE TOP-QUALITY WINDOWS AND PLACE THEM STRATEGICALLY.



This drawing shows a home that uses passive solar heating principles. In the summer, the overhang blocks the warm sun. In the winter, south-facing windows allow sunlight for warmth. Source: "Santa Barbara County Green Building Guidelines," by the Sustainability Project. Also see the last page of these guidelines for information about how the sun's daily path varies in summer and winter

- Locate major window openings on the southeast, south, and southwest. Keep windows small on the north and west.
- Select top-quality windows. Optimize building glazing by evaluating R-value, visible light transmittance and solar heat gain coefficient of the glass.

2 CONTINUED:

- In the Santa Barbara region, provide 0.11-0.25 square feet of south-facing glass for each square foot of habitable floor area to allow for direct heat gain. Do not over-glaze; too many windows will cause the building to overheat.

HAVE YOU CHOSEN TOP-QUALITY WINDOWS AND PLACED THEM STRATEGICALLY?

3. USE THERMAL MASS TO MODERATE TEMPERATURE SWINGS INDOORS.

Incorporate thermal mass in floors and walls where possible to serve as a heat sink for direct or indirect passive solar heating strategies and to minimize indoor temperature fluctuations. Thermal mass saves energy in regions like ours where the outdoor air temperature fluctuates daily above and below the comfort range. The thermal mass absorbs energy during the day, and then transfers it to the indoor environment at night, serving as an effective (and free) heat source.

HAVE YOU USED THERMAL MASS TO MODERATE TEMPERATURE SWINGS INDOORS WHERE POSSIBLE?

4. MEET REMAINING HEATING LOAD WITH AN EFFICIENT BACK-UP SYSTEM.

- Consider using radiant floor heating produced by a solar hot water system.
- Consider an efficient wood or pellet stove with a catalytic converter to minimize particulate emissions as a back-up heat source. When buying a wood stove, make sure that it meets all applicable air quality regulations and is correctly sized for the space it will heat.

HAVE YOU CONSIDERED MEETING THE REMAINING HEATING LOAD WITH AN EFFICIENT BACK-UP SYSTEM?

Passive Cooling Techniques

5. MINIMIZE DIRECT SUN EXPOSURE AND HEAT ABSORPTION.

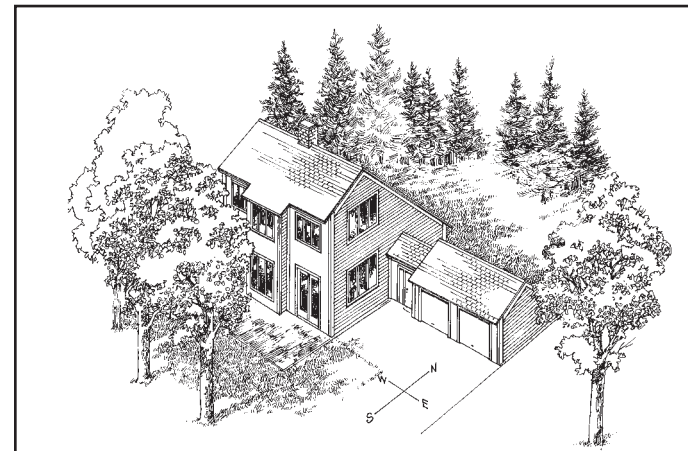
- Give priority to exterior sun controls, such as trees, awnings or trellises – as opposed to interior controls, such as drapes and shutters – in order to block light and heat before they penetrate the building skin.

5 CONTINUED:

- Shade south windows with overhangs sized to keep the sun out in the summer and early fall. Shading devices can take on many attractive forms, such as trellises and awnings.
- Try to minimize west-facing glazing. Shade west glazing by strategically locating shade trees, trellises, awnings, exterior blinds or shutters. In hillside areas, east-facing glazing may require shading as well. Vertical shading devices work best on east-west orientations because of the low sun angle.
- Minimize the size of skylights and use them mostly for natural lighting. Skylids can be used for direct heat gain, or skylights can be indirect (solar tube) to eliminate overheating and glare.
- Make the roof a light color if appropriate. Always take into account the context of the project; for example, earth tones are preferred in hillside areas to minimize visual impact.
- Use light-colored, non-reflective finishes balanced with glare control for outdoor sidewalks, driveways, patios, and parking areas and shade them whenever possible.
- Use high-performance glazing selected for your climate and purpose to optimize heat transfer between the interior and exterior.

**HAVE YOU MINIMIZED DIRECT SUN EXPOSURE AND HEAT ABSORPTION?****6. ALLOW A WAY FOR COOL AIR TO ENTER THE BUILDING.**

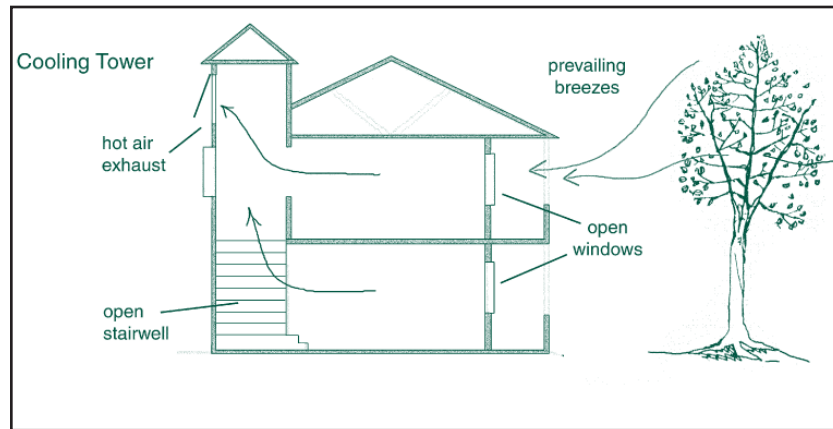
- Arrange openings to catch cooling summertime breezes (which come mostly from the southwest in Santa Barbara). Size and locate outlet openings to accelerate the flow of breezes through habitable rooms. Avoid heat sinks (thermal mass) outside inlet openings. For example, do not place an asphalt driveway in front of the inlet openings catching the cooling breezes.
- Pre-cool entering breezes by passing air through vegetation or by passing it over water ponds or fountains. Avoid dark-colored paving.



Passive solar homes take advantage of natural climate conditions for heating and cooling. In the winter, when the trees' leaves have fallen, the home's long south-facing frontage and large windows let in sunlight for warmth. In the summer, the roof overhang and the leafy trees block the hot sun. Source: *The Passive Solar House*, by James Kachadorian

6 CONTINUED:

- Consider using a “Solar Slab” to create a functional thermal mass flooring with concrete materials.



Design buildings to let in cool air and release hot air. Source: “Santa Barbara County Green Building Guidelines,” by the Sustainability Project

- Use attic fans, whole house fans, and ceiling paddle fans (preferably solar-powered) to assist in cooling airflows and exhausting hot air.
- Consider incorporating cooling towers or thermal chimneys.

HAVE YOU ALLOWED A WAY FOR COOL AIR TO ENTER THE BUILDING?

7. GIVE HOT AIR A WAY OUT OF THE BUILDING.

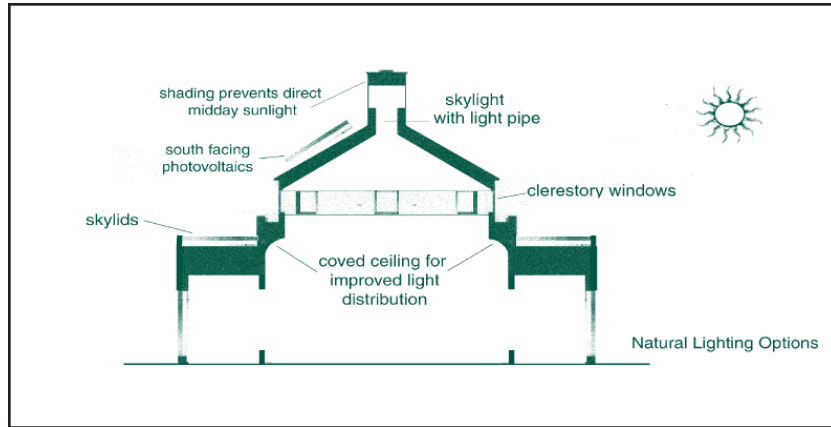
- Employ strategies that utilize nighttime and early morning cooling. These can help reduce the need for mechanical air conditioning.
- Consider cupolas, belvederes, operable skylights and clerestory windows, and thermal chimneys at roof peaks to pull out hot air.
- Incorporate reflective foil and an airspace underneath the roof sheathing to reduce heat penetration.

HAVE YOU GIVEN HOT AIR A WAY OUT OF THE BUILDING?

Natural Lighting Techniques

8. CONSIDER THE FOLLOWING STRATEGIES TO MAXIMIZE NATURAL LIGHT AND COMFORT.

- Consider using computer modeling tools along with technical advances in glazings to optimize natural lighting. See the resources section for software tools.
- Try to arrange natural lighting from at least two planes of every room, (i.e., two walls or a wall and ceiling).

8 CONTINUED:

Properly designed buildings will let in plenty of natural natural light but not too much heat. Source: "Santa Barbara County Green Building Guidelines," by the Sustainability Project

- Consider using clerestory windows, roof monitors, or skylights for overhead natural lighting. Integral tracking reflectors can increase skylight performance early and late in the day. Carefully design skylight areas to avoid overlighting and overheating. Indirect natural lighting systems will prevent overheating and glare.
- For improved distribution of natural light and reduced glare, use light shelves on south-facing windows at about head height, highly reflective ceilings, and light-colored interior surfaces. Surprisingly, it is more important to reduce "veiling glare"—stray light that washes out contrast—than it is to add more natural lighting.
- Consider integrating photovoltaics into large south glazing areas to reduce glare and cost.

- To avoid overheating, minimize direct-beam sunlight penetration into workspaces with the use of shading devices.
- Use task lighting to supplement ambient natural lighting in work areas.



HAVE YOU CONSIDERED THE STRATEGIES ABOVE TO MAXIMIZE NATURAL LIGHTING AND COMFORT?

9. CONSIDER SPECIAL GLAZING AND AUTOMATED CONTROLS.

- Maximize visible light transmittance of glazing while minimizing heat loss and, on east and west exposures, solar heat gain through the use of spectrally selective glazings. Attractive options are:
 - spectrally selective tinted glass;
 - low emissivity coatings (low-E and low E2);
 - "heat mirror" (incorporates a thin plastic film within the air space to effectively create two air spaces);
 - electrochromic glazing (uses electric current to control the amount of heat and light that enters); and
 - "super windows" (incorporate multiple thin plastic films within an enlarged air space)
 - low energy (low E) transmitting glazing and double or triple glazed windows

9 CONTINUED:

- Consider using light pipes or fiber-optic systems for natural lighting spaces far from light openings and reducing glare and overheating. Fiber-optic systems are expensive and may be feasible only in commercial installations).
- Zone lights so that those near windows can be off at times when lighting further from windows is necessary. Continuous dimming electronic ballasts can further reduce energy consumption by up to three times over fixed-output models.
- As part of natural lighting strategies, arrange lights and controls for maximum flexibility and adjustability, including the use of automated natural light-actuated controls.

HAVE YOU CONSIDERED SPECIAL GLAZING AND AUTOMATED CONTROLS?

SOLAR DESIGN RECOGNITION PROGRAM CHECKLIST: PASSIVE SOLAR BUILDING DESIGN

Use this checklist to determine whether a project is eligible for a City Passive Solar Recognition Award. If the answer to all of the questions below is “yes,” the project may be eligible.

Passive Solar Heating

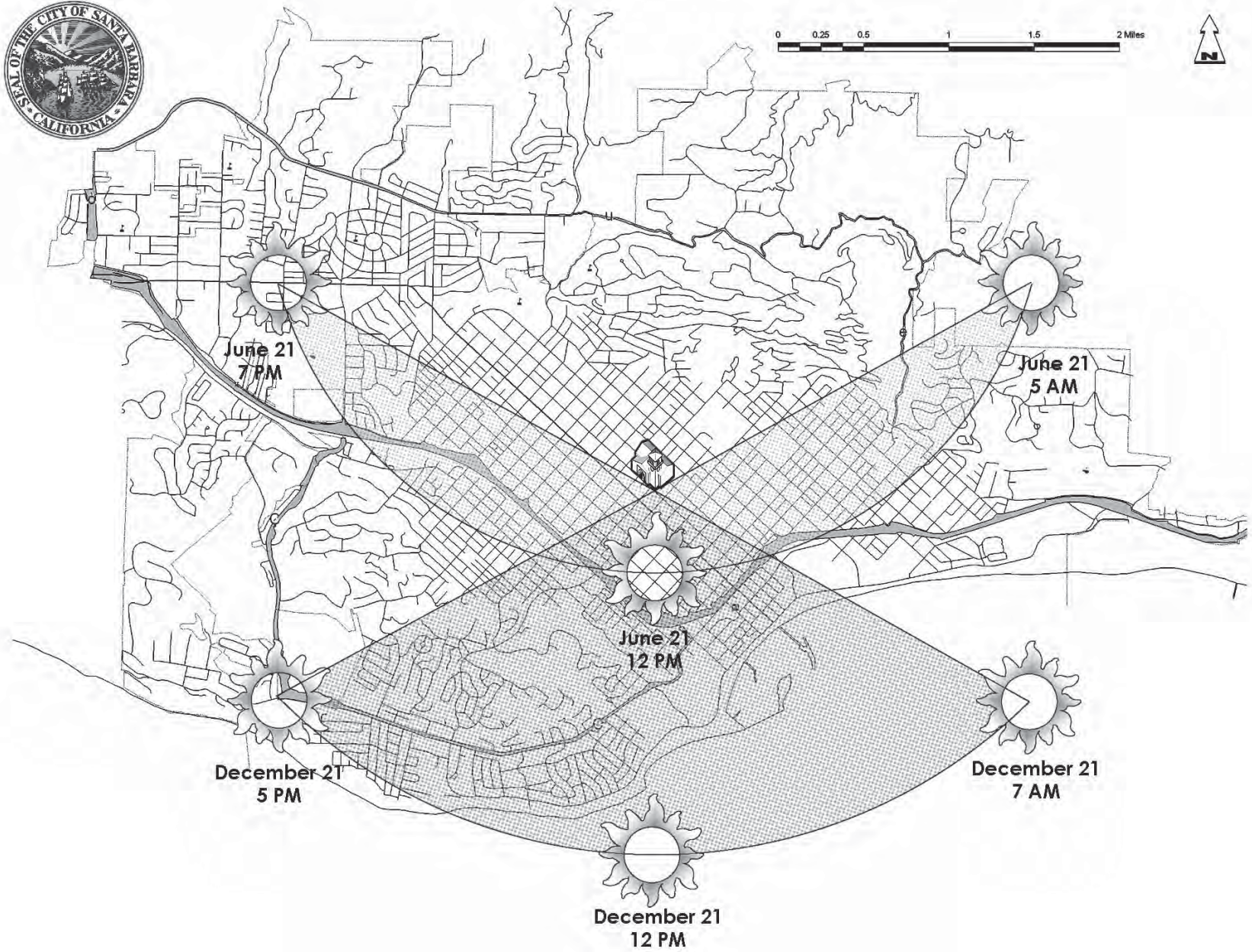
- 1: Have you oriented buildings to maximize winter sun exposure?
- 2: Have you chosen top-quality windows and placed them strategically?
- 3: Have you used thermal mass to moderate temperature swings indoors where possible?
- 4: Have you met remaining non-passive heating load with an efficient back-up system?

Passive Cooling

- 5: Have you minimized direct sun exposure and heat absorption?
- 6: Have you allowed a way for cool air to enter the building?
- 7: Have you given hot air a way out of the building?

Natural Lighting

- 8: Have you maximized natural lighting and comfort?
- 9: Have you used special glazing and automated controls?



This diagram shows the sun's path from sunrise to sunset at summer and winter solstice from the perspective of the Santa Barbara County Courthouse.

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SANTA BARBARA COUNTY PLANNING COMMISSION
Staff Report for Revising Freestanding Solar Energy Systems
Permit Requirements

Hearing Date: March 4, 2009
Staff Report Date: February 13, 2009
Case No. 09ORD-00000-00001
Environmental Document: CEQA Guidelines Section 15061(b)(3)

Dianne Black
Development Services Director: Dianne Black
Staff Contact: Noel Langle
Phone No.: 805.568.2067

1.0 REQUEST

Hearing on the request of the Planning and Development Department that the County Planning Commission consider and adopt a recommendation to the Board of Supervisors that they adopt an ordinance (Case No. 09ORD-00000-00001) amending Article 35.3 - Site Planning and Other Project Standards, of Section 35-1, the Santa Barbara County Land Use and Development Code, of Chapter 35, Zoning, of the County Code as set forth in Attachment C that would revise the existing procedures for permitting freestanding solar energy systems to allow such systems to be allowed with a Zoning Clearance instead of the current Land Use Permit when they comply with a set of development standards designed to address compatibility with the surrounding area.

2.0 RECOMMENDATION AND PROCEDURES

Follow the procedures outlined below and recommend that the Board of Supervisors approve Case No. 09ORD-00000-00001 based upon the ability to make the appropriate findings. Your Commission's motion should include the following:

- Adopt the findings for approval and recommend that the Board of Supervisors adopt the findings for approval of the proposed amendment (Attachment A);
- Recommend that the Board of Supervisors find that this amendment is categorically exempt from the California Environmental Quality Act in compliance with Section 15061(b)(3) of the Guidelines for Implementation of CEQA (Attachment B); and,
- Adopt a Resolution recommending that the Board of Supervisors adopt Case No. 09ORD-00000-00001, an ordinance amending Section 35-1, the Santa Barbara County Land Use and Development Code, of Chapter 35, Zoning, of the County Code (Attachment C).

Please refer the matter to staff if your Commission takes other than the recommended action for the development of appropriate materials.

3.0 JURISDICTION

This project is being considered by the County Planning Commission based upon Section 65855 of the Government Code and Section 35.104.050 of the Santa Barbara County Land Use and Development Code (County LUDC). The Government Code and the County LUDC require that the County Planning Commission, as the designated planning agency for the unincorporated area of the County outside the Montecito Planning Area, review and consider proposed amendments to the County LUDC and provide a recommendation to the Board of Supervisors.

4.0 ISSUE SUMMARY AND BACKGROUND

The County LUDC currently provides that solar energy collection systems are exempt from planning permits if they are located on the roof of a structure, but require a Coastal Development Permit or a Land Use Permit if they are freestanding. In compliance with Government Code Section 65850.5(b) which requires that "a city or county shall administratively approve applications to install solar energy

systems through the issuance of a building permit or similar nondiscretionary permit," the County LUDC does not require design review for solar energy systems. Building permits (especially in the case of roof mounted systems) and electrical permits are typically required.

On October 1, 2008 the Planning and Development Department discussed with your Commission the possibility of shifting the permit requirement for freestanding solar energy systems in the Inland area from a Land Use Permit (with notice and the possibility for appeal) to a Zoning Clearance (no notice, no appeal) provided the project complies with all other zoning requirements (e.g., height, location) and a specific set of development standards designed to address compatibility issues such as location and visibility.

As discussed at the October 1st workshop, Assembly Bill 811 (effective July 21, 2008) authorizes the legislative bodies of cities and counties to adopt a program that could provide low-interest loans to property owners to finance the installation of solar energy systems. The County is in the process of developing a program that will implement AB811. Additional information on the status of this program will be presented at the March 4, 2009 public hearing.

Based on the generally supportive comments received at the October 1st workshop staff is now requesting that your Commission recommend adoption of the proposed ordinance amendment to the County Board of Supervisors.

A similar ordinance will be presented to the Montecito Planning Commission on February 25, 2009. The results of that hearing will be presented to your Commission at the March 4th public hearing

5.0 PROJECT DESCRIPTION

5.1 Proposed permit process. This amendment would shift the permit requirement for freestanding solar energy systems located in the Inland area from a Land Use Permit to a Zoning Clearance for systems that are able to comply with all of the development standards listed below (see Section 35.30.160.C). This amendment is not proposed to apply to the Coastal Zone since freestanding solar energy systems meet the definition of "development" and therefore require the issuance of a Coastal Development Permit. These development standards are written so that they can be applied in a ministerial manner in order to comply with Government Code Section 65850.5(b). If a particular installation is not able to meet all the development standards, it may still be permitted with a Land Use Permit. Implementing this process requires amending the text of Section 35.30.160 (Solar Panels) to read as shown below (added text is shown as underlined, deleted text is struck-through).

35.30.160 - Solar Panels

- A. **Roof Mounted.** Solar panels located on the roof of an existing structure do not require planning permit approval.
- B. **Freestanding.** Solar panels located on the ground shall be classified as accessory structures, and shall require the issuance of ~~a Coastal Development Permit in compliance with Section 35.82.050 (Coastal Development Permits) or a Land Use Permit in compliance with Section 35.82.110 (Land Use Permits).~~ the appropriate planning permit in compliance with the following:
 1. **Coastal Zone.** Freestanding solar panels located in the Coastal Zone shall require the issuance of either a Coastal Development Permit in compliance with Section 35.82.050 (Coastal Development Permits) or a Land Use Permit in compliance with Section 35.82.110 (Land Use Permits) as applicable.

2. Inland area. Freestanding solar panels located in the Inland area shall require the issuance of either a Land Use Permit or a Zoning Clearance.

(a) Land Use Permit. The issuance of a Land Use Permit in compliance with Section 35.82.110 (Land Use Permits) shall be required for solar panels that do not comply with Subsection C. (Development Standards), below.

(b) Zoning Clearance. The issuance of a Zoning Clearance in compliance with Section 35.82.210 (Zoning Clearances) shall be required for solar panels that comply with Subsection C. (Development Standards), below.

C. Development Standards. Freestanding solar panels located in the Inland area may be allowed with the issuance of a Zoning Clearance in compliance with Section 35.82.190 (Zoning Clearances) if they comply with all of the following standards.

1. Design.

a. The proposed system is no larger than necessary to provide 120 percent of the electrical and/or thermal energy requirements of the structure to which it is accessory as determined by a contractor licensed to install photovoltaic and thermal solar energy systems.

b. The solar panels and supporting framework do not extend more than six feet above the existing grade.

2. Location.

a. The solar energy system including any appurtenant equipment is not located within any required setback areas.

b. If the solar panels are visible from off-site, the solar panels are not located within 150 feet of a dwelling located on a lot other than the lot on which the solar energy system is located unless:

(1) There are appropriate facades, walls, fences or landscaping that screen the solar panels and supporting framework from unobstructed view.

(2) Taller screening and landscaping is used on the north side of panels to screen the panels from uphill views without reducing the efficiency of the system.

(3) Reflection angles from collector surfaces are oriented away from neighboring windows.

(4) The panels are mounted as close as possible to the ground to match the slope of the hillside while allowing adequate drainage and preventing vegetation from shading the panels.

c. The system is not located on a designated historical landmark.

3. Visibility.

a. The solar panels are not visible from a public right-of-way that abuts the lot on which the solar energy system is located, or, if visible, they are installed within one foot of the natural ground topography.

b. The solar panels are located so that they are not readily visible from public viewing areas including parks, roads and trails located to the south of the site.

6.0 ENVIRONMENTAL REVIEW

The proposed amendment is recommended to be determined to be exempt from environmental review in compliance with Section 15061(b)(3) of the California Guidelines for Implementation of the California Environmental Quality Act (CEQA) which states that where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment that the activity is not subject to CEQA. No significant environmental impacts would occur as a result of this ordinance amendment as discussed in Attachment B.

7.0 POLICY CONSISTENCY

Adoption of the proposed ordinance will not result in any inconsistencies with the adopted policies and development standards of the County's Comprehensive Plan and regional Community Plans. In order to approve any application that results from this ordinance, the application still must be found consistent with the Comprehensive Plan and regional Community Plans.

8.0 ORDINANCE COMPLIANCE

The proposed ordinance is consistent with the remaining portions of the County LUDC that are not revised by this ordinance.

9.0 PROCEDURES

The County Planning Commission may recommend approval, approval with revisions, or denial of the proposed ordinance.

10.0 APPEALS PROCEDURE

Ordinance amendments are automatically forwarded to the Board of Supervisors for final action, therefore no appeal is required.

11.0 ATTACHMENTS

- A. Findings
- B. CEQA Notice of Exemption
- C. Resolution and Proposed Ordinance
- D. October 1, 2008 County Planning Commission Workshop Staff Report