



TO: HONORABLE MAYOR & CITY COUNCIL MEMBERS

FROM: JOEL ROJAS, AICP, DIRECTOR OF PLANNING, BUILDING AND CODE ENFORCEMENT

DATE: NOVEMBER 6, 2008

SUBJECT: CODE AMENDMENT (CASE NO. ZON2007-00598), A REQUEST TO AMEND TITLE 15 (BUILDING CODE) AND TITLE 17 (DEVELOPMENT CODE) OF THE CITY'S MUNICIPAL CODE TO ENCOURAGE "GREEN BUILDING" CONSTRUCTION.

REVIEWED: CAROLYN LEHR, CITY MANAGER

Project Manager: Leza Mikhail, Associate Planner

RECOMMENDATION

- 1) Adopt Resolution No. 2008-___, thereby certifying a Negative Declaration pursuant to the California Environmental Quality Act determining that no significant environmental impacts would result from the proposed "Green Building" code amendment; and
- 2) Introduce Ordinance No. 2008-___, thereby amending Title 17 (Development Code) to establish a voluntary green building program along with some specific mandatory green practices and development standards and amending Title 15 (Building Code) to establish certain specific construction requirements for new structures.

EXECUTIVE SUMMARY

"Green Building" is a term given to buildings that are sited, designed, constructed and operated to enhance the well-being of occupants, and to minimize negative impacts on the community and natural environment. In an effort to encourage "Green Building" construction throughout the City, Staff conducted a large amount of research, education and outreach with the objective of putting together a green building program for City residents to participate in. As a result of its education and outreach program, Staff developed a green building program that consists of the following concepts:

1. A voluntary green building construction and third-party inspection program
2. The modification of current Development Standards to promote "Green Building" concepts; and
3. New Building Code construction requirements to promote "Green Building"

These components are proposed to be incorporated into the City's Municipal Code as code amendments. The Planning Commission reviewed the proposed amendments and recommends that the City Council certify a Negative Declaration and adopt the Voluntary Green Building Program and specific mandatory green practices and development standards.

BACKGROUND

Director Initiated Code Amendment

On March 6, 2007, the Director initiated a Code Amendment request to the City Council to consider implementing a voluntary Green Building Program for private construction projects in the City. After considering oral and written testimony, the City Council directed Staff to initiate a code amendment to encourage "Green Building" construction throughout the City. This action permitted the proposed voluntary Green Building Program code amendment to move forward through the public hearing process that is required for all code amendments.

Education and Outreach Effort

After the City Council directed Staff to initiate a code amendment, Staff initiated a prolonged research, education and outreach effort in order to formulate the eventual "Green Building Program" to be presented to the Planning Commission and City Council for approval. In conducting the education and outreach effort, it was Staff's goal to develop a program that could be easily utilized by the City's residents, understood by the building community and be consistent with other Cities efforts in initiating incentives and practices in promoting green construction. In summary, Staff took the following actions:

- Staff researched several Green Building Organizations such as *LEED (Leadership in Energy and Environmental Design)*, *Global Green*, and *Build It Green*, to gain an understanding of which organization would best fit the City of Rancho Palos Verdes, with a predominantly residential characteristic.
- Staff collaborated with other jurisdictions on the peninsula (Rolling Hills Estates, Rolling Hills and Palos Verdes Estates) to discuss the creation of an informal partnership whereby the cities on the peninsula would/could utilize green building programs that are compatible and would facilitate a stronger response from residents, architects and builders for "green building."
- Staff periodically met with Commissioner Jim Knight, who has a strong interest in "green construction," to discuss the implementation of a City program.
- Staff initiated an educational campaign geared toward educating residents, contractors and architects about "green building" as noted below:
 - During the 2007 calendar year, Staff arranged for other City Officials to tour a "green" residence constructed in the City.

- On July 24, 2007, the City hosted a Green Building Seminar, geared toward architects and builders, at City Hall where a representative of *Build It Green* provided background information on the program and benefits of creating a Green Building Program through local government.
- City Staff was asked to conduct a presentation at the Green Task Force Meeting on May 22, 2008, spearheaded by the South Bay Energy Savings Center. In attendance, were various South Bay City staff members, Director's, Committee members, Council members, Los Angeles County representatives, a representative from City of Los Angeles City Councilwoman Hann's office and State representatives. Staff presented the City's proposed plan to incorporate a volunteer residential green building program, discussed the incentives that the City would provide to members who choose to participate in the program and discussed City-wide green building requirements. Overall, Staff received a positive response from South Bay representatives who feel that this program is a benefit to promoting green construction from a local government perspective.

Planning Commission Review

As a result of Staff's education and outreach effort, Staff was able to formulate a voluntary "Green Building program that could be easily pursued by interested residents, would fulfill "green building" ideals and would minimize the burden on City Staff. In addition, the outreach resulted in Staff identifying certain code amendments that could help achieve "sustainability" without being overly restrictive to homeowners. Once the basic voluntary program and basic code amendments were developed by Staff, the following formal review process occurred before the Planning Commission:

- A Draft Negative Declaration was prepared for the proposed Voluntary Green Building Program and on April 12, 2008, public notice of the proposed Draft Negative Declaration and Code Amendment was published in the *Palos Verdes Peninsula News*.
- On May 13, 2008, the Planning Commission, after a duly noticed public comment period, was presented with the basic proposed concepts of the Code Amendment package. At the May 13, 2008 public hearing, the Commission directed Staff to draft language to codify the voluntary program and incentives and continued the public hearing to June 10, 2008. On June 10, 2008, the Planning Commission continued the item to the July 8, 2008 Planning Commission meeting to allow Staff additional time to prepare code language.
- On July 8, 2008, the Planning Commission continued item to the August 26, 2008 Planning Commission meeting to allow Staff to participate in two certification classes, funded by *Build It Green*. Additionally, due to the fact that Planning Commissioner Knight, an active participant in the subject code amendment, would be out of town on July 8, 2008, the Planning Commission agreed to continue the request to ensure the participation of Planning Commissioner Knight.

- On August 26, 2008, the Planning Commission reviewed Staff's proposed code amendment language. After considering the proposed language, the Commission approved the proposed code amendment and directed Staff to prepare the appropriate resolutions that recommend that the City Council adopt an ordinance to implement the proposed code amendment. The Commission closed the public hearing and directed that the appropriate resolutions be brought back to the September 9, 2008 Planning Commission meeting.
- On September 9, 2008, the Planning Commission adopted P.C. Resolution No. 2008-30 (attached) recommending that the City Council certify a Negative Declaration pursuant to the California Environmental Quality Act, and P.C. Resolution No. 2008-31 (attached) recommending that the City Council adopt an Ordinance to establish a Voluntary Green Building Program along with specific mandatory green practices and development standards.

The Planning Commissions recommendations are now being presented to the City Council for discussion and adoption.

DISCUSSION

What is meant by "Green Building"

"Green Building" is a term given to buildings that are sited, designed, constructed and operated to enhance the well-being of occupants, and to minimize negative impacts on the community and natural environment. Typically, "green buildings" are higher quality, provide a healthier environment to live in, are less costly to maintain, consume fewer natural resources and generate less waste. Specifically, the benefits of "green building" construction include:

- A reduction of environmental impacts from home construction at both local and global levels
- Long-term savings through reduced energy and water consumption
- An increase in the lifespan of a structure from the industry 40-year standard to 100+ years of sustainability
- Certified recognition to a home owner for constructing an environmentally friendly structure
- A reduction of output to existing infrastructure and utilities, thereby increasing the lifespan of local infrastructure.

Proposed Green Building Program

The "Green Building Program" proposed for the City, which has been reviewed and approved by the Planning Commission, consists of the following 3 components:

1. A voluntary green building construction and third-party inspection program

2. The modification of current Development Standards to promote “Green Building” concepts; and
3. New Building Code construction requirements to promote “Green Building”.

These 3 components are discussed below.

1. Volunteer Green Building Construction/Third-Party Inspection Program

The proposed volunteer Green Building construction program, that the Planning Commission is recommending be implemented, would allow Rancho Palos Verdes residents who wish to construct “green buildings” to work with a recognized organization in order to receive “green building” certification. This approach would allow green building “experts” to work with interested applicants to achieve their green building objectives while not burdening Staff with additional review and/or inspection responsibilities. After researching the various programs, Staff concluded, and the Planning Commission agreed, that the optimal, most holistic and most achievable approach was to implement the *Build It Green* suite of products and services for single-family residential and multi-family residential projects, and *LEED* suite of products for commercial, institutional and/or mixed-use projects. These sets of guidelines would provide the City residents and property owners with recognized, certified, and consistent guidelines and a rating system which property owners can utilize for achieving green construction on their properties.

The program proposed by Staff and recommended for approval by the Planning Commission establishes specific steps to be undertaken by the City’s residential property owners or builders who wishes to voluntarily participate in the proposed “Green Building” program. Although the volunteer program is designed to the *Build It Green* guidelines and certification checklist, the *Build It Green* Guidelines were created to be compatible with other third-party rating programs. As a result, a builder employing the recommended strategies in the *Build It Green* Guidelines could also choose to have projects rated under the *California Green Builder* program, or a national system, such as through *Energy Star* or *LEED for Homes*, with prior approval by the Director.

The specific steps for the volunteer residential program are summarized below (a similar process would be followed for commercial, institutional and/or mixed use projects through the proposed *LEED* guidelines for non-residential projects):

- Step 1: Staff provides a residential property owner/applicant with the adopted *Build It Green* Guidelines and Checklist as well as a directory of southern California-based Certified Green Building professionals who understand how to achieve a certifiable green home.
- Step 2: The residential property owner/applicant then contacts and retains a Certified Green Building Professional or Green Point Rater to work with the owner through the design stages of their construction process.

- Step 3: The Green Building Professional (or property owner) submits plans to the Planning Department that include the checklist printed on the plans indicating what measures are proposed to be incorporated into the new residence or remodeled home and what point value the home can attain. Additionally, the applicant would provide a letter of intent to construct a “green building.”
- Step 4: Planning Staff determines that the submitted project meets the minimum point value set by *Build It Green* (currently 50 points for new construction). Once the property owner submits a letter of intent and the project meets the minimum point value, the assigned Staff member would make the project a priority over other non-green applications submitted in the same time period.
- Step 5: Following all code-required reviews and analyses for the project application, if entitlements are granted through the Planning Department, the applicant would then prepare structural plans for submittal into Building and Safety Plan Check. At the same time, the applicant or Certified Green Building Professional, working on the applicant’s behalf, would retain the services of a certified Green Point Rater and submit a preliminary application to *Build It Green* for future Green Point Rating and certification by a third-party rater.
- Step 6: The applicant would then submit the Planning approved plans into Building and Safety Plan Check. The plans would be required to include the *Build It Green* Checklist and green measures.
- Step 7: The Building Official determines that the submitted project meets the minimum point value set by Build It Green for the respective project type (i.e. new residence, remodeled residence or multi-family residence). If the project meets the minimum point value, the applicant will receive an expedited plan-check process, or will move to the “front-of-the-line.”
- Step 8: Once building permits are issued, the construction process begins with inspections by the City’s Building Inspectors. At the same time, the Green Point Rater will conduct rough inspections, final inspection and performance testing and collect documentation throughout the construction process.
- Step 9: Once the project is complete and constructed, the Green Point Rater will compile documentation, calculate final scores and submit final results to the builder and to *Build It Green*.
- Step 10: The Green Point Rater obtains the completed certificates from *Build It Green* stating that the residence has been constructed or remodeled as a certified “green building.”
- Step 11: The property owner provides a copy of the certification to the Director and requests a fee rebate.
- Step 12: The Director verifies the certification and issues a rebate in the amount of

50% of the total Planning and Building and Safety application fees (not including any penalties that may have been assessed or any fees paid to outside consultants who have reviewed the project, such as geologists) under the City's Green Building Program.

These steps are proposed to be incorporated into Section 17.83.030 and 17.83.040 of the Development Code as described in Section 8 (pages 2-6) of the attached draft Ordinance. The draft Ordinance has been reviewed and recommended for approval by the Planning Commission.

Incentives for participation:

In order to promote participation in the City's volunteer Green Building Program the Planning Commission agreed to establish the following two incentives that could be provided to property owners and/or applicants who pursue the proposed program.

1. Expedited Plan Review: Typically, when an application is submitted into Planning review and/or Building and Safety Plan Check, the application is reviewed in the order that the application is received, after other preceding applications. The Planning Commission recommends that the City Council adopt the incentive that if a property owner opts to pursue construction of a project under the *Build It Green* rating program, said application receive priority review and be reviewed ahead of all other "non-green" applications.
2. Potential Rebate of City's Processing Fees: The Planning Commission is also recommending to the City Council that property owners who choose to pursue construction of a "green building" be given a partial fee rebate upon the submittal of proof that a green building was actually constructed. Specifically, upon submittal of a request for a rebate and proof of the green building construction, the City would issue a rebate to the property owner in the amount of 50% of all Planning and Building Division application fees that were processed (not including any applicable penalty fees or any fees paid to outside consultants who have reviewed the project, such as geologists). Staff is of the opinion that a 50% rebate of fees upon certification will cover most, if not all, of the costs associated with retaining a Green Point Rater as well as provide additional monetary incentive for "green" construction.

These incentives are proposed to be incorporated in Section 17.83.020 of the Development Code, Section 8 (pages 3-4) of the attached draft ordinance. The Planning Commission is recommending approval of the proposed language.

2. Proposed Modification of Certain Development Code Requirements to Promote "Green Building" Concepts

In addition to the establishment of a voluntary Green Building Program, the Planning Commission is also recommending certain Municipal Code amendments that would promote "green building" concepts by clarifying certain regulations and/or requiring that

certain new development standards be met. The proposed amendments are summarized below:

- *Renewable Energy Systems (Photovoltaic and/or Solar Water Heating):*

The current Municipal Code references photovoltaic systems (solar panels) under two separate sections: Section 17.48.050 (Building Height) and Section 17.76.060 (Extreme Slope Permit). Section 17.48.050 (Building Height) states that solar panels may exceed the “by-right” height limit provided that they do not exceed the maximum ridgeline of the existing residence, and do not cause significant view impairment through a separate determination by the Director through a Site Plan Review application. Additionally, Section 17.76.060 (Extreme Slope Permit) requires an application for an Extreme Slope Permit for solar panels that extend a maximum of twelve feet into an extreme slope area, as measured on a horizontal plan from the top or toe of the slope.

As described in the proposed Development Code Section 17.83.050 (Section 8, pages 6-7) of the attached Ordinance, the Planning Commission is recommending to consolidate the regulation of photovoltaic systems into one section of the code and simplify the review process for certain photovoltaic systems in order to help incentivize their installation. Specifically, the code is proposed to be amended to exclude solar panels from requiring review and approval of an Extreme Slope Permit when proposed on a slope that is 35% or greater. Instead, solar panels that are proposed to be located on an extreme slope would be reviewed through a Minor Site Plan Review as would be the case if the slope were less than 35%. Currently, an Extreme Slope Permit costs \$586.00 and takes approximately 2 months to process, whereas a Minor Site Plan Review costs \$64.00 and could be approved over the counter. In addition, the Planning Commission is recommending that the code be amended to require that panels proposed above the “by-right” building height and the existing building ridgeline be reviewed by the Director for specific adverse impacts against public health and safety, as opposed to being reviewed by the Planning Commission for view impairment, as is presently required. This change will save 2 to 3 months of review time for applicants seeking to locate panels on their roof.

In addition to these changes, the City Attorney is recommending that the findings for denying applications for photovoltaic systems be amended to comply with the provisions of Government Code Section 65858.5, which states that such systems may only be denied if the local agency makes written findings, based on substantial evidence in the record, that the proposed installation will have a specific adverse impact upon the public health or safety.

Furthermore, the Planning Commission is also recommending that the code be amended, as described in the proposed Development Code Section 15.04.070 (Section 24, pages 11-12) of the attached Ordinance to require that all new-single family residences be constructed so that electrical and plumbing conduits/connections be installed to facilitate the installation of solar panels on

the roof, if so desired by any future property owner.

- Regulation of Impervious Hardscape (Lot Coverage):

Under Section 17.02.040(A)(5), the current Development Code regulates lot coverage as all buildings and/or structures, covered patios, trellises, courtyards that are fully enclosed or have a maximum of one entrance, decks over thirty inches in height, parking areas or driveways. Hardscape is not included in the calculation of lot coverage. In order to promote more pervious surfaces within a residential lot and discourage large paved areas and/or patios which increase drainage runoff, the Planning Commission is recommending that the City Council amend the current definition of “Lot Coverage” to include some impervious surfaces, but exclude new impervious walkways less than 5 feet in width and new patio areas less than 500 square feet in area. The specific code amendment language is codified in Development Code Section 17.02.040(A)(5) (Section 10, page 7) of the attached Ordinance. This specific code amendment would require any resident proposing new additional square footage to calculate the amount of impervious hardscape on the property to ensure that the maximum lot coverage is not being exceeded. Given that there are permeable hardscape products on the market, any permeable hardscape would not be counted toward lot coverage.

It is important to note, that this code amendment may result in an increase in Minor Exception Permit and/or Variance applications to exceed lot coverage requirements. On the other hand, the new regulation may prompt applicants that come in for major remodels to reduce the amount of impervious surface that exists or is proposed in order to meet the new development standard and still obtain the new square footage desired.

- Artificial Landscaping:

Section 17.96.1020 (Definitions - Landscaping) (page 7 of the draft Ordinance) of the Municipal Code currently defines “Landscaping” as “the planting and continued maintenance of ornamental plant material; the installation, use and continued maintenance of a permanent irrigation system; and/or the continued maintenance of ornamental rock gardens or rockscape, not including natural soil or earth. The current definition of landscaping allows residents to have rock gardens if they wish. However, the current definition does not allow artificial lawns. Given that these have been inquiries about the use of artificial lawns and there are new products on the market that are more realistic looking than past “Astroturf”, the Planning Commission is recommending that the City Council amend the definition of “Landscaping” to include artificial lawns with a permeable sub-surface area thereby allowing residents to install such lawns to reduce their water needs. The proposed code amendment language is codified in the Development Code Section 17.96.1020 (Section 11, page 7) of draft Ordinance.

It is important to note, all landscaping, regardless of being artificial, is subject to the City’s property maintenance requirements. Thus, any artificial landscaping

that becomes deteriorated can be addressed through the City's Code Enforcement Department.

3. Proposed Modification of Certain Building Code Requirements to Promote "Green Building" Concepts

In addition to the amendments to the zoning code that were reviewed and recommended by the Planning Commission, there are additional amendments that are proposed by Staff for Title 15 (Building Code) to help promote "Green Building" construction. These particular code amendments were not reviewed by the Planning Commission since they pertain to the Building Code as opposed to the Zoning Code. The amendments proposed by Staff are listed below.

Renewable Energy Systems (Photovoltaic and Solar Water Heating Systems):

Staff is proposing that the City require all new residences and major remodels, whereby more than 50% of the existing interior and/or exterior walls are removed, to include the installation of conduit or plumbing for either photovoltaic systems (solar panels) or solar water heating systems. Staff believes that, requiring installation of solar hot-water pre-plumbing and/or photovoltaic (solar panel) conduit will make it easier and less expensive to install renewable energy systems in the future. Additionally, requiring such installation will add relatively little cost during the time of construction. This proposed code amendment is proposed to be codified in Section 15.04.070 of the Building Code (Section 24, pages 10-11) of the attached draft Ordinance.

Construction Indoor Air Quality

During construction, an influx of particulate matter is often kicked up into the air and can potentially degrade a residence's ventilation or heating/air system. Staff is proposing to amend Title 15 (Building Code) to require applicants to include in their general notes, a basic construction indoor air quality plan that describes how the indoor air quality will be preserved by protecting ducts during construction, vacuuming ducts prior to occupancy and changing filters prior to occupancy. These specifications will likely be found as notations on construction drawing or within the general notes required for all construction projects. This proposed code amendment is proposed to be codified in Section 15.04.080 of the Building Code (Section 25, page 11) of the attached draft Ordinance

ADDITIONAL INFORMATION

Correspondence Received:

No comments have been received as a result of the most recent public notice dated October 4, 2008.

FISCAL IMPACT

Staff is recommending that the City Council approve, as an incentive to participate in the City's Volunteer Green Building Program, a fee rebate of 50% of all planning permits, plan check and building permit fees. In order to assess the fiscal impact of this proposed rebate, Staff has provided examples of the typical planning and building fees associated with the construction of new residences within the 2007 calendar year. This information was provided through the City's tracking system, Tidemark.

	Address	Square Footage	Planning Fees	Building Fees	Total Fees	Potential 50% Rebate
1	7339 Lunada Vista	7,033	\$285.00	\$9,422.38	\$9,707.38	-\$4,853.69
2	7351 Lunada Vista	5,185	\$285.00	\$10,072.59	\$10,357.59	-\$5,178.80
3	3154 Deluna	4,227	\$1,448.00	\$6,399.74	\$7,847.74	-\$3,923.67
4	37 Via Del Cielo	9,209	\$452.00	\$10,469.72	\$10,921.72	-\$5,460.86
5	4369 Dauntless	4,029	\$1,780.00	\$8,404.92	\$10,184.92	-\$5,092.46
6	61 Via Del Cielo	7,923	\$452.00	\$12,109.83	\$12,561.83	-\$6,280.92
7	57 Via Del Cielo	7,883	\$452.00	\$11,866.32	\$12,318.32	-\$6,159.16
8	27560 Longhill	3,522	\$1,451.30	\$4,981.33	\$6,432.63	-\$3,216.32
9	6333 Via Colinita	4,028	\$520.00	\$9,244.73	\$9,764.73	-\$4,882.37
10	6010 Ocean Terrace	6,467	\$2,145.60	\$7,598.90	\$9,744.5	-\$4,872.25
	Average		\$927.09	\$9,057.05	\$9,984.14	-\$4992.05
	Total Revenue		\$9270.90	\$90,570.46	\$99,841.36	N/A

As noted above, the average cost of the listed planning applications and fees was \$927.09 per case. The average cost of building and plan check fees was \$565.22 per case. The average cost of total fees (planning and building) was \$9,984.14. If an applicant were to choose to participate in the City's Volunteer Green Building Program and receive and show proof of certification from the appropriate certifying entity, the applicant would receive a 50% rebate of their planning and building/plan check fees. On average, the rebate would amount to approximately \$4,992.05.

Although a 50% rebate is a substantial decrease in permitting fees taken in by the City, only persons who actively participate in the Volunteer Green Building Program and meet the minimum requirements established in the proposed code language will be eligible to receive the rebate. Due to the volunteer nature of the program and the additional planning and consultation involved in designing a "green" home, Staff is of the opinion that only 1% to 2% of the total applications received by the City will be active participants in the green program. As such, Staff believes that the loss of revenue would be nominal. It is important to note, Staff will be monitoring the fiscal impact of this program after implementation and will bring an update to the City Council for review after a period of two years, at which time the City Council may modify the incentive program (including 50% rebate) based on the participation in the green building program.

ATTACHMENTS:

Ordinance No.

CC Resolution No. 2008- (Negative Declaration)

PC Resolution No. 2008-31 (Green Building Construction)

PC Resolution No. 2008-30 (Negative Declaration)

Draft Negative Declaration