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REPORT TO PLANNING COMMISSION

SUBJECT

Adopt a Resolution to Update the Green Building Program for Residential Projects, Non-Residential Projects and Public Facilities

REPORT IN BRIEF

As part of the City's 2009 green building program, staff was directed to return to Council approximately every 18 months to review the green building tables for possible implementation of three separate phases. This is the third phase of the program. The intent of each phase is to evaluate how the program is working and determine if the standards should be increased.

After almost four years of experience, the green building program is working well overall. Particularly important is that the program uses standardized green building checklists (LEED and GreenPoint Rated), which are commonly used throughout the Bay Area and nationally. Over the past several years the popularity and availability of green construction products and techniques has increased greatly. Therefore, staff is recommending adoption of the resolution in Attachment 1 which updates the green building program as follows:

Residential Projects:

- Raise the Build It Green point level for new construction to 110 points as the minimum and 150 points for the incentives;
- Modify the requirement for remodels, alterations, and additions to require the CalGreen mandatory measures for all projects, regardless of the project construction valuation.

Non-Residential Projects and Public Facilities:

- Maintain the LEED Silver level for new construction between 5,000 and 25,000 square feet and LEED Gold for incentives.
- Increase the LEED level to Gold for new construction greater than 25,000 square feet and LEED Platinum for the incentives.
- Increase the standard for major alterations to require projects between 5,000 square feet and 25,000 square feet meet a LEED Certified Level and projects greater than 25,000 square feet meet LEED Silver.

Public Facilities:

- Maintain the current standards for new construction, which requires LEED Gold for new buildings greater than 5,000 square feet (unless determined infeasible).
- Increase the standard for a major alteration to match that of the non-residential projects.

All proposed changes would be effective for all projects that submit building permit applications on or after November 1, 2014.

The Sustainability Commission discussed this item at its March 17, 2014 meeting. The Commission was in agreement with the above recommendation and voted 5-0 to adopt standards at least as rigorous as above. The Commission also moved to consider requiring conduit to be installed in all new residential buildings for future photovoltaic systems. Staff has not included this in the recommendation.

BACKGROUND

The first City-wide green building program was implemented in 2004 and included public awareness policies and incentives for non-residential development. That same year green building requirements specific to Moffett Park were included as part of the Moffett Park Specific Plan (MPSP). The MPSP incentivizes the development of Class A office buildings through a streamlined review process subject to the provision of green buildings. The MPSP acknowledges that the LEED standard may need to be changed over time to achieve the city's vision of a more sustainable and energy efficient community.

In March 2009, the City Council approved a city-wide green building program that became effective January 1, 2010. This included minimum green standards for all new construction and major alterations/additions. The adopted ordinance set up a framework for residential and non-residential projects that could be modified over time to require higher levels of "green" achievement. The program was designed in three phases, with each phase increasing the level of green building required. The first phase was effective January 2010, the second phase was fully effective in October 2012 (the non-residential requirements were implemented earlier in October 2011). This will be the third phase of the program.

The green building program uses three green building codes/standards and requires various types of construction to meet specified levels. Following is a summary of each code/standard.

CalGreen

First effective on January 1, 2011, CalGreen is the California Green Building Standards Code. CalGreen is developed by the State of California and is a part of the building codes. This code sets standards for green construction in California. Initially CalGreen was limited to new construction. However, the current version requires additions and many non-residential alterations to existing buildings to meet CalGreen requirements for the area under construction.

CalGreen includes mandatory standards as well as optional Tier 1 and Tier 2 standards. The mandatory requirements are minimum standards that are applicable to all covered projects. The Tier 1 and Tier 2 standards are optional levels of higher green standards that can be adopted by local jurisdictions. However, even the highest CalGreen Tier 2 level represents a lower standard than the GreenPoint Rated and LEED levels proposed below.

Build It Green

Build It Green is an independent non-profit organization committed to promoting green building. They have developed the GreenPoint Rated Checklist, which is a point based system providing options for a variety of green building techniques, allowing project designers and owners to select the items that are applicable or desirable for a specific project. The rating system is divided into categories for energy, indoor air quality, resource conservation, water conservation, and community connectivity,

with a minimum number of points required in each category.

LEED
LEED, or Leadership in Energy and Environmental Design, is a rating system developed by the United States Green Building Council (USGBC) that provides credits for green building features and assigns a LEED level (Certified, Silver, Gold, or Platinum) based on the number of credits achieved. Similar to the GreenPoint Rated Checklist, the LEED rating system includes categories for Location and Transportation, Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality, Innovation, and Regional Priorities.

EXISTING POLICY

Community Vision Statement

> A regional leader in environmental sustainability…advocating to reduce dependence on non-renewable resources by providing greater transportation options, reducing waste, protecting our natural resources, and promoting alternative energy usage and research. We take environmental preservation and protection seriously and consider how each action will affect Sunnyvale for future generations.

Community Vision Goal III. Environmental Sustainability: To promote environmental sustainability and remediation in the planning and development of the City, in the design and operation of public and private buildings, in the transportation system, in the use of potable water and in the recycling of waste.

Green Building Requirements (Title 19)

19.39.030

(h) The city council shall establish by resolution, and shall periodically review and update as necessary, green building standards for compliance. The standards for compliance shall include, but are not limited to, the following:

(1) The types of projects subject to regulation (covered projects);
(2) The green building rating system to be applied to the various types of projects;
(3) Minimum thresholds of compliance for various types of projects; and
(4) Timing and methods of verification of compliance with these regulations.

ENVIRONMENTAL REVIEW

A Negative Declaration was prepared for the 2009 green building ordinance and program, and the proposed changes do not substantially exceed or create any negative impacts not already contemplated and studied in that negative declaration. Therefore, no additional environmental analysis is required to be performed to update the Green Building Tables.

DISCUSSION

Current Green Building Program

The current green building tables (Attachment 2) include graduated requirements based on the scope of projects. These tables require some level of green building for many projects, though there are small projects that do not have a green building requirement (such as re-roofing projects, small residential additions, and minor tenant improvements). This approach has been used to educate the public about green measures and to influence their development decisions. The minimum required green effort increases with larger projects and includes voluntary incentives for higher levels of green building.

The 2013 CalGreen was effective on January 1, 2014. This code version greatly increased the type of projects that are covered by the CalGreen standards. When first applicable in January of 2011, CalGreen only applied to new construction. Various modifications were made over the past few years and now the CalGreen applies to all residential additions, non-residential additions/alterations with a permit valuation of greater than $200,000 as well as all new construction.

Staff has taken several actions to assist design professionals and homeowners in achieving the green building program requirements as well as the CalGreen requirements including the following:

- A website with information and links to resources at: GreenBuilding.inSunnyvale.com <http://www.GreenBuilding.inSunnyvale.com>;
- Informational brochures and FAQs on the green building program; and
- Prescriptive checklists that provide applicants with pre-selected items that, if used, will ensure compliance with the green building requirements.

The structure of the current program has been well received by the development community and property owners. Staff has received positive feedback that the program requirements are clearly described and that the use of standardized green building checklists (LEED and GreenPoint Rated) is helpful as most design professionals are familiar with them.

Comparison of Requirements to Other Jurisdictions
As part of this phase of implementation, staff researched the green building requirements in other local jurisdictions. The summary is provided in Attachment 3. Many local jurisdictions rely only on the CalGreen code mandatory measures and have not adopted higher standards. Although some jurisdictions may have higher requirements for a specific project type and size, the overall program requirements in Sunnyvale's green building program is still a leader in the Bay Area.

Residential Projects
Minimum Standards for New Residential Construction
The minimum point level to achieve certification through the Build It Green organization is 50 points. Sunnyvale's program currently requires a minimum of 80 points so that we provide a green building standard above the minimum. Based on programs in other local jurisdictions, 80 points is still at the high end. Almost half of the jurisdictions surveyed did not have any green building requirements beyond the State mandated CalGreen.

While working with design professionals and homeowners, staff has found that the awareness and understanding of green building requirements has increased significantly. The GreenPoint Rated Checklist is commonly used throughout the Bay Area, allowing design professionals to apply their knowledge and experience from projects across different geographical areas to projects in Sunnyvale.

Staff recommends continued use of the generally accepted GreenPoint Rated Checklist for residential construction. With the objective of Sunnyvale maintaining a leadership role in promoting green building construction, staff recommends increasing the minimum GreenPoint Rated requirement from the current 80 points to 110 points for all new construction. This point level would be higher than the minimum required from Build It Green and would be the highest standards among

local jurisdictions surveyed. Staff also recommends increasing the points required for the incentives to 150 (from 110). Based on current trends in green building construction, staff believes the higher point requirement will challenge residential builders but is still an achievable level.

Minimum Standards for Residential Alterations
Alterations to existing buildings include a wide range of projects from replacing a sewer line to a large addition. Many of the smaller projects do not affect enough change in an existing building to achieve a minimum green building point level. Therefore, the alteration projects are separated into the following threshold categories based on improvement value:

- Single-family/duplex - up to $100,000 and over $100,000
- Multi-family - up to $250,000 and over $250,000

Currently, the higher level category for each type of residential building requires that the project meet the CalGreen requirements that are applicable to the scope of work. However, with the adoption of the 2013 CalGreen, that code applies to residential additions, as well as new construction.

Staff recommends strengthening the requirement for all alterations to include the CalGreen items that are applicable to the scope of the alteration (the CalGreen code only applies to new residential construction or additions). For example, if the alteration included remodeling the bathroom, in addition to the standard energy efficiency upgrades required by the California Energy Efficiency Regulations, the project would also need to meet the CalGreen requirements for low VOC adhesives and paints.

Requirements for Verification of Residential Green Building Items
An important factor in assuring the green building thresholds are met is the verification that these items are included in the construction documents and are installed properly. Currently, the standard requirement is that these items are verified by a GreenPoint Rater, but the project is not required to be submitted to the Build It Green organization for verification. If an incentive is used, the current program requires the project to be submitted to the Build It Green organization for certification.

Staff has received feedback that the certification process through the Build It Green organization can be expensive and time-consuming. Also, the official certification comes several months after the construction is complete and the building is occupied. The goal of the green building program is to achieve high levels of green construction, but without increasing unnecessary costs. Staff recommends maintaining the current practice that all GreenPoint Rated Checklists be verified by a GreenPoint Rater, and not requiring submittal for formal certification.

Residential Incentives
The green building program provides incentives for new residential construction to encourage a higher “green” level for obtaining 110 Build It Green points (rather than the current standard of 80 points). The incentives include an option for additional lot coverage, building height, or density.

One residential project under construction has taken advantage of the green building incentive. The Carmel Partners projects at the former Town and Country site adjacent to Plaza del Sol (approved in October 2011) will achieve a minimum of 110 GreenPoint Rated Checklist points and was approved with a 5% density bonus. Several other projects that are currently in the entitlement review or building

permit review phases are planning to use the incentive for the density bonus (e.g. Iron Work which is two approved developments on E. Evelyn Avenue being developed by Prometheus Real Estate Group and two pending E Weddell projects proposed by Raintree Partners and Sares-Regis Group). Staff has received inquiries regarding the use of the green building incentive for other projects that are in the pre-application phase.

Non-Residential Projects

Minimum Standards for New Non-Residential Construction

The minimum LEED level is Certified followed by Silver then Gold with Platinum as the highest level. The current green building program requires non-residential projects larger than 5,000 square feet to meet a LEED Silver level.

Staff recommends increasing the minimum LEED requirement for new non-residential buildings greater than 25,000 square feet to LEED Gold as the standard. The LEED Silver level would remain for new buildings between 5,000 square feet and 25,000 square feet. Buildings less than 5,000 square feet would maintain the current CalGreen requirement. Staff recommends maintaining the current level for buildings less than 25,000 square feet as higher LEED levels may be dis-proportionally more expensive for smaller sized buildings.

Minimum Standards for Non-Residential Alterations

Non-residential building alterations vary widely in scope and square footage of affected area. Therefore, the current standards for the non-residential alterations are applicable to projects that affect a significant portion of the building (structural, mechanical, plumbing, and electrical alterations) and contain the following square footage threshold:

- 5,000 to 50,000 square feet - LEED Checklist, no minimum points required
- Greater than 50,000 square feet - LEED Checklist with Certified Level

The 2013 CalGreen also requires non-residential alterations with a project valuation greater than $200,000 to meet the CalGreen items that are applicable to the scope of work.

Staff recommends the requirement for all alterations be strengthened as follows:

- 5,000 to 50,000 square feet - LEED Checklist with Certified Level
- Greater than 50,000 square feet - LEED Checklist with Silver Level

CalGreen items would still be applicable to projects based on the valuation, but the LEED standards are generally higher and would result in a “greener” project.

Requirements for Verification of Non-Residential Green Building Items

As with the residential projects, certification of the LEED checklist through the USGBC is currently required for projects that use an incentive. Other projects are verified by a LEED Accredited Professional (LEED AP). Staff has received positive feedback on the current LEED AP verification process, as the process to certify through the USGBC is expensive and time-consuming. Also similar to the residential projects, staff recommends maintaining the existing practice that all LEED levels be verified by a LEED AP and not requiring certification through the USGBC.

Non-Residential Incentives
The green building program provides incentives for new non-residential construction to encourage a higher level of green construction. The higher LEED levels allow a project to increase the FAR allowed.

Several office projects have been approved with the green building incentive and more are in the entitlement review phase. This incentive has proven to be popular among office developers. Currently, there is a very high demand for new office buildings within the City. Due to this high demand, the City's development reserve (within the MPSP area) and development pool (over the rest of the City) are being reduced. Therefore, staff is recommending a significant increase in the non-residential incentive level for buildings greater than 25,000 square feet. Staff recommends the incentive for these buildings be increased to LEED Platinum, the highest LEED level, while maintaining LEED Gold as the incentive for buildings between 5,000 square feet and 25,000 square feet.

Public Facilities
The current requirements for Public Facilities are included in Attachment 2.

The principle for public facility requirements has been that these should exceed the requirements for private developments, as the City should set an example of the importance of green building. Even with the staff recommended updates to the non-residential requirements, the current standards for new construction of public facilities are higher than that for private developments.

The current standards for major alterations of public facilities are higher than private developments, but the recommended modifications of private development will be higher. Therefore, staff is recommending that private facilities meet the same requirements for major alterations as recommend for private as follows:

- 5,000 to 50,000 square feet - LEED Checklist with Certified Level
- Greater than 50,000 square feet - LEED Checklist with Silver Level

Staff believes it will be difficult for major alterations of public facilities to exceed these requirements because City facilities can range greatly in scope (i.e. park buildings, fire stations, water treatment facilities, Community Center Theater, etc.) and do not necessarily meet the typical office/commercial characteristics.

Implementation of Updated Requirements
The recommended implementation date for the updated green building tables is November 1, 2014.The green building tables are applicable based on when a project is submitted for building permits, similar to other building codes. Similar to the adoption of updated building codes, a six-month period between adoption and implementation provides adequate time for customers that are currently preparing construction plans to complete their plans and submit before the changes are effective. Projects with planning approval for a green building density bonus would need to submit building plans prior to the effective date to use the green building density bonus contemplated in the planning permit, or comply with the new green building standards if permits are submitted after November 1, 2014. Staff will advise developers with pending applications of any changes that Council approves.

Staff has continuously heard from the development community that green building has the least cost impact when it is considered at the very early planning stages of a project, including the preliminary site plan. The recommended implementation date of November 1, 2014 provides adequate time for customers to submit plans for projects in the final design phase as well as provide notice to applicants with upcoming projects to plan accordingly.

Sustainability Commission Meeting

This item was included on the Sustainability Commission meeting of March 17, 2014 for discussion. The Commission was in support of raising the standards to those recommended in this report. Several items were discussed, including how this relates to the Climate Action Plan (CAP), how CalGreen and GreenPoint Rated/LEED compare, and the possibility of requiring photovoltaic ready items for new residential construction.

In order to achieve the greenhouse gas (GHG) emission reductions levels of Assembly Bill 32 and Senate Bill 375, a CAP is scheduled to be considered by the Council in May. The CAP provides a framework of options the Council could adopt that would reduce GHG emissions. The various options will then be weighed based on various factors such as cost, impact on the community, and amount of GHG reduction achieve. While some of these options will affect construction, staff believes the CAP items should be evaluated as a package and decisions made on how best to achieve the GHG goals, rather than as part of the scheduled update to the existing green building program.

As discussed in the Background section above, the proposed GreenPoint Rated and LEED levels are a higher green standard than the highest CalGreen level of Tier 2. Therefore, staff recommends continuing with the GreenPoint Rated and LEED programs.

The Sustainability Commission also requested that staff consider the possibility of requiring new residential construction to be photovoltaic ready by installing conduit from the electrical panel to the roof to allow for future photovoltaic wiring. The intent of this is to allow easier installation of photovoltaic panels should a homeowner choose to install them in the future.

On July 1, 2014, a new version of the California Energy Efficiency Standards (CEES) will be effective. These standards will include a requirement that all new residential developments of 10 or more units include a minimum of 250 square feet of clear area (free of plumbing vents and roof vents) on the roof to allow for photovoltaic panels to be installed.

Staff believes that the CEES requirement reduces the barriers to future photovoltaic installation by ensuring that adequate roof area is provided to locate future panels. Staff does not recommend an additional requirement for conduit to be installed as this has not been a barrier to photovoltaic panel installations in existing houses. The conduit installation is one of the easier parts of the installation and needs to be sized and located based on the size and design of the photovoltaic panels. So, if conduit were to be pre-installed in new construction, it may or may not be effective for a future photovoltaic system.

The City Council is scheduled to consider this item on April 29, 2014.

FISCAL IMPACT

The staff recommended changes to the green building program would not have a fiscal impact. If further modifications are made to the green building program, there may be a fiscal impact to the Building Division as additional plan review and inspection resources may be needed if significant new requirements are implemented.

PUBLIC CONTACT

Public contact was made through posting of the Planning Commission agenda on the City's official-notice bulletin board, on the City's website, and the availability of the agenda and report in the Office of the City Clerk.

Notices were sent to the neighborhood associations, developers and design professionals involved in development in Sunnyvale, and posted at the One-Stop Permit Center.

This item was also on the March 17, 2014 Sustainability Commission meeting agenda as a Public Hearing item for discussion.

ALTERNATIVES

1. Adopt the Resolution in Attachment 1 to Update the Green Building Tables for Residential Buildings, Non-Residential Projects, and Public Facilities which includes the following:

Residential Projects:

- Raise the Build It Green point level for new construction to 110 points as the minimum and 150 points for the incentives;
- Modify the requirement for remodels, alterations, and additions to require the CalGreen mandatory measures for all projects, regardless of the project construction valuation.

Non-Residential Projects and Public Facilities:

- Maintain the LEED Silver level for new construction between 5,000 and 25,000 square feet and LEED Gold for incentives.
- Increase the LEED Level to Gold for new construction greater than 25,000 square feet and LEED Platinum for the incentives.
- Increase the standard for major alternations so that projects between 5,000 square feet and 25,000 square feet meet a LEED Certified Level and projects greater than 25,000 square feet meet LEED Silver.

Public Facilities:

- Maintain the current standards for new construction, which requires LEED Gold for new buildings greater than 5,000 square feet (unless determined infeasible).
- Increase the standard for major alteration to match that of the non-residential projects.

2. Adopt the Resolution in Attachment 1 to Update the Green Building Tables for Residential Buildings, Non-Residential Projects, and Public Facilities with modifications.

3. Take no action and maintain the current green building standards.

RECOMMENDATION

Alternative 1: Adopt the Resolution in Attachment 1 to Update the Green Building Tables for Residential Buildings, Non-Residential Projects, and Public Facilities.

The staff recommendation considers the Council's adopted policy to have the City be a leader in green building and sustainability, ease of use of the program, and minimum impact on express plan reviews at the One-Stop Permit Center. In order to be a leader and maintain ease of use of the program, staff is recommending continued use of the standardized programs (GreenPoint Rated and LEED), but require a higher level than most other jurisdictions. This approach provides some level of consistency for design professionals in that they can familiarize themselves with these programs. While a higher point level may be the standard in Sunnyvale, it is based on the same overall programs.

Prepared by: Diana Perkins, Permit Center Coordinator
Reviewed by: Trudi Ryan, Planning Officer
Reviewed by: Hanson Hom, Director, Community Development
Approved by: Robert A. Walker, Interim City Manager

ATTACHMENTS

1. Draft Resolution to Update the Green Building Tables
2. Current Green Building Program Requirements
3. Green Building Requirements from Other Local Jurisdictions
4. Sustainability Commission draft minutes from March 17, 2014