

## **Director's Report and Recommendation LIVING BUILDING AMENDMENTS**

### **I. Introduction**

The Department of Planning and Development (DPD) is proposing amendments to the Living Building Pilot Program to better facilitate the development of buildings that would meet the Living Building Challenge, a standard of the International Living Building Institute for buildings meeting the highest level of sustainable design. This ordinance became effective January 2010. The Pilot Program created by the ordinance has a life of three years, with a maximum of 12 projects allowed to be built. At this point, more than half way through the effective period of this ordinance, only one project has participated in the program and been approved for construction. The current economic climate and its effect on the real estate market has likely had an impact; however, additional flexibility could help encourage more developers to test the Living Building Challenge concept, which is designed to achieve an advanced level of sustainability, and would help inform the City on the regulatory changes that may be necessary to develop such buildings.

This proposal would modify the design review process already in place under Land Use Code Section 23.40.060 for Living Building projects in the Pilot Program. It would allow two additional departures from the regular code standards through design review under subsection 23.41.012.D.2. The first would allow an increase in maximum building height of up to 20 feet above the zone height limit, and the second would exempt ground floor retail space from maximum floor area ratio (FAR) limits. These two new departures would apply only to sites in Industrial Commercial (IC) zones within a designated Urban Village or Urban Center that have a zone height limit of 45 feet or less.

### **II. Background and Analysis**

The Living Building Challenge is a green building rating system created by the International Living Building Institute to recognize buildings meeting the highest level of sustainability. Version 1.3 of the Living Building Challenge requires buildings to meet 16 prerequisites within six performance areas, or Petals: Site Design, Energy, Materials, Water, Indoor Environmental Quality, and Beauty + Inspiration. In general, these prerequisites require buildings to be built on non-environmentally sensitive sites, use recycled materials, generate as much or more electricity as they use through sustainable sources, capture as much rainwater as they use, treat wastewater on site, and meet a number of standards for other elements.

In order to meet the stringent performance standards of the Living Building Challenge, buildings generally rely upon innovative building design techniques and features including natural daylighting and ventilation, use of passive and active solar energy systems, rainwater capture and use, wastewater treatment and reuse, and ultra-efficient heating, ventilation and air conditioning (HVAC) systems. These systems can substantially increase design complexity and necessitate

early integrated design processes to ensure that all systems are compatible and work in an efficient manner, and that each performance goal can be met. These innovative systems may also necessitate alternative building massing, non-traditional exterior and roof top features, or other elements that were not envisioned when existing codes were adopted. Existing codes were designed to provide minimum standards rather than the flexibility to consider radically different building strategies. Additionally, projects may meet the Living Building Challenge through incorporation of uncommon urban accessory uses such as agricultural uses that use treated waste water.

In order to accommodate new design process challenges and alternative building designs, the Living Building Pilot Program expanded the departures allowed through Design Review. These proposed amendments are limited to a modest further expansion of Code departures.

### ***Project Enrollment***

In order to participate in the Living Building Pilot Program, an applicant must submit a plan demonstrating how their proposal would meet each of the prerequisites of the Living Building Challenge. Enrollment is limited to a total of 12 qualifying projects over a period of three years. Projects must be eligible for design review to participate in the Pilot Program; this excludes single-family houses and most projects in industrial zones, except in IC zones that are also within an Urban Village or Urban Center. Projects located in the shoreline district are also excluded.

Since the Living Building Pilot Program became effective in January 2010, one project has been approved (the Bullitt Center at 15<sup>th</sup> Avenue E and E Madison Street, 1501 E Madison Street, DPD Project No. 3011010). No other projects are enrolled in the Pilot Program. The proposed amendments would facilitate an additional project proposed at 3400 Stone Way North.

### ***Design Review***

Qualifying projects participate in the design review process provided in Code Section 23.41.014, except that additional departures are allowed. All projects participating in the Living Building Pilot Program are required to go before the Design Review Board (DRB), rather than going through administrative design review or streamlined design review.

### ***Proposed Design Departures***

In addition to the criteria governing departures from development standards for all projects subject to design review, additional departures are allowed for living building projects if an applicant demonstrates that such departures would better meet the goals of the Living Building Challenge and would not conflict with adopted design guidelines. In recommending any departure from development standards, the DRB must consider the extent to which the anticipated environmental performance of the building would be substantially compromised without the departures.

In addition to the Land Use Code departures currently allowed through design review plus the additional departures currently allowed for Living Buildings, the proposal would allow departure from two additional standards as follows:

- allow up to 20 feet above the zoned height limit for IC zones with a height limit of 45 feet or less that are within Urban Villages or Urban Centers.
- exempt certain ground floor retail space from FAR limits in IC zones with a height limit of 45 feet or less and within Urban Villages or Urban Centers.

The proposed height increase is intended to promote the inclusion of taller street-level stories to encourage and accommodate retail uses that might otherwise be excluded from building programming, and to encourage appropriate daylighting of interior floor spaces. Street-level retail spaces should be taller than other building stories in order to create an environment conducive for retail activities. In addition, buildings with a floor dimension greater than 100 feet require greater floor-to-floor height for appropriate daylighting of interior floor spaces, an important component of a Living Building. For sites with deep floor plates, additional height per floor may be necessary to ensure adequate daylight introduction into the interior. The proposed amendment will provide the flexibility necessary to accommodate these daylighting needs, which is key to meeting building energy efficiency requirements.

The exemption of ground floor space for retail uses, eating and drinking establishments, or entertainment uses will further one important goal of the Living Building Program, which is to fashion a set of regulations that will incentivize the development of Living Building projects that do not need subsidies from government grants or foundations. Developers may avoid retail uses, since in a neighborhood context they may provide less attractive returns than offices or other non-residential uses.

The Director of DPD would remain the decision-maker on any departures. As is the case for all projects in the Living Building Pilot Program, the Director would not be governed by the provisions that limit the Director's ability to modify or amend the recommendations of the Design Review Board.

### ***Minimum Requirements***

An applicant participating in the Living Building Pilot Program for whom departures are approved is required to meet minimum sustainability requirements per the Living Building Pilot Program or face monetary penalties. While the goal of the project is to encourage buildings that meet the Living Building Challenge, the Living Building Pilot Program recognizes that the Living Building Challenge is a difficult standard to meet and that some flexibility is required in setting standards. Consequently, all participating projects that receive departures must strive to meet the Living Building Challenge. The City recognizes that some standards may not currently be achievable due to requirements beyond the City's and the applicants control, such as state requirements; therefore, at a minimum a participating project must meet at least 60% of the Living Building Challenge pre-requisites and all of the following alternative minimum standards:

- energy usage, including all electricity, heating, and cooling requirements and subtracting energy generated on site, must be 25% or less of the average energy usage for a comparable building not in the Living Building Program;
- water usage, subtracting harvested rainwater use, must be 25% or less than the average water usage for a comparable building not in the Living Building Program; and

- 50% of stormwater must be captured and used on site.

In the event a building does not meet these minimum performance goals, the owner would be subject to a maximum penalty of 5% of the construction value and a minimum penalty of 1% of construction value, based on the extent of compliance with standards.

### **III. Recommendation**

The proposed Living Building Pilot Program is intended to promote the public interest by encouraging the development of innovative “living” buildings that can reduce environmental impacts, test new technologies, and serve as a model for development throughout the region and country. The proposed amendments will supplement the original Pilot Program by allowing better development of projects on a limited number of additional sites within IC 45 zones where Living Building Pilot Projects are already allowed. The potential for development of additional living buildings will address growing environmental concerns and encourage new buildings in Seattle to meet the highest sustainable standards. DPD recommends approval of the amendments to the proposed Living Building Pilot Program.