Planning Commission Environment Committee Meeting, October 12, 2017 Green Building – Energy Policy Plan Update (2017-CW-2CP)

Proposed process

- 1. Staff drafts working amendment language for review and discussion.
- 2. Review by Planning Commission Environment Committee.
- 3. Staff updates language, prepares revised language for stakeholder review.
- 4. Planning Commission Environment Committee holds stakeholder work session to review and discuss proposed language.
- 5. Staff will respond to stakeholder comments and meet with Planning Commission Environment Committee to review.
- 6. Staff will update the proposed language to reflect Environment Committee comments.
- 7. Staff will meet with stakeholder groups, the BOS Environmental Committee, and will schedule PC and BOS dates.
- 8. PC and then BOS hearings.

Scope of the Amendment

At the February 1, 2017 Planning Commission meeting, Commissioner Hart made this motion: I therefore move, first, that the Planning Commission approve the January 26, 2017, Environment Committee report; second, that the report be transmitted to the Board of Supervisors as the Planning Commission's recommendation in response to the Board's May 14, 2013, request; and third, that the Planning Commission request that the Board authorize the preparation and advertisement of an amendment to the green building policy in the Policy Plan volume of the Comprehensive Plan, consistent with the Committee's recommendation for action, as presented on both pages 1 and 30 of the Committee report.

Text from page 1 (and repeated verbatim on page 30):

The green building policy in Objective 13 of the Environment section of the Policy Plan should be amended such that there would be an increased emphasis on energy efficiency and conservation efforts. The related policy (Objective 13, Policy b) addressing nonresidential development and multifamily residential development proposals that would be eligible to attain the LEED-NC (New Construction) or LEED-CS (Core and Shell) Certification should incorporate guidance that would encourage applicants and their development teams to emphasize energy efforts within their green building strategies without establishing a prescription or expectation for any additional specific levels of energy performance. Further, this guidance should not establish a preference for any particular approach or certification system relating to energy efficiency/conservation. There should instead be general guidance encouraging such efforts. Note that this proposed action would not apply to single family detached or attached residential projects, for which the green building policy in the Policy Plan (Environmental Objective 13, Policy c) already has established an energy focus.

At the June 20, 2017 BOS meeting, Supervisor Gross made this motion:

Therefore, I move that the Board authorize, for inclusion in the Fairfax Forward Comprehensive Plan Amendment Work Program, a Plan Amendment proposal that would be consistent with the Planning Commission's recommendation.

The notes from the June 20, 2017 BOS meeting state:

Supervisor Gross said that at the May 23 Environmental Committee meeting, staff provided an overview of the PC's review of a report from the MITRE Corporation entitled "Building Energy Technology Recommendations to Fairfax County." The report had been referred by the Board to the PC, and the PC's report was transmitted to the Board on March 6 of this year.

As noted in the PC report and in staff's briefing on May 23, there is one PC recommendation relating to the MITRE report that would require a follow-up action, and that's **the development** and consideration of a Policy Plan amendment to provide for an increased emphasis on energy efficiency and conservation efforts for the component of the green building policy addressing nonresidential development and multifamily residential development proposals. This would not be a re-visitation of the entirety of the green building policy but would instead be a relatively minor change to the component of the green building policy dealing specifically with green building certification for non-residential and multifamily residential proposals.

Therefore, Supervisor Gross moved that the Board authorize consideration of a Plan amendment consistent with the PC's recommendation. Supervisor L. Smyth seconded the motion and it carried by a vote of nine, Supervisor Herrity not yet having arrived.

Areas of the Green Building Policy (Comprehensive Plan Policy Plan) Potentially Affected

Policy b. Within the Tysons Urban Center, Suburban Centers, Community Business Centers, Industrial Areas and Transit Station Areas as identified on the Concept Map for Future Development, unless otherwise recommended in the applicable area plan, ensure that zoning proposals for nonresidential development or zoning proposals for multifamily residential development incorporate green building practices sufficient to attain certification through the LEED-NC or LEED-CS program or an equivalent program specifically

these zoning proposals seek at least one of the following:

- Development in accordance with Comprehensive Plan Options;
- Development involving a change in use from what would be allowed as a permitted use under existing zoning;

incorporating multiple green building concepts, where applicable, where

Development at the Overlay Level; or

- Development at the high end of planned density/intensity ranges. For nonresidential development, consider the upper 40% of the range between by-right development potential and the maximum Plan intensity to constitute the high end of the range.

Where developments with exceptional intensity or density are proposed (e.g. at 90 percent or more of the maximum planned density or intensity), ensure that higher than basic levels of green building certification are attained.

Draft Plan Language for Discussion

Policy b. Within the Tysons Urban Center, Suburban Centers, Community Business Centers, Industrial Areas and Transit Station Areas as identified on the Concept Map for Future Development, unless otherwise recommended in the applicable area plan, ensure that zoning proposals for nonresidential development or zoning proposals for multifamily residential development incorporate green building practices both sufficient to attain certification through the LEED-NC or LEED-CS program or an equivalent program specifically incorporating multiple green building concepts, where applicable,

and emphasizing energy efficiency and conservation, where these zoning proposals seek at least one of the following: ...

Full Text of the Green Building Policy

RESOURCE CONSERVATION AND GREEN BUILDING PRACTICES

The energy shortage in the United States in the 1970s highlighted the finite nature of our natural resources. Since the 1970s, efforts have been pursued at the federal level to enhance energy efficiency and the efficient use of water resources. While such efforts are best addressed at the federal level, local efforts to conserve these resources should be encouraged. Recent events and trends have highlighted the increasing need for energy and resource conservation and efficiency, greenhouse gas reduction and green building practices. Many jurisdictions are now engaging in community energy planning and other strategies to best use available resources.

The "green building" concept provides a holistic approach to the reduction of adverse environmental impacts associated with buildings and their associated facilities and landscapes.

Objective 13: Design and construct buildings and associated landscapes to use energy and water resources efficiently and to minimize short- and long-term negative impacts on the environment and building occupants.

Policy a. In consideration of other Policy Plan objectives, encourage the application of energy conservation, water conservation and other green building practices in the design and construction of new development and redevelopment projects. These practices may include, but are not limited to:

- Environmentally-sensitive siting and construction of development;

- Application of low impact development practices, including minimization of impervious cover (See Policy k under Objective 2 of this section of the *Policy Plan*);
- Optimization of energy performance of structures/energy-efficient design;
- Use of renewable energy resources;
- Use of energy efficient appliances, heating/cooling systems, lighting and/or other products;
- Application of best practices for water conservation, such as water efficient landscaping and innovative wastewater technologies, that can serve to reduce the use of potable water and/or reduce stormwater runoff volumes;
- Reuse of existing building materials for redevelopment projects;
- Recycling/salvage of non-hazardous construction, demolition, and land clearing debris;
- Use of recycled and rapidly renewable building materials;
- Use of building materials and products that originate from nearby sources;
- Reduction of potential indoor air quality problems through measures such as increased ventilation, indoor air testing and use of low-emitting adhesives, sealants, paints/coatings, carpeting and other building materials;
- Reuse, preservation and conservation of existing buildings, including historic structures;
- Retrofitting of other green building practices within existing structures to be preserved, conserved and reused;
- Energy and water usage data collection and performance monitoring;
- Solid waste and recycling management practices; and
- Natural lighting for occupants.

Encourage commitments to implementation of green building practices through certification under established green building rating systems for individual buildings (e.g., the U.S. Green Building Council's Leadership in Energy and Environmental Design for New Construction [LEED-NC®] or the U.S. Green Building Council's Leadership in Energy and Environmental Design for Core and Shell [LEED-CS®] program or other equivalent programs with third party certification). An equivalent program is one that is independent, third-

party verified, and has regional or national recognition or one that otherwise includes multiple green building concepts and overall levels of green building performance that are at least similar in scope to the applicable LEED rating system. Encourage commitments to the attainment of the ENERGY STAR rating where available. Encourage certification of new homes through an established residential green building rating system that incorporates multiple green building concepts and has a level of energy performance that is comparable to or exceeds ENERGY STAR qualification for homes. Encourage the inclusion of professionals with green building accreditation on development teams. Encourage commitments to the provision of information to owners of buildings with green building/energy efficiency measures that identifies both the benefits of these measures and their associated maintenance needs.

- Policy b.
- Within the Tysons Urban Center, Suburban Centers, Community Business Centers, Industrial Areas and Transit Station Areas as identified on the Concept Map for Future Development, unless otherwise recommended in the applicable area plan, ensure that zoning proposals for nonresidential development or zoning proposals for multifamily residential development incorporate green building practices sufficient to attain certification through the LEED-NC or LEED-CS program or an equivalent program specifically incorporating multiple green building concepts, where applicable, where these zoning proposals seek at least one of the following:
- Development in accordance with Comprehensive Plan Options;
- Development involving a change in use from what would be allowed as a permitted use under existing zoning;
- Development at the Overlay Level; or
- Development at the high end of planned density/intensity ranges. For nonresidential development, consider the upper 40% of the range between by-right development potential and the maximum Plan intensity to constitute the high end of the range.

Where developments with exceptional intensity or density are proposed (e.g. at 90 percent or more of the maximum planned density or intensity), ensure that higher than basic levels of green building certification are attained.

Policy c.

Ensure that zoning proposals for residential development that are not otherwise addressed in Policy b above will incorporate green building practices sufficient to attain certification under an established residential green building rating system that incorporates multiple green building concepts and that includes an ENERGY STAR Qualified Homes designation or a comparable level of energy performance. Where such zoning proposals seek development at or above the mid-point of the Plan density range, ensure that county expectations regarding the incorporation of green building practices are exceeded in two or more of the following measurable categories: energy efficiency; water conservation; reusable and recycled building materials; pedestrian orientation and alternative

transportation strategies; healthier indoor air quality; open space and habitat conservation and restoration; and greenhouse gas emission reduction. As intensity or density increases, the expectations for achievement in the area of green building practices would commensurately increase.

- Policy d. Promote implementation of green building practices by encouraging commitments to monetary contributions in support of the county's environmental initiatives, with such contributions to be refunded upon demonstration of attainment of certification under the applicable LEED rating system or equivalent rating system.
- Policy e. Encourage energy conservation through the provision of measures which support non-motorized transportation, such as the provision of showers and lockers for employees and the provision of secure short-term and long-term bicycle parking facilities for employment, retail, institutional, and multifamily residential uses.
- Policy f. Encourage applicants involved in public-private partnerships where land is leased or provided by the county to meet or exceed county guidelines for green building certification for capital projects.
- Policy g. Encourage provision of or readiness for charging stations and related infrastructure for electric vehicles within new development and redevelopment proposals, particularly for residential where other opportunities are not available.
- Policy h. Encourage and participate in periodic regional and local evaluations of the outcomes achieved through the application of sustainable land use principles and technology, in coordination with the energy and resources providers and industry. Such evaluations should be based on pooled, anonymous-source data, and should provide information helpful in decisions regarding the costs and benefits of green practices, including evaluations focused on innovative approaches and technology.