

**FAIRFAX COUNTY PLANNING COMMISSION
ENVIRONMENT COMMITTEE WORKSHOP
THURSDAY, SEPTEMBER 6, 2007**

COMMITTEE MEMBERS PRESENT:

Walter L. Alcorn, At-Large
Frank A. de la Fe, Hunter Mill District
James R. Hart, Commissioner At-large
Kenneth A. Lawrence, Providence District
Timothy J. Sargeant, At-Large

COMMITTEE MEMBERS ABSENT:

Nancy Hopkins, Dranesville District
Rodney L. Lusk, Lee District

OTHER PLANNING COMMISSIONER PRESENT:

Earl L. Flanagan, Mount Vernon District

PLANNING COMMISSION STAFF PRESENT:

Barbara J. Lippa, Executive Director, Planning Commission Office
Linda B. Rodeffer, Clerk to the Planning Commission

COUNTY STAFF PRESENT:

Pamela Nee, Chief, Environment and Development Review Branch, Planning Division
(PD), Department of Planning and Zoning (DPZ)
Noel Kaplan, Senior Environmental Planner, PD, DPZ
Dawn Dhavale, Planner II, Environment and Development Review Branch, PD, DPZ
Michelle Brickner, Director, Site Development Services, Department of Public Works
and Environmental Services (DPWES)
James Patteson, Director, Land Development Services, Department of Public Works and
Environmental Services
Kambiz Agazi, Environmental Coordinator, Office of the County Executive

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Chairman James R. Hart called the meeting to order at 7:05 p.m. in the Board Auditorium of the Fairfax County Government Center, 12000 Government Center Parkway, Fairfax, Virginia 22035.

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Chairman Hart reviewed the agenda for the workshop, a copy of which is in the date file. He said the first order of business was approval of minutes.

Commissioner Alcorn MOVED THAT THE ENVIRONMENT COMMITTEE MINUTES OF AUGUST 13, 2007 BE APPROVED.

The motion was seconded and carried unanimously.

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Chairman Hart explained that the workshop had been scheduled to discuss a strawman drafted by staff entitled "Encouraging Green Building Practices Through the Comprehensive Plan." He emphasized that this document was not a staff report which would be published later this year. He said the Planning Commission would hold a public hearing on the Policy Plan Amendment in November. (A copy of the strawman document is in the date file.)

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Chairman Hart recognized Noel Kaplan, Senior Environmental Planner, Planning Division (PD), Department of Planning and Zoning (DPZ), for the staff presentation.

Mr. Kaplan said his presentation would include a brief review of the Environment Committee efforts to date; the June 27, 2007 memorandum prepared by staff in response to interest expressed by the Board of Supervisors (BOS) in Arlington County's Green Building Incentives Program; the referral of that memorandum by the BOS to the Environment Committee; and the subsequent development of the strawman outline of one possible approach to the use of the Comprehensive Plan to encourage implementation. He emphasized that the strawman document should not be viewed as a staff recommendation but as a point of departure for discussion.

Mr. Kaplan explained that the term "green building" individually and holistically referenced a series of practices in the design and construction of buildings and associated landscapes that served to minimize adverse impacts to the environment and to building occupants. He said that included within this concept were environmentally-sensitive planning, energy efficiency and conservation, water conservation and water resource protection, conservation of materials and indoor environmental quality.

Mr. Kaplan stated that the green building concept had first been presented to the Environment Committee in January 2007 as part of a broader discussion of a proposed Plan Amendment drafted to both strengthen Plan guidance regarding air quality issues and, in general terms, green building practices. He noted that after presentations and discussions at several committee meetings, the committee had reached a consensus to advertise the draft Plan Amendment for public hearings, recognizing that the committee might want to pursue further analysis and revision during the review process. He said the draft Plan Amendment would provide broad policy support for green building practices and would support a case-by-case consideration of these practices during the zoning process, but would not establish incentives for the implementation of such practices. He said the proposed amendment would support the negotiation of commitments to green building efforts during the zoning process and perhaps set the stage for consideration of incorporating density/intensity based incentives for green building practices into future Area Plans amendments. He commented that in response to an interest expressed by the BOS, the County Executive sent a memorandum, dated June 27,

2007, to Chairman Connolly which provided an overview of Arlington County's green building incentive program and identified a series of options that could be considered for application in Fairfax County. (A copy of the memorandum is in the date file.) He noted the following key components of Arlington County's program:

- Bonus density tied to certification under the U. S. Green Building Council's Leadership in Energy and Environment Design (LEED) incorporated into the County's special exception/site plan process with a sliding scale of allowable bonus densities tied to various levels of LEED certification.
- Special exception/site plan process only available in certain zoning districts, generally within Metro station corridors.
- Consideration of up to three stories of additional building height, granted on a discretionary basis;
- All special exception/site plan projects, whether or not subject to the incentive program for additional density, are conditioned on a three cent per square foot contribution to the County's Green Building Fund, refundable if LEED certification is attained.

Mr. Kaplan remarked that a series of options, presented in the June 27, 2007 memorandum, could be considered to establish density/intensity incentives or otherwise encourage the application of green building practices through the Comprehensive Plan. He noted that, like Arlington County's incentive program, all options would be applied through the zoning process and would not apply to by-right development. He identified three options beyond the general Policy Plan amendment:

Option 1 – a general linkage in the Policy Plan Area Plan options. This option would not provide bonus densities or intensities but would instead link the attainment of Comprehensive Plan options to green building performance.

Option 2 – establish bonus densities through Policy Plan guidance. Through this option the Policy Plan would establish a maximum possible density/intensity bonus that could be considered.

Option 3 – establish a new special exception procedure through which additional density/intensity could be granted in certain zoning districts through special exception approval.

Mr. Kaplan said with respect to the idea of a green building fund, Arlington County conditions special exception/site plans on the three cent per square foot contribution to its Green Building Fund, established as a rough equivalent of the registration and certification costs associated with LEED certification. He noted that the fund was used to support education, outreach, and training efforts.

Mr. Kaplan said that on July 9, 2007, the BOS had authorized consideration of a Policy Plan Amendment and requested the committee provide recommendations regarding green building incentive options in a time frame that would allow for BOS consideration before the end of 2007. He said the BOS had also requested the committee to consider possible ways to promote and encourage green building practices through the Comprehensive Plan. He noted that the committee had met twice since that time and because a number of concerns had been raised about various approaches, it had been determined that a lengthier discussion and public input were needed. He said the committee had also recognized that some of the incentive approaches fell outside the context of the Comprehensive Plan, such as tax incentives, fee reductions, grants, and expedited review processes. Mr. Kaplan explained that the scope of the strawman document was limited to the consideration of Comprehensive Plan-based approaches to encourage green building practices and identified six key issues:

Issue 1: Establishment of Bonus Densities and Intensities – should there be bonus densities applies beyond the current Plan density and intensity ranges and options?

Issue 2: Establishment of Green Building Performance Levels – what level or levels of green building performance should be applied and to what extent, if any, should specific green building rating systems be referenced?

Issue 3: Geographic Application of Green Building Policy – should the approaches be applied Countywide or should they be limited geographically in some way?

Issue 4: Residential vs. Non-residential application – should the approaches be applied to all development or should the focus be on non-residential development, mixed-use development and perhaps higher multi-family residential structures?

Issue 5: Enforcement – all of the approaches identified would need to be implemented through commitments obtained through the zoning process. How can we, and should we, ensure that such commitments would be enforceable?

Issue 6: Green Building Fund – should this idea be pursued and, if so, how should it be applied?

Mr. Kaplan said since Issues 2-4 were closely related, they were addressed together in the strawman document and Issues 1, 5, and 6 were addressed separately.

Issue 1:

Strawman Proposal #1

- Do not pursue density/intensity bonuses at this time
- Consider bonuses through Area Plan reviews
- Incorporate into Policy Plan linkages between Area Plan options/density intensity ranges and green building performance.

Issues 2, 3, and 4:

Strawman Proposal #2

- Incorporate certification under an established green building program as a preferred means of third party verification;
- Retain flexibility to consider other approaches during the zoning process.

Strawman Proposal #3

- Identify LEED as an acceptable green building rating system;
- Retain flexibility to allow for consideration of alternative equivalent systems/approaches during the zoning process.

Strawman Proposal #4

- Limit LEED-based (or equivalent) linkages to Plan to nonresidential development, mixed use development and multifamily residential development of four or more stories.

Strawman Proposal #5

- Limit LEED-based (or equivalent) linkages to Plan to transit station areas and other growth centers.

Strawman Proposal #6

- Establish LEED certified level (or equivalent) as level of performance to be linked to Plan options and densities/intensities.
- Pursue commitments to Silver or higher LEED (or equivalent) performance and commitments to LEED credits of particular local/regional importance.

Strawman Proposal #7

- Apply green building performance linkage for Comprehensive Plan options; overlay levels of development; high end of the density/intensity range.

Strawman Proposal #8

- Adopt Policy Plan text providing broad support for green building practices;
- Pursue green building commitments, even outside areas subject to LEED based (or equivalent) linkage to the Plan.

Strawman Proposal #9

- Pursue commitments to the "Designed to Earn the ENERGY STAR" program.

Strawman Proposal #10

- Establish expectation that, for residential development at the high end of the Plan density range, eligible homes will qualify for the ENERGY STAR Qualified Homes designation.

Issue 5 (Enforcement)

Strawman Proposal #11

- Retain flexibility to consider enforcement approaches that may be identified by applicants during the zoning process;
- Recognize the following as acceptable approaches: Linkage to occupancy permits; linkage to bond release; and establishment of a green building bond (subject to further analysis)

Issue 6 (Green Building Fund)

Strawman Proposal #12

- No suggestion at this time.

Mr. Kaplan reviewed green building fund approaches that were being pursued in Arlington County and Washington, D. C. He noted that Arlington County imposed site plan conditions for \$0.03 per square foot contributions, refundable with LEED certification. He added that Washington, D. C. charged \$0.002 per square foot added to building construction permit fees (new construction); this money was not refundable.

Mr. Kaplan identified a number of issues that would need to be considered in conjunction with the establishment of a Green Building Fund:

- Disposition of funds
- Suggested amount of contribution;
- Mechanisms for seeking contributions;
- Threshold of green building design/energy performance to be linked to refunds;
- Geographic application;
- Residential vs. nonresidential;
- Minimum square footage thresholds.

Responding to a question from Commissioner Lawrence, Mr. Kaplan said his PowerPoint presentation could be made available online.

Commissioner Flanagan pointed out that the strawman recommendations did not condition approval of special permit and special exception applications on meeting green building criteria.

He asked why this was not being proposed. Mr. Kaplan replied that staff thought it appropriate to incorporate policy into the Policy Plan that provided broad support for green building practices and that a Plan linkage approach for certain types of development in certain parts of the County did not mean that it would be inappropriate to pursue commitments for developments that fell outside of development covered by these linkages.

Referring to the recommendation that green building practices might be an expectation for special exception/special permit uses, Chairman Hart pointed out that Area Plans had text stating that nonresidential uses in the Residential-Conservation district were expected to meet three additional criteria: orientation toward an arterial roadway, designed to mitigate water quality, and compatible with the size and scale to the surrounding area. He raised the possibility of using such criteria for green building.

Referring to strawman recommendations #1 and #5, Chairman Hart said that the adoption of an effective incentive program would probably have to include site specific text in certain places, such as transit station areas and growth centers. He asked if Area Plans Review nominations would be submitted by staff to correspond with the amended Policy Plan. Mr. Kaplan replied he thought the vision at this time was a holistic approach and it was not anticipated that staff would submit nominations.

In response to a question from Chairman Hart, Mr. Kaplan said it was envisioned that a certain level of green building performance, whether it was certification or something else specified in the proffers, would be linked to an enforcement mechanism, such as occupancy or release of bond, and would not be an ongoing assessment.

Chairman Hart asked if other jurisdictions allowed flexibility in the application of third party rating systems. Mr. Kaplan said that certification methodology in Washington, D. C., which had a Green Building Act, required development consistent with LEED for non-residential development and that there was not an ability to apply other, equivalent systems. He said the City had its own internal system for residential development. He explained that Montgomery County, Maryland was also going to be applying a green building mandate next year for the private sector which would allow for some level of certification flexibility, including LEED and equivalent approaches which could be approved administratively on a case-by-case basis. He said Arlington County's Green Building Incentive Program relied solely on LEED without an alternative system for the non-residential component of the program. Chairman Hart said he would be interested in knowing about certification requirements in other jurisdictions as to whether or not they provided flexibility to apply alternative, equivalent systems.

Chairman Hart asked if Arlington County applied its green building fund based on the size of the building or the size of the site. Mr. Kaplan replied that Arlington County only looked at the square footage of a building to calculate the contribution to the Green Building Fund even though landscapes were part of the review of green building practices. He said he anticipated that, if a fund concept was to be pursued in Fairfax County, the same approach would likely be followed, although it was possible that other approaches could be applied. Chairman Hart said

he would like to see information on other jurisdictions around the country, specifically mentioning a county in Oregon which had a green building fund.

Chairman Hart asked if a "green expedited" review process could be established as an incentive and if, so, how would it be accomplished. James Patteson, Director, Land Development Services, Department of Public Works and Environmental Services, explained that at the present time 50 percent of the cases his office reviewed received expedited status, including revitalization district development, affordable housing, and capital facility projects. He said industry representatives had expressed a strong interest in an expedited review process as well as tax incentives for green building. He said one thing that needed to be considered was the consequence in the event the process was expedited but commitments were not met. He said he would research the appropriate mechanism to best implement such incentives if that was the approach the Planning Commission and the BOS decided to pursue.

Responding to a question from Commissioner Sargeant, Mr. Kaplan said the overall objective of the green building policy would be to reduce environmental impacts associated with building design and construction. He noted that the Policy Plan already addressed such environmental components as protecting sensitive areas, tree preservation, impervious cover, and stream protection, but not environmental sensitivity in buildings themselves. Commissioner Sargeant asked if the effectiveness of these initiatives could be measured. Mr. Kaplan said data would be needed from green building raters.

In response to another question from Commissioner Sargeant, Mr. Patteson said that LEED certification was done through the U. S. Green Building Council (USGBC) and that staff did not have the expertise required to certify green buildings and evaluate types of materials used, such as paint, carpet, and adhesives. He said a separate County review team would have to be established which in his opinion was duplicative of what was available through the USGBC.

Commissioner Sargeant asked for guidance on what role citizens would play in the consideration of green building-related density issues during the Area Plans Review process. Mr. Kaplan indicated that there would be no difference in how this issue would be considered compared with other APR issues and that citizen involvement in consideration of planned uses or densities would occur through the standard Plan process, whether or not the use or density was tied to green building performance.

Commissioner Sargeant asked what issues citizens would likely be concerned about if densities tied to green building performance were to be pursued. Mr. Kaplan indicated that he could only speculate on this and that the specific issues could vary from case-to-case. He also indicated that a benefit of looking at the density bonus idea on an area specific basis was that it would allow for a consideration of the specific issues of concern, as opposed to a broader brush Policy Plan-based bonus density approach.

Commissioner Sargeant noted the suggestion to apply ENERGY STAR to residential construction and asked if this could be combined with other green building guidance for residential construction such as the NAHB guidelines. Mr. Kaplan noted that the NAHB

guidelines incorporated ENERGY STAR components but that concerns with the NAHB guidelines included uncertainty regarding where the guidelines would be headed during the ANSI process and how the third party certification process would work.

Commissioner de la Fe said he would be interested in hearing from developers why incentives were necessary for green building since it was cost effective in the long run, in terms of resource conservation and lower operating costs.

Commissioner Flanagan suggested that it might be more appropriate to use the term "green development" rather than "green building" so that it would be clear landscaping as well as buildings was included. Mr. Kaplan said landscaping was included in the definition of green building in the proposed Policy Plan amendment. He explained that the intent was not to cover all issues involved in the environmental planning policy in the amendment, noting that there were policies that addressed other issues, such as tree preservation and air quality. Mr. Patteson added that the LEED had different value sets built into the rating system, such as energy or water conservation, carbon footprint, and stormwater benefits. He said specific areas for certification could be specified in proffers. Commissioner Flanagan suggested that if the term green "building" was used it should be clarified for the public.

Chairman Hart reviewed the procedures for speaking and called for a recess at 8:25 p.m. The committee reconvened in the Board Auditorium at 8:41 p.m.

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John Byrne, 2801 Oakton Manor Court, Oakton, requested that three additional strawman items be considered:

1. The minimum standard for all new construction, renovation, and expansion should be LEED; a five percent bonus FAR or lot density awarded for LEED Silver, ten percent for Gold, and 20 percent for Platinum.
2. Homeowner association rules disallowing solar collectors or solar roofing shingles be voided.
3. LEED Neighborhood Development standards be applied to all new development and for modification of existing development.

Mr. Byrne also said that for consideration of other than LEED standards, the basis for review should be energy savings over the life of the structure and that consideration should be given to design and construction practices that enabled future improvements to meet higher LEED standards, to respond to higher energy costs, and to allow for global climate change. (A copy of his remarks is in the date file.)

David Schnare, 9033 Brook Ford Road, Burke, representative of the Occoquan Watershed Coalition and member of the Environmental Quality Advisory Council, said green building

would not significantly affect global warming and that the marketplace offered an incentive for cost-efficient engineering. He said the Commonwealth of Virginia had decided against offering tax incentives for LEED building but chose to instead tie it exclusively to energy efficiencies associated with building codes and if the requisite level of energy efficiency was exceeded, localities had the authority under State law to provide tax incentives on that basis. He pointed out that tax incentives could have a negative impact on revenue. He said he had not seen an analysis indicating that increased density would result in increased energy reduction and proposals for density bonuses would need to take into account fully the impact on the infrastructure. Dr. Schnare said if a green building fund or regulations were not established, the planning process would essentially be what it was today, negotiations between staff and the applicants to try to get as much as possible in accordance with the Comprehensive Plan. He said the practical implications of the planning process showed some promise but was as well a cudgel which could be used in a number of ways.

Commissioner Flanagan commented that the idea was to increase density at transit station areas. Dr. Schnare replied evidence indicated that unless a transit station was within four blocks of an employment location, the employee would drive. He added that for residential development, congestion was worse on Saturdays when people were trying to get things done at places not served by Metro.

F. Thomas Lee, U. S. Green Building Council, 9990 Lee Highway, Fairfax, Co-Chairman of the Advocacy Committee of the USGBC, referring to strawman proposal #3, cautioned the Commission against using "other equivalent systems" because the LEED building program had been specifically designed to eliminate "green washing," i.e., making environmental claims that were not able to be quantified or proven, and was not driven by industry sponsorship. He offered to provide the Commission with a list of counties nationally and their incentive programs. Mr. Lee expressed support for the idea of pursuing locally-significant LEED credits tailored to address environmental issues of particular relevance within specific areas (e.g., heat island effect in Tysons Corner; water use in Great Falls.)

Lynne Corn, 1851 Griffith Road, Falls Church, said she had recently built a green house on a quarter acre lot in Falls Church. She explained that one of the problems she had encountered was the unfamiliarity of the County inspectors with the systems and materials used and suggested that County staff be specially trained and become aware of new and advanced technologies.

Carol A. Hawn, 6500 Harvest Mill Court, Centreville, speaking on behalf of her husband who was in the commercial building industry, cautioned against rushing the amendment through without careful consideration of all aspects. She explained that her husband, who would submit written comments, had encountered many problems with green roofs.

Leslie Cook, ENERGY STAR for Commercial Buildings, 1818 15th Street, NW, Washington, D. C., encouraged the County's continuing investigation into how ENERGY STAR tools and resources could help to ensure that commercial buildings were designed to be energy efficient.

Lou Sagatov, Chairman of the Green Committee, Northern Virginia Building Industry Association, stated that (NVBIA) had adopted Model Green Home Building Guidelines developed by the National Association of Home Builders (NAHB) and that it was anticipated that these guidelines would be approved as residential green building standards by the American National Standards Institute (ANSI). He said after ANSI approval of the standards, a pilot program would be established for homes built to the new standards which would be third-party certified through the NAHB Research Center. He said consideration should be given to applying green building standards to by-right development, including tear-downs and additions. He recommended that labeling green residential programs be avoided as long it was third-party certified and a nationally recognized, or to label all programs.

Commissioner Alcorn said that the Public Facilities Manual, including low impact development (LID) practices, could address by-right development.

In response to a question from Chairman Hart, Mr. Sagatov said he had become interested in building green because it was a better and more practical approach to building and resulted in a better product. Responding to another question from Chairman Hart, he said that a good incentive would be for the buyer to have his tax bill prorated for a certain number of years because his home met a certain level of energy performance.

Responding to a question from Commissioner Flanagan, Mr. Sagatov said he could provide him with information on homes built to Code requirements and NAHB standards, and what it would take to obtain different levels of certification.

Barry Clark, 2020 12th Street, N.W., Washington, D. C., Daks Restaurant, said he had recently had difficulty obtaining approval for development of a restaurant using green building techniques. He said it would be helpful if County staff had more expertise in this area.

Commissioner Alcorn pointed out that building green would not relieve an applicant of the need to conform to the Comprehensive Plan.

Jonathan Passe, 2005 Gunnell Farms Drive, Vienna, U. S. Environmental Protection Agency, ENERGY STAR Homes Branch, asked what the goal of the amendment was; i.e., to reduce the carbon footprint or for general environmental protection. He said that if it was to reduce the carbon footprint, address global warming and climate change issues, the focus should be on energy efficiency, but if it was general environmental protection, green building programs, such as LEED, should be pursued. He said that most ENERGY STAR homes had been built without incentives or in a small percentage of cases, with only modest incentives. Mr. Passe said energy-efficient homes made good business sense because they offered a higher level of consumer satisfaction, had less warranty claims, and provided recognition for builders.

In response to a question from Commissioner Lawrence, Mr. Passe said reduction of the carbon footprint and general environmental protection were not mutually exclusive. In response to a question from Commissioner Alcorn, Mr. Passe said pursuing a larger green building program would not sacrifice energy efficiency, he just wanted to point out the scope of the issues.

Responding to a question from Commissioner Sargeant, Mr. Passe said the ENERGY STAR program rated a home on its energy efficiency and its size was not relevant.

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Since there were no further speakers. Chairman Hart announced that the Committee would next meet on September 19, 2007 to receive a presentation from Green Globes and to discuss with staff the input received at the workshop as well as written comments. He said a staff report on the Plan Amendment would be published later this fall and a Planning Commission public hearing would be held on November 8, 2007. He said additional comments could be sent to the Planning Commission at plancom@fairfaxcounty.gov.

Chairman Hart asked if staff had closing comments. Mr. Patteson stated that the Zoning Ordinance, the Public Facilities Manual, and the Subdivision Ordinance were local regulations that could be amended and required for by-right development. However, he pointed out that some of the standards in a rating system were controlled by the state-wide Building Code which could not be changed locally; therefore, some green building commitments would have to be voluntary.

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The meeting was adjourned at 9:50 p.m.
James R. Hart, Chairman

For a verbatim record of this meeting, reference may be made to the audio recording which can be found in the Planning Commission Office.

Minutes by: Linda B. Rodeffer

Approved: September 19, 2007

Linda B. Rodeffer, Clerk
Fairfax County Planning Commission