



ARLINGTON COUNTY, VIRGINIA

County Board Agenda Item Meeting of November 15, 2014

DATE: October 31, 2014

SUBJECT: Updates to the Green Building Incentive Policy for Site Plan Projects

C. M. RECOMMENDATION:

Amend the County's Green Building Incentive Policy for Site Plans (see attached) to evaluate special exception site plan requests for bonus density consistent with Section 15.6.7.A.1 of the Zoning Ordinance.

ISSUES: Changes to the bonus density incentive program are proposed based on the success of the policy to date, green building market transformations in the construction industry, changes in the building code, and recent updates to the LEED green building rating system (from LEED 2009 to LEED version 4). Although the proposed revisions were negotiated in collaboration with NAIOP and were generally agreed upon, NAIOP remains concerned that the proposed changes will make it more costly to do business in Arlington. NAIOP has requested that the County maintain the bonus density levels from the 2012 version of the program.

SUMMARY: It is proposed that Arlington County strengthen its commitment to sustainable community and green building efforts through the update and revision of its green building policy and green building bonus density program for site plan projects in the County. These programs rely on the Leadership in Energy and Environmental Design (LEED) rating system, developed by the U.S. Green Building Council (USGBC), as a means of evaluating proposed site plan projects and encouraging the construction of energy efficient and environmentally sustainable buildings.

The key revisions to the County's program include the following:

- In exchange for a commitment to achieve LEED Version 4 Silver Certification or above, site plan projects may request Floor Area Ratio (FAR) bonus. All site plan applicants (commercial and residential) may request up to 0.25 FAR bonus for LEED Silver certification; 0.35 FAR bonus for LEED Gold certification; and 0.50 FAR bonus for

County Manager:

County Attorney:

Staff: Joan B. Kelsch, DES - AIRE

LEED Platinum certification. All commercial office projects earning bonus density must also agree to earn Energy Star building certification within four years of occupancy.

- Projects earning bonus density are also eligible to request an additional 0.025 FAR for achieving one of eight Arlington priority credits. Credit will be given for up to two Arlington priority credits, for a total additional bonus density of 0.05 FAR.
- Projects designed and constructed to achieve at least LEED Gold certification plus two Arlington priority credits plus Net Zero Energy Building certification through the International Living Futures Institute, may earn additional bonus density above 0.55 FAR.
- In order to facilitate the construction of high performing “green” affordable housing units, the program proposes that affordable housing projects receiving tax credits from the Virginia Housing Development Authority (VHDA) be allowed to earn bonus density using the Earthcraft green building rating system in place of LEED for projects designed to achieve the Earthcraft version 4 Gold and Platinum certifications.

Components of the program which remain in place:

- Provide Energy Star Portfolio Manager utility reporting data after occupancy each year for 10 years.
- In multifamily residential projects, the program includes requirements for Energy Star labeled appliances, WaterSense labeled fixtures, and a focus on reducing energy demands from lighting in common areas.

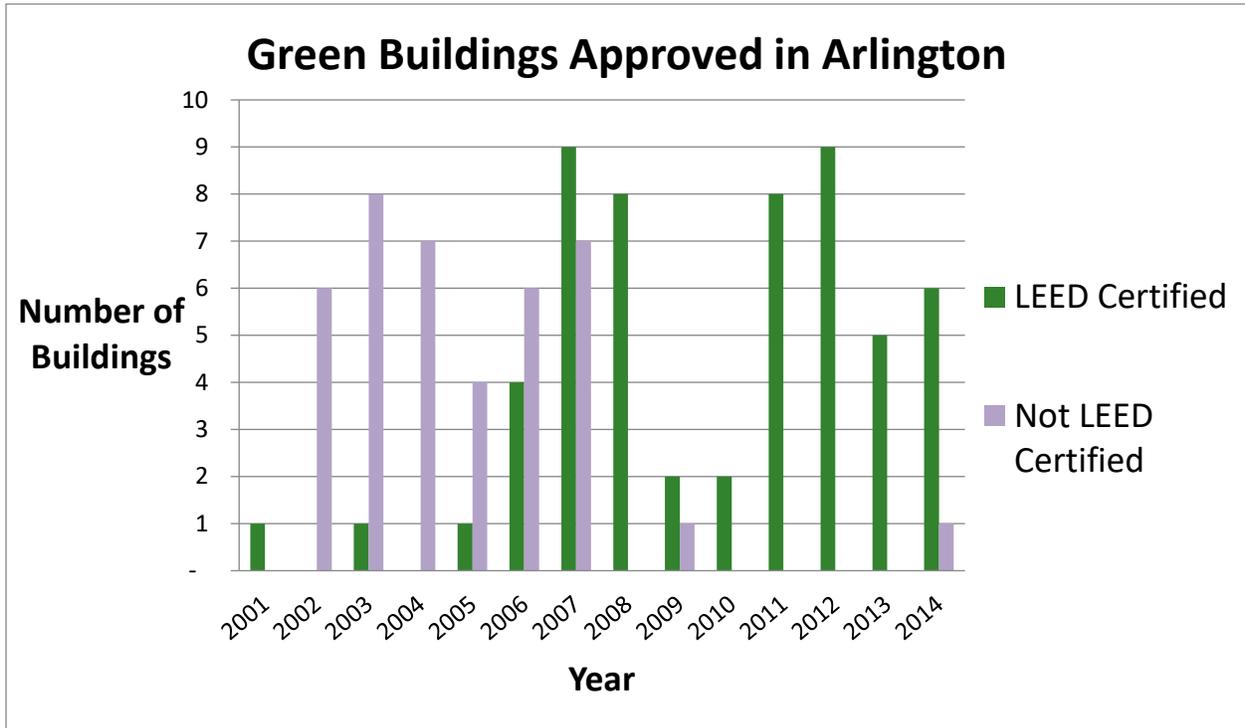
Each project will be evaluated on a case-by-case basis.

The Green Building Program will be reviewed (and updated if appropriate) at least every three years or when the LEED green building rating system is updated to ensure that the program remains current with emerging green building technologies, national trends, and the needs of the community.

BACKGROUND: This report proposes enhancing and upgrading the green building density incentive program for site plan projects. Originally adopted in 1999 and updated in 2003, 2009, and 2012, the green building program has been an effective tool for reducing the environmental impacts of buildings on the community. Program history is further discussed in Attachment 1.

The Green Building Incentive Program has been popular with developers in Arlington. The following chart summarizes the site plan buildings that have been approved with bonus density in exchange for LEED certification. Since the first LEED bonus density project was approved in 2001, 96 site plan buildings have been approved by the County Board. Of these 96 buildings, 56 have agreed to achieve LEED certification. Of these 56 buildings, 19 have completed construction, achieved their LEED commitments, and complied with the green building site plan conditions. Figure 1 summarizes the green buildings approved in Arlington. Additional data are provided in Attachment 2.

**Figure 1
Green Buildings Approved in Arlington**



Staff will continue to evaluate national and regional green building trends and participation in the density incentive program, and will conduct a formal analysis in three years, or sooner as market trends and LEED updates warrant.

DISCUSSION: Although most site plan projects have committed to achieving high levels of LEED certification over the years, the LEED projects in Arlington did not include significant energy efficiency components (as defined by the LEED Energy Optimization credit (EA1.1)) above the minimum LEED prerequisite until the 2012 green building program update incorporated the 18-20% energy efficiency component. This higher level of energy efficiency has now been incorporated into the new energy baseline prescribed by the updated LEED version 4 green building rating system. This change keeps the LEED rating system ahead of building codes which are also increasing the energy efficiency minimum requirements. The current proposed changes to the green building bonus density incentive program are intended to incentivize exceptional energy efficient design and construction as well as efficient energy performance post-occupancy, while continuing to focus on holistically designed and constructed buildings.

An incentive program is needed in Arlington to encourage developers to incorporate high levels of energy efficiency into new buildings and to ensure performance post-occupancy. There are several reasons why added investment in energy efficiency may not be cost effective in Arlington:

- Utility rates in Virginia are relatively low. This means that the payback period based on utility cost savings on an initial energy efficiency investment is too long to make the investment beneficial.
- For developers who lease the building and whose tenants pay their own utility bills (office or residential), the energy savings earned during the life of the building benefits the tenant, not the developer. Thus, the developer never sees the payback on the initial investment.
- Similarly, for developers who sell their buildings soon after completion, the energy savings benefit the new owner not the developer who made the energy efficiency investments.

This update proposes to continue to provide an incentive to encourage upfront investment in energy efficient building design and construction as part of an overall environmentally responsible LEED building. In addition, the update incorporates the Energy Star rating to ensure buildings are performing in an energy efficient manner post-occupancy.

Measuring energy efficiency

The Community Energy Plan (CEP) adopted by the County Board establishes a milestone for the year 2015, calling for new residential and non-residential buildings to be approximately 30% more efficient than the 2004 Virginia building code. The LEED version 4 energy baseline (as specified by ASHRAE 90.1-2010), is estimated to be 30% more efficient than the 2004 Virginia building code, so at a minimum all LEED green building incentive projects will achieve this 2015 CEP milestone. In addition, the Arlington Priority credit List rewards projects that commit to reach beyond this baseline to reach 39% - 42% improvement beyond the 2004 Virginia building code.

Other Regional Green Building Policies

Over the years, Arlington's program sparked interest in neighboring jurisdictions. In Washington, D.C., private office buildings greater than 50,000 square feet are now required to achieve LEED certification at the Certified level. The Green Construction Code (a more stringent building code) applies to office and residential projects larger than 10,000 square feet. Annual energy benchmarking is also required. Montgomery County similarly requires private office buildings greater than 10,000 square feet to achieve LEED certification at the Certified level. Montgomery County offers a tax credit for buildings larger than 10,000 square feet that achieve LEED certification. The amount of the tax credit varies depending upon the building type and LEED level achieved.

In Fairfax County, a countywide policy for green building, offers one-time expedited plan review for projects seeking LEED Silver or higher. The Plan for Tysons recommends that a commitment of LEED Silver be made for new commercial buildings and LEED Certified for new residential buildings. Existing buildings and sites that are proposed to be retained as part of

new development are encouraged to incorporate green building features to the extent possible. All of the major zoning applications approved since the Plan was adopted have provided for LEED certification or its equivalent, consistent with the Plan.

Alexandria's Green Building Policy states that special exception office development projects "should" achieve LEED Silver and residential projects "should" achieve certification at the LEED Certified level. No incentives or enforcement are included in the policy.

Proposed changes to Arlington's Green Building Incentive Policy

- *Green Building Rating System:* Staff recommends updating the program to use the LEED Version 4 rating system for site plan projects receiving green building bonus density. The previous requirement to include an additional 18-20% energy efficiency beyond the LEED baseline is no longer specified as this level of energy efficiency has been incorporated into the new energy baseline prescribed by the updated LEED Version 4 green building rating system.
- *Office vs. Residential LEED certification:* The proposed program no longer offers separate FAR offerings for residential and office projects. LEED now includes a rating system specifically designed for Multi-family Midrise construction, as well as the LEED for Building, Design, and Construction (LEED BD&C) rating system which applies to office, mixed use and larger multi-family construction. Because the rating systems are more specific to the building type, the proposed program offers a uniform FAR level for both office and residential projects. For site plans with multiple buildings, all buildings on the site must commit to earn the agreed upon LEED certification level in order to earn the full green building FAR bonus.
- *Ongoing Energy Performance:* Energy models are predictive and guide the design and construction of the building. However, they do not ensure that the building will operate to the specified level of energy efficiency. Operational energy use depends on many variables including weather, building use, hours of occupancy, etc., which can change over the course of a building's life.

The proposed program adds an energy performance component in order to receive the requested bonus density. Density may be requested for office construction in exchange for a commitment to LEED Silver certification or above and for a commitment to a minimum level of energy performance (i.e., an Energy Star score of 75.). The project has four years after the building is occupied to achieve the US Department of Energy's Energy Star certification. One complete year of energy data and a third party review by a Professional Engineer or Registered Architect (not a member of the project team) are required. A score of 75 indicates that the project performs as well as the top quartile of buildings in the Department of Energy's baseline set of buildings.

Multi-family residential projects are encouraged, but not required, to achieve post-occupancy Energy Star certification in order to participate in the incentive program. Multi-family residential projects have the option of requesting additional density (0.025

FAR) for Energy Star certification, with a score of at least 75, as one of the Arlington Priority credits.

- *Arlington Priority Credits:* In order to make the green building program more specific to Arlington, Energy Star certification for multifamily buildings and seven specific LEED credits have been identified as being particularly relevant to the Arlington community. These include:
 - Energy Star certification with a score of 75 (Multi-family residential projects only)
 - Optimize Energy Performance (nine percent above the LEED baseline)
 - Additional Optimize Energy performance (twelve percentage points above the LEED baseline)
 - Envelope Commissioning
 - Renewable Energy production (one percent of building energy use from renewables)
 - Onsite habitat restoration
 - Light pollution reduction and bird friendly facades
 - Building reuse and materials salvage

See Attachment 2 for an explanation of each Arlington Priority credit. Projects may choose up to two Arlington Priority credits for an additional 0.025 FAR per credit for a maximum of 0.05 FAR per project. This Arlington Priority FAR is added to the FAR earned for LEED/Energy Star certification.

- *Encouraging Green Affordable Housing:* In order to offset the cost of construction and documentation of high performing “green” affordable housing units, the program proposes that any affordable housing project receiving tax credits from the Virginia Housing Development Authority (VHDA) be allowed to use the Earthcraft green building rating system in place of LEED for projects designed to achieve the Earthcraft Gold and Platinum certifications. VHDA uses Earthcraft as their primary green building rating system. Analysis has shown that Earthcraft Gold and Platinum certifications are equivalent to (or exceed) the requirements of the LEED program. Affordable housing projects seeking base Earthcraft certification are not eligible for bonus FAR.

Installation of Energy Star appliances and WaterSense fixtures, and the 10-year energy reporting requirements apply to these Earthcraft projects. Affordable housing projects using Earthcraft may also apply for additional density (up to 0.05 FAR) by achieving up to two of the Arlington Priority credits.

- *Net Zero Energy Construction:* In order to encourage site plan projects in Arlington to achieve superior levels of energy performance, the program proposes the option of negotiating for density above 0.55 FAR in exchange for projects that are designed and constructed to achieve the Net Zero Energy building certification (as defined by the International Living Futures Institute) in addition to at least LEED Gold certification and two Arlington Priority credits. Projects committed to Net Zero Energy certification must generate as much clean energy onsite as is used by the building over the course of a year.

Effective date: The program will be effective immediately, but site plan projects accepted by the County Manager before September 30, 2015 may continue to use the 2012 version of the Green Building Density Incentive Policy, including the LEED 2009 rating system. Site plan projects accepted after September 30, 2015 must use the updated policy and LEED V4. The USGBC will allow LEED projects to register under the LEED 2009 rating system until October 31, 2016 (projects may choose to register for LEED v4 before this date). Arlington’s September 30, 2015, transition date ensures that the density incentive program continues to incentivize projects to achieve exemplary environmental performance, in particular for energy and water efficiency, in line with the Community Energy Plan goals.

Updated Policy Summary

The proposed Green Building Density Incentive Policy for Site Plans is attached (Attachment 4). Table 1 below outlines the proposed changes to the bonus density portion of the program.

Table 1
Summary of Proposed Changes to the
Green Building Bonus Density Incentive Policy

<u>2012 Policy</u>			<u>2014 Proposed Policy</u>		
LEED 2009	Office	Residential	LEED v4 (plus Energy Star for Office)	Arl. Priority	Total FAR available
Silver	0.20 FAR	0.25 FAR	0.25 FAR	+up to 0.05 FAR	0.30
Gold	0.35	0.40	0.35	+up to 0.05 FAR	0.40
Platinum	0.45	0.50	0.50	+up to 0.05 FAR	0.55
Additional 0.10 FAR for LEED-EBOM or Energy Star			Energy Star <ul style="list-style-type: none"> • Office – Energy Star score of 75 • Residential – Arlington Priorities allow an option for 0.025 FAR for Energy Star score of 75 Net Zero Energy certification: Negotiate additional density above 0.55 FAR for at least LEED Gold plus two Community Priority credits plus Net Zero Energy certification		

The following components of the program remain unchanged:

- For residential site plan projects:
 - All refrigerators, dishwashers, clothes washers, and ceiling fans initially installed in the residential units shall have earned the U.S. EPA’s Energy Star label ;
 - All bathroom sink faucets, showers, toilets initially installed in residential units shall have earned the U.S. EPA’s WaterSense label.
 - The need for common area lighting will be reduced through the use of daylighting and energy efficient fixtures and technologies following the guidelines for lighting power density established by LEED.

- All bonus density project owners will also report utility data after occupancy for 10 years using Energy Star Portfolio Manager. These data will allow staff to evaluate the correlation between the predictive energy model used to design and construct the building, and the actual energy used in the building.
- The methodology for determining the units per acre for LEED bonus calculations is as follows:
 - Determine the floor area attributed to LEED bonus FAR (example - for LEED Silver, multiply 0.25 by the site area).
 - Divide this bonus floor area by the average unit size in the proposed development to determine the number of units attributed to the LEED bonus.
 - Divide the number of units attributed to the LEED bonus by the site area.

Enforcement

Enforcement of the Green Building incentive program will continue to require the developer to post a financial security prior to issuance of the partial Certificate of Occupancy for the last floor of space. In general, the financial security is calculated based on the square feet of bonus density approved multiplied by the average rental rate for space in the specific area of the County (as calculated by Arlington County's Real Estate Section). The financial security will be divided in two parts: a) 75% will be held until the LEED certification is achieved; and b) 25% will be held until the Energy Star certification is achieved. If a project fails to achieve the promised LEED and Energy Star certifications after receiving the bonus density, the financial security amount(s) defaults to the County. To date, 19 projects have posted financial security and all have met their LEED obligations and the securities were released. No projects have defaulted on their LEED green building bonus density commitments.

Community Process

Over the past eight months, staff presented the proposed changes to the green building incentive program to the developer groups (Northern Virginia Building Industries Association (NVBIA) and the National Association of Industrial and Office Parks (NAIOP)), as well as energy professionals, LEED consultants, commercial leasing brokers, architects, mechanical engineers, and land use attorneys. Several issues were discussed at length with the NAIOP working group and the final proposal reflects their input. NAIOP has expressed concern that the proposed changes will make it more costly to do business in Arlington, claiming that the additional costs will be reflected in residential and office rental rates.

Staff discussed the green building program with the Environment and Energy Conservation Commission (E2C2) during the summer of 2014 and formally presented the proposed changes to E2C2 on July 28, 2014.

Staff discussed the proposal with the Long Range Planning Committee on September 15, 2014. Comments from the Long Range Planning Committee related to the proposed policy were addressed by staff.

Staff presented the proposed program to the Economic Development Commission on October 14, 2014.

FISCAL IMPACT: There is no direct fiscal impact on the County. The development community has expressed concerns about the overall increasing requirements of the site plan process, and resulting increased costs imposed on development projects. The Green Building Incentive program offers density in exchange for achieving high levels of environmental performance. The amount of bonus density that can be earned considers the upfront costs and the ongoing utility cost savings resulting from the green building components incorporated into the projects, as well as the ongoing increased revenue for owners resulting from the additional density awarded to the project.

Attachment 1

Green Building Program History

Since the early 1960s, Arlington has made a commitment to smart growth, primarily through Metro-oriented development planning and land use policies in the General Land Use Plan. For the past 15 years, Arlington has used the LEED green building rating system to guide the design and construction of new public facilities in the County. Arlington Public Schools (APS) also uses LEED to guide new school construction. LEED is now the principal green building rating system used nationwide. With the recent rapid growth of the green building industry in the region and the development of specific LEED rating systems for different building types, fully integrating sustainability into the design, construction, operation, maintenance, and demolition of projects is now understood and achievable. Because of the broad acceptance of LEED, staff proposes changes to the green building incentive program to encourage developers to focus on incorporating energy efficiency into site plan projects and on the ongoing energy performance of buildings once they are occupied.

Arlington's original Pilot Green Building Incentive Program (adopted in October 1999) applied only to commercial office space and offered up to 0.25 FAR bonus density in exchange for obtaining a LEED Silver certification from the USGBC. The program was nationally recognized as being an innovative approach to encouraging green building. However, County staff found that the original program excluded developers who were interested in incorporating green building components but who were not prepared to achieve the LEED Silver rating.

In 2003, the County's green building program for site plans was updated and strengthened. The original program did not apply to multi-family residential projects, rehabilitation of existing buildings or other types of site plan development, even though the LEED rating system can be used to enhance and measure the "greenness" of these types of projects. The 2003 revision encouraged all site plan projects (not just commercial office) to participate in the voluntary incentive program, and the program was expanded to include the full range of LEED awards (including Certified, Silver, Gold, and Platinum). Density could be requested in an amount commensurate with the applicant's level of commitment to sustainable building (ranging from a maximum of 0.15 FAR for baseline LEED Certified projects to a maximum of 0.35 FAR for a LEED Gold or Platinum project).

The 2009 update to the green building bonus density program reduced the amount of bonus offered for LEED Certified and Silver projects since market transformation made it easier to achieve these levels of LEED certification. The update also incorporated an additional 0.05 FAR bonus for residential buildings (high-rise multi-family apartments and condominiums) over the baseline bonus offered for office. The additional bonus for residential projects was added because it is more difficult for residential projects to achieve some of the LEED credits, as compared to office buildings. This small additional bonus has resulted in all participating residential site plan projects committing to LEED Silver certification or above since 2009.

In 2012, the program update focused on improving the energy efficiency of site plan projects by incorporating a minimum level of energy savings for office buildings (20% above the established

LEED energy baseline) and multi-family residential buildings (18% above the LEED baseline). An additional 0.10 FAR was offered to projects committing to the LEED certification and minimum energy savings plus the Energy Star building certification or LEED for Existing Buildings (LEED-EB) certification, both of which are based on actual energy use. Finally, the program asked site plan projects to report utility data after occupancy each year for 10 years.

Attachment 2
Summary of Approved Site Plan Projects in Arlington (excludes townhouses)
(2010 - Present)

<p>Total number of site plan buildings:</p> <p>31 buildings</p>	<p>Note - several site plans have multiple buildings</p>
<p>Buildings with LEED green building commitment:</p> <p>30 buildings</p>	<p>30 of 31 site plan buildings (97%) participate and agreed to achieve LEED certification (one project is using Earthcraft and is not seeking density)</p>
<p>Buildings with commitment to earn Energy Star or LEED EBOM certification:</p> <p>6 buildings</p>	<p>Additional density awards to confirm post-occupancy green building and energy performance</p>
<p>Office</p> <p style="padding-left: 40px;">Total GFA approved 4,388,727 ft²</p> <p style="padding-left: 40px;">LEED 4,388,727 ft²</p>	<p>100% of site plan office space is planned to achieve LEED certification</p> <p>Office project buildings include:</p> <p style="padding-left: 40px;">3 Silver</p> <p style="padding-left: 40px;">6 Gold</p> <p style="padding-left: 40px;">2 Platinum</p>
<p>Residential</p> <p style="padding-left: 40px;">Total units approved 4,407 units</p> <p style="padding-left: 40px;">LEED with bonus 4,303 units</p>	<p>98% of site plan residential units are planned to achieve LEED certification</p> <p>Residential/hotel project buildings include:</p> <p style="padding-left: 40px;">10 Silver</p> <p style="padding-left: 40px;">8 Gold</p>

Attachment 3

Description of Arlington Community Priority Credits

Energy Star Certification (residential only) – Demonstrate sustained energy performance by earning the Energy Star building certification based on one consecutive year of actual energy use. The project must receive an Energy Star score of 75 or higher at least once within four years of building occupancy. The Energy Star Score must be verified by a third party Professional Engineer or Registered Architect that is not a member of the project team.

Optimize Energy Performance (9%) - Demonstrate at least a nine percent improvement in energy performance above the LEED baseline, ASHRAE 90.1-2010, by earning points under the energy performance credit of the applicable LEED rating system.

Optimize Energy Performance (12%) - Demonstrate at least a twelve percent improvement in energy performance above the LEED baseline, ASHRAE 90.1-2010, by earning points under the energy performance credit of the applicable LEED rating system.

Envelope Commissioning - Earn points under the LEED version 4 credit *Enhanced Commissioning, option 2 - Envelope Commissioning* to demonstrate commissioning and verification of the building's thermal envelope.

Renewable Energy Production – Earn points under the LEED version 4 credit *Renewable Energy Production* to demonstrate that at least one percent of the building's calculated annual energy is supplied by renewable energy systems.

On-site Habitat Restoration – Earn points under LEED version 4 credit *Site Development – Protect or Restore Habitat, option 1 - on-site restoration* to demonstrate the project has used native or adapted vegetation to protect from construction 40% of any existing greenfield, and restore 30% of all previously developed portions of the site.

Light pollution reduction and bird friendly facades – Earn a point under the LEED version 4 pilot credit *Bird Collision Deterrence* to reduce or eliminate light pollution and facade conditions that create confusing reflections to birds.

Building reuse and materials salvage – Earn points under LEED version 4 credit *Building Life-Cycle Impact Reduction, option 1 - historic building reuse, option 2 - renovation of abandoned or blighted building, or option 3 - building materials reuse*.

**Attachment 4
Green Building Bonus Density Incentive Policy for Site Plans
Arlington County, Virginia
November 2014**

Arlington County’s Green Building Bonus Density Incentive Policy is a voluntary program to evaluate special exception site plan requests for bonus density consistent with Section 15.6.7.A.1 of Arlington County’s Zoning Ordinance. All site plan project developers are encouraged to include specific green building components in site plan projects and to commit to becoming certified under the U.S. Green Building Council’s (USGBC) Leadership in Energy and Environmental Design (LEED™) Version 4 program. Additionally office projects are encouraged to achieve Energy Star certification with a score of 75 post-occupancy.

Arlington offers potential levels of bonus density (as measured in Floor Area Ratio (FAR)) when the developer commits to LEED certification (including post-occupancy energy performance for office buildings), as follows:

LEED v4 Certification (plus Energy Star for office)	FAR Bonus	Arlington Priority	Total FAR Available
Silver	0.25	+ up to 0.05	0.30
Gold	0.35	+ up to 0.05	0.40
Platinum	0.50	+ up to 0.05	0.55

Up to an additional 0.05 FAR may be awarded to buildings that commit to achieving up to two Arlington Priority credits. Each Arlington priority credit may earn up to 0.025 FAR, for a total of up to 0.05 FAR per project.

Additional density above 0.55 FAR may be requested for Net Zero Energy certification or Zero Carbon certification (as defined by the International Living Futures Institute) in addition to at least LEED Gold certification and two Arlington Community Priority credits.

Midrise (four to eight stories) affordable housing projects receiving tax credits from the Virginia Housing Development Authority (VHDA) may use the Earthcraft version 4 green building rating system in place of LEED version 4 Multifamily Midrise at the Gold and Platinum levels only. For these projects, up to an additional 0.05 FAR may be requested in exchange for achievement of two Arlington Community Priority credits.

All site plan projects that increase density or height in exchange for LEED certification, are expected to have a LEED Accredited Professional on the development team. Projects are also expected to fully evaluate all LEED components and incorporate at least enough LEED credits to achieve baseline LEED Silver and, for office buildings, a minimum Energy Star score of 75, as calculated by Energy Star’s Portfolio Manager benchmarking tool in order to minimize the environmental impact of the project on the site and the community. A specific LEED certification level and Energy Star certification level are identified and included in a site plan

condition. County staff reviews LEED compliance at specific permit applications throughout the demolition and construction process. The applicant’s development team submits the project’s LEED documentation to the USGBC for review and official LEED certification within a specific time frame identified in the site plan condition. The Energy Star certification may be achieved within four years after the building is occupied. The Energy Star Score must be verified by a third party Professional Engineer or Registered Architect that is not a member of the project team.

All bonus density project owners will provide Energy Star Portfolio Manager utility reporting data after occupancy each year for 10 years. These data are provided for informational purposes only. This is not intended to be a performance review of the energy usage in the building; these data will allow staff to evaluate the correlation between the predictive energy model used to design and construct the building, and the actual energy used in the building.

For residential site plan projects, all refrigerators, dishwashers, clothes washers, and ceiling fans initially installed in the residential units shall have earned the U.S. EPA’s Energy Star label. All bathroom sink faucets, showers, toilets initially installed in residential units will have earned the U.S. EPA’s WaterSense label. The need for common area lighting will be reduced through the use of daylighting and energy efficient fixtures and technologies following the guidelines for lighting power density established by LEED.

Because some green components are not complete until a building is operational, enforcement of the green building density incentive policy requires the developer to post a form of financial security acceptable to the County prior to issuance of the first Certificate of Occupancy. In general, the financial security amount is calculated based on the size of the bonus density approved multiplied by the average rental rate for space in the specific area of the County (as calculated by Arlington’s Real Estate Section). For office projects and multifamily residential projects requesting additional density for Energy Star certification of 75, the bond will be divided into two parts: 75% of the financial security will be tied to the LEED certification and 25% of the financial security will be tied to the Energy Star certification post-occupancy. If a project fails to achieve the specified LEED or Energy Star certification, the security will default to the County as follows:

<u>Points missed</u>	<u>Percentage of financial security forfeited</u>
<u>1-2</u>	<u>25%</u>
<u>3-4</u>	<u>50%</u>
<u>5-6</u>	<u>75%</u>
<u>7+</u>	<u>100%</u>

For residential projects not seeking Energy Star certification, 100% of the bond will be tied to completion of the specified LEED certification.