Sponsored by: Collette & Rushefsky

COUNCIL BILL NO. 2008-058  RESOLUTION NO. 9573

A RESOLUTION

ADOPTING the City of Springfield, Missouri, Green Building Policy.

WHEREAS, the Springfield-Greene Vision 20/20 Comprehensive Plan sets forth goals for preserving and improving the natural and built environment of the City, protecting the health of its residents and visitors, and fostering its economy; and

WHEREAS, the City of Springfield is an acknowledged environmental leader in the State of Missouri; and

WHEREAS, the City of Springfield recognizes and accepts its responsibility to implement and promote building practices that protect Springfield's natural and built environment; and

WHEREAS, green building is a whole systems approach to the design, construction, and operation of buildings that employ materials and methods that promote natural resource conservation, energy efficiency, and good indoor air quality; and

WHEREAS, some conventional design and construction methods can produce buildings that negatively impact the environment; these buildings may be unnecessarily expensive to operate and contribute to excessive resource consumption, waste generation, and pollution due to unnecessary landfilng of wasted materials, and inefficient use of energy and water; and

WHEREAS, emissions from some conventional construction materials, including paints, carpets, and particleboard may contribute to a host of health problems associated with poor indoor air quality; these health impacts may be exacerbated by conventional ventilation technology and may result in lost productivity, increased costs for maintenance, waste disposal, and health care; and
WHEREAS, green building design, construction, and operation can minimize or
avoid these types of adverse impacts in a variety of ways by incorporating energy and
water efficient technologies and landscaping; using recycled content materials; reducing
construction and demolition waste; improving indoor air quality; and promoting long-
term economic efficiency; and

WHEREAS, the Leadership in Energy and Environmental Design (LEED®) Green
Building Rating System™ and LEED certification is a nationally recognized standard for
excellence in facility design and has multiple levels of certification; and

WHEREAS, the Springfield City Council finds that green design and construction
decisions made by the City in the construction and remodeling of City buildings can
result in significant cost savings to the City over the life of the buildings; and

WHEREAS, the benefits of green building design, construction, and operation
should be enjoyed by the residents, workers, and visitors of the City.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY
SPRINGFIELD, MISSOURI, as follows:

Section 1 - Green building design, construction, and operation furthers the goals
set forth in the Springfield-Greene County Vision 20/20 Comprehensive Plan.

Section 2 - The City Council hereby adopts the "City of Springfield Green
Building Policy." This policy reflects the City's commitment to encourage
environmentally sensitive construction practices in the City of Springfield by utilizing, for
City-owned buildings, construction practices that meet the prerequisites and
performance benchmarks of the U.S. Green Building Council’s Leadership in Energy and
Environmental Design (LEED) certification process.

Section 3 - The City Council hereby declares that all new City-owned buildings,
of any size, intended for human occupation, shall be designed, contracted, and built to
LEED Silver Certification for New Construction (LEED-NC), and shall strive to achieve
higher certification levels (Gold or Platinum) whenever project resources and conditions
permit. Regardless of the level of certification, the project shall include at a minimum:
seven (7) of the total LEED points achieved shall be for energy performance; two (2) of
the total LEED points achieved shall be for water use reduction; and one (1) of the total
LEED points achieved shall be for construction waste management. All projects shall
develop and implement a Measurement & Verification Plan consistent with EA Credit 5,
which will result in an additional point for energy efficiency. All new City buildings not
intended for human occupation shall be designed, contracted, and built to include as
many prerequisites and performance benchmarks of the LEED-NC program as possible.
Buildings not intended for human occupation include utility, material, and equipment
storage type structures, structures where occupancy is typically intermittent, or
structures not designed to have heating and/or air conditioning equipment installed, i.e.
open sided structures.

Section 4 - The City Council hereby declares that all future renovations of City
buildings shall be designed, contracted, and built to include as many prerequisites and
performance benchmarks of the LEED for Existing Buildings (LEED-EB) program as possible. If a building renovation involves replacement of appliances, heating and/or air conditioning equipment, or other systems that use energy, the new equipment shall be Energy Star qualified, if qualified equipment is available.

Section 5 - The City Council, to maintain tight control over the cost of City building projects, qualifies the above Section 3 of this Green Building Policy to require the total LEED project life cycle cost analysis demonstrate an operational cost savings payback within ten (10) years for any premium above the industry standard. Where the operational cost savings payback is anticipated to be more than ten (10) years, the City Manager is directed to approve the level of LEED certification appropriate for that particular project. If no level of LEED certification is feasible, the project under consideration shall include as many prerequisites and performance benchmarks of the LEED program that are feasible and at a minimum all equipment installed in the building shall be Energy Star qualified, if qualified equipment is available.

Section 6 - The City Council may grant exceptions to this Policy when it deems appropriate.

Section 7 - The City Council directs the City Manager to perform a review of this policy within two (2) years after the policy is adopted and to provide a report to the City Council’s Community Involvement Committee regarding any recommended changes to the policy.

Passed at meeting: February 25, 2008

Attest: , City Clerk

Filed as Ordinance: February 25, 2008

Approved as to form: , Assistant City Attorney

Approved for Council action: , City Manager
EXPLANATION TO SUBSTITUTE COUNCIL BILL NO. 2007-315

ORIGINATING DEPARTMENT: Planning and Development & Public Works

PURPOSE: To adopt a resolution establishing a Green Building Policy for the City of Springfield that requires environmentally sensitive construction practices, in conformance with Leadership in Energy and Environmental Design (LEED) standards, for new construction and renovation of City-owned buildings. (Community Involvement Committee and staff recommend approval.)

BACKGROUND INFORMATION:

The Council's Community Involvement Committee met on the proposed policy on February 8, 2008. The committee recommended approval with the following changes to the proposed policy (Exhibit A).

1. Require certification at the LEED-NC Silver level.
2. Require a 10-year operational cost savings payback period.
3. Require at least seven points for energy performance in new buildings.
4. Require the use of Energy Star equipment, if available, for building renovations.
5. Remove Section 6 that encourages the use of green building guidelines within the community.
6. Require two points for water use reduction.
7. Require all projects develop and implement a Measurement & Verification Plan consistent with EA Credit 5 (one point).
8. Require one point for construction waste management.
9. Require the policy be reviewed within two years of adoption.

The Committee also directed staff to develop a project life cycle cost analysis that would come back to the committee for review and approval.

STAFF COMMENTS:

The proposed policy requires that all new City-owned buildings, of any size and intended for human occupation, be designed, contracted and built to meet the prerequisites and performance benchmarks of the LEED-NC Silver certification level, and to strive to meet the prerequisites and performance benchmarks of higher certification levels (Gold or Platinum) whenever project resources and conditions permit. Economic feasibility for achieving the Silver Certification level is based on a cost/benefit ratio that reflects a return on investment of not more than ten years. Future renovations and City buildings not intended for human occupation must be designed, contracted and built to include as many prerequisites and performance benchmarks of the LEED program as possible. Renovations must include Energy Star equipment if available. Buildings not intended for human occupation include utility and material and equipment storage type
structures; structures where occupancy is typically intermittent, or structures not designed to have heating and/or air conditioning equipment installed, i.e. open sided structures.

Certification of buildings by the U.S. Green Building Council will provide independent verification that the Silver certification level is achieved. The 10-year payback is more realistic for achieving energy cost savings. The seven points for energy performance will result in energy cost savings of 31.5%. The two points for water use reduction will result in a 30% reduction in water use. The one point for construction waste management will result in a 50% diversion of waste materials from the landfill. The one point for the Measurement & Verification Plan will provide the information to evaluate the policy over the next two years.

RECOMMENDATION:

Community Involvement Committee recommends approval.

Staff recommends approval.

Submitted by: Ralph Rogersdale
Planning and Development

Approved by: City Manager

Public Works

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Exhibit A

A RESOLUTION

ADOPTING the City of Springfield, Missouri, Green Building Policy.

WHEREAS, the Springfield/Greene Vision 20/20 Comprehensive Plan sets forth goals for preserving and improving the natural and built environment of the City, protecting the health of its residents and visitors, and fostering its economy; and

WHEREAS, the City of Springfield is an acknowledged environmental leader in the State of Missouri; and

WHEREAS, the City of Springfield recognizes and accepts its responsibility to implement and promote building practices that protect Springfield's natural and built environment; and

WHEREAS, green building is a whole systems approach to the design, construction and operation of buildings that employs materials and methods that promote natural resource conservation, energy efficiency and good indoor air quality; and

WHEREAS, some conventional design and construction methods can produce buildings that negatively impact the environment; these buildings may be unnecessarily expensive to operate and contribute to excessive resource consumption, waste generation, and pollution due to unnecessary landfills of wasted materials, and inefficient use of energy and water; and

WHEREAS, emissions from some conventional construction materials, including paints, carpets, and particleboard may contribute to a host of health problems associated with poor indoor air quality; these health impacts may be exacerbated by conventional ventilation technology and may result in lost productivity and increased costs for maintenance, waste disposal and health care; and

WHEREAS, green building design, construction, and operation can minimize or avoid these types of adverse impacts in a variety of ways: by incorporating energy and water efficient technologies and landscaping, using recycled content materials, reducing construction and demolition waste, improving indoor air quality and promoting long-term economic efficiency; and

WHEREAS, the Leadership in Energy and Environmental Design (LEED) Green Building Rating System and Certification is a nationally recognized standard for excellence in facility design and has multiple levels of certification; and

WHEREAS, the Springfield City Council finds that green design and construction decisions made by the City in the construction and remodeling of City buildings can result in significant cost savings to the City over the life of the buildings; and

WHEREAS, the benefits of green building design, construction, and operation should be enjoyed by the residents, workers, and visitors of the City.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF
SPRINGFIELD, MISSOURI, the following:

Section 1—That green building design, construction and operation furthers the goals set forth in the Springfield/Greene County Vision 20/20 Comprehensive Plan.

Section 2—That the City Council hereby adopts the “City of Springfield Green Building Policy.” This policy reflects the City’s commitment to encouraging environmentally sensitive construction practices in the City of Springfield by utilizing, for City-owned buildings, construction practices that meet the prerequisites and performance benchmarks of the Leadership in Energy and Environmental Design (LEED) certification process.

Section 3—That the City Council hereby declares that all new City-owned buildings, of any size and intended for human occupation, will be designed, contracted and built to meet the prerequisites and performance benchmarks at the LEED Silver certification for new construction (LEED-NC) level, and to strive to meet the prerequisites and performance benchmarks at achieve higher certification levels (Gold or Platinum) whenever project resources and conditions permit. Actual certification of buildings by the U.S. Green Building Council is not required. Regardless of the level of certification, at a minimum: seven (7) of the total LEED points achieved will be for energy performance; two (2) of the total LEED points achieved will be for water use reduction; and one (1) of the total LEED points achieved will be for construction waste management. All projects will also develop and implement a Measurement & Verification Plan consistent with FA Credit 5, which will result in an additional point for energy efficiency. All new City buildings not intended for human occupation will be designed, contracted and built to include as many prerequisites and performance benchmarks of the LEED-NC program as possible. Buildings not intended for human occupation include utility and material and equipment storage type structures; structures where occupancy is typically intermittent, or structures not designed to have heating and/or air conditioning equipment installed, i.e. open sided structures.

Section 4—That the City Council hereby declares that all future renovations of City buildings not intended for human occupation will be designed, contracted and built to include as many prerequisites and performance benchmarks of the LEED-EB program as possible. If a building renovation involves replacement of appliances, heating and/or air conditioning equipment, or other systems that use energy, the new equipment shall be Energy Star qualified, if qualified equipment is available. Buildings not intended for human occupation include utility and material and equipment storage type structures; structures where occupancy is typically intermittent, or structures not designed to have heating and/or air conditioning equipment installed, i.e. open sided structures.

Section 5—That the City Council, to maintain tight control over the cost of City building projects, qualifies the above Section 3 of this Green Building Policy to require a cost/benefit ratio that reflects a return on investment of no more than five (5) years for each “Green Building” design element for projects designed to the LEED Silver Standard. The total LEED project life cycle cost analysis demonstrate an operational cost savings payback within ten (10) years for any premium above the industry standard. Where the return on investment operational cost savings payback is anticipated to be more than five (5) ten (10) years, the City Manager is directed to approve the level of LEED certification appropriate for that particular project. If no level of LEED certification is feasible, the project under consideration shall include as many prerequisites and performance benchmarks of the LEED program that are feasible and, at a
minimum all equipment installed in the building shall be Energy Star qualified, if qualified equipment is available.

Section 6: That the City of Springfield will encourage private residential and commercial developers to use green building design, construction and operation whenever feasible.

Section 7: The City Council may grant exceptions to this Policy when it deems appropriate.

Section 8: The City Council directs the City Manager to perform a review of this policy within two (2) years after the policy is adopted and to provide a report to the City Council's Community Involvement Committee regarding any recommended changes to the policy.