

**CITY OF NEWARK
DELAWARE
PLANNING COMMISSION
GREEN BUILDING CODE WORK GROUP MEETING**

**TUESDAY, NOVEMBER 27, 2018
3:30 – 5:30 P.M.**

**NEWARK MUNICIPAL BUILDING
220 SOUTH MAIN STREET
COUNCIL CHAMBER**

AGENDA

1. Introductions
2. Chair's Remarks
3. Discussion: Goals of Green Building Code
4. Discussion: Focus Areas for Green Building Code
5. Items for Next Meeting
6. General Public Comment
7. Selecting December Meeting Date

The Green Building Code Work Group may modify the above agenda.

Advertised on November 13, 2018

Posted on November 20, 2018

Attest:

Sworn by:

CITY OF NEWARK
Delaware

August 8, 2007

TO: Mayor and City Council
FROM: Carl F. Luft, City Manager



SUBJ: LEED "Green Building" and Related Energy Conservation Issues

In April, based on a report from the Conservation Advisory Commission, Council asked the City staff to work with the Commission to develop a proposal regarding the LEED Green Building Rating System in order to improve energy conservation and energy efficiency in new construction in the City of Newark.

As a result, the staff has had a series of meetings with Steve Dentel, CAC Chairman, and has also researched this matter and suggests the following for Council's consideration and direction:

- Based on the Building Department's final review, Council will be asked to adopt the 2006 International Energy Conservation Code that significantly updates the City's local Building Code requirements for construction to promote energy efficiency and conservation. Most important in terms of the CAC's goals in this regard, the new code will apply to all buildings constructed in the City of Newark – residential, commercial, industrial and those owned by the University of Delaware. Because so much of the City's new construction is conducted on campus, we believe that a meaningful energy efficiency and conservation program must include University projects.
- The Planning Department will propose an amendment to Zoning Code Article XXVII, Site Plan Approval, stipulating that its density bonus provisions for residential uses will apply to LEED certified buildings. The LEED (Leadership in Energy and Environmental Design) "Green Building" Rating System is the most prominent national program intended to provide incentives for "green" building construction. It should be noted that while the LEED Rating System at the moment is specifically designed for commercial and industrial buildings, the United States Green Building Council, the developers of LEED, are working on a companion system for residential structures. This means that once the residential LEED system is created, the City's amended Site Plan Approval process will be in place to provide density bonuses for "green" residences.

- Regarding commercial and industrial buildings, we believe that the City's adoption of the new International Energy Conservation Code will ensure that new construction of this type meets the latest and most appropriate standards for energy conservation and efficiency. We do not believe additional incentives for more "intensive or larger buildings (buildings with more floor area than typically permitted) make sense in Newark in light of the community and related impacts that will result from more intense projects on existing parcels within the City. Nothing in our current regulations precludes a commercial or industrial developer from voluntarily complying with LEED requirements in order to receive LEED certification.
- Regarding City buildings and construction, we recommend that in the future, the City seriously consider utilizing LEED certification standards for municipal construction.

Finally, we thought it would be helpful to attach a recent report from the ICC (International Code Council) recently issued that evaluates the LEED Program as well as providing related information concerning the status of "green buildings," in the United States. As you will see, our recommendations are in line with the approach endorsed by the ICC.

Please let me know if you would like to have this item placed on a future Council agenda for final discussion and direction. If you have any other questions, please also let me know.

CFL/ed

Attachments

c: Thomas J. Sciulli, Building Director
Charles R. Emerson, Parks and Recreation Director
Roy H. Lopata, Planning Director
Steve Dentel, Chair, Conservation Advisory Commission

March 5, 2007

ICC Green Building White Paper

Purpose

The purpose of this paper is to give an overview of the current green building climate, track the efforts of various organizations in this area and provide a general background or primer for ICC members and others interested in green building and the relationship of green building to the codes produced by the International Code Council.

What is Green Building?

Green building can be characterized as building with a conscious effort to minimize the negative impacts and encourage positive impacts of buildings on both the indoor and outdoor environments. The practice of green building typically includes attention to the following primary concepts and systems:^{1,2}

- Sustainable/durable/low maintenance building design and operation
- Energy efficiency and conservation
- Site/land management, sustainability, reclamation and conservation
- Water efficiency, management and conservation
- Indoor Air Quality (IAQ)
- Outdoor Air Quality
- Material and resource management, recycling and conservation (including the re-use of building materials and products)
- Innovation

Each of the above major concepts and systems may be broken down into many specific and detailed components. A covered entry over an exterior entry door, for example, may be one way of reducing water intrusion, which is one way that maintenance may be reduced in accordance with the NAHB Model Green Home Building Guidelines.¹

Green Building Rating Systems

Most buildings, even existing buildings, may be considered "green" to some extent. The previous example of a covered entry is one way in which many homes could be considered green. Similarly, when a community decides to enforce or encourage water conservation or enforce requirements which address urban heat island issues, these may be considered "green" initiatives. Federal government sponsored programs such as Energy Star³ and those outlined in 10 CFR Parts 435⁴ (Energy Conservation Voluntary Performance Standards for New Buildings; Mandatory for Federal Buildings) and 436⁵

March 5, 2007

(Federal Energy Management and Planning Programs), address energy and/or energy conservation, which are green building principles. Should all these buildings be considered "green"? To answer this question, as well as to give further weight and definition to the term "green", green building rating systems have been developed. These rating systems seek to establish minimum criteria and methods by which green buildings can be measured, compared and evaluated. Green building rating systems typically grade a structure on a scale so that various levels of "green" may be verified or certified. A point system is often utilized, with points given for each environmentally friendly concept implemented. The criteria analyzed and the relative score assigned to each criteria satisfied, however, may vary significantly from one green building rating system to another.

In the United States, a handful of local jurisdictions have developed their own green building criteria or rating systems, but typically only for low-rise residential structures, such as governed by the ICC International Residential Code. More prominently, the Leadership in Energy and Environmental Design (LEED) green building rating system, developed by the United States Green Building Council (USGBC) has been utilized for a limited but fast growing number of "green" commercial structures.

The Current Status of Green Building

The groundswell of interest in green building in the United States continues to grow and gain momentum. We hear of "the greening of America" regularly in the media. The Federal Government and more and more state and local jurisdictions are either requiring that government owned buildings, as well as government sponsored or funded projects, be built to green standards (such as the standards of one of the green building rating systems), or they may give some form of incentives to expedite private or corporate projects that are built green. Why? Because such buildings typically cost significantly less when considered over their expected life span, may not cost prohibitively more initially than conventional structures, have less negative impact on the environment and may significantly reduce the huge amount of financial investment required for infrastructure (such as new water treatment and power plants).

Even though green building continues to gain significant momentum, it is still very much in its infancy. While it is true that even ancient thatched huts could be considered green buildings, the concept of controlling and measuring the impact of the construction of modern buildings on the environment is quite new and revolutionary, especially at the level of detail required by some green building rating systems. The determination of what are the proper applications of new concepts such as life cycle analysis (LCA, which seeks to determine the overall environmental impact of and total energy consumed by building products, from extraction of raw materials to manufacturing, transportation, how they are

March 5, 2007

finally disposed of, etc.⁶) and embodied energy (which seeks to evaluate criteria similar to LCA, but for all products and materials in an entire building⁷), for example, are still in their early stages of development. And what value should be assigned to a materials effect on the ozone vs. its effect on water, for instance, can be very subjective. Some of the criteria and methods used to evaluate green building systems can, in themselves, be very arbitrary and unscientific, and may vary significantly from one rating system to the next. How many points do we give for one wind generator versus five, or to the use of recycled wood products versus saving trees on a site? Is one more important than the other? Should we give any points at all, or should we subtract points if recycled wood products also happen to contain formaldehyde? Is addressing water pollution more important than addressing light or noise pollution? Each green building rating system has a different approach to these issues, and each system continues to evolve and improve.

Although many citizens and government officials simply feel green building is the right thing to do, federal, state and local jurisdictions have typically stopped short of mandating green building (as defined by a green building rating system) for private or corporate owned buildings. Instead, federal, state and local jurisdictions which have implemented green building programs typically require only government owned, funded or sponsored buildings to be built to green standards. Their primary motivation is to serve as an example to the public of what can be done to conserve energy and resources, as well as to save maintenance and operating costs over the life span of the building. And aside from the environmental benefits to green building, there can be additional financial benefits such as reduced utility, maintenance and even healthcare costs.

Green building for privately owned and corporate buildings, however, is typically *voluntary*, except for specific government sponsored or funded "green" projects. Local jurisdictions have developed these *voluntary* programs to stimulate green building, and typically offer incentives, such as expedited permits and plan reviews, awards and tax credits to stimulate interest in the programs. In addition, a number of local Home Builders Associations have set up their own *voluntary* green building programs for low-rise residential structures.

Only a very limited number of jurisdictions have implemented *mandatory* green building requirements (as defined by a green building rating system) for *private sector* commercial or residential structures. An informal internet search conducted on November 27, 2006, found 8 jurisdictions with *mandatory* green building requirements for *private sector* commercial and/or residential structures. The jurisdictions were: Austin, Texas; Battery Park City, New York, New York; Frisco, Texas; Novato, California; Santa Cruz, California; Sebastopol, California; Seattle, Washington; and Telluride, Colorado. But even among some in this group, it appears that *mandatory* green building requirements may be tied only to programs sponsored or funded by local government agencies. Still, it is an emerging trend which appears to indicate that, as building officials, designers and contractors become more familiar with *voluntary* green building requirements, there may be less resistance to the implementation of *mandatory* requirements.

March 5, 2007

Green Building Rating Systems for Commercial Structures

Although similar green and sustainable building concepts can be applied to both commercial and residential structures, there has been a divergence in the development of the rating systems for each.

As alluded to previously, although there is an emerging trend toward mandatory green building, even where jurisdictions have adopted green building programs, corporate and commercial buildings are *not* typically *required* to be "green" (as defined by a green building rating system), except in special cases as part of specific government sponsored projects. Yet more and more such buildings are *voluntarily* built to "green" standards every year, even where jurisdictions have no green building program whatsoever. At the federal, state and local levels, more and more government agencies are requiring that buildings utilized for government purposes (not privately or corporate owned buildings) be built to "green" standards.

For commercial buildings in the United States, federal, state and local jurisdictions, corporations and designers have overwhelmingly looked to the aforementioned LEED green building rating system as a basis for the assessment and certification of the anticipated performance of a building with respect to "green" attributes.⁸ A major reason that the LEED program has become so popular and prominent may be that it is a system which can be administered and certified by USGBC staff, rather than putting a significant burden on local building departments. The USGBC is a not-for-profit organization which is not affiliated with the federal government. Over 2,100 LEED-NC (LEED for new commercial construction) projects were registered in the year ending September, 2005. In the same time period, the states of Nevada, Washington, Arizona, Rhode Island, Colorado, Maryland and Michigan either mandated LEED projects for government buildings and projects, or provided tax abatements or credits for LEED certified commercial buildings. The USGBC not only rates and certifies green buildings, it also has programs to train and certify LEED-accredited professionals. As of 2005, 22,000 professionals were LEED Accredited.⁹ It is important to note, however, that being LEED certified does not mean a building has no negative impact on the environment, and the LEED program, as well as all other green building evaluation systems, are in their early stages of their development.

In 2002, the U.S. Office of Management and Budget's Circular A-11 encouraged federal agencies to incorporate Energy Star³ (a voluntary program developed by the Environmental Protection Agency to help businesses and individuals protect the environment through superior energy efficiency) or LEED into all designs for new buildings and renovations. As a result, many federal agencies or departments began to use LEED and most new federal buildings and renovations since that time have been LEED certified.¹⁰ Also of note on the federal front, in 2005, Congress passed the Energy Policy Act (EPACT), which provides increased incentives for alternative power (solar and wind) and energy conservation for buildings in the private sector. As alternative power is also a green concept, this will also serve to further stimulate green building. Other

March 5, 2007

federal and some state and/or utility company sponsored incentives to conserve energy are often coordinated and integrated in green building programs.

In 2006, the USGBC began working with The American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE) and The Illuminating Engineering Society of North America (IESNA) to create an ANSI-accredited standard for green building that could be incorporated into building codes. Known as Standard 189, when finalized, it is intended to establish a baseline for high-performance green buildings (other than low-rise residential buildings) and will eventually be a prerequisite under LEED. The USGBC contends that the new standard will draw on LEED, but will be distinct from LEED, and the LEED program will continue to exist, albeit in a modified form. Standard 189 is scheduled for completion in 2007. Greg Gress, ICC Senior Technical Staff, Codes and Standards Dept., is serving as a consultant to the Standard 189 Committee.¹¹

Originating in Canada and relatively new to the United States (2004), Green Globes is a green building rating system for commercial buildings which is gaining significant attention.¹² Major related points of interest regarding Green Globes are as follows:

- The Green Building Initiative (GBI), working in conjunction with the National Association of Home Builders (NAHB), has acquired the rights to Green Globes in the United States and is actively promoting the program.
- Although originally criticized for its lack of third-party verification procedures, the Green Globes program now offers the option of verification of submitted data by GBI-approved and Green Globes-trained licensed engineers and architects.
- GBI is the first green building organization to become ANSI accredited.
- Current efforts of GBI and Green Globes, similar to that of USGBC and LEED, have been focused on the development of an ANSI-accredited green building standard for commercial buildings to be utilized in conjunction with Green Globes.
- As part of the ANSI protocols to develop Green Globes as an ANSI standard, Steven Thorsell, Licensed Architect and ICC Evaluation Services Chicago Regional Manager is currently serving as a technical committee member.

Green Building for Residential Structures

With regard to single-family dwellings, two-family dwellings and townhouses (low-rise residential structures typically regulated under the International Residential Code), a handful of local jurisdictions across the country have developed and are administering their own residential green building programs and rating systems. As noted earlier, to date these programs have typically been *voluntary*, with incentives given (such as shorter permit and plan review times) to generate interest in the programs. While there are a fair and growing number of *voluntary* residential green building programs in the country, as noted earlier, there is also an emerging trend toward *mandatory* requirements in communities which have had previous experience with voluntary green building

March 5, 2007

programs. On a parallel note, although energy is only one component in the green building scenario, it may be of interest to note that the city of Austin, Texas (which in 1991 became the first city in the U.S. to implement a green building program) recently announced plans to make "Zero-Energy Capable" homes mandatory by 2015. The intent is that such homes will be energy efficient and adaptable to be net-zero energy efficient homes in the future (when on-site energy generation, such as solar photovoltaics could be designed and installed with minimal modifications to the structure). The City of Austin contends that such homes could be approximately 60 percent more efficient than homes built to current codes.¹³

Even where not required to do so by federal, state and local government agencies, many builders and developers throughout the country have claimed their residential projects to be green and have utilized this distinction as a marketing tool. Lower utility bills, cleaner indoor air, less environmental impact, etc. are often advertised in an effort to give builders a competitive advantage. Until recently, however, outside of the handful of local jurisdictions and Home Builders Associations in the country which developed their own green building programs, there were few tools which could be used to objectively evaluate or quantify a home as being green. To further complicate matters, because many typical residential construction practices (such as the use of recycled wood products like particle board and OSB, the use of ceiling fans and simply meeting the energy provisions of the IRC) may be considered applications of "green" principles, it could be argued that almost any home is green to some degree. In an effort to set measurable minimum criteria for residential green buildings and create a yardstick for comparison, The Model Green Home Building Guidelines were unveiled by NAHB last year.¹ On behalf of ICC, Senior Staff Architect Allan Bilka, Technical Services, Plan Review Dept., was involved in the formulation of these guidelines as a member of the Stakeholder Group for the guidelines. Some local Home Builder Associations (HBAs) across the country now utilize these guidelines, and now have procedures in place to certify green buildings in accordance with them. In addition, the city of Las Vegas, Nevada, recently announced the creation of a green building program based on The Green Home Building Guidelines, becoming the first city to do so. Once again, as appears to be the trend, ANSI-accreditation is currently being sought by NAHB, in association with ICC, for a green building standard based upon the Model Green Home Building Guidelines.

Meanwhile, The USGBC is in the process of developing a LEED for Homes program to evaluate low-rise residential green buildings. LEED for Homes is intended to be a much more user friendly and streamlined system than LEED for commercial buildings. Currently in the pilot stages of development, the specific requirements and procedures for the program are still evolving, so it is too early to comment on its potential impact. It does appear, however, that the USGBC intends to develop and certify a network of third party reviewers to evaluate project submissions for the program.¹⁴

March 5, 2007

The Impact of Green Building on the I-Codes

Green building has already impacted the I-Code's. Some green and sustainable principles have direct impact on or virtually duplicate existing code provisions. In such cases, the greening of the codes may simply be a matter of raising the bars which are already in place in the codes. This process is already taking place, such as in the case of increases in energy efficiency required by the International Energy Conservation Code over time. Similarly, code text is being amended to accommodate green building. For example, while all urinals in the 2003 International Plumbing Code are required to meet hydraulic supply standards, they unintentionally prevented the use of waterless urinals. In the 2006 IBC, however, minor revisions were made to the code text to require that only water supplied urinals conform to hydraulic performance standards.

A fundamental aspect of many green building rating systems is to spur innovation and the development of creative solutions related to green building. Many green building rating systems give credits or points for such innovation. The concept of innovation, however, may be difficult to require or quantify in the codes. Green building rating systems also typically use many of the criteria in existing codes and standards, including various ICC Codes, as fundamental baseline or minimum standards, then seek to outperform those criteria. For example, to meet energy criteria for green building, it may be necessary to meet the minimum requirements of the ICC Energy Code, and additional points may be given if those minimum requirements are exceeded by specified percentages.

Other green building concepts may never have an impact on current or future ICC codes. For example, although various government requirements may regulate the use of asbestos, the ICC codes do not. Should ICC assume the role of regulating the amount of various chemicals in buildings and/or building products? Some standards and government agencies already do so, or may in the future. It is probably best that some green building concepts be addressed outside of the codes. In the end, these points serve to illustrate that it is possible for the codes and green building rating systems and standards to coexist.

The efforts of some government agencies to create and administer their own green building programs have been pioneering, innovative and detailed. Others appear to be oversimplified, subjective and contain almost arbitrary requirements. And some critics have pointed out that the application of rating systems such as LEED and, to a lesser extent, Green Globes and MGHBG, can be an overwhelming and very subjective process with few criteria which are truly measurable. It is too early to tell whether recent efforts to create green ANSI standards will yield more effective, tangible and measurable requirements which can be applied in the quantitative manner standards demand. The developers of some of these standards intend that they could be referenced in the codes, adopted by various agencies or jurisdictions or utilized by third parties to verify compliance. Other developers prefer that green building concepts remain voluntary. In either case, as municipalities struggle to initiate and administer their own programs, they

March 5, 2007

may be ready and able to see the value of green standards when they become available, as opposed to developing their own. It will also be easier for designers, builders, contractors and building officials to comply with green building requirements and evaluate green buildings if green building criteria are standardized, as opposed to varying from jurisdiction to jurisdiction.

Real vs. Perceived Code Barriers to Green Building

In reality, there are few, if any, real barriers which actually prevent green building in the I-Codes. However, just as with all methods and materials which are not prescribed in the codes, testing, evaluation reports and/or other information may be required for green building products, materials or methods before building officials have enough information to confidently approve them. This was true of products like plywood and insulated concrete form (ICF) walls when they first appeared, and it will be true of many new and alternative materials and methods as they relate to green building as well.

Historically, as new and innovative materials and methods slowly become standard practice, the criteria to regulate them prescriptively have made their way into the codes. As interested parties get involved in the code change process and submit code changes, many green and sustainable materials and methods will thus be prescribed in the codes. Along the way, however, testing, standards development and evaluation reports may be necessary, but they typically cost money and take a great deal of time. Most individuals acting on their own neither have the funds nor the patience required to see the process through. For example, if one desires to build their home's exterior walls from recycled tires (an actual alternative construction method), the International Residential Code (IRC) does not contain prescriptive criteria for such a structure, and engineering data may be hard to come by. Manufacturers and trade associations associated with a product such as tires are not likely to be interested in creating standards or prescriptive code requirements for the use of their products as a recycled building construction material. But without complete information on a proposed alternative material or method, building officials may not be inclined to give their approval. Subsequently, permits may be denied and a project may never get off the ground.

Even if building officials were to try to keep open minds concerning the desire of a permit applicant or owner to implement certain untested green building principles, they must also struggle with the concerns of future building owners, as well as the long term effects of untested building methods on the face of their community in general. Jurisdictions with experience in green building, however, appear to have shown that many of the fears and apprehensions often associated with green building are simply fears of the unknown. It simply takes time for officials to become knowledgeable and comfortable with green building principles, just as it takes time to become familiar with the complexity of code requirements in general. In addition, permit applicants must be willing to do the leg work required to provide building officials with the enough information so that the officials can lend their approval with confidence.

March 5, 2007

Some green building advocates feel that code requirements place unfair barriers to green building because they impose additional restrictions on or require additional information for various green building elements. But there are many examples of scenarios throughout the existing codes and standards where multiple requirements regulate the same building components. Green building requirements are yet another ingredient which must be added to the mixture of items which must be considered in the daily duties of building officials, designers, contractors and manufacturers. The interaction of such requirements and the "best" solutions will vary with each scenario. The resolution of apparent conflicts between green building and current code requirements will require creative new solutions. Yes, the codes do present hurdles which green building advocates may be forced to overcome from time to time. But, as in the example of waterless urinals or plywood, as cited earlier, such barriers are typically not without achievable resolution. In the event that there are true conflicts between the codes and green requirements, the administrative chapters of each of the I-Codes indicate that specific requirements govern over general requirements and, where neither is more specific, the more restrictive governs. Although it is acceptable for green building requirements to be more restrictive than the code's requirements, where they are less restrictive, the code's requirements govern.

It is important to realize, however, that alternative materials and methods, including those related to green building, are not prohibited by the code. In fact, the administrative chapters of the I-Codes contain sections which govern such matters, typically requiring additional information, such as evaluation reports, be provided to the code official showing that the alternative method or material performs in a manner which is at least the equivalent to similar code prescribed materials and methods. It is also important to note that, while ICC manages the code change process and publishes those results, ICC does not write the codes. The code change process is open to building scientists, the general public, designers, engineers, manufacturers and builders, etc. All interested parties are encouraged to become involved in the code change process, and ICC Code Development Staff is already in place to provide guidance and make that process as painless as possible. But it is up to those outside of ICC to become actively involved in the code change process if they truly desire innovation and change. ICC should not function as a vehicle to weaken current codes just to accommodate green building. It will certainly be necessary to add to and modify current code language and to reference new construction and material standards as the green building movement develops. But, as guardians of public interests, ICC and local building officials have a responsibility to make sure that green materials and methods undergo the same scrutiny and procedures that other code prescribed materials and methods have endured. The public health, safety and general welfare must be safeguarded for green buildings, just as it is for all other buildings.

Summary

- Almost any building, new or existing, may be considered "green" to some extent.
- Although a building can certainly be "green" without being certified by a municipality or a green building rating system, certification serves to substantiate and quantify such claims.
- Green building rating systems seek to establish minimum criteria and methods by which green buildings can be measured, compared and evaluated.
- Green building rating systems typically use ICC code requirements as relative baseline requirements, then require higher standards in some areas, but also contain an array of additional requirements which are not currently addressed in the ICC codes.
- Although the ICC codes are the foundation upon which most buildings, including green buildings, in the United States are built, not one point would be awarded by the LEED or the Green Home Building Guidelines for building in accordance with the minimum requirements of the ICC codes.
- The concept of green building in contemporary usage is intended to imply building above and beyond minimum code requirements, with the primary focus and intent being to protect the environment.
- The most prominent green building rating system for *commercial* structures is the LEED program, developed by the USGBC, but the Green Globes program, developed by GBI, appears to be gaining popularity.^{1, 2, 10}
- For one- and two-family dwellings and townhouses, due to the previous lack of an established low-rise residential rating system, government agencies in the past were forced to develop their own low-rise residential rating systems or referred to limited portions of LEED requirements intended for commercial buildings. The introduction of The NAHB Green Home Building Guidelines and the impending introduction of The LEED for Homes programs, however, are certain to have an impact on the green low-rise residential scenario.
- Both GBI and USGBC are currently developing green building ANSI standards.
- For *private sector low-rise residential* structures, a limited but growing number of local jurisdictions across the country have implemented *voluntary* green building programs.
- Even in jurisdictions with established green building programs, *private sector* buildings, both residential and commercial, are not typically *mandated* to be "green", except in special cases as part of specific government sponsored or funded projects.
- Only a very small number of jurisdictions have *mandatory* "green" requirements (as defined by a green building rating system) for *private sector* buildings. Emerging trends, however, appear to indicate that, once voluntary green building programs have been in place and tested, building officials, the public, designers and contractors may be more accepting of mandatory requirements.
- The federal government is currently utilizing the LEED green building program for virtually all of its newly constructed and renovated *public sector* buildings and

projects (both *commercial and residential* in nature).¹⁰

March 5, 2007

- At the state and local levels, green buildings are increasingly being *mandated* for both *commercial and residential public sector structures* (structures which are owned by or are part of programs which are sponsored or funded by state or local jurisdictions).⁹
- Even where jurisdictions have no green building program whatsoever (either voluntary or mandatory), builders, designers and building owners in the *private sector* are increasingly electing to *voluntarily* build green. This is applicable to both commercial and low-rise residential projects.
- Green building has already impacted the I-Code's.
- Some issues associated with "green" building, such as encouraging innovation, are outside of the scope of the ICC codes.
- There is currently an absence of requirements in the I-codes for building products which are specifically based on green or sustainable criteria.
- Just as with all methods and materials that are not prescribed in the codes, information may be required for alternative green building products, materials or methods before building officials have enough information to confidently give their approval. Thus, if someone wants to do something which is not prescribed in the codes, they may have to do something else first. Though is often perceived as a barrier, it is really more akin to a hurdle, a hurdle which can be overcome.
- Where green building programs are implemented in a jurisdiction, there will be a learning curve for code officials, just as there likely was with their initial exposure to the ICC codes. However, green building programs such as LEED, which offer evaluation and certification, may significantly reduce the potential work load for building officials.
- As guardians of public interests, ICC and building officials have a responsibility to ensure that "green" materials and methods undergo the same scrutiny and procedures that other code prescribed materials and methods have endured.

Final Thoughts

Over time, more and more "green" materials and methods will appear in the codes and/or have an effect on current code text. But the implications of green and sustainable building are so wide and far reaching that their effects will most certainly not be limited to one single code or standard. On the contrary, they will affect virtually all codes, and will spill beyond the codes. Some green building concepts may become hotly contested political issues in the future, possibly requiring the creation of new legislation and/or entirely new government agencies. It is certain, however, that the greening of the codes is inevitable, the greening process will continue to demand the time and effort of many individuals and organizations, and ICC will be definitely be one of those agents of change. Green buildings are, after all, buildings, and ICC is all about producing codes which safeguard the public health, safety and general welfare with regard to the built

environment.

Prepared by Allan M. Bilka, RA, Senior Staff Architect, ICC Technical Services.

Endnotes:

1. <http://www.nahb.org/generic.aspx?sectionID=222&genericContentID=56077>
(NAHB Model Green Home Building Guidelines, National Association of Homebuilders, 2006)
2. <https://www.usgbc.org/ShowFile.aspx?DocumentID=1095> (LEED-NC Green Building Rating System for New Construction and Major Renovations)
3. <http://www.energystar.gov/>
4. <http://www.wbdg.org/pdfs/10cfr435.pdf>
5. <http://www.wbdg.org/pdfs/10cfr436.pdf>
6. Life Cycle Assessment and Sustainability, a supplement to Building Design & Construction, November, 2005.
7. <http://www.greenhouse.gov.au/yourhome/technical/fs31.htm>
8. Sustainable Rating Systems Summary, Completed by the Pacific Northwest National Laboratory, operated for the U.S. Department of Energy by Battelle, July 2006.
9. 2006 Green Building Update, by Jerry Yudelson, 2006.
10. http://www.ofee.gov/sb/fqb_report.html (The Federal Commitment to Green Building: Experiences and Expectations)
11. <http://www.usgbc-sd.org/images/FAQ.pdf>
12. <http://www.thegbi.com/greenglobes/>
13. Builder Magazine, October, 2006.
14. <http://www.usgbc.org/DisplayPage.aspx?CMSPageID=147> (LEED for Homes)

BILL NO. 10-09

1st Reading _____

2nd Reading _____

**CITY OF NEWARK
DELAWARE**

ORDINANCE NO. 10 - ____

**An Ordinance Combining Chapter 6, International
Energy Code with Chapter 7, Building, Code of the
City of Newark, Delaware, and Establishing a Newark
LEED Based Energy Conservation Program**

THE COUNCIL OF THE CITY OF NEWARK HEREBY ORDAINS:

That Chapter 6, International Energy Code and Chapter 7, Building, Code of the City of Newark, Delaware, be hereby amended in the following respect:

AMENDMENT 1. Amend Chapter 6, International Energy Code, by eliminating it in its entirety.

AMENDMENT 2. Amend Chapter 7, Building, by adding new Subsections 7-4.1 and 7-4-2. to read as follows:

"Sec. 7-4-1. Adoption of the International Energy Conservation Code.

There is hereby adopted by the City of Newark for the purpose of establishing rules and regulations which establish the minimum regulations governing the energy efficient building envelopes and installation of energy efficient mechanical, lighting and power systems as herein provided; providing for the issuance of permits and collection of fees therefor; and each and all of the regulations, provision, penalties, conditions, and terms of said Energy Conservation Code, of which not less than three copies have been and are now on file in the office of the Code Enforcement Department, being in particular, the 2006 International Energy Conservation Code and all of the nationally recognized standards referred to and incorporated into that code, together with any and all supplements thereto, are hereby referred to, adopted, and made a part hereof, as if fully set out in this ordinance, except such articles and sections as are hereinafter deleted, modified, or amended.

Sec. 7-4-2. Amendments Made to the 2006 International Energy Conservation Code

Amendments made to the 2006 International Energy Conservation Code is hereby amended and changed in the following respects:

(1) 101.1 Title: Insert "City of Newark" within parentheses of this Section.

(2) The following additional energy conservation and efficiency standards shall apply to all major subdivisions, as defined in Chapter 27, Subdivisions, of this code:

a. These additional energy conservation and efficiencies standards shall be based on the most recently issued United States Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) rating system or equivalent standard approved by the Planning and Development Department.

b. Projects shall be reviewed and evaluated and points rewarded as established herein through the building permit process.

c. Required energy conservation efficiency standards shall be derived from the specifications in the USGBC's LEED 2009 for New Construction and Major Renovations and LEED 2008 for Homes, as subsequently revised and reissued, or a Planning and Development Department approved equivalent. Other LEED publications and adopted specifications may also be used as references or guides by the City as part of the energy conservation and efficiency standards review process.

d. Commercial, institutional, high-rise residential and industrial projects shall be required to earn twenty-five (25) points as specified in LEED 2009 For New Construction and Major Renovations [page numbers below refer to said text; these numbers may change in future editions]:

<u>LEED FOR NEW CONSTRUCTION</u>	<u>LEED PAGE</u>	<u>POINTS</u>
1) Water Efficient Landscaping	23	4
2) Optimize Energy Performance	35	2
3) Enhanced Commissioning	39	2
4) Enhanced Refrigerant Management	41	2
5) Green Power	45	2
6) Construction Waste Management	50	2
7) Regional Materials	53	2

8) Certified Wood	55	1
9) Outdoor Air Delivery Monitoring	60	1
10) Increased Ventilation	61	1
11) Construction Indoor Air Quality Management Plan – Before Occupancy	64	1
12) Low Emitting Materials – Adhesives and Sealants	66	1
13) Low Emitting Materials – Paints & Coatings	68	1
14) Low Emitting Materials – Flooring	69	1
15) Indoor Chemical & Pollutant Source Control	72	1
16) Controllability of Systems – Lighting	73	1
17) Thermal Comfort Design	75	1
18) Daylight and Views – Daylight	77	1
19) Daylight and Views – Views	81	1
20) LEED Accredited Professional	84	1

e. Residential (non-high-rise) projects shall be required to earn twenty-five (25) points as specified in LEED (2008) For Homes, [page numbers below refer to this text; these numbers may change in future editions]:

<u>LEED FOR HOMES</u>	<u>LEED PAGE</u>	<u>POINTS</u>
1) Integrated Project Planning	19/20	2
2) LEED Accredited Professional	20	1
3) Landscaping	35/36	7
4) Optimize Energy Performance	55/56	11
<u>OR Substitute A Through G:</u>		
a) Enhanced Insulation	58	2
b) Air Infiltration	61	2
c) Windows	62	2
d) Heating & Cooling Distribution System	64	2
e) Heating & Cooling Equipment	66	2
f) Water Heating	68	2
g) Lighting	71	1
5) Environmentally Preferable Products	79/80	2
6) Construction Waste Management (Table 27)	83/84	2
7) Local Exhaust	92	2
8) Contaminant Control	96	1
9) Garage Pollutant Protection	98	3

f. Unless a waiver is granted for special circumstances or practical difficulties by the Planning and Development Director or his designees through the building permit review process, all interior common area hallways in commercial, institutional and industrial buildings reviewed

under LEED requirements shall be required to include interior lighting occupancy daylight or motion detectors sensors that operate such indoor lighting.

g. Except as otherwise indicating herein, waiver International Building Code, Section 112, Board of Building Appeals.

h. This ordinance shall not apply to subdivisions and/or construction in which building permits have been approved before the adoption of this ordinance.”

MOTION for Acceptance as First Reading on _____, 2010,

By Council Member _____.

Second Reading and Final Passage on _____, 2010.

VOTE: _____ to _____.

Mayor

Attest:

City Secretary

Approved as to Legality & Form:

City Solicitor

**CITY OF NEWARK
DELAWARE
PLANNING AND DEVELOPMENT DEPARTMENT**

May 5, 2010

TO: Mayor and Council

VIA: Kyle R. Sonnenberg, City Manager *KS*

FROM: Roy H. Lopata, Planning and Development Director *R. H. Lopata*

RE: Establishing a Newark LEED Based Energy Conservation Program

I have attached a Planning and Development Department Code Enforcement Division report that describes a series of amendments to the Newark Building Code that would incorporate various aspects of the LEED (Leadership in Energy and Environmental Design) Program of the United States Green Building Council into the City's building permit review process.

As you can also see from the attached, at its March 9, 2010 meeting, the City's Conservation Advisory Commission endorsed an earlier version of these proposed Building Code amendments.

Please note, in this regard, that following discussions with University of Delaware officials and review by City Solicitor Roger Akin of the initial version of the Planning and Development Department Report, Mr. Akin indicated that based on the Delaware State Code requirements and specifications, more than likely the inclusion of the University of Delaware under the terms of this ordinance would not be upheld by the Delaware courts. On the other hand, based on our discussions with University of Delaware Associate Vice President for Facilities David W. Singleton and as you can see from the attached letter, the University, "will commit to meeting the spirit of the ordinance voluntarily. . . ." As a result of the City Solicitor opinion and in light of the correspondence with the University, the specific reference to the University of Delaware included in the earlier version of the attached report has been deleted.

Upon your direction, the City Secretary can prepare the required ordinance for a future Council agenda.

If you have any questions, please let me know.

RHL/ed
Attachments

Cc: Pat Fogg, City Secretary
Steve Wilson, Code Enforcement Supervisor
Thomas Fruehstorfer, Chairperson, Conservation Advisory Commission
David Singleton, Associate Vice President, University of Delaware
Roger Akin, City Solicitor

**CITY OF NEWARK
DELAWARE**

**PLANNING AND DEVELOPMENT DEPARTMENT REPORT
CODE ENFORCEMENT DIVISION**

**May 4, 2010
[Revised]**

**BUILDING CODE AMENDMENTS: ESTABLISHING A NEWARK LEED
BASED ENERGY CONSERVATION PROGRAM**

Background

Following many months of work by the Newark Conservation Advisory Commission (CAC) and based on the CAC recommendations, the City Council held a series of public discussions on April 23, 2007 and August 13, 2007 regarding establishing a Newark Energy Conservation Program. Subsequently, the City Staff held meetings with CAC Chair Steve Dental regarding details of the program. As the results of these discussions, the Staff, in conjunction with the CAC, moved forward on the following three aspects of a Newark Energy Conservation Program that included the following:

1. Amend the Site Plan Approval portion of the Zoning Code [our “flexible” zoning density bonus Code provision] to include LEED Energy Conservation stipulations as a voluntary option for residential, commercial and industrial development.
2. Experiment with LEED requirements for to-be-constructed new city buildings/facilities prior to making a decision whether or not to adopt LEED for all future City funded projects.
3. Evaluate Newark’s current code to determine if and where it can be changed to enhance energy conservation and environmental sustainability for all development projects.

LEED is the United States Green Building Council’s (USGBC) “Green” building rating system and is the most prominent national construction energy conservation program with a uniform methodology, designed to measure the energy conservation performance of new buildings.

The beginning of this process in 2007 represented the key first step in a program intended to modernize and update Newark’s land use review procedures and specifications with the goal of promoting energy conservation.

In any case, to implement Energy Conservation Program item Number One above, the Planning and Development Department drafted a detailed November 11, 2007 report, reviewed

by the CAC, that proposed Zoning Code amendments incorporated LEED certification into the City's Site Plan Approval process. The intent of the amendments, reviewed by the Planning Commission, and eventually adopted by the City Council on February 25, 2008, was to revise and redefine the Site Plan Approval energy conservations standards for residential waivers and density bonuses and to establish an area requirement bonus system for industrial and commercial projects, based on the LEED system of energy conservation certification.

Regarding Energy Conservation Program item Number Two, while Newark has not recently constructed new buildings, the City has applied for and received \$147,800 of federal stimulus funds to implement energy conservation measures within our existing facilities. The stimulus fund improvements include retrofitting of light fixtures, insulation improvements, and window replacements. Additional funds are being sought for conservation and energy efficiency measures that may include City facility water conservation, motor replacements, building management systems, and renewable energy initiatives.

At the outset, regarding Energy Conservation Program item Number Three, the Building Department experimented with a voluntary LEED based "checklist" intended to ascertain the administrative requirements and impact on local construction projects that might result from establishing LEED Building Code specifications. When we soon learned that few builders were willing to participate in the experiment, the Planning and Development Department urged that the City consider adoption of a mandatory set of LEED energy conservation measures that would apply to all major projects in the city, including our community's most prolific builder -- the University of Delaware. Subsequently, and at the direction of City Manager Kyle Sonnenberg, the Code Enforcement Division has examined the latest LEED New Construction Standards (2009), for commercial, institutional, high-rise residential, industrial projects and LEED For Homes (2008), for other residential development in terms of their suitability for Newark's land use approval system and whether they could be incorporated into our City adopted Building Code. Once again, this effort has been conducted with the assistance of CAC representative Steve Dental. The resulting suggested Building Code amendments and proposed administrative methodology appear below.

Applying LEED in Newark

Because the City has adopted a LEED program for our voluntary Zoning Code Site Plan Approval process that applies to projects for which developers seek density or floor area bonuses, our proposed required energy conservation program for all new projects in all major subdivisions -- residential developments six units or larger; commercial and additional developments twenty-thousand square feet or larger -- will be specifically targeted at energy conservation in building design and construction. We also propose that these LEED requirements apply to all University of Delaware construction. The Site Plan Approval process, while also focusing on building construction, also includes site design. As an adjunct to this voluntary procedure, we intend to set up a building construction required minimum LEED point stipulation to allow some flexibility so builders can select applicable options for their projects. We have also added one non LEED item for commercial/industrial/institutional buildings that we believe will have significant energy impact savings. For those rare instances where unusual

circumstances may make compliance difficult, a waiver process through the Board of Building Appeals is also included.

In sum, by incorporating new energy conservation rules into our Building Code, we can ensure that reasonable energy conservation building standards utilizing the LEED system as a guide apply to all but the smallest building projects in Newark. Moreover our adoption of mandatory LEED construction standards places Newark in the forefront nationally of those communities striving for a green future.

Source Materials

To help prepare this report, the Planning and Development Department consulted the following:

City of Batavia, New York, "International Energy Conservation Code," Memo, March 12, 2007.

Dennis Boothe, Lori Leonardo, and Daran Nawles, LEED Building Ordinances for Local Government, Land Use Clinic, University of Georgia, 2007.

City of Boulder, Colorado, "City Council Approves Increased Energy Efficiency Requirements," Press Release, 2008.

City of Mill Valley, California, Green Building Requirements, Report, December, 2008.

City of Newark, Delaware, "Creation of a Green Building Initiative," Conservation Advisory Commission Report, n.d.

City of Palo Alto, California, "Local Energy Efficiency Standards," Memo, September, 2008.

City of Pasadena, California, Green Building Development Guide, 2008

City of Santa Monica, California, Green Building Ordinance, n.d.

Schott Shuford, Suzanne Rynne and Jan Mueller, Planning for a New Energy and Climate Future, American Planning Association, February 2010.

United States Environmental Protection Agency, Building Codes for Energy Efficiency, Report, n.d.

United States of Department of Interior, Lighting – Occupancy Sensors, Report, August, 2008.

Proposed Municipal Code Amendments

Based on the methodology described above, the Planning and Development Department Code Enforcement Division has provided below a set of suggested amendments to the Municipal Code that would add specific minimum Building Code requirements for an energy efficiency code:

1. Amend Municipal Code, Chapter 6, International Energy Code by relocating this language to Chapter 7, Building as a new sub-section 7-4.1, to read the same, except for the deletion of Chapter 6, International Energy Code, Section 6-2, Definition -- Code Official; and renumbering the subsections accordingly [please note this amendment is simply an editorial change moving all the city's current Energy Code Requirements impacting building construction into the same place in the code, that is, Chapter 7].
2. Amend Chapter 7, Building, as revised above by adding the following language to new Section 7-4.2, Amendments to the 2006 International Energy Conservation Code:

“(2) The following additional energy conservation and efficiency standards shall apply to all major subdivisions, as defined in Chapter 27, Subdivisions, of this code:

- a. These additional energy conservation and efficiencies standards shall be based on the most recently issued United States Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) rating system or equivalent standard approved by the Planning and Development Department.
- b. Projects shall be reviewed and evaluated and points rewarded as established herein through the building permit process.
- c. Required energy conservation efficiency standards shall be derived from the specifications in the USGBC's LEED 2009 for New Construction and Major Renovations and LEED 2008 for Homes, as subsequently revised and reissued, or a Planning and Development Department approved equivalent. Other LEED publications and adopted specifications may also be used as reference or guides by the City as part of the energy conservation and efficiency standards review process.
- d. Commercial, institutional, high-rise residential and industrial projects shall be required to earn twenty-five (25) points as specified in LEED 2009 For New Construction and Major Renovations [page numbers below refer to this text; these numbers may change in future editions]:

<u>LEED FOR NEW CONSTRUCTION</u>	<u>LEED PAGE</u>	<u>POINTS</u>
1) Water Efficient Landscaping	23	4

2) Optimize Energy Performance	35	2
3) Enhanced Commissioning	39	2
4) Enhanced Refrigerant Management	41	2
5) Green Power	45	2
6) Construction Waste Management	50	2
7) Regional Materials	53	2
8) Certified Wood	55	1
9) Outdoor Air Delivery Monitoring	60	1
10) Increased Ventilation	61	1
11) Construction Indoor Air Quality Management Plan – Before Occupancy	64	1
12) Low Emitting Materials – Adhesives and Sealants	66	1
13) Low Emitting Materials – Paints & Coatings	68	1
14) Low Emitting Materials – Flooring	69	1
15) Indoor Chemical & Pollutant Source Control	72	1
16) Controllability of Systems – Lighting	73	1
17) Thermal Comfort Design	75	1
18) Daylight and Views – Daylight	77	1
19) Daylight and Views – Views	81	1
20) LEED Accredited Professional	84	1

- e. Residential (non-high-rise) projects shall be required to earn twenty-five (25) points as specified in LEED (2008) For Homes, [page numbers below refer to this text; these numbers may change in future editions]:

<u>LEED FOR HOMES</u>	<u>LEED PAGE</u>	<u>POINTS</u>
1) Integrated Project Planning	19/20	2
2) LEED Accredited Professional	20	1
3) Landscaping	35/36	7
4) Optimize Energy Performance	55/56	11
<u>OR Substitute A Through G</u>		
a) Enhanced Insulation	58	2
b) Air Infiltration	61	2
c) Windows	62	2
d) Heating & Cooling Distribution System	64	2
e) Heating & Cooling Equipment	66	2
<u>LEED FOR HOMES (cont.)</u>	<u>LEED PAGE</u>	<u>POINTS</u>
f) Water Heating	68	2
g) Lighting	71	1
5) Environmentally Preferable Products	79/80	2

6) Construction Waste Management (Table 27)	83/84	2
7) Local Exhaust	92	2
8) Contaminant Control	96	1
9) Garage Pollutant Protection	98	3

- f. Unless a waiver is granted for special circumstances or practical difficulties by the Planning and Development Director or his designees through the building permit review process, all interior common area hallways in commercial, institutional and industrial buildings reviewed under LEED requirements shall be required to include interior lighting occupancy daylight or motion detectors sensors that operate such indoor lighting.
- g. Except as otherwise indicating herein, waivers from these requirements shall be approved as per the specifications in Section 112, Board of Building Appeals.”
- h. This ordinance shall not apply to subdivisions and/or construction in which building permits have been approved before the adoption of this ordinance.

Upon your direction, the required ordinances to establish a Newark LEED building energy conservation program will be drafted by the City Secretary, reviewed by the City Solicitor and prepared for the next available Council agenda.

**CITY OF NEWARK
DELAWARE**

CONSERVATION ADVISORY COMMISSION

March 24, 2010

TO: Roy Lopata, Planning & Development Director

FROM: Steven K. Dentel
Conservation Advisory Commission

RE: Establishing a Newark LEED Based Energy Conservation Program

The Conservation Advisory Commission (CAC) met on Tuesday, March 9, 2010, and unanimously approved the following motion regarding LEED:

WHEREAS, THE CITY OF NEWARK WISHES TO PROMOTE ENERGY CONSERVATION AND ENVIRONMENTAL SUSTAINABILITY, FOR THE BENEFIT OF OUR NATION, OUR ENVIRONMENT, AND OUR FUTURE; AND

WHEREAS, THE CITY'S CONSERVATION ADVISORY COMMISSION HAS CONDUCTED CONSIDERABLE STUDY OF THE ATTRIBUTES OF "GREEN BUILDINGS" AND HAS FOUND THAT THERE ARE MANY ADVANTAGES IN IMPROVING RESOURCE CONSERVATION AND, OVER TIME, IN ENERGY AND ECONOMIC SAVINGS; AND

WHEREAS THE CITY OF NEWARK WISHES TO LEAD BY EXAMPLE IN ENCOURAGING AND REQUIRING GREEN BUILDING.

The Conservation Advisory Commission fully supports the proposed LEED-based energy conservation program as proposed, through building code amendments, by the Planning and Development Department. This proposal will serve as an important component of the Conservation Advisory Commission's vision for Newark as an exemplary "Green City."

The Conservation Advisory Commission will assist the City in an ongoing review of this program as it is implemented, and will also examine possibilities for requiring additional LEED points and applicability to smaller building and developments.

If you have any questions, please don't hesitate to contact me.

cc: Thomas Fruehstorfer, Chairman, Conservation Advisory Commission



FACILITIES

General Services Building
222 South Chapel Street
University of Delaware
Newark, DE 19716-5801
Ph: 302/831-0399
Fax: 302/831-2775

Roy H. Lopata, Planning and Development Director
City of Newark Municipal Building
220 Elkton Road
Newark, DE

Re: Building Code Amendments Establishing a Newark LEED Based Energy Conservation Program

Dear Roy,

I appreciate the opportunity the City has provided the University of Delaware, and the larger community, in reviewing the proposed Building Code Amendments as well as the *Planning and Development Report on Establishing a Newark LEED Based Energy Consumption Program*. The proposed amendments and report clearly reflect the importance the City of Newark places on energy efficiency and environmental design. The University also shares these goals and recognizes the responsibility of all organizations, particularly public institutions, to address the pressing environmental challenges of our day. It is the University's belief that the intent of these ordinances can be met through a voluntary agreement.

As you may know, over the past two years the University has made significant investments in environmental stewardship, not only in an expansion of resources dedicated to environmental research and education, but also in efforts to "green" University operations. The seriousness of the University's commitment is grounded in the University's Strategic Plan and Climate Action Plan, as well as actions already undertaken by senior leadership and the Facilities division. In fact, the University's Strategic Plan specifically calls for new construction to be "models of efficiency." Furthermore, our campus community, and our mutual community, expect environmental conscientious decisions to be incorporated into building design.

During the Newark Conservation Advisory Commission's exploration of the US Green Building Council's Leadership in Energy and Environmental Design (LEED), the University was also active in reviewing building standards and codes. Several University building projects and renovations have already incorporated construction that meets or exceeds LEED requirements and University project managers in Facilities Planning and Construction currently examine every opportunity to enhance energy efficiency in all major renovations and new construction.

In reviewing the report mentioned above, it is clear that a central focus has been placed on ensuring construction within the city limits reflects the principles set forth in LEED green building construction. While the Newark Conservation Program described on pg. 1 of the report recommended a voluntary

program, the most recent proposal would specifically require, through the Site Approval Process, a building required minimum LEED point requirement.

Given the University's aggressive environmental goals, and our past and planned actions on incorporating energy efficiency into major buildings and renovations, we believe it is unnecessary to include the University in a mandatory program. Recognizing the importance of this issue to the city and our wider community, the University will commit to meeting the spirit of the ordinance voluntarily, if in exchange it is exempted from the most recent ordinance proposal.

Please understand that the University does not take this position lightly. It has always been vigilant to preserve rights granted by its Charter - including freedom from compliance with local land use codes- and needs to continue this vigilance as a matter of principle. However, preservation of rights under the Charter certainly does not stand in the way of a partnership with Newark regarding conservation and environmental protection. Let me know if I can be of any further assistance in resolving this issue.

Sincerely,



David W. Singleton
Associate Vice President, Facilities
University of Delaware
Ph: 302.831.1110

**CITY OF NEWARK
DELAWARE**

COUNCIL MEETING MINUTES

June 14, 2010

Those present at 7:00 pm:

Presiding: Mayor Vance A. Funk, III
District 1, Paul J. Pomeroy
District 2, Jerry Clifton
District 3, Doug Tuttle
District 4, David J. Athey
District 5, Ezra J. Temko
District 6, A. Stuart Markham

Staff Members: City Manager Kyle Sonnenberg
Deputy City Secretary Alice Van Veen
Assistant to the City Manager Carol S. Houck
City Solicitor Roger A. Akin
Community Affairs Officer Dana Johnston
Planning & Development Director Roy H. Lopata
Finance Director Dennis McFarland
Code Enforcement Supervisor Steve Wilson

1. The meeting began with a moment of silent meditation and pledge to the flag. Mr. Funk asked those present to remember Ada Leigh Soles, prominent Delaware civic leader and legislator and mother-in-law of Councilman Paul Pomeroy, whose memorial service was held today.

2. Mr. Clifton read a proclamation for Mrs. Linda Burns, who was named Honorary Mayor for 30 years of service to the Newark Memorial Day Parade Committee. Mr. Funk presented the proclamation and thanked Mrs. Burns for her dedicated service.

MOTION BY MR. POMEROY, SECONDED BY MR. CLIFTON: THAT AGENDA ITEM 8-A-1, PRESENTATION AND DISCUSSION ON NEWARK'S SOLAR OPTIONS, BE MOVED TO FOLLOW COUNCIL MEMBER COMMENTS.

MOTION PASSED UNANIMOUSLY: VOTE: 7 to 0.

Aye – Athey, Clifton, Funk, Markham, Pomeroy, Temko, Tuttle.
Nay – 0.

3. 1. ITEMS NOT ON PUBLISHED AGENDA

A. Public

03:51

Ivan Nusic, a Newark resident, was disturbed that when he spoke at the 5/24/10 Council meeting, he was interrupted by the City Secretary and Mayor for exceeding his five minute time limit, although he was permitted to finish his comments. Mr. Nusic was further concerned this fact was not mentioned in the minutes from the meeting and thus felt the minutes were inaccurate. He planned to listen to the audio recordings from the meeting after which he would decide whether to take legal action against the City.

4. 1-B. UNIVERSITY

1. Administration

07:55

Mr. Armitage distributed a plan showing the two crosswalks on E. Delaware Avenue which the University and DelDOT planned to collapse into one

crosswalk. The University requested area legislators to help fund the project, and it was hoped the project would be completed by summer.

Another traffic project mentioned by Mr. Armitage involved the University's Webb Farm. For a number of years students crossed Rt. 72 to access the Webb Farm, and the concern was for safety along that busy portion of road. The Federal Highway Administration recently approved a new pedestrian-activated traffic signal to allow safer pedestrian crossing, and the University was working with the Department of Transportation to have the signal installed at that location.

5. 1-B-2. STUDENT BODY REPRESENTATIVE

There were no comments forthcoming.

6. 1-C. COUNCIL MEMBERS

10:16

Mr. Temko – reminded Council members the Resident Survey would be an agenda item at the 6/28 Council meeting; at a future Council meeting he wanted to discuss the scheduling of special meetings on the third Monday of the month for Council to review lengthier agenda items; appreciated Ms. Houck working to put together the conservation report update and asked for adequate time for Council to review the report before discussing it; raised the issue of the voluntary Green Energy Fund and, in particular, the energy source which he believed was controversial. Mr. McFarland noted updates on the program would be provided to Council in the near future; noted there would be a Committee looking at how to enhance Newark Nite with representatives from UD, the DNP and the City and suggested community members be included; commented that the City was unprepared for the follow up to Newark Nite and hoped there would be meaningful discussions in preparation for next year's event.

Mr. Clifton added he spoke with Chief Tiernan about Newark Nite. He said the group involved in fighting was asked three or four times to disperse. The shooting that happened later in the evening was still under investigation, but it was suspected that several gang members were involved. Mr. Clifton pointed out the NPD was short five officers, and he was infuriated that the two officers Council asked to have funded several years ago were not funded.

7. Mr. Pomeroy – since he would be leaving the meeting early, commented on Bill 10-12 (New Center Village Overlay Zone) which he applauded for its innovative approach to urban planning and good smart growth policy, and he liked the proactivity that went into exploring the initiative; thanked the City, members of Council and the community who took the time to attend the memorial service for his mother-in-law, Ada Leigh Soles, a former legislator who was highly respected for her contributions to the greater Newark community.

8. Mr. Athey – offered condolences to the Soles, Pomeroy and Armitage families for their recent losses; regarding the Newark Nite Committee, he believed public input was desirable in some manner; noted the sewer rate increase effective July 1 was not posted on the City's website – Mr. McFarland will check that it was on the website and noted comments were included on the bills starting the middle of May; thanked Chief Tiernan for speeding enforcement on South College Avenue at the bridge; recognized Charlie Emerson for a great job at the Kells Park ceremony recognizing the Hall Trail as a National Recreation Trail.

9. Mr. Clifton – expressed his condolences to the Soles family; commented that Linda Burns was the Memorial Day Parade Committee and thanked her for the selfless service she gave for 30 years; offered condolences to Rick Armitage on the loss of his mother; remarked on the passing of Ronnie Bramble, a great Newarker who served 22 years in the Newark Police Department and over 50 years with Aetna Hose Hook and Ladder and who chose to serve his country in

the Marine Corps in the Korean War instead of playing professional ball with the Philadelphia Phillies.

10. Mr. Tuttle – was pleased there would be follow up on Newark Nite; joined in expressing his condolences to Rick Armitage; recognized Ron Bramble whom he knew from his years on the UDPD; remarked that the ceremony honoring Ada Leigh Soles was moving, and it was a privilege and an honor to have known her.

11. Mr. Markham – regarding Newark Nite, he talked to the Chief who promised additional personnel would be on duty next year for the event; offered condolences to Rick Armitage and on the passing of Ada Leigh Soles who was a fine public servant; noted legislators Liane Sorenson and Terry Schooley assisted in trying to complete the sidewalks along Old Paper Mill Road which was supposed to start this week.

12. 8-A-1. PRESENTATION AND DISCUSSION ON NEWARK'S SOLAR OPTIONS

28:12

Mr. Pomeroy believed changes in the City's energy policy were inevitable; they would either be state mandated or demanded by the public. He was interested in trying to move the City forward in a manner that was fiscally prudent while considering whether solar power could provide long-term benefits beyond being a good source of renewable energy for the City. Thus he asked Dr. Byrne, an expert on issues related to solar, to provide options available to the City. Mr. Pomeroy felt it was prudent to explore this no-cost option to broaden the City's energy portfolio.

John Byrne, Director of the Center for Energy and Environmental Policy (CEEP) at the University of Delaware gave a power point presentation and distributed the final report on *Creating A Solar City*. Dr. Byrne said a number of factors would change the nation's energy system, and most were very economic. We were currently paying more from the national income for energy bills than we had in the last 25 years, and the likelihood that it would cost more was high. In looking at what the U.S. Energy Information Administration was forecasting as to pricing for natural gas, gasoline, heating oil and electricity, in the next ten years it was expected to see between a 50% and 150% increase in those prices because the better part of the last century was spent looking for the lowest cost options for these fuels, and what remained was expensive.

Dr. Byrne pointed out the launching of the Dover Sun Park on 6/15 which was a ten megawatt solar power plant being built in the City of Dover. The plant will provide enough electricity for 5,000 households on an annual basis on several acres of land and was an important model for the state. He reported the UD would make an announcement to produce a little less than one megawatt of power to provide energy to about 500 homes in the City. In addition, he believed Delaware Technical Community College would announce their plan to produce two megawatts powering about 1,000 households.

Dr. Byrne said there was a lot of interest in the new option of the Power Purchase Agreement. Under this option, solar power developers bid on solar projects, and if they provided a lower price than what the City currently charged, the City would then look into signing a purchase power agreement. The City of Dover was not spending one dollar of capital budget for Dover Sun Park. It was being financed privately, and they were receiving electricity at a cheaper rate than what they currently charged their customers. According to Dr. Byrne, there were long-term benefits to the City to proceed this way, and the option was immensely important to local economic development.

In order for the economics of solar to work out, the Federal government provided an investment tax credit given to the developer of 30% of the cost of the system. The tax credit caused an explosion of interest in solar. Mr. Pomeroy interjected that grants were distributed to the private sector company, not to the

municipality or public entity. Dr. Byrne added there was also a type of depreciation allowed to private developers where approximately 45% of the cost of the system would be paid for through Federal tax incentives, thereby resulting in a payback period of less than six years.

Mr. Funk remarked that his solar system had been up 23 months, and he received over \$2,000 in renewable energy credits. Dr. Byrne said Delaware was a renewable portfolio standards state which required the utilities to purchase a certain percentage of their electricity from renewable sources. If a customer generated electricity with a renewable source, the utility, in order to show compliance with the law, had to buy the credits in the marketplace.

Ms. Houck reported that she contacted the same company the University was working with to explore solar opportunities for the City. She provided them with approximately 14 locations, sites, buildings and open fields to look at for solar applications. Two areas that showed potential were McKee's Park and Old Paper Mill Park (the old Moore property across from the reservoir.) Once a proposal was received, Ms. Houck would share the information with Council.

Mr. Clifton asked if it would be advantageous for the City to have its own system in order to remove itself from market-based energy. Ms. Houck said the up-front costs would be very expensive to implement. Mr. McFarland added the City could not take advantage of the tax credits without a private partner. Mr. Pomeroy explained the incentives were in place for private entities to spur that industry, and the incentives were set to expire at the end of this calendar year, which was the reason for some degree of urgency. Dr. Byrne noted the advantage in having a private firm was that it took about 40% of the capital cost away from the citizens.

Mr. Temko asked what kind of costs the City would incur with a solar project. Ms. Houck said depending on what was ultimately decided, it was possible the City would not have to spend anything. The private solar developer would purchase, install and maintain the equipment, and there was usually a 20-year agreement. Mr. Temko asked if other solar options were being considered that would require City funding. Mr. McFarland said there was a proposal put on hold to directly purchase RECS at a cost of about \$220,000. Mr. McFarland said the proposal was for about a 1 megawatt solar facility which translated to about 4% of the City's overall sales.

Mr. Markham requested that Ms. Houck's report address financial liability for issues such as the solar developer going out of business or not completing the project, questions about ownership of the solar panels, etc. He also asked whether it was possible that the Federal credit would be even better next year. Dr. Byrne said the investment tax credit would continue for seven more years but the provision for taking the credit in the form of a grant would expire in December, and he did not think there were the votes needed to extend it in its current form. Regarding the PPA, the City should be allowed to take possession of the solar panels if it wished to do so and also could decline to do so – he said it was up to the negotiation to specify. In regard to a developer going bankrupt, because there was a revenue stream being paid on a regular basis, there were numerous companies with an appetite for this type of contract, so having the project completed would not be a problem. Mr. Markham was more concerned about limiting the City's financial liability since it would not be doing the capital outlay.

Ms. Houck said it was reasonable for Council to expect some additional information on this by the first meeting in July.

(Secretary's note: Mr. Pomeroy left the meeting at 7:58 p.m.)

13. 2. APPROVAL OF CONSENT AGENDA

1:02

- A. Approval of Regular Council Meeting Minutes – May 24, 2010
- B. Receipt of Alderman's Report -- May 19 & June 3, 2010
- C. Appointment of Syl Woolford to the Newark Housing Authority

Mr. Clifton read the Consent Agenda in its entirety.

MOTION BY MR. ATHEY, SECONDED BY MR. TUTTLE: THAT THE CONSENT AGENDA BE APPROVED AS SUBMITTED.

MOTION PASSED UNANIMOUSLY: VOTE: 6 to 0.

Aye – Athey, Clifton, Funk, Markham, Temko, Tuttle.

Nay – 0.

Absent – Pomeroy.

14. 3. ITEMS NOT FINISHED AT PREVIOUS MEETING: None

15. 4. FINANCIAL STATEMENT: Next Meeting

16. 5. RECOMMENDATIONS ON CONTRACTS & BIDS

- A. Recommendation to Purchase a Police Department Video Surveillance System from a Competitively Solicited Purchase Contract in Association with the U.S. Communities Technology Products and Equipment Contract (Tech Depot)

1:03

Ms. Houck detailed the recommendation for the purchase of a Police Department surveillance system from the U.S. Communities organization, a nationwide governmental purchasing cooperative participating organization where members gained access to competitively bid contracts. Newark was a member of the group since 2006 but had previously utilized it only for office supplies.

The system would be placed in seven locations as noted in Ms. Houck's memo, and the Newark proposal totaled \$196,945. References were contacted and funds were available from two grants - the 2009 COPS Technology Grant and the 2009 Recovery Act Justice Assistance Grant, totaling \$200,420. It was recommended to award the contract to the Avrio Group at the total cost of \$196,945.

Mr. Markham asked the time frame on the purchase which Ms. Houck expected by late fall.

Mr. Athey remembered getting feedback from constituents regarding the "Big Brother"-type scenario, and thought there might be some negative reaction from the community. He believed the City had the right and obligation to monitor activity on public streets. He questioned maintenance and support following the first year of the contract, and Ms. Houck stated the City would have to provide the funding to continue using the cameras.

Mr. Clifton noted the University was installing cameras on their campus as well and asked if there would be visibility of each other's cameras. Ms. Houck said yes, we were trying to work with the same company, and there was assurance of compatibility and that the City would be able to share views.

Mr. Clifton stressed the need for good, clear resolution to make the system worthwhile. Ms. Houck and Captain Williams were impressed with what they saw.

Mr. Tuttle was pleased the City was stepping up participation with the U.S. Communities and felt the City might want to look at them again for other technology and major purchases.

Mr. Temko asked Ms. Houck to comment on the choice of locations which she said were chosen by the Police Department.

MOTION BY MR. TUTTLE, SECONDED BY MR. MARKHAM: TO WAIVE THE REQUIRMENT TO SOLICIT A NEWARK SPECIFIC BID AND AUTHORIZE THE CITY MANAGER TO PURCHASE A SEVEN CAMERA WIRELESS SYSTEM AT THE U.S. COMMUNITIES COMPETITIVELY BID CONTRACT (AWARDED TO TECH DEPOT) PRICING AT THE TOTAL COST OF \$196,945 FOR PLACEMENT AT SEVEN LOCATIONS WITH VIDEO FEED TO THE POLICE DEPARTMENT.

MOTION PASSED UNANIMOUSLY: VOTE: 6 to 0.

Aye – Athey, Clifton, Funk, Markham, Temko, Tuttle.

Nay – 0.

Absent – Pomeroy.

17. 6. ORDINANCES FOR SECOND READING & PUBLIC HEARING

1:10

A. Bill 10-09 - An Ordinance Amending and Combining Chapter 6, International Energy Code with Chapter 7, Building, Code of the City of Newark, Delaware, and Establishing a Newark LEED Based Energy Conservation Program

MOTION BY MR. CLIFTON, SECONDED BY MR. TEMKO: THAT THIS BE THE SECOND READING AND FINAL PASSAGE OF BILL 10-09.

Mr. Lopata explained the proposed LEED based Energy Conservation Program would amend the City's Building Code in a very significant way to enhance energy conservation construction. The LEED based Building Code program came about through discussions between Council, staff and CAC in 2007. At that time, Council authorized staff to do a series of steps in terms of energy conservation and development review in Newark. First, there was a plan to amend the site plan approval portion of the Zoning Code, the flexible neo-traditional zoning density bonus Code provision to include LEED energy conservation stipulations as a voluntary option for development in the City. That was done in February 2008 and was currently the law of Newark.

Second, it was agreed to experiment with LEED requirements for "to be constructed" new City buildings. Although none were planned in the near future, it was agreed to do that if and when the City builds a facility of any significant size.

Finally, Council directed the City to determine whether current Code requirements should be changed to enhance energy conservation and environmental sustainability.

There were a series of meetings held with staff, CAC members and the Code Enforcement Division of the City to develop a set of standards that would put minimum LEED regulations in the Building Code for new construction of small homes, residential buildings and larger industrial and commercial projects.

Under the LEED program, the developer would be required to meet a certain minimum standard to get points that result in certification. The City was not requiring that and not proposing that – they were talking about a substantial level below that but significantly beyond what was currently required in the Building Code. Builders would be required to enhance their energy conservation and the sustainability of their projects at all times through a required program.

Mr. Lopata felt these were significant measures and said most communities do not approach LEED regulation in this manner. He said Newark was pioneering here, and this was groundbreaking for the state and the region.

What was being proposed was a set of specifications. The developer would come to the City with a plan. They would match their plan vs. the new specifications, and if they met the minimum point requirement, the building permit would be issued. There were enough points in the system where the minimum number of points was 25. In both cases for large construction there were up to 29 points available, and in smaller construction 31 to 33, so there was some give in the system. Developers were being allowed to pick and choose from the point values assigned in the ordinance to do what they felt was most effective for their project.

Mr. Lopata recognized Steve Dentel and other members of the Conservation Advisory Commission for spending years on this project to get to this point as well as the efforts of Steve Wilson and Tim Poole from the Code Enforcement Department.

Mr. Athey noted under the category LEED for new construction, he saw a total of 29 possible points with 25 required. To him there was not a huge amount of flexibility, but he assumed that was well vetted. Mr. Lopata said it was decided to pick a minimum set of standards beyond what was in the Code. Mr. Athey assumed this made the City's requirements tougher than New Castle County's. Mr. Lopata agreed and added the proposal was not etched in stone, and staff was willing to continue working on this ordinance.

Mr. Markham presumed there was a lot of discussion and compromise to come up with this document. He noted it addressed only major subdivisions, developments with six or more units or buildings 20,000 square feet or larger. He would like to think about extending this to just about all the construction that comes into the City

Mr. Tuttle assumed the only thing this would not capture would be a vacant lot sold off and developed into a private house.

Mr. Lopata recommended a "testing out" period to see how this worked as it may need to go back to the drawing board and start all over again after a couple of years.

Mr. Temko asked what the process was after the plan was given to the City and before issuing a Certificate of Occupancy. Mr. Wilson said the engineer of record would follow-up and inspect before, during and after construction and would sign that it met LEED certification. Mr. Temko asked what the current numbers were for a LEED-certified project. Mr. Wilson said the minimum certification for construction was 40 points and for single family homes or residential it was 45-49 to get minimum certification.

Mr. Temko asked for an explanation of special circumstances or practical difficulties. Mr. Lopata said that would be a Board of Building Appeals process as there would be cases where the staff may disagree with the engineer.

Mr. Temko asked when Council could expect a report back on progress and whether changes were needed. Mr. Lopata said that depended on how much construction was going on and assured him staff would keep Council informed.

Mr. Athey asked Mr. Wilson why he only picked certain categories from the LEED list. Mr. Wilson said there were other options not mentioned here and there was flexibility inside each category, and it was up to the developer and the design engineer to find what worked for them. This was an outline of the minimum.

The Chair opened the discussion to the public.

Ralph Olivier, a practicing architect in the State of Delaware and resident of Landenberg, PA, provided a list of reasons for Council to vote the ordinance down. The ordinance amended the 2006 International Energy Conservation Code. He said the State already adopted the 2009 IECC, so this ordinance was not in compliance with state statutes. Further, the ordinance referenced and used language that was copyrighted by the U.S. Green Building Council. The USGBC copyright statement declared the LEED rating system was not to be modified (which this ordinance did) and not to reproduce, display or distribute the LEED rating system in any way for public or commercial use. He said because this was an ordinance, the City would have to make the LEED documentation available to the public and asked if the City had permission from the USGBC to use their copyrighted documents. Neither the LEED standard, nor the ordinance nor the Building Code defined what a major renovation was and that was one of the provisions in the ordinance. Further, the bill did not define the process of documentation, submission, evaluation and approval. The bill stated that projects shall be reviewed and evaluated and points rewarded as established through the building permit process. He asked if the City's Code Enforcement Department had the proper training and staffing to handle the evaluation.

Mr. Olivier reported the USGBC review was based on a proprietary online database completed by the design professionals. He was not sure what the current USGBC position was on utilizing their templates without registering a project. Also, the USGBC was focusing more on measurement and verification. Many of the credit requirements could not be completed or evaluated until the project was complete and the field paperwork was submitted. If a project was evaluated at the building permit stage, this may not give an accurate representation of the final built project. He asked what would happen if at the end of the construction, the building did not earn all the required points. Would the CO be withheld? The bill indicated the Planning & Development Department's approved equivalent standards may be used in lieu of LEED. He asked if the City had the resources to evaluate the equivalency of other standards. The bill cited specific credits that must be earned by the project. The point of having a broad-based rating system which LEED was, a system with 110 available points, was that the system was flexible and adaptable to the specific needs of an individual project. This ordinance had only 29 potential points to be earned, with 25 required. Many projects could not meet this requirement because they do not include the practices required to earn these points. Mr. Olivier felt because many projects would not meet point requirements, the Board of Appeals would be flooded with appeals for waivers of the requirements, or the Code Enforcement Department would have to waive requirements when they were not applicable.

Mr. Olivier pointed out the LEED evaluation system was designed for much larger buildings than those typically built in Newark, except for those built by the University. Placing LEED requirements on relatively small buildings was an onerous expense and would place a burden on small developers in Newark while rewarding larger out-of-town developers who had the financial muscles to endure these requirements. He asked if it was Council's intent to burden local developers in favor of others. There was also much debate about whether buildings that met LEED standards were more energy efficient and felt the LEED standard was not a guarantee that buildings would be energy efficient.

Mr. Olivier said he attended a seminar about the future of energy codes given by the Pacific Northwest National Laboratory, the branch of the Department of Energy leading the effort to make buildings more energy efficient. They were doing the research, creating computer models and creating software used by architects and engineers to calculate energy usage of buildings. At the seminar they pointed out that LEED, ASHRAE standards and the International Energy Code did not agree with each other and sometimes worked at cross purposes.

There has been collaboration for the last several years on new standards and codes that address the inadequacies and inconsistencies of existing codes and standards. The goal was for these codes and standards to converge to agreement by 2014. The International Code Council was on track to issue the new Energy Conservation Code in 2012 and was also introducing an International Green Construction Code that included land use, water resources and material conservation (much like the City's proposed ordinance) with an intent to have the code issued by 2012.

Mr. Olivier concluded by saying all the City had to do to create more energy efficient buildings in Newark was to keep adopting the International Codes as they were issued, thereby creating more energy efficient buildings than required by the proposed ordinance.

Mr. Clifton asked if the International Building Code made a building more energy efficient, how would that differ from LEED. Mr. Olivier stated LEED had more complicated reporting requirements in order to justify their certificates which a building code would not do. Thus he thought the City would be better adopting a code written as a code that was easily interpreted by design professionals and the Code Enforcement Department.

Joe Charma, a Newark resident and Chair of the DNP Design Review Committee, said the Design Review Committee reviewed the proposed ordinance and was not in favor of a mandatory requirement. They felt it should be voluntary. He supported the premise of the LEED ordinance, and the Committee supported the principles trying to be established for energy conservation. He agreed the International Building Code would seamlessly mesh all the other international codes. He thought Mr. Lopata made a good point when he said most cities had not made the LEED certification mandatory, and felt cost was the reason. Gold certification on a fairly large building could cost \$100,000 for the paperwork alone. While he supported sustainable design, he felt there was a better way to accomplish it. He felt mandated costs were not a great idea in this economy and suggested carefully thinking about increasing fees or creating situations that have unintended consequences. He thought a better approach was to create incentives for builders and developers, such as bonus densities, reduced license fees, deferred taxes and tradeoffs on stormwater fees. He also felt the IBC was a better way to go.

Mr. Funk asked Mr. Akin to comment on the copyright issue. Mr. Akin had not seen the document from which the material was drawn and was not certain that it was protected status.

Mr. Lopata said he contacted representatives from the U.S. Green Building Council District, and they had not raised any issues. However, he agreed the copyright matter should be double checked.

Mr. Temko asked if the City was requiring certification since the question had been raised about the expense of paperwork and getting certified. Mr. Lopata said there was no requirement for certification. Regarding the 2009 BOCA ICC Code to be considered by Council in a few months, the ordinance was structured so the changes would slip right into that Code. In order to get one of the checklist points, Mr. Temko asked if it had to go to the U.S. Green Building Council or the City. Mr. Lopata said that would require getting somebody with certification, and there would be a cost involved.

Kevin Heitzenroder, a Newark resident and local developer, thought the intent of the ordinance made a lot of sense. His concern, however, was mandating the implementation process, particularly in light of the impact of added costs. Thus, he preferred a voluntary option. He believed the new codes for higher energy standards issued regularly would make buildings much more energy efficient.

There being no further comments forthcoming, the discussion was returned to the table.

Regarding the convergence of the codes he mentioned, Mr. Athey asked Mr. Olivier if the proposed ordinance was above that standard or about equal. Mr. Olivier's understanding from the seminar was that the new codes would surpass the LEED requirements. He said this ordinance was enacting last year's standards and this year's standards were already moving beyond that. If the ordinance was enacted, the City would just be doing what would be done in a few years anyway.

Tom Fruehstorfer, CAC Chair, said the CAC started with a proposal years ago. Mr. Lopata took that proposal and adjusted it to work for the City, and the CAC now endorsed the ordinance.

In regard to added costs, Mr. Temko said everything the U.S. Green Building Council put out several years ago (independent of the cost of getting certified) showed a payback in energy conservation savings of 5-8 years.

Mr. Fruehstorfer heard resistance from developers about paying more for building to stronger standards. If the standards did not make them do a better job, they would obviously not take the extra step and would only meet the existing standards. His thought was those developers were not the ones who would stay and pay the utility bills over time.

Mr. Olivier pointed out the statement was made that the engineer would be asked to certify building compliance after completion. He did not know any liability insurance that would cover that risk and did not know how that could work.

Mr. Athey saw three issues – the copyright issue, the training aspect with Code Enforcement staff reviewing documents from a LEED certified professional, and the allegation of outdated Code references. Mr. Lopata agreed written permission was required for the copyright issue. The City staff felt confident they would be able to review the materials. The Code issue was not a problem since the language was structured to easily roll into the 2009 edition which had to be adopted anyway.

Mr. Athey asked if there were any other issues to be addressed before making a tabling motion.

Mr. Clifton noted there has been no participation in the current voluntary program, and he saw this mandatory certification process as doing the right thing. The tenants who lived there in perpetuity were the ones who needed the City to do this. The bottom line was the product costs X to build and the end net from that product remained consistent, so he did not see the requirement as any more burdensome.

Mr. Temko said one thing that might be looked at was not necessarily lowering the minimum from 25 but, for example, in the LEED for new construction, if landscaping would be an issue in the downtown or if there were other specific issues that would preclude this from being successful, perhaps several more potential points could be added.

Mr. Tuttle asked Mr. Lopata the timing for the adoption of the 2009 Code and if this was tabled, would it make sense to reconsider it at the same time as the 2009 Code. Mr. Lopata was not sure that was a good idea based on the size of the 2009 Code.

Mr. Markham questioned if a new ordinance would be required if points and the formula process were being modified. Mr. Lopata said the key item was the copyright issue. What was heard tonight would be integrated into the

proposal, and Mr. Akin would have to opine whether to go back to a First Reading. Mr. Markham suggested listening to the audio again because Mr. Olivier presented a lot of different points, and he wanted to make sure the legal points were addressed.

MOTION BY MR. ATHEY, SECONDED BY MR. CLIFTON: TO TABLE BILL 10-09.

MOTION PASSED UNANIMOUSLY: VOTE: 6 to 0.

Aye – Athey, Clifton, Funk, Markham, Temko, Tuttle.

Nay – 0.

Absent – Pomeroy.

18. 6-B. BILL 10-12 - AN ORDINANCE AMENDING CHAPTER 32, ZONING, CODE OF THE CITY OF NEWARK, DELAWARE, BY ESTABLISHING A NEW CENTER VILLAGE OVERLAY (NCV) ZONING DISTRICT

2:06

MOTION BY MR. MARKHAM, SECONDED BY MR. CLIFTON: THAT THIS BE THE SECOND READING AND FINAL PASSAGE OF BILL 10-12.

Mr. Lopata explained the main components of the proposed ordinance. Under Amendment 1, a new district would be established that would be labeled NCV. Amendment 2 listed the permitted uses, which were essentially residential up to four stories in height and limited first floor office and home occupancy use. It was largely a residential district with types of ancillary, commercial uses that would fit in a residential urban environment.

One of the key parts of the proposal was grafting the New Center Village district onto the City's site plan approval process, the flexible, neo-traditional zoning ordinance allowing and requiring additional design criteria for redevelopment. For development on vacant sites, this would be used in the New Center Village area, the downtown area between New Street and the back of the City parking areas, and between Choate and Center Streets. In addition to the site plan approval requirements, the ordinance included specific building design and site design criteria that were crafted for this area.

Most important, according to Mr. Lopata, this proposal was an overlay zone. An applicant who wanted to use the requirements or take advantage of the new development procedures here chose to do so voluntarily. If someone did not want to use it, everything at their property reverted back to the current code. The zoning map would not change at all. The underlying zone will be kept, only using these criteria if a land owner wished to add additional units to the site. Any renovation, reconstruction or other changes (but not adding units), would continue to come under the current zonings which vary.

If the model worked, Mr. Lopata felt it could be used in other sections of the City. Although this was planned exclusively for New Center Village, certain aspects of it could be used for some other older sections of the community. Mr. Lopata said there were people in the development community who were anxious for the ordinance to pass because they saw great potential in the locations discussed.

Mr. Athey thought one of the best ways to keep communities such as NCV looking their best was to have owners living at their property. An example he gave was a duplex where the owner lived on one side and rented the other. Mr. Lopata said in Newark's experience restricting rentals to two occupants worked well in communities such as Abbotsford and Country Place.

Mr. Athey asked the time frame or suggested approach for incorporating this plan in other areas. Mr. Lopata said that depended on what happened with this location – if nothing happened in this area for a year or two, there would be no point in going forward. He did not want to rush into this until he was sure that it worked.

The Chair opened the discussion to the public.

David Robertson, a Newark resident, asked if this would preclude something like an auxiliary suite arrangement. Mr. Lopata said it would not preclude that, provided it was limited to two tenants.

Gary Hayman, a Newark resident, was confused about the ordinance and asked what the future impact could be on Cleveland Avenue. Mr. Lopata explained this was an overlay zone intended for a specific area -- from New Street, south of the railroad, to north of the City, parking lot 4, and between Center and Choate Streets. Mr. Temko explained a historic overlay district was being explored on West Main Street to be used in special circumstances. For example, Terry Manor was a neighborhood where there was concern about transforming an owner-occupied neighborhood into student rentals. If the NCV overlay was successful, he would be interested in looking at whether it could be applied to preserve neighborhoods close to the downtown area. For use in other locations, Mr. Athey explained this was a lengthy process that would have to go back to the table for public hearings.

Joe Charma, a Newark resident, spoke in support of the proposed zoning overlay. He saw it as a very exciting opportunity for the City that was badly needed to encourage owner occupancy in this area. He thought it would encourage quality development and design opportunities, would create livable, walkable communities, and the process would create a diversified, planned urban development to overcome the limitations of the existing small lots governed by the current zone. He said the plan would attract young families, grad students, professionals, mature families downsizing from large, single-family homes, and retirees all having one thing in common – their desire to live in the attractive downtown urban environment Newark offered.

There being no further comments forthcoming, the discussion was returned to the table.

Mr. Markham commented the goal was to make this area something other than student rentals. He supported the plan for Center Street which was in his district and was pleased it was expanded to the property the City recently obtained from the 108 E. Main Street project.

Question on the Motion was called.

MOTION PASSED UNANIMOUSLY: VOTE: 6 to 0.

Aye – Athey, Clifton, Funk, Markham, Temko, Tuttle.

Nay – 0.

Absent – Pomeroy.

(ORDINANCE NO. 10-16)

19. 7. PLANNING COMMISSION/DEPARTMENT RECOMMENDATIONS
None.

20. 8. ITEMS SUBMITTED FOR PUBLISHED AGENDA

A. Council Members:

1. Presentation and Discussion on Newark's Solar Options

(See Item #12)

21. **9. SPECIAL DEPARTMENTAL REPORTS**
A. Special Reports from Manager & Staff – None

22. **9-B. REQUEST FOR EXECUTIVE SESSION RE PERSONNEL**

2:25

MOTION BY MR. CLIFTON, SECONDED BY MR. MARKHAM: TO ENTER INTO EXECUTIVE SESSION WITHOUT THE PRESS TO DISCUSS PERSONNEL.

MOTION PASSED UNANIMOUSLY: VOTE: 6 to 0.

Aye – Athey, Clifton, Funk, Markham, Temko, Tuttle.

Nay – 0.

Absent – Pomeroy.

Council entered into Executive Session at 9:21 p.m. and returned to the table at 9:58 p.m. Mr. Funk said no further action was required.

23. **Meeting adjourned at 10:01 p.m.**

Patricia M. Fogg, CMC
City Secretary

/av

**CITY OF NEWARK
DELAWARE**

COUNCIL MEETING MINUTES

November 8, 2010

Those present at 7:00 pm:

Presiding: Mayor Vance A. Funk, III
District 2, Jerry Clifton
District 3, Doug Tuttle
District 4, David J. Athey
District 5, Ezra J. Temko
District 6, A. Stuart Markham

Absent: District 1, Paul J. Pomeroy

Staff Members: City Manager Kyle Sonnenberg
City Secretary Patricia Fogg
City Solicitor Roger Akin
Community Affairs Officer Dana Johnston
Finance Director Dennis McFarland
Planning & Development Director Roy Lopata
Code Enforcement Supervisor Steve Wilson

1. The regular Council meeting began with a moment of silent meditation and pledge to the flag.

2. PRESENTATION OF CERTIFICATES TO CITIZENS ACADEMY PARTICIPANTS

00:33

Community Affairs Officer Dana Johnston announced the first class of participants who successfully completed the Citizens Academy. The program was an educational experience that gave insight into Newark's history and governmental process, and the goal was to increase civic participation and leadership within the City by residents. The following residents received certificates for their participation:

Paul Bielewicz	Eric Mailman
Deana Burd	Virginia Mailman
Catherine Ciferni	Vickie McCardle
Cathy Davies	Nancy Pedrick
Debbie Dintenfass	Bud Neu
Rose Gallante	Rebbecah Neu
Lynn Julin	Lynn Nickle
Justin Kates	Brent Rhodes

3. MOTION BY MR. CLIFTON, SECONDED BY MR. MARKHAM: THAT ITEM 2-G, APPOINTMENT OF PAUL FAUST, 25 E. MILL STATION DRIVE TO THE BOARD OF ADJUSTMENT, BE ADDED TO THE CONSENT AGENDA.

MOTION PASSED UNANIMOUSLY: VOTE: 6 to 0.

Aye – Athey, Clifton, Funk, Markham, Temko, Tuttle.

Nay – 0.

Absent – Pomeroy.

4. 1. ITEMS NOT ON PUBLISHED AGENDA

A. Public – None

5. 1-B. UNIVERSITY

1. Administration

08:33

Mr. Armitage introduced two colleagues from the University of Delaware, David W. Singleton, Vice President for Facilities and Auxiliary Services, and Peter Krawchyk, Director of Facilities. They reviewed a PowerPoint presentation about the major projects being undertaken by the University over the next five to seven years. Overall, the projects represented an investment by the University of \$500 million. New projects, additions and renovations reviewed included the Interdisciplinary Science and Engineering Building, East Campus Utility Plant, McKinly Animal Care Facility, Alison Hall, Barnes & Noble Bookstore, Frazer Field Synthetic Turf, Bob Carpenter Center addition, Carpenter Sports Building, East Campus Housing and the Science and Technology Campus.

Mr. Athey questioned whether the University contemplated any improvements to College Avenue based on the activity in that area. According to Mr. Singleton, part of the planning currently underway involved traffic engineers to address that issue. He said at its peak, the Chrysler plant employed about 4,000 people, so there was existing traffic infrastructure with significant capacity. However, as the site develops, he agreed it would be necessary for the University to work closely with the City and DelDOT on upgrades.

6. 1-B-2. STUDENT BODY REPRESENTATIVE

There were no comments forthcoming.

7. 1-C. COUNCIL MEMBERS

43:54

Mr. Markham

- Congratulated Catherine Rooney's for their Downtown Newark Partnership award.
- Rode along with the Newark Police on Halloween Eve which provided an interesting viewpoint from the perspective of the Police Department.
- Recognized the City for converting to electronic paystubs.
- Remembered and recognized Jim Soles, father-in-law of Councilman Paul Pomeroy. He was a good man with a great wit who liked to help all students and advise those who had lost their way and also had a big influence on the political process in the state.

8. Mr. Athey

- Commended Mr. Temko for his role in suggesting the Citizen's Academy.
- Thanked Messrs. Lopata, Wilson and Chief Tiernan for assistance with some rental issues.
- Recognized the efforts of Messrs. Emerson and Zaleski for working with the College Park Civic Association while they considered the Adopt-A-Park program for Dickey Park.
- Noted Mr. Funk was appointed by DelDOT Secretary Carolann Wicks to the Municipal Street Aid Program Committee, and advised he received a similar appointment from Secretary Wicks to a task force on the Transportation Trust Fund.

9. **Mr. Temko**

- Acknowledged area legislators who were elected or re-elected to represent the Newark area.
- Congratulated the graduating members of the Citizen's Academy and hoped the City would continue to look for opportunities to build civic leadership in the community.
- Questioned when the City's 2011 proposed Operating Budget would be available online. Mr. McFarland thought the document had been posted under the Finance Department link on the City's website, but would verify that it was available.
- Regarding the Electric Rate Study, asked if the consultant had provided any new information about the electric heat component. Mr. McFarland advised he sent that information to Mr. Temko via email. Mr. Temko was also interested in reviewing information from the consultant on inclining block rates for Council's final discussion of the study.

10. **Mr. Funk**

- Met Jim Soles when he first started teaching at the University of Delaware and said he was an incredible, special person who would be sorely missed.

11. **2. APPROVAL OF CONSENT AGENDA**

- 50:57**
- A. Approval of Regular Council Meeting Minutes – October 25, 2010
 - B. Approval of Special Council Meeting Minutes – October 25, 2010
 - C. Receipt of Alderman's Report – November 4, 2010
 - D. Setting Date for Public Hearing of 2011 General Operating Budget for November 22, 2010
 - E. Receipt of Quarterly Pension Report
 - F. Receipt of Real Estate Tax Assessment Quarterly Supplemental Roll
 - G. Appointment of Paul Faust, 25 E. Mill Station Drive, to the Board of Adjustment

MOTION BY MR. ATHEY, SECONDED BY MR. MARKHAM: THAT THE CONSENT AGENDA BE APPROVED AS SUBMITTED.

MOTION PASSED UNANIMOUSLY: VOTE: 6 to 0.

Aye – Athey, Clifton, Funk, Markham, Temko, Tuttle.

Nay – 0.

Absent – Pomeroy.

12. **3. ITEMS NOT FINISHED AT PREVIOUS MEETING**

- A. **Bill 10-09** – An Ordinance Amending Chapter 7, Building, Code of the City of Newark, Delaware, By Establishing a Newark LEED Based Energy Conservation Program (***Tabled 6/14/10 – Revised 10/7/10***)
 - 1. Authorization to Execute Licensing Agreement with U.S. Green Building Council, Inc.

51:47

Ms. Fogg read Bill 10-09 by title only.

MOTION BY MR. CLIFTON, SECONDED BY MR. ATHEY: THAT BILL NO. 10-09 BE LIFTED FROM THE TABLE.

MOTION PASSED UNANIMOUSLY: VOTE: 6 to 0.

Aye – Athey, Clifton, Funk, Markham, Temko, Tuttle.

Nay – 0.
Absent – Pomeroy.

Mr. Lopata said when the bill was previously discussed in June, the City was on the verge of adopting the first set of required energy conservation measures based on the LEED program. This was the culmination of many years of work begun by the Conservation Advisory Commission, by Steve Dentel and by members of the Code Enforcement Division who had put together a set of standards making energy conservation measures mandatory beyond current requirements in the ICC Code.

During the discussion in June, issues were raised about copyright provisions since the City was adopting LEED requirements into the Code. The United States Green Building Council, owner of the LEED program, was contacted. They were pleased by what the City was doing and said the copyright question had never previously been raised. They then produced a licensing agreement which was a companion piece to the proposed bill for the City to adopt in order to formalize the relationship with the Green Building Council.

Mr. Lopata noted that several areas of flexibility were added to provide additional LEED points, primarily for projects in the downtown area.

The Chair opened the discussion to the public.

Steve Dentel, Conservation Advisory Commission member and former Chair, previously made presentations and provided details about the conservation advantages of the measures. He thanked Mr. Lopata for the time he spent working through all the details. He felt this was a very positive step for the City and would set an example that would be emulated elsewhere. Mr. Dentel pointed out the standards were currently limited to buildings of 20,000 square feet or larger and hoped going forward that the standards could be applied to smaller construction projects.

There being no further comments forthcoming, the discussion was returned to the table.

Mr. Athey referenced past comments made by architect Ralph Olivier where he stated since the City adopted the International Building Code, these requirements would be incorporated there within a year or two and therefore the City could do nothing. Mr. Lopata said while the ICC had strengthened its regulations over time, this program went well beyond those regulations.

Regarding the licensing agreement, Mr. Athey asked if the City could make a change to Attachment A. Mr. Lopata discussed this question at length with the Chief Legal Counsel of the USGBC and had confirmation that the City could make modifications, provided it was done in tandem with what LEED proposed.

Mr. Markham questioned if the City needed to have a LEED certified engineer on board, and Mr. Lopata responded that was not necessary. Further, he verified that no builders had participated in the voluntary LEED-based checklist experiment. Mr. Markham commented there was some question at the last meeting regarding the cost to developers. Mr. Lopata replied the jury was still out on that point, and as Mr. Dentel noted, people in the environmental field claimed if you build to LEED standards, you will eventually recoup your investment. Others in the field say that was not the case. Mr. Lopata noted the standards the City adopted were not full LEED. Rather, the City took what was felt to be tough and rigorous while still being fair, and staff would be back to CAC and Council if they found any items that were onerous.

Mr. Temko recognized the Conservation Advisory Commission and Mr. Lopata for their hard work. If the LEED program was adopted, he thought the

City should revisit it in the future to assess successes and failures and discuss the point system and whether smaller projects should be included.

MOTION BY MR. CLIFTON, SECONDED BY MR. TEMKO: THAT THIS BE THE SECOND READING AND FINAL PASSAGE OF BILL 10-09.
(MOTION FROM 6/14/10 COUNCIL MEETING)

MOTION PASSED UNANIMOUSLY: VOTE: 6 to 0.

Aye – Athey, Clifton, Funk, Markham, Temko, Tuttle.
Nay – 0.
Absent – Pomeroy.

(ORDINANCE NO. 10-26)

MOTION BY MR. CLIFTON, SECONDED BY MR. TUTTLE: TO APPROVE THE LICENSING AGREEMENT BETWEEN THE U.S. GREEN BUILDING COUNCIL, INC. AND THE CITY TO INCORPORATE LEED RATING SYSTEM AND REFERENCE GUIDES IN THE MUNICIPAL CODE.

MOTION PASSED UNANIMOUSLY: VOTE: 6 to 0.

Aye – Athey, Clifton, Funk, Markham, Temko, Tuttle.
Nay – 0.
Absent – Pomeroy.

13. **4. FINANCIAL STATEMENT** – None

14. **5. RECOMMENDATIONS ON CONTRACTS & BIDS** – None

15. **6. ORDINANCES FOR SECOND READING & PUBLIC HEARING** – None

16. **7. PLANNING COMMISSION/DEPARTMENT RECOMMENDATIONS**

A. Request of Janet E. Jacobson for a Special Use Permit for a Proposed Customary Home Occupation in a Residential Dwelling in Order to Sell Home Baked Pretzels Wholesale at 22 Minquil Drive in Silverbrook, Newark, Delaware

1:03

MOTION BY MR. TUTTLE, SECONDED BY MR. ATHEY: THAT THE SPECIAL USE PERMIT BE GRANTED AS REQUESTED.

Ms. Jacobson will bake pretzels at her home in Silverbrook and planned to sell them wholesale. She sent letters to her neighbors informing them of the proposed business, and Ms Fogg reported the neighbors within 300 feet were notified by the City of the public hearing.

Mr. Clifton asked if there would be traffic generated to distribute the pretzels, and Ms. Jacobson said she would make deliveries from her personal vehicle once a day.

The Chair opened the discussion to the public.

Allan Crowe, a resident of Minquil Drive, felt there would be no negative impact to the neighborhood from the business and thus supported the request.

Charles Scott, a Minquil Drive resident, was also in favor of the request.

There being no further comments, the discussion was returned to the table.

MOTION PASSED UNANIMOUSLY: VOTE: 6 to 0.

Aye – Athey, Clifton, Funk, Markham, Temko, Tuttle.

Nay – 0.

Absent – Pomeroy.

17. 8. ITEMS SUBMITTED FOR PUBLISHED AGENDA

A. Council Members:

1. Resolution No. 10-

1:09

In Appreciation of Representative Michael N. 'Mike' Castle

The following resolution was presented.

**IN APPRECIATION OF REPRESENTATIVE
MICHAEL N. 'MIKE' CASTLE**

WHEREAS, the Honorable Mike Castle has served the citizens of the State of Delaware since 1967 when he was first elected to the Delaware State House of Representatives, then elected as a Delaware State Senator in 1969, became Lieutenant Governor in 1981, elected as Governor in 1985, and has served as Delaware's Congressman in the United States House of Representatives since 1993; and

WHEREAS, Representative Castle, as Governor and Congressman, provided funding assistance for improving Newark's highway system, and our parks and bikeways, and our public transit service; and

WHEREAS, most recently, Representative Castle played a major role in providing the funding for the proposed Newark Transportation Center; and

WHEREAS, Representative Castle has been a major supporter of Municipal Street Aid which has benefitted the citizens of the City of Newark for many years; and

WHEREAS, Representative Castle will be remembered not only for the important legislation he supported, but for always being there for his constituents, and for his participation at Newark's Community Day, walking in Newark's Memorial Day Parade, and frightening Newarkers as Frankenstein in Newark's annual Halloween parade;

NOW, THEREFORE, BE IT RESOLVED that the Council of the City of Newark wishes to commend Representative Mike Castle for his effective leadership, his dedication to the State of Delaware and its citizens, his true professionalism, and extend its heartfelt thanks and appreciation for his service to the State of Delaware.

RESOLVED at a Regularly Scheduled Meeting on November 8, 2010.

Mr. Funk said that Mike Castle was an incredible friend of the City and would definitely be missed from his service on the Delaware legislature.

MOTION BY MR. CLIFTON, SECONDED BY MR. MARKHAM: THAT RESOLUTION 10-__, IN APPRECIATION OF REPRESENTATIVE MICHAEL N. 'MIKE' CASTLE, BE APPROVED AS PRESENTED.

MOTION PASSED UNANIMOUSLY: VOTE: 6 to 0.

Aye – Athey, Clifton, Funk, Markham, Temko, Tuttle.

Nay – 0.

Absent – Pomeroy.

(RESOLUTION NO. 10-X)

18. 8-B. OTHERS:

1. WILMAPCO Presentation re Regional Transportation Plan

1:10

Heather Dunigan, Principle Planner for WILMAPCO, distributed a draft of WILMAPCO's twenty year, long-range regional transportation improvement plan. The plan was updated every four years and contained a specific list of projects that could realistically be funded within the next twenty years. Approval of the plan by WILMAPCO Council was scheduled for January. For the New Castle County portion of the plan, WILMAPCO was projecting that beyond 2020, they would have no funding for capital projects. Newark projects included Elkton Road from Casho Mill Road to Delaware Avenue, a safety project for South College Avenue at Old Chestnut Road, minor improvements along Possum Park Road from Possum Hollow to Old Possum Park and the MARC train extension to Elkton in service by 2020 (which WILMAPCO thought would be more realistic and a better project with the extension to Newark included.)

Ms. Dunigan issued an invitation to the public forum to discuss the transportation plan on November 17 at 4:00 p.m. at the Embassy Suites hotel. DelDOT will be present to discuss their statewide transportation plan as would the Office of State Planning to discuss the updated growth area. She also announced the Newark Transportation Plan Public Workshop on November 16 at 7:00 p.m. at WILMAPCO.

19. 9. SPECIAL DEPARTMENTAL REPORTS

A. Special Reports from Manager & Staff: None

20. Meeting adjourned at 8:12 p.m.

Patricia M. Fogg, CMC
City Secretary

/av

Sec. 7-8. - Amendments made to the 2012 International Energy Conservation Code.

The 2012 International Energy Conservation Code is hereby amended and changed in the following respects:

- (1) *101.1 Title*: Insert "the City of Newark" within parenthesis of this section.
- (2) *103.3.1 Approval of construction documents*. Delete Section 103.3.1 in its entirety and insert in lieu thereof a new Section 103.3.1 to read as follows:

" *103.3.1 Approval of construction documents*: When the building/code official issues a permit, the construction documents shall be approved, in writing or by stamp, as "Approved." One set of construction documents so reviewed shall be retained by the building/code official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the building/code official or a duly authorized representative.
- (3) *107.5 Refunds*: Delete Section 107.5 in its entirety and insert in lieu thereof a new Section 107.5 to read as follows:

" *107.5 Refunds*: There shall be no refund of any permit fees and/or any associated fees once paid."
- (4) *108.4 Failure to comply*: Delete Section 108.4 in its entirety and insert in lieu thereof of a new Section 108.4 to read as follows:

" *108.4 Failure to Comply*: Any person who shall continue any work in or about the structure after having been served with a stop-work order, except such work as he is directed to perform to remove a violation or unsafe conditions, shall be liable to the penalties as set forth in Section 108.5 as amended."
- (5) *108.5 Violation penalties*: Add a new Section 108.5 to read as follows:

" *108.5 Violation penalties*: Penalties for violations shall be imposed in accordance with Chapter 7, Article I, Section 7-1 (g)."
- (6) *109 Board of appeals*. Delete Section 109 in its entirety and insert in lieu thereof a new Section 109 and a new Subsection 109.1 to read as follows:

" *109 Board of appeals*. "

" *109.1 Application for appeal*: An appeal may be made from a decision of the Building/Code Official by making an appeal to the Board of Building, Fire, Property Maintenance and Sidewalk Appeals, pursuant to Chapter 7, Article 1, Section 7-1(d)."
- (7) The following additional energy conservation and efficiency standards shall apply to all major subdivisions, as defined in chapter 27, subdivisions, of this Code:
 - a. These additional energy conservation and efficiencies standards shall be based on the most recently issued United States Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) rating system or equivalent standard approved by the planning and development department.
 - b. Projects shall be reviewed and evaluated and points rewarded as established herein through the building permit process.
 - c. Required energy conservation efficiency standards shall be derived from the specifications in the USGBC's LEED 2009 for New Construction and Major Renovations and LEED 2008 for Homes, as subsequently revised and reissued, or a planning and development approved equivalent. Other LEED publications and adopted specifications may also be used as references or guides by the city as part of the energy conservation and efficiency standards review process.

- d. Commercial, institutional, high-rise residential and industrial projects shall be required to earn 25 points as specified in LEED 2009 For New Construction and Major Renovations (page numbers below refer to said text; these numbers may change in future editions):

LEED FOR NEW CONSTRUCTION	LEED PAGE	POINTS
1) Site Selection	2	4
2) Development Density and Community Connectivity	3	5
3) Alternative Transportation—Public Transportation Access	6	6
4) Water Efficient Landscaping	23	4
5) Optimize Energy Performance	35	2
6) Enhanced Commissioning	39	2
7) Enhanced Refrigerant Management	41	2
8) Green Power	45	2
9) Construction Waste Management	50	2
10) Regional Materials	53	2
11) Certified Wood	55	1
12) Outdoor Air Delivery Monitoring	60	1
13) Increased Ventilation	61	1
14) Construction Indoor Air Quality Management Plan—Before Occupancy	64	1
15) Low Emitting Materials—Adhesive and Sealants	66	1
16) Low Emitting Materials—Paints and Coatings	68	1
17) Low Emitting Materials—Flooring	69	1

18) Indoor Chemical and Pollutant Source Control	72	1
19) Controllability of Systems—Lighting	73	1
20) Thermal Comfort Design	75	1
21) Daylight and Views—Daylight	77	1
22) Daylight and Views—Views	81	1
23) LEED Accredited Professional	84	1

- e. Residential (non high-rise) projects shall be required to earn 25 points as specified in LEED (2008) For Homes, (page numbers below refer to this text; these numbers may change in the future editions):

LEED FOR HOMES	LEED PAGE	POINTS
1) Integrated Project Planning	19/20	2
2) LEED Accredited Professional	20	1
3) Landscaping	35/36	7
4) Optimize Energy Performance OR Substitute A Through G	55/56	11
a) Enhanced Insulation	58	2
b) Air Infiltration	61	2
c) Windows	62	2
d) Heating and Cooling Distribution System	64	2
e) Heating and Cooling Equipment	66	2
f) Water Heating	68	1

g) Lighting	71	1
5) Environmentally Preferable Products	79/80	2
6) Construction Waste Management (Table 27)	83/84	2
7) Local Exhaust	92	2
8) Contaminant Control	96	1
9) Garage Pollutant Protection	98	3

- f. Unless a waiver is granted for special circumstances of practical difficulties by the planning and development director through the building permit review process, all interior common area hallways in commercial, institutional and industrial buildings reviewed under LEED requirements shall be required to include interior lighting occupancy daylight or motion detectors sensors that operate such indoor lighting.
- g. Except as otherwise indicated herein, waivers from these requirements shall be approved as per the specifications in Section 112, Board of Building Appeals.
- h. This subsection (7) shall not apply to subdivision and/or construction in which building permits have been approved before the adoption of this subsection.

(Ord. No. 12-25, Amend. No. 1, 9-24-12; Ord. No. 16-22, Amend. No. 5, 7-11-16)

Sustainability Themes and Actions for 2018 Community Day

Draft as of September 6

Theme: Prepare the City and Adapt to Climate Change Impacts

Threats:

- Weather extremes that result in increasing rain, snow, and storm intensity
- Prolonged heat waves which result in increased energy demand

Opportunities:

- Provide flood resiliency and adaptation / reduce flooding risk
 - Map floodplains using future conditions
 - Model extreme precipitation events and stormwater drainage system response
 - Increase "freeboard" requirements
- Increase and enhance natural areas, parks and open spaces to manage stormwater
- Increase tree canopy and maintain tree health within the City
- Educate and provide outreach to businesses and residents / involve in solutions
 - Maintenance of stormwater controls and BMP's
 - Roof design and maintenance
 - Increase tree canopy and water infiltration / decrease runoff and standing water
- Prepare community contingency plans to respond to flooding, heat waves, and extreme weather
- Improve resiliency, storm response, reserve capacity and redundancy of local electric distribution grid for extreme weather response

Benefits: Improved water quality; reduced water runoff; reduced disruption and damage to roadways, businesses, and residents from stream flooding; decreased urban heat island effect; decreased power outages and business interruption, improved public safety.

Theme: Advance Clean Energy and Reduce the City's Fossil Fuel Dependence

Threats:

- Energy costs and energy waste
- Volatile prices of fossil fuels
- Local air pollution impacts from burning fuels
- Global impact of greenhouse gas emissions from burning fossil
- Spills and accidental releases of fuels into the environment

Opportunities:

- Reduce energy use in buildings
 - Monitor energy and water use of all City-owned Buildings (Energy Star or similar)
 - Adopt latest International Energy Code
 - Update building codes and land development ordinance to require all new or major retrofit buildings to achieve Green Building standards (LEED)
 - Increase participation in DEMEC energy efficiency and demand response programs

- Support and encourage renewable energy and storage
 - Evaluate all City-owned roofs and real estate for potential solar generation
 - Decrease barriers for private solar generation on buildings in the City
 - Offer 100% fossil fuel free Green Power Generation option to electrical customers

Benefits: Improved electric grid reliability; reduced long-term costs; reduction in City's Carbon Footprint; and demonstrated leadership in climate action.

Theme: Green and Sustainable for Buildings, Infrastructure, and Land Development

Threats:

- Wasteful and unhealthy methods of the past will burden future residents and government agencies for the life of the assets
- Not applying latest up-to-date methods and practices is detrimental to society

Opportunities:

- Require all new investments in building and infrastructure within City to use the latest sustainable design strategies
 - Require LEED for public and institutional buildings – Silver as a minimum / incentivize Gold and Platinum
 - Set Target date for Net Zero Buildings
 - Set increasing standards
- Require Green Infrastructure benchmarking for infrastructure investments within the City
 - Use Envision for Public Infrastructure
 - Use GreenRoads
- Sustainable land development – minimize development “footprint”, protect natural resources
 - LEED for neighborhoods
 - LEED for cities

Benefits: Reduced environmental footprint; water, energy and resource conservation and improved indoor air quality; vibrant inclusive and healthy community; reduction in City's carbon pollution; and demonstrated leadership in climate action; encourage innovation, retain talent and future focused businesses in the City.

Theme: Advance Clean Transportation

Threats:

- Health effects of carbon-based fuels
- Fluctuations in costs of gasoline and fuels

Opportunities:

- Support transition to fossil fuel-free transport
 - Provide incentives and additional routes for mass transit and ride sharing
 - Transition to electric vehicles with charging network for City vehicles
 - Increase electric vehicle charging network for public vehicles

- Encourage human mobility – additional on and off road bike trails, pedestrian crosswalks, traffic calming measures
- Study traffic circulation and provide congestion mitigation

Benefits: reduction in City's carbon pollution; healthier population; and demonstrated leadership in climate action.

Theme: Reduce City's Waste Footprint

Threats:

- Cost of waste disposal
- Inefficient use of resources
- Environmental impacts of improper waste handling

Opportunities:

- Further recycling program – ordinances / public education for to reuse, reduce, and recycle
- Encourage composting – organic wastes that can be used to fertilize soil
- Reduce pet wastes – ordinances and public education

Benefits: Lessening of wastes to landfill, lower costs to residents and businesses.

Theme: Reduce Water Usage

Threats:

- Unneeded costs to residents and businesses
- Impacts to overall water quality

Opportunities:

- Further encourage water conservation – low flow fixtures, xeriscaping practices
- Reinforce safety and accessibility of tap water
- Minimize purchase of bottled water, encourage use of refillable containers
 - Ban purchase of bottled water by the City of Newark and all its Departments

Benefits: Improved water quality; reduced Water Treatment Plant costs, reduced withdrawals from aquifers and surface waters (White Clay Creek), demonstrated leadership in water conservation.

Theme: Practice Sustainable Economic Development

Threats:

- Inability for City and its residents to fund operations and quality of life measures

Opportunities:

- Triple Bottom Line approach – balance costs and benefits economically, environmentally, and socially
- Code amendments – assure responsible development that won't jeopardize the ability of

- future Newarkers to meet their needs
- Sustainable Purchasing Program for City operations

Benefits: Long term vision, material and resource efficiencies.

Theme: Improve Local Food Systems

Threats:

- Excessive use of energy to transport food
- Environmental impacts of corporate farms and processed food

Opportunities:

- Create Buy Local campaign – encourage purchases from local food sources
- Provide community gardens – opportunities for non-home owners to grow their own food
- Support local Farmers Markets within the City to provide fresh local foods

Benefits: increased patronage for local farmers and businesses; reduced fuel consumption, support a sustainable local food supply, healthy citizens.

TO: Green Building Code Work Group
FROM: Willard F. Hurd, AIA
DATE: November 16, 2018
RE: Information for the Areas of Focus Discussion

The Newark Sustainability Plan Steering Committee is currently working on a broad, long-term, and integrated community sustainability plan that will implement the City's vision and goals as contained in the Comprehensive Plan. The early part of their work has been to define several themes. They presented these themes at Community Day for the public to rank them. The results were:

- Promote green and sustainable buildings, infrastructure, and land development
- Advance clean energy and reduce the City's fossil fuel dependence
- Improve local food systems
- Advance clean transportation
- Reduce the City's waste footprint
- Prepare the City to adapt to climate change impacts
- Reduce water usage
- Practice sustainable economic development

Within these themes are many elements that can be addressed through amendments to the Building and Zoning Code. Currently, the City uses selected items from LEED 2009 for commercial projects and LEED 2008 for residential projects as amendments to the International Energy Code adoption. They also set LEED Certified as a recommended component of the Site Plan Approval process.

Within the Building Code, some of the elements that we can address within the ranked themes from the Sustainability Plan are:

- Reduce Energy Usage
- Increase Renewable / Onsite Energy Production
- Reduce Water Usage
- Reduce Material Usage / Responsible Sourcing
- Reduce / Recycle Construction Waste

Within the scope of the Zoning Code and Site Plan Approval the elements are broader and include:

- Reduce Land Development “footprint” and Promote Conservation of Natural Resources
- Promote Multi-modal Transportation Access
- Improve Storm Water Management

This is not a complete list, and some elements overlap and complement each other.