

GREEN BUILDING AND SMART GROWTH
AN OVERVIEW OF RECENT DEVELOPMENT AND
INITIATIVES ON THE LOCAL AND
STATE LEVEL IN MASSACHUSETTS

Ellyn H. Hurd and Daniel C. Perry
Perry, Hicks, Crotty & Deshaies, LLP, New Bedford, MA

I. GREEN ZONING CODES.

Efforts in Massachusetts to incorporate “green building” concerns in local zoning and building codes have primarily concentrated on the LEED Certification process.

What is LEED? LEED is an acronym for Leadership in Energy and Environmental Design, a green building rating system developed by the US Green Building Council (USGBC). USGBC is a non-profit organization headquartered in Washington, D.C., whose guidelines have been developed with broad input from the construction industry, government, and non-profit organizations. USGBC’s web site, www.usgbc.org contains extensive information about its programs and standards.

LEED is a certification process administered by USGBC that evaluates numerous aspects of the environmental impact of a construction project. There are several different standards; the most pertinent one for present purposes is the certification program for new construction and major renovation projects. Application for certification is made directly to USGBC (often online), and requires substantial documentation. The existing certification standards (version 2.2, enacted October, 2005) will be retired later this month, and applications after that date will be reviewed under version 3.0. Both are available on the USGBC website. The Checklist for version 3.0 is Attachment 1 to this Outline. It establishes certain threshold requirements for any LEED certified project, but mostly relies on a point system providing for as much as 110 possible points, achieved by meeting designated standards. Certification requires at least 40 points. Higher levels of certification (silver, gold and platinum) can be achieved with higher point totals.

Points are awarded in the following seven categories:

- a. Sustainable Sites
- b. Water Efficiency
- c. Energy and Atmosphere
- d. Materials and Resources
- e. Indoor Environmental Quality
- f. Innovation and Design
- g. Regional Priority

There are also minimum project requirements, mostly procedural in nature, to insure that certification process is meaningful.

Some Examples

Sustainable Sites contains a baseline requirement for controlling pollution generated by the construction process, and contains bonuses for density and redevelopment of brownfields. It offers potential points for a number of building practices that encourage reduction of automobile usage, including:

- location near mass transit (Credit 4.1)
- accommodations for bicyclists (Credit 4.2)
- parking arrangements that encourage carpooling (Credit 4.4)

Water efficiency imposes a mandatory requirement that the water use for the project be demonstrated to be at least 20% below the calculated commercial baseline, based on standard water usage of code compliant systems, fixtures and appliances. Points are available, among other things, for:

- water efficient landscape design
- re-use or treatment onsite of wastewater
- meeting enhanced water reduction technology

Energy and Atmosphere contains several important threshold requirements, including creating a program for oversight of energy usage, and significantly, minimum standards for

energy efficiency that substantially exceed the Massachusetts Building Code. Prerequisite 2 states as a requirement that the applicant must:

Design the building project to comply with both –

- the mandatory provisions (Sections 5.4, 6.4, 7.4, 8.4, 9.4 and 10.4) of ASHRAE/IESNA Standard 90.1-2004 (without amendments); and
- the prescriptive requirements (Sections 5.5, 6.5, 7.5 and 9.5) or performance requirements (Section 11) of ASHRAE/IESNA Standard 90.1-2004 (without amendments).¹

Standard 90.1-2004 can be downloaded at:

http://www.energycodes.gov/training/pdfs/ashrae_90_1_2004.pdf

Up to 10 points are available if the owner demonstrates that the building performance rating exceeds the building performance rating calculated by Exhibit G of Standard 90.1-2004. Other points are available for renewable energy and solar power, and enhanced oversight concerning energy usage.

Materials and Resources creates baseline requirements for handling recyclables, and awards credits for, among other things:

- re-use of existing materials on site
- recycling construction waste
- using salvaged materials
- using products that incorporate pre and post consumer recycled materials

¹ The Cambridge City Solicitor has rendered an opinion that this requirement is inconsistent with the provision of M.G.L. chapter 40A, section 3 that “no zoning ordinance or by-law shall regulate or restrict the use of materials, or methods of construction, regulated by the state building code.” Any attempt by a city or town (other than Boston, which has its own zoning authority) to enact zoning making LEED certification insert mandatory probably requires special authorizing legislation.

- using wood products that are grown using environmentally responsible forest management

Indoor Environmental Quality creates a baseline requirement for controlling exposure to second hand smoke, and awards credits for, among other things:

- enhanced ventilation
- controlling emissions during construction
- using low emitting materials

LEED in Massachusetts Zoning

Boston. In 2007, the City of Boston enacted amendments to the Boston Zoning Ordinance requiring that “large projects” governed by Article 80B of the City Zoning Ordinance (50,000 square feet of habitable space to be “LEED certifiable using the LEED building rating system most appropriate for the proposed project” (Attachment 2)). The Ordinance slightly modifies the LEED formula by providing additional local criteria that make four additional points achievable. Boston is the largest municipality in the County to enact LEED Certification as a component of private building permitting.

Note that while the Ordinance requires that a project “be LEED certifiable,” and requires the submission of a LEED score sheet, it does not require submission to USGBC. The Ordinance has been criticized by academic commentators because (1) the Boston Redevelopment Authority does not require the analysis and documentation that USGBC would require to achieve points, and (2) BRA has not developed substitute criteria or baseline documentation, so there is no guidance to design teams, and there is a perception that there is of a lack of transparency in decision making.

Public Projects. There are several instances in Massachusetts where LEED certification has been required for public projects. Governor Patrick has signed an executive order requiring LEED Certification for all construction and major renovation projects over 20,000 square feet by

state agencies. Arlington, Massachusetts has required all new city buildings and major restoration projects to achieve a LEED silver rating. (Attachment 3)

Incentive Clauses. Acton and Arlington have both enacted provisions in their zoning by law providing incentives in the form of bonus a bonus in the maximum density of residential developments for LEED-certified projects.

II. SMART GROWTH ZONING INITIATIVES.

Chapter 40R was enacted in 2004 to encourage “smart growth and increased housing production in Massachusetts. Generally, the statute works by creating an overlay district, wherein a developer can elect to develop a project pursuant to alternation zoning requirements that comply with state standards for smart growth. Primary requirements are: (1) the district must have density of at least 8 units per acre for single family, 12 units per acre for two and three family, and 20 units per acre for multi-family; (2) 20% of units must be affordable; and (3) the district is not subject to moratoria or annual limits on building permits. As an incentive, the Commonwealth makes payments to the Town at the time of creating the district and at the time of completion of each unit (\$3,000 each). The statute also directs state agencies that award discretionary funds to use methodology favoring cities or towns with 40R Districts.

Twenty-six municipalities have enacted smart growth districts, authorizing 9,000 units of housing. Only 400 units have been built today. The balance are “shovel ready” when the economy improves.

LUPA. The Patrick Administration’s main smart growth initiative is a proposed bill entitled the “Land Use Partnership Act.” (Attachment 4). The bill resulted from a task force formed by Secretary of Environmental Affairs Greg Bialecki. The primary goal of the legislation is is to (1) discourage local zoning enactments that are not consistent with state land use policies; and (2) generally streamline the permitting process and make it more predictable.

The Act is in two parts. Part 1 contains modifications to the Zoning Act and the Subdivision Control Law, which are applicable to all municipalities. The second section contains “opt in” provisions for municipalities, which gives additional regulatory power and some additional funding to communities that create and agree to be bound by a land use plan that is consistent with state policy.

Mandatory Provisions.

The most significant mandatory provisions of the plan are the following:

1. Allows cities and towns to regulate maximum residential floor area and curb “McMansions.”
2. Establishes clear authority for cities and town to create new “form-based” zoning codes.
3. Allows a majority vote for adopting a zoning bylaw or ordinance, with the local option of maintaining it at 2/3.
4. Limits “zoning freezes” to project plans, and not the underlying land itself.
5. Establishes the statutory framework for site plan review, which among other things, limits the power of local boards to impose design conditions.
6. Authorizes cities and town to institute “Transfer of Development Rights” (TDR) zoning.
7. Clarifies and expands the use of “cluster development” to protect open space within residential developments.
8. Specifically authorizes municipalities to charge impact fees to offset the costs of increased public services, but limits the basis on which the fees can be calculated.
9. Clarifies the rules for subdivision review.

Opt-In Provisions

Opt-In municipalities must meet the following requirements:

1. Creation of a certified land-use plan and enactment of local zoning consistent with the plan.

2. Prompt and predictable permitting of commercial and/or industrial development within one or more districts unless waived by the Regional Planning Authority.
3. Prompt and predictable permitting of reasonable compact residential development within one or more districts that can accommodate a number of new housing units equal to 5% of existing housing units over 10 years (0.5% per year).
4. Mandatory open space residential design to protect open space in developments five units or larger in all zoning districts with minimum one acre lot size.
5. Mandatory low impact development techniques to help replenish groundwater in all developments greater than one acre.
6. Prompt and predictable permitting of (i) renewable or alternative energy generating facilities, (ii) renewable or alternative energy research and development facilities, or (iii) renewable or alternative energy manufacturing facilities, within one or more zoning districts that are eligible locations.

Opt-In municipalities receive the following benefits:

1. Permission to eliminate the approval not required (ANR) exemption for residential projects.
2. Reduction of the subdivision zoning freeze from eight to three years (five years if the developer has invested substantially in infrastructure).
3. Ability to impose reasonable rate-of-growth programs within growth areas.
4. Permits natural resource protection zoning (very large lot conservation zoning) in areas of environmental resource value.
5. Priority for discretionary state funding for infrastructure.
6. Technical assistance grant funding from the state to municipalities to prepare their land-use plans and implement the necessary zoning changes.

It has been 34 years since the Legislature has enacted comprehensive review of zoning. Despite the Administration's support, the prospects for enactment of LUPA are not clear at this time. Judging from web comments, local reaction has been lukewarm.

LEED 2009 FOR NEW CONSTRUCTION AND MAJOR RENOVATIONS PROJECT CHECKLIST

Sustainable Sites

26 Possible Points

<input checked="" type="checkbox"/>	Prerequisite 1	Construction Activity Pollution Prevention	Required
<input type="checkbox"/>	Credit 1	Site Selection	1
<input type="checkbox"/>	Credit 2	Development Density and Community Connectivity	5
<input type="checkbox"/>	Credit 3	Brownfield Redevelopment	1
<input type="checkbox"/>	Credit 4.1	Alternative Transportation—Public Transportation Access	6
<input type="checkbox"/>	Credit 4.2	Alternative Transportation—Bicycle Storage and Changing Rooms	1
<input type="checkbox"/>	Credit 4.3	Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	3
<input type="checkbox"/>	Credit 4.4	Alternative Transportation—Parking Capacity	2
<input type="checkbox"/>	Credit 5.1	Site Development—Protect or Restore Habitat	1
<input type="checkbox"/>	Credit 5.2	Site Development—Maximize Open Space	1
<input type="checkbox"/>	Credit 6.1	Stormwater Design—Quantity Control	1
<input type="checkbox"/>	Credit 6.2	Stormwater Design—Quality Control	1
<input type="checkbox"/>	Credit 7.1	Heat Island Effect—Nonroof	1
<input type="checkbox"/>	Credit 7.2	Heat Island Effect—Roof	1
<input type="checkbox"/>	Credit 8	Light Pollution Reduction	1

Water Efficiency

10 Possible Points

<input checked="" type="checkbox"/>	Prerequisite 1	Water Use Reduction	Required
<input type="checkbox"/>	Credit 1	Water Efficient Landscaping	2-4
<input type="checkbox"/>	Credit 2	Innovative Wastewater Technologies	2
<input type="checkbox"/>	Credit 3	Water Use Reduction	2-4

Energy and Atmosphere

35 Possible Points

<input checked="" type="checkbox"/>	Prerequisite 1	Fundamental Commissioning of Building Energy Systems	Required
<input checked="" type="checkbox"/>	Prerequisite 2	Minimum Energy Performance	Required
<input checked="" type="checkbox"/>	Prerequisite 3	Fundamental Refrigerant Management	Required
<input type="checkbox"/>	Credit 1	Optimize Energy Performance	1-19
<input type="checkbox"/>	Credit 2	On-site Renewable Energy	1-7
<input type="checkbox"/>	Credit 3	Enhanced Commissioning	2
<input type="checkbox"/>	Credit 4	Enhanced Refrigerant Management	2
<input type="checkbox"/>	Credit 5	Measurement and Verification	3
<input type="checkbox"/>	Credit 6	Green Power	2

Materials and Resources

14 Possible Points

<input checked="" type="checkbox"/>	Prerequisite 1	Storage and Collection of Recyclables	Required
<input type="checkbox"/>	Credit 1.1	Building Reuse—Maintain Existing Walls, Floors and Roof	1-3
<input type="checkbox"/>	Credit 1.2	Building Reuse—Maintain Existing Interior Nonstructural Elements	1
<input type="checkbox"/>	Credit 2	Construction Waste Management	1-2
<input type="checkbox"/>	Credit 3	Materials Reuse	1-2
<input type="checkbox"/>	Credit 4	Recycled Content	1-2

<input type="checkbox"/>	Credit 5	Regional Materials	1-2
<input type="checkbox"/>	Credit 6	Rapidly Renewable Materials	1
<input type="checkbox"/>	Credit 7	Certified Wood	1

Indoor Environmental Quality

15 Possible Points

<input checked="" type="checkbox"/>	Prerequisite 1	Minimum Indoor Air Quality Performance	Required
<input checked="" type="checkbox"/>	Prerequisite 2	Environmental Tobacco Smoke (ETS) Control	Required
<input type="checkbox"/>	Credit 1	Outdoor Air Delivery Monitoring	1
<input type="checkbox"/>	Credit 2	Increased Ventilation	1
<input type="checkbox"/>	Credit 3.1	Construction Indoor Air Quality Management Plan—During Construction	1
<input type="checkbox"/>	Credit 3.2	Construction Indoor Air Quality Management Plan—Before Occupancy	1
<input type="checkbox"/>	Credit 4.1	Low-Emitting Materials—Adhesives and Sealants	1
<input type="checkbox"/>	Credit 4.2	Low-Emitting Materials—Paints and Coatings	1
<input type="checkbox"/>	Credit 4.3	Low-Emitting Materials—Flooring Systems	1
<input type="checkbox"/>	Credit 4.4	Low-Emitting Materials—Composite Wood and Agrifiber Products	1
<input type="checkbox"/>	Credit 5	Indoor Chemical and Pollutant Source Control	1
<input type="checkbox"/>	Credit 6.1	Controllability of Systems—Lighting	1
<input type="checkbox"/>	Credit 6.2	Controllability of Systems—Thermal Comfort	1
<input type="checkbox"/>	Credit 7.1	Thermal Comfort—Design	1
<input type="checkbox"/>	Credit 7.2	Thermal Comfort—Verification	1
<input type="checkbox"/>	Credit 8.1	Daylight and Views—Daylight	1
<input type="checkbox"/>	Credit 8.2	Daylight and Views—Views	1

Innovation in Design

6 Possible Points

<input type="checkbox"/>	Credit 1	Innovation in Design	1-5
<input type="checkbox"/>	Credit 2	LEED Accredited Professional	1

Regional Priority

4 Possible Points

<input type="checkbox"/>	Credit 1	Regional Priority	1-4
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LEED 2009 for New Construction and Major Renovations

100 base points; 6 possible Innovation in Design and 4 Regional Priority points

Certified	40–49 points
Silver	50–59 points
Gold	60–79 points
Platinum	80 points and above

TEXT AMENDMENT NO. 331

THE COMMONWEALTH OF MASSACHUSETTS

CITY OF BOSTON

IN ZONING COMMISSION

The Zoning Commission of the City of Boston, acting under Chapter 665 of the Acts of 1956, as amended, after due report, notice and hearing, does hereby amend the Boston Zoning Code as follows:

1. By amending **Article 2 (Definitions) and 2A (Definitions Applicable in Neighborhood Districts and in Article 80, Development Review and Approval)** as follows:
 - a. **In Section 2-1, Meanings of Certain Words and Phrases, insert** the following definition in appropriate alphabetical order:
 - i. "Green Building", structures and their surrounding landscapes designed, constructed, and maintained to decrease energy and water usage and costs, to improve the efficiency and longevity of building systems, and to decrease the burdens imposed on the environment and public health.
 - ii. "LEED", Leadership in Energy and Environmental Design Green Building Rating System are nationally accepted standards for green buildings developed by the USGBC. LEED standards include the following: LEED NC for new construction and major renovation projects; LEED CI for commercial interior projects; LEED H for homes; LEED ND for neighborhood development. The Green Guide for Health Care, developed by Healthcare without Harm, in conjunction with the USGBC is the appropriate standards for hospitals.
 - iii. "USGBC", United States Green Building Council, a nonprofit organization comprised of leaders from the building industry formed to encourage sustainability by promoting buildings

that are environmentally responsible, profitable, and healthy places to live and work.

b. **In Section 2A-1, Meanings of Certain Words and Phrases**, insert the following definition in appropriate alphabetical order:

- i. "Green Building", structures and their surrounding landscapes designed, constructed, and maintained to decrease energy and water usage and costs, to improve the efficiency and longevity of building systems, and to decrease the burdens imposed on the environment and public health.
- ii. "LEED", Leadership in Energy and Environmental Design Green Building Rating System are nationally accepted standards for green buildings developed by the USGBC. LEED standards include the following: LEED NC for new construction and major renovation projects; LEED CI for commercial interior projects; LEED H for homes; LEED ND for neighborhood development. The Green Guide for Health Care, developed by Healthcare without Harm, in conjunction with the USGBC is the appropriate standards for hospitals.
- iii. "USGBC", United States Green Building Council, a nonprofit organization comprised of leaders from the building industry formed to encourage sustainability by promoting buildings that are environmentally responsible, profitable, and healthy places to live and work.

2. By amending **Article 80 (Development Review and Approval)** as follows:

- a. In Section 80B-3.2 (Environmental Protection Component), insert the following subsection:
 - (o) Green Building. An analysis to determine how well the proposed project complies with LEED and to assess the level of environmental performance that will be achieved by the Proposed Project under the most appropriate LEED building rating system.
- b. In Section 80B-5.2 (b) (Content of PNF), insert the following subsection:

(ix) Preliminary green building information. A completed LEED checklist indicating the level of performance/point outcome of the Proposed Project based on the most appropriate LEED building rating system with an explanation of how each credit will be achieved, a list of members of the development team including a LEED certified professional, and a statement as to whether the developer will register the project with USGBC and seek certification.

c. In Section 80B-6.2 (Findings), insert the following subsection:

(vii) Article 37: Green Buildings.

ARTICLE 37

GREEN BUILDINGS

(Article inserted on January 10, 2007)

SECTION 37-1. **Statement of Purpose.** The purposes of this article are to ensure that major building projects are planned, designed, constructed, and managed to minimize adverse environmental impacts; to conserve natural resources; to promote sustainable development; and to enhance the quality of life in Boston.

SECTION 37-2. **Definitions.** For the purposes of this article only, the following words and phrases when capitalized shall have the meanings indicated.

1. "Applicant", any person or entity having a legal or equitable interest in a Proposed Project subject to the requirements of this article, or the authorized agent of any such person or entity.
2. "Boston Green Building Credits", Credits identified in this article that may be included in the calculation toward achieving a LEED Certifiable project under the provisions of this article.
3. "Boston Interagency Green Building Committee", an interdisciplinary committee consisting of at least one (1), but not more than two (2) representatives of city agencies including but not limited to, the Boston Redevelopment Authority, the Boston Environment Department, the Boston Transportation Department, the Inspectional Services Department and the Mayor's Office. Such Committee will advise the Boston Redevelopment Authority on Proposed Project's compliance with the provisions of this article.
4. "LEED Certifiable", a structure that is planned, designed and constructed to achieve the level "certified" using the LEED building rating system most appropriate for the Proposed Project.
5. "Proposed Project", the erection, extension, rehabilitation, alteration, or substantial demolition of any structure or part thereof, or the change of use of any structure or land, for which the Applicant is required to obtain a building or use permit.

SECTION 37-3. **Applicability.** Any Proposed Project which is subject to or shall elect to comply with Section 80B of this Code, Large Project Review, shall be subject to the requirements of this article. The following Proposed Projects, however, shall be exempt from the provisions of this article:

1. Any Proposed Project for which application to the Inspectional Services Department for a building or use permit has been made prior to the first notice of hearing before the Zoning Commission for adoption of this article and for which no Zoning Relief is required.
2. Any Proposed Project for which appeal to the Board of Appeal for any Zoning Relief has been made prior to the first notice of hearing before the Commission for adoption of this article, provided that such Zoning Relief has been or is thereafter granted by the Board of Appeal pursuant to such appeal.
3. Any Proposed Project or site for which application for approval of a development impact project plan or planned development area development plan, has been submitted to the Boston Redevelopment Authority prior to the first notice of hearing before the Commission for adoption of this article, provided that such development impact project plan or planned development area development plan, has been or is thereafter approved by the Boston Redevelopment Authority pursuant to such application, whether or not such application or such development impact project plan or planned development area development plan is thereafter modified or amended.

SECTION 37-4. **Green Building Requirements.** Any Proposed Project subject to the provisions of this article shall be LEED Certifiable under the most appropriate LEED building rating system. Up to four (4) of the required points may be obtained from the Boston Green Building Credits identified in Appendix A.

SECTION 37-5. **Procedures.** Any Applicant subject to the provisions of this article shall provide to the Boston Redevelopment Authority a completed LEED scorecard, including any Boston Green Credits that the Proposed Project will achieve. The Applicant shall demonstrate that the Proposed Project will meet the requirements of this article with appropriate supporting documentation and by certification from a LEED Accredited Professional and/or other expert recognized by the Boston Redevelopment Authority. The submissions shall be in accordance with the provisions of Section 80B.

Within five (5) days of its receipt of a completed LEED submission, the Boston Redevelopment Authority shall transmit a copy of the submission to Boston Interagency Green Building Committee.

SECTION 37-6. **Regulations.** The Boston Redevelopment Authority may promulgate regulations to administer this article.

SECTION 37-7. **Enforcement.** The Commissioner of Inspectional Services shall not issue any building permit or use permit for a Proposed Project that is subject to the provisions of this article unless the Director of the Boston Redevelopment Authority has issued a Certification of Compliance pursuant to Section 80B-6.

SECTION 37-8. **Severability.** The provisions of this article are severable, and if any such provision or provisions shall be held invalid by any decision of any court of competent jurisdiction, such decision shall not impair or otherwise affect any other provision of this article.

APPENDIX A to ARTICLE 37

Boston Green Building Credits

Any Proposed Project subject to the provisions of this article may obtain a maximum of four (4) of the required points from the Boston Green Building Credits which will be included in the calculation toward achieving a LEED Certifiable project under this article. One point may be awarded for each of the following four categories: Modern Grid; Historic Preservation; Groundwater Recharge; and Modern Mobility. In order to be eligible for the Boston Green Building Credits, a plan must be submitted to the Boston Redevelopment Authority to meet the following Boston Public Health Commission prerequisites:

- a. Retrofit of all diesel construction vehicles, from the United States Environmental Protection Agency approved retrofit technologies, as applicable, or contribution of a comparable amount to the Air Pollution Control Commission Abatement Fund;
- b. An outdoor construction management plan including provisions for wheel washing, site vacuuming, truck covers and anti-idling signage; and,
- c. Integrated pest management plan.

1. **Modern Grid**

One point will be awarded if a Proposed Project qualifies as a Distributed Generation/Combined Heat and Power (DG/CHP) project that provides useful "congestion relief" in locations where the Boston Redevelopment Authority and Boston Environment and Energy Services determine that electricity distribution load constraints exist. In order to earn this point the Proposed Project must include an on-site combined electrical power and heat generation system that provides for ten percent (10%) or more of the total building energy use. Eligible systems include combustion engine driven generators, fuel cells and micro turbines that utilize clean fuels including natural gas and biodiesel.

This provides value in reducing both transmission and distribution-level costs.

2. **Historic Preservation**

This point will be awarded if a Proposed Project involves the historic renovation of an existing structure and recognizes the importance of preserving Boston's historic assets. In order to earn this point the Proposed Project must include the historic renovation of an existing structure which complies with the applicable historic

preservation regulations and design guidelines including building and site materials and features. Structures must be located in a historic district or listed in the National Register of Historic Places, the State Register of Historic Places, or the Inventory of Historic and Archaeological Assets of the Commonwealth.

3. **Groundwater Recharge**

- a. In areas subject to Article 32, Groundwater Conservation Overlay District, one point will be awarded for Proposed Projects that provide fifty percent (50%) greater recharge than required under Article 32-6 (i.e., *capturing within a suitably-designed system a volume of rainfall on the lot equivalent to no less than 1.5 inches across that portion of the surface area of the lot to be occupied by the Proposed Project*); or
- b. For Proposed Projects in areas not governed by Article 32 and located in areas of filled land, one point will be awarded for Proposed Projects that capture a volume of rainwater on the lot equivalent to no less than one inch across that portion of the surface area of the lot to be occupied by the Proposed Project, or provide measures that otherwise result in on-site infiltration of rainwater including landscape irrigation. Applicants must demonstrate how combined building systems will meet this standard including area absorption/retention calculations.

4. **Modern Mobility**

This point will be awarded for Proposed Projects that meet all of the Transportation Demand Management ("TDM") Prerequisites and implement the required actions from the menu of TDM Options as set forth below:

- a. Prerequisites. The following prerequisites must be met for all Proposed Projects. The Applicant must specify commitment to these measures prior to the filing of the Project Notification Form:
 - (1) Designate an On-Site Transportation Coordinator in the management office;
 - (2) Post information about public transportation and car-sharing options;
 - (3) Provide transit, bike and pedestrian access information on building website;
 - (4) Provide on-site, external bicycle racks for visitors and covered secure bicycle storage for building occupants. The capacity is to be sized as follows: fifteen percent (15%) or

- more for residential buildings and five percent (5%) or more for all other building uses;
- (5) Comply with Boston Transportation Department district parking ratios; and
 - (6) join a Transportation Management Association (for commercial, hotel and mixed use projects).

b. TDM Options

(1) For residential projects (meet at least three):

- (a) Provide a fifty percent (50%) subsidy for monthly T pass purchases, one for each dwelling unit for the tenants first full year of occupancy.
- (b) Provide preferred parking spaces for a car-sharing service capable of serving 1% of the building occupants.
- (c) Provide shuttle service to public transit stations (applicable to projects located more than ¼ mile from a public bus or rail station).
- (d) Price and allow the purchase of deeded parking spaces separately from dwelling units. Parking spaces required by zoning may only be purchased and used by building tenants/unit owners.
- (e) On-site electric charging plug-in stations for plug-ins capable of serving one percent (1%) of the building occupants.
- (f) On site ATM, dry cleaning drop-off/pick-up & other amenities that reduce short car trips.

(2) For educational or medical institutions (meet at least eight):

- (a) Provide on-site sales of semester T passes for students.
- (b) Pre-tax payroll deduction and distribution for T passes for all on-site employees.
- (c) Fifty percent (50%) transit pass subsidy for all on-site employees.
- (d) Provide garage occupancy information by installing electronic monitors at entry/exits.
- (e) Provide parking cash out program for employees using public transit
- (f) Provide covered secure bicycle storage with convenient changing/shower facilities for five percent (5%) or more of building occupants.

- (g) Provide shuttle service to public transit stations (applicable to projects located more than ¼ mile from a public bus or rail station).
- (h) Provide preferential parking spaces for carpools and vanpools capable of serving five percent (5%) of the building occupants.
- (i) Provide preferential parking for alternative fuel or high efficiency vehicles capable of serving one percent (1%) if the building occupants.
- (j) On-site electric charging plug-in stations for plug-ins capable of serving one percent (1%) of the building occupants.
- (k) Provide an on-site ATM and direct deposit of paychecks

(3) For office or retail projects (meet at least one high-value and four basic):

(a) High-value (meet at least one):

1. Provide shuttle service to public transit stations (applicable to projects located more than ¼ mile from a public bus or rail station).
2. Parking cash out program for employees using public transit.
3. Fifty percent (50%) transit pass subsidy for all on-site employees.

(b) Basic (meet at least four):

1. Provide garage occupancy information by installing electronic monitors at entry/exits.
2. Pre-tax payroll deduction and distribution for T passes for all on-site employees.
3. Provide covered secure bicycle storage with convenient changing/shower facilities for five percent (5%) or more of building occupants.
4. Provide an on-site ATM and direct deposit of paychecks.
5. Provide preferential parking spaces for carpools and vanpools capable of serving five percent (5%) of the building occupants.

6. Provide preferential parking for alternative fuel or high efficiency vehicles capable of serving one percent (1%) of the building occupants.
7. On-site electric charging plug-in stations for plug-ins capable of serving one percent (1%) of the building occupants.

4. For hotels (meet at least three):

- (a) Fifty percent (50%) transit pass subsidy for all on-site employees.
- (b) Free weekend or multi-day pre-loaded T-passes for hotel guests.
- (c) Provision of transit and pedestrian information to guests before arrival.
- (d) Pre-tax payroll deduction and distribution for T passes for all on-site employees.
- (e) Provide garage occupancy information by installing electronic monitors at entry/exits.
- (f) Parking cash out program for employees using public transit.
- (g) Provide covered secure bicycle storage with convenient changing/shower facilities for five percent (5%) or more of building occupants.
- (h) On-site car rental service.
- (i) On-site electric charging plug-in stations for plug-ins capable of serving one percent (1%) of the building occupants.

(5) For mixed use projects (meet at least three from each of the appropriate use categories above)

Section 4. LEED

It is the intent of the Town to reduce the life-cycle operating costs and increase the environmental efficiency of Town buildings, by adopting the goal that all construction of new Town buildings and major renovations and additions to existing Town buildings meet or exceed a Silver Certification based on the most current criteria of the Leadership in Energy and Environmental Design (LEED) Green Building Rating System promulgated by the United States Green Building Council, or comparable scoring system. The Town shall include a minimum of LEED Silver Certification, or equivalent level in comparable building scoring system, as a required element in requests for proposal or bids it issues soliciting architectural design services for construction, major renovation, and addition to its buildings, unless the Permanent Town Building Committee makes the finding that such certification is not in keeping with the use or purpose of the building or is otherwise inappropriate. No building project shall be deemed complete until LEED Silver Certification or greater, or equivalent, has been confirmed, unless the PTBC makes the finding that such certification is not in keeping with the use or purpose of the building or is otherwise inappropriate.

ART. 18, ATM 4/00, ART. 32 ATM 5/14/03



Town of Arlington, Massachusetts
730 Massachusetts Ave., Arlington, MA 02476
Phone: 781-316-3000

webmaster@town.arlington.ma.us

2008 Zoning Bylaw Changes

Changes to the Arlington Zoning ByLaw Passed by the Annual Town Meeting-2008

As a result of the actions voted by the Arlington Annual Town Meeting, four articles were passed which propose changes to the Arlington Zoning Bylaw. These changes require approval by the State Attorney General, but are considered in effect until the Town is notified otherwise. These changes will not appear in the Zoning Bylaw until Attorney General approval is received; this is expected to be by September 1, 2008.

The changes to the Zoning Bylaw are:

Section 6.13 Reduced Height Limits in Height Buffered Areas

Open space properties that were subject to height buffering were changed from the R1 zone to the new OS zone in 2001, but the OS zone was not mentioned in the height buffering section (Section 6.13). This oversight is corrected.

Section 7.03 General Regulations for Signs

At one time, there were special sign guidelines for the "H" (hospital) zoning district; an "H" district no longer exists. By oversight, a sign bylaw referring to the "H" district was not removed. This oversight is corrected.

Section 8.01 Table of Off-street Parking Regulations

This change will allow restaurants to create outdoor seating (where it complies with other regulations) without having to add parking spaces that the extra seats would otherwise require. The outdoor seating must be temporary (seasonal) only. Here is the change:

TABLE OF OFF-STREET PARKING REGULATIONS

Use	Number of off-street parking spaces per unit
Dwelling, one-, two-, and three-family units.	Two (2) per dwelling unit.
Theater, restaurant, gymnasium, auditorium or similar place of public assembly with seating facilities.	One for each four (4) seats of total seating. For the purpose of calculating parking requirements for restaurants, seasonal outdoor seating shall not count in total seating capacity.

Section 8.06 Location of Parking Spaces

This article proposes to allow property owners to meet the parking requirement for a particular use by off-site parking. Every use that is developed must meet a parking requirement. The Bylaw currently allows off-site parking that is under the same ownership to meet parking requirements. This amendment would allow off-site parking that the user does not own, but has agreement to utilize. The amendment applies only to projects that are subject to Environmental Design Review.

Here is the update:

Section 8.06 - Location of Parking Spaces

Required off-street parking spaces shall be provided on the same lot as the principal use they are required to serve or when practical difficulties as determined by the ZBA, or in cases subject to Section 11.06, the ARB, prevent their establishment upon the same lot, they shall be established no further than three hundred (300) feet from the premises to which they are appurtenant. Such spaces may be located out of doors or within a structure designed as a public or private garage. Projects subject to Environmental Design Review under Section 11.06, may provide parking off site within six hundred (600) feet, where it can be shown that a long-term agreement has been made to secure off site parking.

Section 11.06 Environmental Design Review

Environmental Design Review is a special permit process with 11 standards which developers must address in their application. A new review standard has been added – Standard 12. Sustainable Building and Site Design. The standard encourages developers to consider sustainable options for elements and systems in the construction of their projects. Applicants seeking a special permit under Environmental Design Review are advised to review the LEED (Leadership in Energy and Environmental Design) rating system as established by the U.S. Green Building Council. A project is NOT required to be LEED certifiable, but application must discuss what design elements will be included to make the project energy efficient and environmentally sustainable.

Here is the change:

Section 11.06 Environmental Design Review

f. ENVIRONMENTAL DESIGN REVIEW STANDARDS

- 1.
- ..
12. Sustainable Building and Site Design. Projects are encouraged to incorporate best practices related to sustainable sites, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality. Applicants must submit a current Green Building Council Leadership in Energy and Environmental Design (LEED®) checklist, appropriate to the type of development, annotated with narrative description, that indicates how the LEED® performance objectives will be incorporated into the project.

Land Use Partnership Act
12/08/08 DRAFT

I. MODIFICATIONS TO LOCAL LAND USE REGULATION AFFECTING ALL MUNICIPALITIES

A) Modifications to Chapter 40A (zoning)

1) Definitions

Insert the following new definitions into Section 1A of Chapter 40A:

“Declaration of development intent” shall mean a written notice that describes the land on which proposed development will be located, states whether the proposed development is residential, commercial/industrial or institutional, and sets forth the total gross square footage of proposed buildings (or the number of proposed housing units, in the case of residential development).

“Development impact fee” shall mean a fee imposed by city zoning ordinance or town zoning by-law for the purpose of offsetting the impacts of a development, and in accordance with the provisions of section 9D of this chapter.

“Site plan review” shall have the meaning set forth in Section 7A of this chapter.

2) Ability to regulate maximum interior floor area

The beginning of the second paragraph of Section 3 of Chapter 40A is modified as follows:

No zoning ordinance or by-law shall regulate or restrict the **minimum** interior area of a single family residential building . . .

3) Form-based zoning

Add the following to the end of Section 3 of Chapter 40A:

The text and diagrams in a zoning ordinance or by-law that address the location and extent of land uses, may also express community intentions regarding urban form and design. These expressions may differentiate neighborhoods, districts, and corridors, provide for a mixture of land uses and housing types within each, and provide specific measures for regulating relationships between buildings, and between buildings and outdoor public areas, including streets.¹

4) Majority enactment of zoning

Modify the fifth paragraph of Section 5 of Chapter 40A to read as follows:

¹ Adapted from California enabling act for form-based zoning.

No zoning ordinance or by-law or amendment thereto shall be adopted or changed except by a ~~majority~~two-thirds vote of all the members of the town council, or of the city council where there is a commission form of government or a single branch, or of each branch where there are two branches, or by a ~~majority~~two-thirds vote of a town meeting; **except in each case if a two-thirds vote has been prescribed in an ordinance or by-law adopted by a two-thirds vote of the local legislative body.**; provided, however, that if in a city or town with a council of fewer than twenty-five members there is filed with the clerk prior to final action by the council a written protest against such change, stating the reasons duly signed by owners of twenty per cent or more of the area of the land proposed to be included in such change or of the area of the land immediately adjacent extending three hundred feet therefrom, no such change of any such ordinance shall be adopted except by a three-fourths vote of all members.

5) **Expansion of permit freezes.**

The second paragraph of Section 6 of Chapter 40A is hereby amended to provide as follows: A zoning ordinance or by-law shall provide that construction or operations under a building permit shall conform to any subsequent amendment of the ordinance or by-law unless the use or construction is commenced within a period of not more than six months after the issuance of the permit and in cases involving construction, unless such construction is continued through to completion as continuously and expeditiously as is reasonable. **Construction or operations under a special permit or site plan approval shall conform to any subsequent amendment of the zoning ordinance or by-law or of any other local land use regulations unless the use or construction is commenced within a period of two years after the issuance of the permit and in cases involving construction, unless such construction is continued through to completion as continuously and expeditiously as is reasonable. For the purpose of the prior sentence, construction involving the redevelopment of previously disturbed land shall be deemed to have commenced upon substantial investment in site preparation and/or infrastructure construction, and construction of development intended to proceed in phases shall proceed expeditiously, but not continuously, among phases.**

6) **Zoning plan freezes**

Replace the fifth paragraph of Section 6 of Chapter 40A with the following:

Subject to the transition rules set forth below, within a municipality that is not a certified plan community, if a declaration of development intent is submitted to a planning board, and written notice of such submission has been given to the city or town clerk, the development described in such declaration shall be governed by the applicable provisions of the zoning ordinance or by-law, if any, in effect at the time of such declaration, for a vesting period that ends eight years from the date of such written notice of submission; provided that: (i) the development described in such declaration shall be subject to subsequent amendment of the zoning ordinance or by-law, if the first notice thereof was posted prior to such written notice of submission, and (ii) the development described in such declaration shall be subject to subsequent amendment of the zoning ordinance or by-law, unless a definitive plan, or a preliminary plan followed within seven months by a definitive plan, is submitted to a planning board for approval under the subdivision control law prior to such amendment, and, if such definitive plan or an amendment thereof is

thereafter finally approved. The length of such vesting period shall be extended by a period equal to the time which a city or town imposes or has imposed upon it by a state, a federal agency or a court, a moratorium on construction, the issuance of permits or utility connections. The provisions of this paragraph shall not apply to development substantially different in use or substantially greater in extent from the development described in the declaration of development intent.

The provisions of the foregoing paragraph are subject to the following transition rules:

(A) If a definitive plan, or a preliminary plan followed within seven months by a definitive plan, is submitted to a planning board for approval under the subdivision control law and written notice of such submission has been given to the city or town clerk on or before December 1, 2008 and before the effective date of the zoning ordinance or by-law, the land shown on such plan shall be governed by the applicable provisions of the zoning ordinance or by-law, if any, in effect at the time of the first such submission while such plan or plans are being processed under the subdivision control law, and, if such definitive plan or an amendment thereof is finally approved, for eight years from the date of the endorsement of such approval. Such period shall be extended by a period equal to the time which a city or town imposes or has imposed upon it by a state, a federal agency or a court, a moratorium on construction, the issuance of permits or utility connections.

(B) If a definitive plan, or preliminary plan followed within seven months by a definitive plan, is submitted to a planning board for approval under the subdivision control law after December 1, 2008 and on or before the date six months after the effective date of this act, then: (i) a declaration of development intent must be submitted to a planning board, and written notice of such submission be given to the city or town clerk, on or before the date six months after the effective date in order to obtain the benefit of the foregoing paragraph; (ii) the vesting period ends eight years from the date of the submission of the plan first submitted; (iii) the development described in such declaration shall not be subject to subsequent amendment of the zoning ordinance or by-law for the duration of the vesting period, so long as such definitive plan or an amendment thereof is thereafter finally approved; and (iv) the benefits of the foregoing paragraph may be obtained whether or not the declaration of development intent is consistent with the contents of the plans submitted for approval.

(C) If the municipality thereafter becomes a certified plan community, the vesting periods otherwise provided in the foregoing paragraph and in clause (B) above shall not be eight years, but shall instead be the latest of: (a) three years; or (b) to the extent the land shown on the plan has been previously been disturbed, and if there has been substantial investment in site preparation and/or infrastructure construction within such three years, five years; or (c) until the municipality's effective date, as that term is defined in Section [2] of Chapter 41, if and only if the latest of such dates is less than eight years. Whatever the length of such vesting period, it shall be extended by a period equal to the time which a city or town imposes or has imposed upon it by a state, a federal agency or a court, a moratorium on construction, the issuance of permits or utility connections.

7) **Site plan review**

The following new Section 7A is inserted into chapter 40A:

40A:7A. Site Plan Review

- (a) As used in this section, "site plan review" shall mean review and approval under a municipality's zoning ordinance or by-law, by an authority other than the zoning administrator, of a proposed use of land or structures that does not require a special permit or a variance, whether to determine whether a proposed use of land or structures is in compliance with the ordinance or by-law, to evaluate the proposed use of land or structures, to consider site design alternatives or otherwise.
- (b) In addition to the home rule authority of cities and towns to require site plan review, a municipality may adopt a local ordinance or by-law under this section requiring site plan review and approval by a designated authority before authorization is granted for the use of land or structures governed by a zoning ordinance or by-law. The approving authority may adopt, and from time to time amend, rules and regulations to implement the local site plan review ordinance or by-law, including provisions for the imposition of reasonable fees for the employment of outside consultants in the same manner as set forth in section 53G of chapter 44.
- (c) An ordinance or by-law requiring site plan review, whether adopted under this section or under the municipality's home rule authority, shall comply with the provisions of this and all following subsections of Section 7A. The ordinance or by-law shall establish the submission, review, and approval process for applications, which may include the requirement of a public hearing held pursuant to the provisions in section eleven of this chapter. Approval of a site plan shall require a simple majority vote of the designated authority and shall be made within the time limits prescribed by ordinance or by-law, not to exceed 90 days from the date of filing of the application. If no decision is issued within the time limit prescribed, the site plan shall be deemed constructively approved as provided in section 9, paragraph 11 of this chapter. The submission and review process for a site plan submitted in connection with an application for a special permit or variance shall be conducted with the review of such application in a coordinated process.
- (d) Site plan review may include only those conditions that are necessary: (i) to ensure substantial compliance of the proposed use of land or structures with the requirements of the zoning ordinance or by-law; or (ii) to mitigate any extraordinary adverse impacts of the project on adjacent properties or public infrastructure. Site plan approval may not require the payment or performance of any off-site mitigation, except that site plan approval may be subject to development impact fees imposed in accordance with the provisions of Section 9D of this chapter. A site plan application may be denied only on the grounds that: (i) the proposed use of land or structures project does not meet the conditions and requirements set forth in the zoning ordinance or by-law; (ii) the applicant failed to submit information and fees required by the zoning ordinance or by-law and necessary for an adequate and timely review of the design of the proposed land or structures; or (iii) it is not possible to adequately mitigate extraordinary adverse project impacts on adjacent properties or public infrastructure by means of suitable site design