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November 15, 2007

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
FINAL ENVIRONMENTAL IMPACT REPORT

PROJECT NAME	: Brice Lemon Estates Residential Subdivision
PROJECT MUNICIPALITY	: Rutland
PROJECT WATERSHED	: Ware River
EOEA NUMBER	: 13019
PROJECT PROPONENT	: C.B. Blair Development Corporation
DATE NOTICED IN MONITOR	: October 9, 2007

As Secretary of Energy and Environmental Affairs, I hereby determine that the Final Environmental Impact Report (FEIR) submitted on this project **does not adequately and properly** comply with the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00) and I require the filing of a Supplemental Draft (SDEIR). I find that the FEIR has not satisfied the MEPA statute's underlying goal to ensure that the requirements of 301 CMR 11.07 are met, that the aspects and issues of the project have been clearly described, that the proponent has committed to a set of mitigation measures that will allow the state agencies to satisfy their Section 61 obligations, and that there will be meaningful opportunities for public review of the additional analysis prior to any Agency action.

Project Description

As originally described in the April 2003 Environmental Notification Form (ENF), the proposed project involved the development of an 80 unit Open Space Cluster residential housing subdivision on a 96-acre site located off Route 122A (Main Street) in Rutland. The project included the construction of 8,848 linear feet of roadway with sidewalk, and supporting utilities and drainage infrastructure including a 40,000 gallon per day (gpd) on-site sewage pump station, and 8 stormwater detention basins. The proposed project resulted in the creation of approximately 54 acres of permanent open space.

The project had undergone review and required a mandatory EIR pursuant to Section 11.03 (1)(a)(2) of the MEPA regulations, because the project proposed to create more than ten acres of new impervious surfaces (12.6 acres total). The project also underwent review pursuant to section 11.03 (1)(b)(1) of the MEPA regulations, because the project proposed to alter more than 25 acres of land (33 acres total). The project as currently proposed continues to require a 401 Water Quality Certificate and Sewer Extension Permit from the Department of Environmental Protection (MassDEP), and a Variance from the Department of Conservation and Recreation (DCR). Because the project requires a 404 Programmatic General Permit from the US Army Corps of Engineers (ACOE), it will also be subject to review by the Advisory Council on Historic Preservation (ACHP) pursuant to Section 106 of the National Historic Preservation Act for work within historic properties (36 CFR Part 800). The project will result in a "take" of rare species habitat and thus requires a Conservation Management Permit from the Natural Heritage and Endangered Species Program (NHESP). The project also continues to require review by the Massachusetts Historical Commission (MHC) and an Order of Conditions from the Rutland Conservation Commission (and hence Superseding Order(s) from MassDEP if any local Orders were appealed).

Notice of Project Change

Included with the DEIR submittal, the proponent described a number of changes and modifications to the proposed project. Subsequent to the issuance of the Secretary's Certificate on the ENF (May 22, 2003), the proponent acquired an additional 25.45 acre development parcel (Lemon parcel) abutting the northwestern corner of the project site to allow for the proposed construction of a secondary accessway into the project site. As a result, the project site was expanded to include a total of approximately 122 acres of land area. The development plan for the Brice-Lemon Estates Residential Subdivision project was also revised to include approximately 32 additional residential house lots (112 residential lots total). As proposed, the residential subdivision project will result in additional impacts to on-site wetlands resource areas, rare species habitat, potable water supply and wastewater flows, and traffic. The proponent proposed to place under a Conservation Restriction (CR) on approximately 47.3 acres of the project site comprised of forested upland and wetland habitat, to be held under the supervision of the Rutland Conservation Commission, as permanently protected open space.

Summary of Findings

The potential environmental impacts associated with the proposed Brice Lemon Estates Residential Subdivision Project are extensive. MassDEP, DCR, ACOE, along with the Massachusetts Water Resources Commission, (WRC), the Massachusetts Water Resources Authority's Advisory Board, and others, have provided detailed comments regarding the inadequacy of the proponent's assessment and mitigation of potential environmental impacts to wetlands, drainage, wastewater, and historic resources. DCR indicates that the project's extensive impacts to wetland resources and Outstanding Resource Waters require the need for further evaluation of the project's consistency with the Watershed Protection Act.

According to DCR, the project does not meet the Variance eligibility requirements of the Watershed Protection Act regulations. According to the comments submitted by MassDEP, the FEIR does not contain sufficient information to adequately describe the project's proposed water supply plan and wastewater management plan. ACOE has submitted comments which indicate that the proponent has not successfully demonstrated that the project is permittable under the Federal Section 106 of the National Historic Preservation Act. As described in the comments received from the MWRC's Advisory Board, DCR and others, the proponent's wastewater management plan is not viable.

I agree with the comments received from expert state and federal agencies, and others that the FEIR does not contain an adequate description of the project's direct and indirect environmental impacts, and lacks clearly defined and adequate mitigating measures. Given the potentially extensive environmental impacts associated with the proposed project, I am requiring the proponent to prepare a Supplemental Final Environmental Impact Report (SFEIR) to provide an expanded and detailed analysis of potential project-related impacts to wetlands, drainage, wastewater, historic resources and mitigation as required by this Certificate. The proponent should use the SFEIR to realistically assess the viability of the proposed project, particularly regarding wastewater disposal, and should include a detailed discussion and analysis regarding the project's consistency with the regulatory requirements of applicable State permit requirements and policies.

Land Alteration/Alternatives

The project as currently designed will result in the significant permanent alterations to wetland buffer areas (approximately 35 acres), watershed protection areas (4.43 acres), and significant portions of a designated National Historic Landmark site. The project will also result in the creation of significant amounts new impervious areas (approximately 19.0 acres). As currently proposed, the project will require a Variance under the Watershed Protection Act (350 CVMR 11.00) from DCR for work within the 200 feet and 400 feet of Mill Brook (tributary) and Thayer Pond (surface water), which are classified as Outstanding Resource Waters (ORW) and proposed impacts to wetland resource areas associated with these ORWs. According to the project site plans included in the FEIR submittal, significant portions of approximately 45 proposed residential development lots and all five of the project's stormwater detention basins continue to be located either wholly or primarily within wetland buffer areas. Approximately 14 residential development lots appear to be located within 200'of the Mill Brook or Thayer Pond. In their comments, DCR has indicated that the Watershed Protection Regulations prohibit alterations within 200' of a Tributary or Surface Water. Significant portions of approximately 22 proposed development lots also appear to be located within 400' of Mill Brook or Thayer Pond and may be subject specific residential density limits contained in the Watershed Protection Act regulations.

The SFEIR should identify those individual building lots that are located within 200' and 400' from Mill Brook or Thayer Pond and subject to the "no alteration" and residential density limit regulations of the Watershed Protection Act. The SFEIR should include a sufficiently detailed discussion of the proposed project's consistency with the Variance requirements of the Watershed Protection Act regulations.

I note that the proponent may have to make fundamental changes to the currently proposed project design to accommodate state permitting requirements (e.g., reduce the size of the project). The SFEIR should include an expanded Alternative Analysis to further investigate all feasible methods of avoiding, reducing, or minimizing project impacts to enhance the project's overall permittability. This alternatives analysis should evaluate at least one alternative 'reduced build' alternative site layout that significantly reduces land alteration and impervious surface area, and further reduces impacts to wetlands and wetland buffer areas. The alternatives analysis should also include any alternatives analyses necessary for the DCR, and MassDEP permitting processes.

Wetlands

As described in the FEIR, the project will result in the permanent alteration of approximately 5,553 sf of bordering vegetated wetlands (BVW) for impacts associated with the proposed construction of one (Wetland Crossing 'A') of five wetland roadway crossings for new project roadways.

Included in the Conservation and Management Plan for the project, the proponent has also committed to construct an arched bridged crossing to span BVW along Windham Circle, and a bridge crossing at Wetlands Crossing 'B'. The project also includes three culvert crossings over BVW located along Woodside Avenue (Wetland Crossings "C' and 'D') and Sedona Circle (Wetland Crossing 'E'). According to the proponent, the proposed wetland crossings 'B', 'C', 'D' and 'E' will not result in permanent alterations to BVW resources. The SFEIR should include reasonable scaled plans identifying the wetland resource areas and 'limit of work' for any proposed wetlands crossings The SFEIR should a breakdown of the amount of wetlands proposed to be "temporarily" and "permanently" altered at each location to construct the proposed roadway crossings. I note that shading of vegetated wetlands by roadway spans or arches, and clearing of wetlands overstory/canopy may result in temporary and/or permanent impacts to wetland resources. The SFEIR should quantify the amount of wetlands shading and/or overstory/canopy clearing associated with the project, and discuss whether any proposed shading or overstory clearing is permittable under the Wetlands Protection Act. As noted elsewhere in this Certificate, the wetland resource areas located within the project site drain to the Mill Brook and Thayer Pond and have been classified as Outstanding Resource Waters (ORW). The SFEIR should demonstrate the project's consistency with the performance standards for filling of an ORW pursuant to 314 CMR 9.06(3)(e)(3).

The SFEIR should also analyze any indirect impacts to wetlands that may result from receipt of drainage and stormwater runoff from the site. The SFEIR should discuss the consistency of the project's proposed stormwater management plan with MassDEP guidelines. The SFEIR should include a phased erosion and sedimentation control plan that minimizes the amount of disturbed soils.

The proponent has committed to constructing approximately 10,000 sf (2:1) of on-site wetlands mitigation, in three wetlands replication areas to be located adjacent to existing wetlands abutting Woodside Avenue and Windham Drive. The proponent has also committed to maintain approximately 58 acres (52%) of the project site as permanently protected open space. As described below, the proponent's open space plan includes the placement of a Conservation Restriction on approximately 47 acres of the project site including uplands, and wetlands habitat areas as part of the proponent's proposed Conservation Management Plan. I strongly encourage the proponent to install permanent boundary markers for individual house lots located throughout the project site that will clearly identify the extent of the permanently protected CR land areas, and to avoid future impacts to wetlands resource areas, and watershed protection areas from homeowner and/or Resident Association lawn and yard maintenance activities.

In their comments on the FEIR submittal, the DCR has indicated that the project design involves multiple wetlands crossings that may not be permitted under the variance provisions of the Watershed Protection Act regulations. As noted elsewhere in this Certificate, numerous residential development lots appear to be located wholly or primarily within 200'of either the Mill Brook or Thayer Pond. According to DCR, the proposed development and future proposed use of these specific residential lots may not be permitted under the Variance provisions of the Watershed Protection Act regulations. The SFEIR should respond to DCR's comments. The SFEIR should clearly demonstrate the project's consistency with the Variance provisions of the Watershed Protection Act regulations.

Stormwater

At full build-out, the Brice Lemon Estates Residential Subdivision project will create approximately 20 acres of new impervious surface area. According to the information provided in the FEIR, the stormwater management plan for the proposed project includes the use of deep sump catch batch basins, approximately 5 detention basins with sediment forebays, and periodic road sweeping to service the project's stormwater flows for eventual discharge to Bordering Vegetated Wetlands (BVW) abutting the project site.

According to the comments received from DCR, the proposed stormwater management plan may not be adequate to accommodate stormwater flows from greater than a two-year storm event. The SFEIR must respond to DCR's comments. The SFEIR should include a detailed description of stormwater drainage plan for the proposed project. The SFEIR should identify the quantity and quality of flows. The rates of stormwater runoff should be analyzed for the 10, 25 and 100-year storm events. The SFEIR should demonstrate that the design of the project's

drainage system is consistent with DCR's Watershed Protection regulations and MassDEP's Stormwater Management Policy, or in the alternative, why the proponent is proposing a drainage system design not recommended by MassDEP. The proponent should use the MassDEP Stormwater Management Handbook when addressing this issue. The SFEIR should detail any water quality monitoring proposed, and development of any action thresholds and management responses.

I encourage the proponent to evaluate sustainable design alternatives such as Low Impact Development (LID) techniques in site design and stormwater management plans. LID techniques incorporate stormwater best management practices (BMPs) and can reduce impacts to land and water resources by conserving natural systems and hydrologic functions. The primary tools of LID are landscaping features and naturally vegetated areas, which encourage detention, infiltration and filtration of stormwater on-site. Other tools include water conservation and use of pervious surfaces. Clustering of buildings is an example of how LID can preserve open space and minimize land disturbance. LID can also protect natural resources by incorporating wetlands, stream buffers and mature forests as project design features. For more information on LID, visit http://www.mass.gov/envir/lid/. Other LID resources include the national LID manual (Low Impact Development Design Strategies: An Integrated Design Approach), which can be found on the EPA website at: http://www.epa.gov/owow/nps/lid/.

Rare Species

As described in the FEIR, the Brice Lemon Estates project site is located within priority and estimated habitat for the Four-toed Salamander (*Hemidactylium scutatum*), a state-listed species of "Special Concern." The Four-toed Salamander and its habitat are regulated pursuant to the implementing regulations of MA Endangered Species Act (MESA) (321 CMR 10.00).

Based on the plans included in the filing, the Natural Heritage and Endangered Species Program (NHESP) has determined that the proposed project will result in a "take" of state-listed species. In their comments, NHESP has indicated that necessary habitat protection will be achieved through a combination of construction related measures to ensure machinery remains within the limit of work, long-term protection of areas through formal Conservation Restriction, and deed restrictions on several lots. According to NHESP's comments on the FEIR, the proponent has committed to revising the project design to span the western wetland crossing (Wetland Crossing "E") with the use of a bridge structure and re-configuring the open space to improve continuity of habitat for the Four-toed Salamander and ensure a configuration that lends itself to adequate enforcement for areas to remain unaltered. Based on the plans and materials submitted to date, and improved by the modifications to the open space and bridging structures, NHESP believes the project as currently proposed will likely meet the performance standards for a MESA Conservation and Management permit.

The proponent, in consultation with NHESP, has committed to a Conservation management Plan (CMP) containing a number of necessary conditions that NHESP has determined are

critically important to the long term protection of the Four-toed Salamander, or having an adverse effect on its habitat areas located within the project site including:

- placing a Conservation Restriction (CR) on approximately 47.3 acres (42%) of the project site for the permanent protection of Four-toed Salamander habitat;
- implementation of construction mitigation activities including the installation of erosion control fencing prior to construction, and the restoration and monitoring of any temporary alteration along the streams to facilitate installation of the crossing structures; and,
- placing deed restrictions on particular residential development lots to ensure protection and compliance with adjacent CR land areas.

The proponent should forward a copy of the proponent's executed and recorded CR, and any proposed deed restriction documentation to NHESP for review and comment. I ask that the proponent forward a copy of the final project site plan identifying the designated conservation areas and development areas to the MEPA Office for the project file.

Water Supply

The potable water supply needs for the 122-unit Brice Lemon Estates Residential Subdivision project (approximately 49,280 gpd) will be served by the Town of Rutland's municipal water supply system which draws its source supply from the Nashua River basin. According to MassDEP, the Town of Rutland exceeded its existing permitted volumes under the Water Management Act in 2005 and 2006. The addition of the project's 49,280 gpd of potable water supply demand would bring the average daily demand of the public water supply beyond the Rutland's authorized water withdrawal volume under the existing Water Management Act permit and will require the Town of Rutland to apply to MassDEP for a new Water Management Act permit.

The project does not require a State agency permit associated with water usage, nor does it exceed a threshold under the MEPA regulations. However, I strongly encourage the proponent, in an effort to clarify potential environmental impacts that may negatively affect the Town of Rutland's compliance with their Water Management Act (WMA) permit, to discuss how this project will allow the Town of Rutland to remain compliant with their WMA permit. I encourage the proponent to include information in the SFIER to demonstrate that the use of the Town of Rutland's municipal water supply to serve the proposed project is feasible, the municipal water supply has sufficient design capacity to accommodate the proposed project's additional (49,280 gpd) water supply demand; and, that the proponent has secured permission from the Town of Rutland to obtain the necessary water supply from the Town's municipal water supply.

Water Conservation

I encourage the proponent to incorporate water conservation and water use efficiency in the project design to comply with the March 1989 state plumbing code. Specifically, the proponent should commit to employing efficient residential water conservation technologies for the project including water saving devices, low flow toilets, and low flow appliances (dishwashers, washing machines). The proponent should consult with MassDEP to ensure that the final project design meets the Commonwealth's water conservation standards, including those standards pertaining to lawn and landscape conservation.

The proponent should also consider implementing an Irrigation Management Plan (IMP) to further reduce the project's irrigation water demand. An IMP could involve the use of amended soils and compost, the planting of native and drought-tolerant species of trees, shrubs, and turf grasses, an automated water efficient irrigation system, and a water management protocol for drought conditions. I ask that the proponent consult with DEP, and refer to the Massachusetts Water Resources Commission's *Lawn and Landscape Water Conservation, An Addendum to the Water Conservation Standards for the Commonwealth of Massachusetts, October 2002*, during the final design of the proponent's IMP.

Wastewater

As described in the FEIR, the project's wastewater flows will be conveyed from the project site via a proposed new on-site sewer pump station to the Rutland-Holden Trunk Sewer and Relief Trunk Sewer to the City of Worcester's sewer system and the Upper Blackstone Water Pollution Abatement District's wastewater treatment facility (WWTF) in Millbury for treatment and disposal.

According to the information provided in the comment letters received from DCR, MassDEP and others, in May 2000, DCR entered into a Sewer Use Agreement (SUA) with the City of Worcester that established wastewater flow allotments for a number of communities including Rutland, Holden and West Boylston. Under the SUA, the Town of Rutland was allotted 0.45 millions gallons per day (mgd) of annual average flow for 2005. The Town of Rutland has exceeded its allotted wastewater flow limit in 2005 and 2006. In June 2007, DCR required the Town of Rutland to halt all additional wastewater flows resulting from new sewer connections and extensions until the Town comes into compliance with its 0.45 mgd flow allotment, and needed improvements to the City of Worcester's sanitary system are completed. According to DCR and MassDEP, it is expected that funding and construction of needed improvements to the City of Worcester's sanitary system will take several years. On August 27, 2007, MassDEP issued a denial of the proponent's sewer extension permit application due to unresolved structural capacity issues in the Rutland-Holden Trunk Sewer.

Wastewater Treatment Alternatives Analysis

The Secretary's Certificate on the DEIR required the proponent to include in the FEIR a detailed discussion of on-site and off-site wastewater treatment alternatives that could serve to accommodate wastewater flows from the proposed residential development project. The FEIR included a brief discussion of an on-site wastewater treatment alternative that the proponent determined to be problematic. According to the proponent, an on-site wastewater treatment and disposal system could be located within the project site but would require up to six acres of land area and result in the loss of approximately 16 proposed house lots.

Comments received from MassDEP, DCR and others regarding the capacity constraints associated with the Town of Rutland's sewer system highlight the need for the SFEIR to include a more robust and detailed analysis of wastewater treatment alternatives to serve the project's total wastewater flows. This analysis should include an evaluation of both off-site and on-site wastewater treatment alternatives including the construction of a small on-site package treatment facility providing primary and secondary treatment and disposal of the project's wastewater flows. The proponent should evaluate the potential for using proposed Open Space areas within the project site for locating all or a portion of a small on-site package wastewater treatment facility. According to MassDEP, soil testing evaluations should be conducted to determine the configuration of an on-site wastewater treatment and disposal system within the project site. An analysis of on-site treatment and groundwater disposal should be predicated on a system design that meets all MassDEP requirements for a Major Groundwater Discharge Permit pursuant to 314 CMR 5.00 and 6.00, and has sufficient design capacity to accommodate the project's estimated (49,280 gpd) wastewater flows and any mitigation for wastewater impacts deemed necessary. The SFEIR must respond to the comments received pertaining to the viability and feasibility of the proponent's currently proposed wastewater management plan.

Historic Resources

A large portion of the project site is located within the boundaries of the Rufus Putnam House and agricultural land (c. 1760), a National Historic Landmark site that is listed in the Federal Register and the Massachusetts State Register of Historic Properties. This National Historic Landmark site includes the Rufus Putnam House and approximately 135 acres of historically associated agricultural land area. The project will be subject to review by the ACOE and the Advisory Council on Historic Preservation (ACHP) pursuant to Section 106 of the National Historic Preservation Act of 1966 (36 CFR 800), and Massachusetts General Laws, Chapter 9, Section 26-27C (950 CMR 71.00) for work within historic properties.

I note that the ACOE has indicated that the proposed project is not eligible for authorization under the Massachusetts Programmatic General Permit (MPGP) because the activity does not comply with all of the PGP's conditions. According to the comments received from the ACOE, the project as currently proposed may have a significant impact on the character and setting of the Rufus Putnam National Landmark site and will have an adverse effect on the overall 135-

acre historic property. The ACOE has stated that the proponent will need to consider alternative project designs to avoid, minimize and mitigate the project's potential impacts to the historic setting of the Rufus Putnam House Site, including any remaining historic agricultural fields located within its boundaries. In their comments on the FEIR, MHC has requested that the proponent provide MHC with copies of the proponent's alternatives analysis and visibility study to be prepared for the ACOE's Section 106.

The SFEIR should include a response to comments received from MHC. The SFEIR should demonstrate the project's consistency with state regulations governing properties listed in the State Register of Historic Places. The proponent must continue to investigate all feasible methods of further avoiding, reducing, or minimizing project construction impacts to historic landmark properties and resource areas.

Construction Period

The SFEIR should continue to analyze construction-period impacts, including temporary impacts to wetlands, watershed protection areas, and historic resources, and the extent of any blasting and/or re-grading during construction. The SFEIR should discuss whether the project will require a federal NPDES permit for construction activities, and explain how the proponent will meet any performance standards. This section of the SFEIR should include a detailed response to DCR's concerns regarding the proponent's proposed time-of-year schedule for conducting grading and clearing activities.

Comments

The SFEIR should respond to the substantive issues raised in the comments received to the extent that the comments are within the subject matter jurisdiction of MEPA. I recommend that the proponent employ an indexed response to comments format, supplemented as appropriate with direct narrative response.

Mitigation and Section 61

The SFEIR should contain a summary of all mitigation measures to which the proponent has committed, including a description of timing (by year or appropriate trigger point), estimated cost, and responsible party. The SFEIR should include Proposed Section 61 Findings for use by the state agencies.

Circulation

The SFEIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should also be sent to the list of "comments received" below and to the Town of Rutland officials. A copy of the SFEIR should be made available for public review at the Rutland Public Library.

November 15, 2007
Date

Ian A. Bowles, Secretary

Comments received:

10/23/07	Massachusetts Water Resources Commission (WRC)
11/07/07	Massachusetts Water Resources Authority – (MWRA) Advisory Board
11/07/07	Water Supply Citizens Advisory Committee (WSCAC)
11/08/07	Natural Heritage and Endangered Species Program (NHESP)
11/05/07	Massachusetts Department of Conservation and Recreation (DCR)
11/13/07	Massachusetts Historic Commission (MHC)
11/08/07	Department of the Army, Army Corps of Engineers (ACOE)
11/14/07	Department of Environmental Protection (MassDEP) – CERO

IAB/NCZ/ncz
FEIR #13019