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STEPHEN R. PRITCHARD SECRETARY

March 10, 2006

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS ON THE ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME

: Farm Gate

PROJECT MUNICIPALITY

: Dracut

PROJECT WATERSHED

: Merrimack

EOEA NUMBER

: 13723

PROJECT PROPONENT

: DRACO Homes, Inc.

DATE NOTICED IN MONITOR

: February 8, 2006

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.03 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project requires the preparation of an Environmental Impact Report (EIR).

As described in the Environmental Notification Form (ENF), the proposed project involves the construction of a 52-lot residential subdivision, and 3 individual houses, approval not required (ANR), on a 77.3-acre site abutting Parker Road in Dracut. The project includes the construction of approximately 4,390 linear feet of internal roadway with sidewalks, and associated utilities and stormwater management infrastructure including 5 stormwater detention basins. The project site will be accessed from two separated sites drives located on Parker Road.

The project is undergoing review pursuant to Sections 11.03 (1)(b)(1), (5)(b)(3)(c), and (2)(b)(1) of the MEPA regulations, because the project proposes to directly alter more than 25 acres of land (27.6 acres total), proposes to construct a new sewer main ½ or more miles (.85) in length, and results in the alteration of a designated significant habitat. The project will require a 401 Water Quality Certificate from the Department of Environmental Protection (DEP). The project will also require Orders of Conditions from the Dracut Conservation Commission (and hence Superseding Order(s) from DEP if any local Orders were appealed). The project must comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges from a construction site of over one acre.

If blasting will be required during project construction, the proponent will need to prepare a blast design plan pursuant to the Board of Fire Protection Regulations (577 CMR 13.09) for the proposed construction of roads, houses and utilities within the project site. Blasting operations employing perchlorate-containing explosives have been identified as a possible source of contamination in Massachusetts public water supplies. and thus should be prohibited from use in the project watershed. According to DEP, to the extent practical, the use of perchlorate-containing explosive products should be avoided when surface or groundwater can be affected.

The proponent is not seeking financial assistance from the Commonwealth for the project. MEPA jurisdiction therefore extends to those aspects of the project that are within the subject matter of required or potentially required state permits and that have the potential to produce significant Damage to the Environment. In this case, MEPA jurisdiction extends to issues of land alteration, wetlands/water quality, rare species, and wastewater.

Future Development/Segmentation:

Although not described in the ENF, the proponent is also proposing to develop an additional 105 residential dwelling units on two contiguous development parcels (113 acres, 59 acres) located off Parker Road and Wheeler Road and adjacent to the Farm Gate project site's northern property boundary in Dracut. According to additional information provided by the proponent during the MEPA Scoping session for this project on February 22, 2006, and the comments received from the Northern Middlesex Council of Governments and the Dracut Assistant Town Manager's Office, the proponent is also proposing the development of Wheeler Village, a 72-lot residential subdivision abutting the northern boundary of the Farm Gate development parcel, and Berube Farms, a 32-unit residential subdivision abutting the northern property boundary of the Wheeler Village development parcel.

Wheeler Village

According to the proponent, the Wheeler Village project involves the construction of a 73-lot residential subdivision on a 113-acre site abutting Wheeler Road to the north and the proposed Farm Gate development project to the south. As currently designed, this project will result in the construction of approximately 8.8 acres of impervious surface area and the permanent alteration of approximately 2,700 sf of bordering vegetated wetlands (BVW), and 4.8 acres of 100-foot wetland buffer area. This project site will be accessed from two separate site drives located on Wheeler Road.

Berube Farms

The Berube Farms project involves the construction of a 160-lot residential subdivision on a 250-acre site abutting Wheeler Road and the Wheeler Village development project to the south. This project will result in the construction of approximately 20 acres of impervious surface area and the permanent alteration of approximately 10,200 sf of bordering vegetated wetlands (BVW), and 24 acres of 100-foot wetland buffer area. This project site will be accessed from two separate site drives located on Wheeler Road.

MEPA imposes a requirement on project proponents and state agencies to understand and fully disclose the potential impacts of a project (including cumulative impacts); to study feasible alternatives to a project; and to avoid, reduce, or mitigate environmental impacts (including cumulative impacts) to the maximum extent feasible. The anti-segmentation provisions of the MEPA Regulations (Section 11.01(2)(c) require the review of the proponent's proposed Farm Gate project, and the Wheeler Village and Berube Farms projects as a "common plan or undertaking". Pursuant to the antisegmentation provision of the MEPA regulations, I must consider the environmental impacts associated with the full build-out of the Farm Gate project, including the Wheeler Village development parcel, and the Berube Farms development parcel. I am therefore requiring the preparation of a Draft EIR (DEIR) to discuss the impacts of the proposed Farm Gate project, as well as the potential cumulative infrastructure impacts and site planning issues arising out of the full build-out of the proponent's remaining two contiguous development parcels (173 acres total). When considering the full build-out of the Farm Gate project, and the Wheeler Village and Berube Farms development parcels, it appears likely that it will meet the mandatory EIR threshold related to land alteration, wetlands, and possibly rare species.

SCOPE

General:

As modified by this Certificate, the proponent should prepare the DEIR in accordance with the general guidance for outline and content found in Section 11.07 of the MEPA regulations. The proponent should circulate the DEIR to those parties submitting written comments on the ENF, and to any other party required by regulation. The DEIR should include a copy of this Certificate and a copy of each comment letter received.

Alternatives:

In addition to the proponent's preferred alternative for the Farm Gate project, and the Wheeler Village and Berube Farms development parcels, the DEIR should evaluate at least one alternative site layout that reduces land alteration and impervious surface area, and further reduces impacts to wetlands and wetland buffer areas. The DEIR should discuss whether the proponent will seek any waivers for roadway or sidewalk width, and explain any implications for the alternatives analysis. The DEIR should also investigate alternative site layouts that maximize undisturbed buffers around vernal pools, perennial streams, and other wetlands; and that minimize loss of open space.

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/.

Permitting:

The DEIR should briefly describe each state permit necessary for the full-build project, and should demonstrate that the full-build project design meets applicable performance standards. The DEIR should contain sufficient information for the state permitting agencies to evaluate the project in light of their Section 61 obligations. The DEIR should include an update on the local permitting process, and should discuss how any local requirements impact project design. To ensure that the MEPA review of the project complies with Executive Order 385 (Planning for Growth) and Section 11.01 (3) of the MEPA regulations, the DEIR should discuss the consistency of the project with applicable local regulations. The DEIR should also discuss the consistency of the project with local and/or regional growth and open space plans.

Land Alteration:

As currently designed, the proposed full-build project will result in significant alterations to land, and significant new impervious areas. The DEIR should quantify the amount of land altered and current use, the amount of earth work involved in meeting final grades, and the amount of impervious surfaces created for the proposed Farm Gate project, and the Wheeler Village and Berube Farms development parcels. The DEIR should investigate all feasible methods of avoiding, reducing, or minimizing impacts to land. The DEIR should include a map that delineates which areas of the site are proposed to remain as undisturbed open space following the project completion, and it should disaggregate landscaped open space and undisturbed open space. The DEIR should also delineate those portions of each development parcel that the proponent has proposed to place under a Conservation Restriction (CR) to ensure for their permanent protection. The proponent should also consider placing deed restrictions, to include certified vernal pools, if any, and the uplands around them, on any residential properties that will be located within 600 feet of any vernal pools or within the 100-foot wetlands buffer zone as a method for avoiding future impacts from homeowner activities.

Wetlands/Drainage/Water Quality:

The DEIR should include reasonably scaled maps that delineate wetland boundaries and buffer zones for each of the three development parcels, and should include the appropriate overlays of each site layout described in the alternatives analysis. The plans should also note any applicable local buffer zone requirements.

The DEIR should explain the significance of each wetland area on the site to the interests enumerated in the Wetlands Protection Act. The proponent should certify that all streams identified on the Farm Gate project site, and the Wheeler Village and Berube Farms development parcels, meet the Massachusetts definition for an intermittent or perennial stream, and the DEIR should evaluate potential impacts on these resource areas. For each alternative, the DEIR should quantify the amount of direct wetland alterations proposed including removal of tree and shrub canopy from forested wetlands, expected alterations from development of cluster and individual house lots, and temporary construction-related disturbances. The DEIR should discuss whether any proposed overstory clearing is permitable under the Wetlands Protection Act. The DEIR should contain sufficient information to determine whether all proposed wetland alterations are permitable under the Wetlands Protection Act (i.e., whether the project would require a variance). The DEIR should discuss whether the proponent is claiming limited project status for any wetland alterations, and the DEIR should include any supporting information to evaluate limited project claims.

The ENF proposes up to three wetlands crossings for the Farm Gate project's access road. The DEIR should study the feasibility of this approach, and discuss any trade-offs between transportation access and wetlands impacts. The Farm Gate site plan shows 5 house lots to be located within the 100-foot wetland buffer zone. The DEIR should examine methods of avoiding or minimizing encroachment into buffer zones including, but not limited to, reducing the total number of proposed residential units. The DEIR should evaluate deed restrictions as a method of avoiding future wetland impacts from homeowner activities, and as a method of minimizing water quality impacts associated with residential lawn care. The DEIR should identify and discuss any/all proposed impacts to wetland resource areas located within the Wheeler Village and Berube Farms development parcels.

The Commonwealth has endorsed a "No Net Loss Policy" that requires that all feasible means to avoid and reduce the extent of wetland alteration be considered and implemented. The DEIR should examine alternatives that avoid impacts to wetland resource areas, their associated buffer zones, riverfront protection areas and 100-year flood plain areas. The proponent will need to provide wetlands replication for any unavoidable impacts to wetlands. For any amount of required wetlands replication, a detailed wetlands replication plan should be provided in the DEIR which, at a minimum, includes: replication location(s) delineated on plans, elevations, typical cross sections, test pits or soil boring logs, groundwater elevations, the hydrology of areas to be altered and replicated, list of wetlands plant species of areas to be altered and the proposed wetland replication species, planned construction sequence, and a discussion of the required performance standards and monitoring.

For each alternative, the DEIR should also analyze indirect impacts to wetlands from receipt of drainage, stormwater runoff and wastewater disposal from the project. The DEIR should present drainage calculations and detailed plans for the management of stormwater from the proposed project. It should include a detailed description of the proposed drainage system design, including a discussion of the alternatives considered along with their impacts. The DEIR should identify the quantity of flows. The rates of stormwater runoff should be analyzed for the 10, 25 and 100-year storm events.

The DEIR should discuss the consistency of the stormwater management plan with DEP's guidelines for stormwater best management practices (BMPs), and should include at least a conceptual schematic drainage plan. The DEIR should detail any water quality monitoring proposed, and development of any action thresholds and management responses. The DEIR should also evaluate impacts on wetlands from drawdown of the water table associated with any proposed residential water withdrawals.

Rare Species:

According to the information provided in the ENF, the Farm Gate project site is located within priority and estimated habitat for the Spotted Turtle (*Clemmys guttata*). In their comments, the Natural Heritage and Endangered Species Program (NHESP) has indicated that the proponent, in consultation with NHESP, has agreed to place a Conservation Restriction (CR) on 40.1 acres (52%) of the eastern portion of the project site that will result in avoiding a take of the Spotted Turtle, or having an adverse effect on the Spotted Turtle habitat located within the project site. The proponent should forward a copy of the proponent's executed and recorded CR to NHESP.

The DEIR should include a site inventory of the proponent's Wheeler Village and Berube Farms development parcels to determine if any areas within those sites constitute suitable habitat for rare species, with results presented on an appropriately scaled map. The DEIR should also include a survey of areas of suitable habitat to determine if rare species are present. If any rare species are present, the DEIR should include sufficient information to determine if the full-build project will require a Conservation Permit pursuant to the Massachusetts Endangered Species Act. The proponent should contact the Natural Heritage Program to determine the appropriate survey protocols. The DEIR should include sufficient information to determine if the project will require a Conservation Permit pursuant to the Massachusetts Endangered Species Act. If necessary, the DEIR should include an alternatives analysis to evaluate methods of avoiding or minimizing impacts on rare species, and the document should fully explain any permitting implications under the Massachusetts Endangered Species Act.

Water Supply:

The DEIR should include estimates of the potable water supply demands from the proposed Farm Gate project, and the Wheeler Village and Berube Farms projects. The DEIR should examine alternative methods of meeting the proposed project's water supply needs. At a minimum, the DEIR should evaluate development of an on-site groundwater wellfield to serve the project. The plans should also note any applicable local and state buffer zone requirements. The proponent should consult with DEP regarding the need, if any, for a Groundwater Withdrawal Permit for any portion of the proposed project.

As currently proposed, the Farm Gate project will be served by the Town of Dracut. The DEIR should demonstrate that the use of the Town of Dracut's municipal water supply to serve the Farm Gate project and the Wheeler Village and Berube Farms projects, is feasible.

At a minimum, the DEIR should demonstrate that:

- 1. the municipal water supply has sufficient design capacity to accommodate the full-build project's additional (60,800 gpd) water supply demand; and
- 2. the proponent has secured permission from the Town of Dracut to obtain the necessary potable water supply.

Wastewater:

As described in the ENF, the estimated wastewater flow from the Farm Gate project (approximately 20,000 gallons per day (gpd) will be conveyed from the project site by the Town of Dracut's wastewater collection system to the City of Lowell's wastewater treatment facility (WWTF) for treatment and disposal. The DEIR should demonstrate that the proposed discharge of wastewater from the Farm Gate project, and the Wheeler Village and Berube Farms projects to the Town of Dracut's municipal sewer collection system and the Town of Mansfield's WWTF is feasible. At a minimum, the DEIR should demonstrate that:

- 1. the Town of Dracut's sewer collection system has sufficient design capacity to accommodate the full-build project's additional (60,800 gpd) additional wastewater flows;
- 2. the proponent has secured permission from the Town of Dracut to direct the full-build project's wastewater flows to Dracut's sewer collection system; and

The DEIR should respond to DEP's comments pertaining to the potential for sewering of the Wheeler Village and Berube Farms development parcels. Specifically, the DEIR should discuss the potential for sewering the Wheeler Village and Berube projects under the Town of Dracut's Comprehensive Wastewater Management Plan (CWMP). The DEIR should demonstrate that Dracut's sewer conveyance system has the capacity to accommodate the additional wastewater flows from the full-build project, and that these additional wastewater flows can be accommodated within the total volume of wastewater flow allowed to the Town of Dracut under its existing inter-municipal agreement (IMA) with the City of Lowell for treatment of wastewater flows at Lowell's WWTF. The DEIR should respond to DEP's comments pertaining to the proponent's sewer management plan. The DEIR should examine alternative methods of meeting the proposed project's wastewater treatment needs. At a minimum, the DEIR should evaluate development of an on-site small package treatment facility.

The proponent should consult with DEP regarding the need, if any, for a Groundwater Discharge Permit for any portion of the full-build project. The plans should also note any applicable local and state buffer zone requirements.

Stormwater Resources:

According to the information provided by the proponent, the full build-out project will create approximately 21 acres of new impervious surface area. The DEIR should include stormwater drainage plans for the proposed Farm Gate project and the Wheeler Village and Berube Farms projects, and should discuss the consistency of the drainage plan with the DEP Stormwater Management guidelines, and the Town of Dracut's Storm Water Program. It should demonstrate that the design of the drainage system is consistent with this policy, or in the alternative, why the proponent is proposing a drainage system design not recommended by DEP. The proponent should use the DEP Stormwater Management Handbook when addressing this issue. In addition, a maintenance program for the drainage system will be needed to ensure its effectiveness, and should outline the maintenance operations, sweeping schedule, responsible parties, and back-up systems. The DEIR should respond to DEP's comments pertaining to stormwater management

The DEIR should present drainage calculations and detailed plans for the management of stormwater from each project development parcel for the 2, and 10-year, and 24 hour storm events. If the proponent ties into an existing municipal stormwater system, the DEIR should clarify the permits required and if there will be a recharge deficit on-site. The DEIR should describe where the Parker Road and Wheeler Street drainage systems discharge in this area. It should also be demonstrated that the proposed drainage system would control storm flows at existing levels. In addition, a maintenance program for the drainage system will be needed to ensure its effectiveness. This maintenance program should outline the actual maintenance operations, responsible parties and back-up systems. The DEIR should investigate feasible methods of reducing impervious surfaces.

Transportation:

The proponent has completed a study the potential traffic impacts from all three residential development proposals as part of the local review process in Dracut. For informational purposes, the DEIR should a copy of the proponent's traffic study of the project area.

Construction Period:

The DEIR should analyze construction-period impacts, including temporary impacts to wetlands, and the extent of any blasting and/or re-grading during construction.

The DEIR should discuss whether the project will require a federal NPDES permit for construction activities, and explain how the proponent will meet any performance standards.

Mitigation:

The DEIR should include a summary and explanation of all environmental mitigation to which the proponent is committed. This chapter on mitigation should include a Draft Section 61 Finding for all state permits. The Draft Section 61 Finding should contain a clear commitment to mitigation, an estimate of the individual costs of the proposed mitigation, and the identification of the parties responsible for implementing the mitigation. A schedule for the implementation of mitigation, based on the construction phases of the project, should also be included.

Comments:

The DEIR 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.

Circulation:

The DEIR 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 Town of Dracut, and City of Lowell officials. A copy of the DEIR should be made available for public review at the Dracut, and Lowell Public Libraries.

March 10, 2006

Date

Stephen R. Pritchard, Secretary

Comments received:

04/28/06 02/28/06 02/28/06	Department of Environmental Protection - NERO Natural Heritage and Endangered Species Program (NHESP) Northern Middlesex Council of Governments (NMCOG)
02/21/06	Assistant Town Manager, Town of Dracut

SRP/NCZ/ncz

ENF #13723