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November 15, 2007

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

PROJECT NAME : Farm Gate
 PROJECT MUNICIPALITY : Dracut
 PROJECT WATERSHED : Merrimack
 EOE A NUMBER : 13723
 PROJECT PROPONENT : DRACO Homes, Inc.
 DATE NOTICED IN MONITOR : October 9, 2007

As Secretary of Energy and Environmental Affairs, I determine that the Final Environmental Impact Report (FEIR) submitted on the above project **adequately and properly complies** with the Massachusetts Environmental Policy Act (MGL, c 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00).

Project History

As described in the February 2006 Environmental Notification Form (ENF), the proponent proposed to construct 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 included the construction of approximately 4,390 linear feet (lf) 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 proponent also proposed 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 February 22, 2006 MEPA Site Visit for this project, the proponent also proposed 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 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.

The proponent's proposed Farm Gate project, and the Wheeler Village and Berube Farms projects are considered to be a "common plan or undertaking" pursuant to the anti-segmentation provisions of the MEPA Regulations (Section 11.01(2)(c)). The proponent was therefore required to prepare a Draft and Final EIR (DEIR, FEIR) 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).

Phase I Waiver Request

The proponent submitted a Notice of Project Change (NPC)/Phase I Waiver Request to the MEPA Office in February 2006 to construct the 52-lot residential subdivision Farm Gate project, and thereby allowing its construction to proceed in advance of the preparation of a DEIR for the full build-out of the site. The Phase I construction activities included the construction of a 55-lot residential subdivision, 3 additional ANR houses lots, approximately 4,390 lf of internal roadway with sidewalks, and associated utilities and stormwater management infrastructure (5 stormwater detention basins) on a 77.3-acre site abutting Parker Road in Dracut. Access to the project site was to be provided from two separated sites drives located on Parker Road. The Farm Gate project's potable water demands and wastewater flows (20,020 gallons per day (gpd)) would be served by the Town of Dracut's municipal water supply and sewer systems, respectively. Phase I would result in the alteration of approximately 3,000 sf of BVW, approximately 6.6 acres of impervious surface area, 100 new surface parking spaces, and the generation of approximately 550 new vehicle trips per day (vtd). Phase I will require a Sewer Connection Permit from MassDEP, and an Order of Conditions from the Dracut Conservation Commission (and hence a Superseding Order from MassDEP if the local Order were appealed).

Subsequent to the filing of the NPC submittal with the MEPA Office, the proponent worked closely with MassDEP to address a number of issues identified in MassDEP's comments on the ENF and the NPC pertaining to the project's potential impacts to wetlands and wastewater.

As a result, the proponent provided additional Phase I project information to the MEPA Office that described a revised phased development plan involving a reduced Phase I construction program. The proponent's revised Phase I development activities included the construction of 20 residential housing lots within a 32-acre portion of the project site located to the north of the existing underground gas transmission line (North Development/Phase I), and three existing house lots on Parker Road. According to the proponent, Phase II construction activities would involve the construction of the remaining 35 single family house lots originally proposed Farm Gate development project (South Development/Phase II). The North Development project's potable water demands and wastewater flows (7,280 gpd) would be served by the Town of Dracut's municipal water supply and sewer systems, respectively. Construction of the North Development/Phase I portion of the Farm Gate project would not result in the alteration of bordering vegetated wetlands (BVW), but will alter approximately 13,230 sf of wetland buffer area, and create approximately 0.3 acres of impervious surface area. The North Development project would require a Sewer Connection Permit from MassDEP, and an Order of Conditions from the Dracut Conservation Commission (and hence a Superseding Order from MassDEP if the local Order were appealed).

Wastewater flows from the North Development/Phase I project would be conveyed by gravity sewer to an existing 8" municipal sewer main located in the Parker Road right-of-way. According to the proponent, the Town of Dracut's existing municipal sewer collection/conveyance system has adequate capacity to accommodate the proposed Phase I Waiver project, and the additional flow from the reduced Phase I project is well within the wastewater flow limits established for the Town of Dracut under its Inter-municipal Agreement (IMA) with the City of Lowell for treatment of wastewater flows at the City of Lowell's WWTF. In their comments on the NPC submittal, MassDEP expressed their support of the proposed sewerage of the 23 house lots as part of the North Development/Phase I project. The North Development/Phase I project required a Sewer Extension Permit from MassDEP.

In the June 23, 2006 the Secretary issued a Certificate on the Phase I Waiver request granting the proponent a Phase I Waiver with conditions allowing the proposed Farm Gate/Phase I Waiver project to proceed while the Draft Environmental Impact Report (DEIR) was being prepared. The proponent was asked to provide additional information in the DEIR to respond to comments received on the ENF and the NPC, particularly with respect to issues of wetlands, wastewater, and rare species.

Land Alteration

As currently designed, the proposed full-build project will result in the alteration of approximately 250 acres of land area, approximately 10, 200 sf of bordering vegetated wetlands (BVW), and approximately 21 acres of new impervious areas. Proposed under the Town of Dracut's Open Space Residential Subdivision Development Zoning By-Law, the proponent has proposed to place a total of approximately 139 acres (56%) of the full-build Farm Gate project area (Farm Gate- 40.1 acres, Wheeler Village - 65.4 acres, Berube Farms - 21.0 acres) under a Conservation Restriction (CR) to ensure for their permanent protection.

Farm Gate/Wheeler Village/Berube Farms - Cumulative Impacts

	FARM GATE	WHEELER VILLAGE	BERUBE FARMS	Cumulative Totals
LAND				
Site Area (ac)	77.3	113.8	58.9	250.0
Land Alteration (ac)	53.8	57.9	29.8	141.5
Impervious Area (ac)	10.2	12.0	6.3	28.5
Wetlands Alteration (sf)	4,013	32,450	4,986	41,449
Buffer to Wetlands (ac)	2.06	17.26	9.65	28.97
STRUCTURES				
Housing units	55	73	34	162
TRANSPORTATION				
Vehicle trips per day	550	730	340	1620
Parking spaces	110	146	68	324
WATER/WASTEWATER				
GPD of water use	20,020	28,105	12,650	60,775
GPD wastewater	20,020	28,105	12,650	60,775
Length of water	1.3	1.70	0.80	3.8

Wetlands

As described in the FEIR, the construction of the full-build project will involve a total of 4 wetlands crossings for internal roadways, and will result in the alteration of approximately 10,200 sf of BVW. The Farm Gate and Wheeler Village residential development projects will each include the construction of one roadway crossing. The proponent has proposed two roadway crossings for the Berube Farms project. The phased full-build project's alteration of more than 5,000 sf of BVW (approximately 10,200 sf) will require a 410 Water Quality Certificate from MassDEP.

The FEIR contains a small-scale full-build project site plans that shows portions of numerous house lots and internal circulation roadways located within the 100-foot wetland buffer zone. According to the proponent the full-build project will result in the alteration of approximately 24 acres of the 100' wetland buffer zone. The proponent should continue to examine methods of avoiding or minimizing encroachment into buffer zones including, but not limited to, reducing the total number of proposed residential units. The proponent has committed to provide a total of approximately 20,600 sf (2:1) of on-site wetlands replication for unavoidable impacts to BVW resource areas resulting from the proposed full-build development project. The proponent has committed to placing deed restrictions on individual lots containing wetlands resource areas 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. I encourage the proponent to consider installing 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.

Rare Species

According to the information originally provided in the ENF, the Farm Gate project site was located within priority and estimated habitat for the Spotted Turtle (*Clemmys guttata*). I note that the Spotted Turtle was removed from the Endangered Species List on July 14, 2006. In their comments on the ENF, the Natural Heritage and Endangered Species Program (NHESP) had indicated that the proponent, in consultation with NHESP, agreed to place a Conservation Restriction (CR) on 40.1 acres (52%) of the eastern portion of the project site that would result in avoiding a take of the Spotted Turtle, or having an adverse effect on the Spotted Turtle habitat. NHESP has subsequently determined that only a small portion of the Farm Gate development parcel is located within Priority Habitat and Estimated Habitat.

Water Supply

The estimated total potable water supply need (60,775 gpd) generated by the proposed full-build residential development project (Farm Gate, Wheeler Village and Berube Farms) will be served by the Kenwood Water Department District which receives its water from the City of Lowell and the Lowell Regional water utility (LRWU). The proponent has indicated that the Kenwood Water Department has granted the proponent approval to connect the full-build project to the Kenwood Water Department District. The proponent has committed to constructing infrastructure improvements to the Kenwood Water Department's water supply system. The FEIR should include a detailed description of the infrastructure improvements to be constructed by the proponent.

Wastewater

The estimated wastewater flow from the full-build project (approximately 60,800 gallons per day (gpd)) will be conveyed from the project site to the Town of Dracut's wastewater collection system located within the Parker Road right-of-way, and on to the City of Lowell's Regional Wastewater Treatment Facility (LWRTF) for treatment and disposal. As currently proposed, gravity sewers will convey flows from the Berube Farms project site to the Wheeler Village project site. The combined wastewater flows from Berube Farms and Wheeler Village will be pumped to the Farm Gate project site and combined with the Farm Gate project flows to be conveyed by gravity to the existing municipal sewer located in Parker Road. A second gravity sewer connection to the existing municipal Parker Road sewer is proposed to accept flows from Farm Gate's South Development/Phase II development plan.

Under a 1977 Inter-Municipal Agreement (IMA) between the City of Lowell and the Town of Dracut, the LWRTF will provide wastewater treatment and disposal for up to 3.6 million gallons per day (mgd) of Dracut's wastewater flows. According to the proponent, the Town of Dracut entered into an IMA with the Town of Tyngsborough to allocate up to 1.0 mgd of Dracut's 3.6 mgd wastewater flow allocation to Tyngsborough. The estimated wastewater flows from the full-build project will not exceed the Town of Dracut's 2.6 mgd remaining wastewater flow allocation.

In addition to the IMAs with the City of Lowell and the Town of Tyngsborough, the Town of Dracut is also currently involved in negotiations with the City of Methuen for an IMA to convey a portion of Dracut's wastewater flows to the City of Lawrence's WWTF via Methuen's sewer collection system. I note that the Town of Dracut has imposed a moratorium on all proposed sewer connections until such time as the IMA with the City of Methuen has been completed. MassDEP has indicated that the proponent will need to demonstrate the availability of capacity in the IMAs before any additional flows from the Farm Gate project may be added to Dracut's sewer system. Each of the proposed development phases will require a sewer connection/extension permit from MassDEP prior to the start of construction.

Stormwater Resources

The FEIR includes a stormwater management plan for each of the three Farm Gate development phases comprised of a closed drainage system and the use of Best Management Practices (BMPs) to collect and convey surface runoff in culverts, deep sump hooded catch basins with forebays and detention basins. These proposed stormwater management plans have been designed to be consistent with MassDEP's Stormwater Management Policy and guidelines, and the Town of Dracut's Storm Water Program.

I encourage the proponent and the Town of Dracut to continue to work together to identify and 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/>.

Construction Period Impacts

The proponent has committed to implementing standard construction practices to mitigate project construction impacts to traffic, noise dust and erosion and sedimentation. The proponent should consult with the Town of Dracut, and meet with local residents from Wheeler Road, Parker Road and other nearby neighborhoods to identify approved truck access routes (i.e., Routes 110 and 113) for construction-generated traffic during project construction. I strongly encourage the proponent to commit to using only those construction firms that apply after-treatment controls and On-Road Low Sulfur Diesel (LSD) fuel to their equipment. All construction-related refueling and equipment maintenance activities should be conducted under cover on impervious surface areas with containment, and outside of any wetlands resource areas, endangered species habitat areas, residential areas and wellhead protection areas.

Mitigation/Section 61

I anticipate that the permitting process will provide an opportunity to incorporate any needed additional detail and clarification to the proponent's mitigation commitments. I will require the proponent to submit a detailed final Section 61 Findings to the MEPA Office for the project file at the conclusion of the project permitting process. The Section 61 Findings must contain a detailed description of any/all proposed mitigation/ improvements to wetlands, stormwater management, water supply, and wastewater management, and must include estimates of the individual costs of the proposed mitigation/improvements, identification of the parties responsible for implementing the mitigation, and a schedule for their implementation based on the proposed construction phases for the Farm Gate project.

I find that the FEIR provides sufficient information to understand the environmental impacts of the project and potentially feasible alternatives to the project, that the project has avoided and mitigated environmental impacts to the greatest feasible extent, and that the state permitting agencies have adequate information on which to execute their Section 61 obligations. The proponent can resolve any remaining issues during the permitting process.

November 15, 2007

Date



Ian A. Bowles, Secretary

Comments received:

11/06/07 Natural Heritage and Endangered Species Program (NHESP)
11/08/07 MA Department of Environmental Protection – NERO
11/08/07 Northern Middlesex Council of Governments (NMCOG)

IAB/NCZ/ncz

#13723 FEIR Farm Gate, Dracut