

Berkshire Regional Planning Commission Clearinghouse Review Report

September 5, 2007

SUBJECT: Cassilis Farm Fire Pond
EOEA#: 14078
LOCATION: New Marlborough
ESTIMATED COST: \$40,000-50,000
REVIEW TYPE: ENF
PROPONENT: Jane Carpenter
COMMENTS DUE: August 28, 2007

PROJECT DESCRIPTION:

This project will excavate and grade wetlands and uplands on Hartville/New Marlborough Road in New Marlborough to create a fire pond. The 12-acre property was once a working farm and extends on both sides of the road. The property currently supports a large main house, a guest house, barns and sheds. A few of the barns have small apartments in them. The main house is surrounded by lawn, while barns and sheds are surrounded by pasture. A fire hydrant will be installed at the pond for use by the local fire department.

The project is being reviewed through the MEPA process because it is altering greater than 5,000 sf of wetlands and will require a state 401 Water Quality Certificate from the DEP. The project has received an Order of Conditions from the New Marlborough Conservation Commission and a Section 404 permit from the Army Corps of Engineers.

CONSIDERATIONS AND POTENTIAL ISSUES:

Wetlands and Wetland/Aquatic Habitat

To create the pond, 6,949 square feet (sf) of Bordering Vegetated Wetlands (BVW) and 7,264 sf of upland will be excavated to form a 14,213 sf of pond (called Land Under Water or LUW). 9,960 sf of BVW will be replicated to compensate for the transformation of the BVW to LUW. The existing intermittent stream will flow through the pond and water will exit the pond through the existing stream channel and culvert. The pond's outlet will be reconstructed to include stabilization fabric, cobble rip-rap and stone dike dams to slow water velocity. According to an architect's rendering of the pond, a gazebo, stone steps and other landscaped amenities will be placed around the pond, and a water fountain will be installed within the pond for aeration.

There are several site plans in the ENF, some of which conflict with other documents, and therefore it is not known which of the plans is final and will supersede the others. For example, the NOI states that 6,949 sf of BVW will be changed into LUW, but the Pond Creation & Resource Improvements site plan states that 5,318 sf will be changed. Architectural renderings show landscaped amenities not shown on engineering drawings. These discrepancies should be clarified. The Notice of Intent (NOI) plans do not show the location of the fire hydrant nor the driveway/pullover where the fire trucks will enter to withdraw water. This should be prominently shown to demonstrate access for the New Marlborough Fire Department.

The pond's 700,000 gallons will be filled by groundwater inflow and surface runoff. The ENF provides groundwater data from monitoring wells, but does not provide flow data nor discuss what percentages of groundwater and surface flow will contribute to the pond's water levels. The ENF does not provide hydrologic data demonstrating that the level of the pond water will

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remain fairly constant, especially during low flow conditions. The ENF also does not provide data that demonstrates that groundwater quality will not be impacted by possible surface water inflow during dry periods.

It was stated during the site visit on August 22nd that if, during construction, it was found that the pond was not holding water as expected, the floor of a portion of the pond may be lined with clay. These contingency plans are not stated in the ENF nor in the NOI. It is unknown what the impacts of laying down an unknown square footage of nearly impervious surface will be to the hydrology in the surrounding area.

The ENF does not indicate how the pond's creation and its possible drawdown for fire protection will affect the groundwater and surface water flows at the site and downstream. The ENF does not indicate how often or how much water the fire department expects to draw from the pond. Will it draw water only in the event of a fire, or will it also draw water during practice exercises?

The site currently hosts several invasive plant species. The applicant has indicated that she will remove invasive plant species on the site, but does not explain steps that will be taken to control spreading them further afield as they are being removed. It should be noted that late summer and autumn, when construction is planned, are times when many of the invasive plants have berries and the seeds could easily be spread during removal. The ENF does not indicate a willingness to monitor and control invasive species re-colonization once construction is complete.

The NOI within the ENF states that the altered BVW will be planted with trees and shrubs native to the area. However, there are plants listed in the landscape plan, including Japanese Black Pine and Pink Shell Azalea, which are not native to the Berkshires. Bidens species is listed as a general category, but it should be noted that most bidens are not native. Most importantly, the applicant and its landscape consultant should be aware that Forget-me-not (*Myosotis scorpioides*) has officially been declared an invasive plant species in Massachusetts, and thus they should remove it from the plant list. The importation of this plant has been banned since July 1, 2006, and its propagation has been banned since January 1, 2007. The landscaping consultant is strongly encouraged to become familiar with state invasive species regulations and guidelines. The landscape plan within the ENF lists several non-native species.

The ENF states that if fish are introduced, they will be indigenous. A list of potential fish species is not given. Given the erroneous list of so-called native plants in the landscape plan, it is important for the ENF to be clear regarding the fish species which will be introduced.

Land Alteration

The ENF cover page states that 240 sf of impervious area will be added to the site, but the Land Section of the ENF does not discuss this. Also, the Land Section is not filled out completely.

Consistency with Local & Regional Plans

The New Marlborough Fire Department supports the creation of the fire pond at this location, as it will provide an easily accessible water source in an area of town that currently lacks an adequate supply.

Alternatives Analysis

The ENF states that there are no other alternatives to this project in the area. The applicant considered a perennial stream present at the site, but states that existing and future septic systems occupy land on either side of the stream. The ENF states that offsite alternatives are

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not options, as the applicant does not have access to other lands. The ENF does not state if the applicant approached other landowners about off-site options.

There is an existing farm pond across the street from the property that may be useful as a fire pond. Although subsequent information provided by the fire chief indicates that the volume of water in the existing pond is insufficient, it should have been discussed in the ENF as an alternative.

COMMENTS AND RECOMMENDATIONS:

Overall, the ENF lacks the hydrological data necessary to document that the creation of the pond will not impair groundwater and surface water quality in the area, or that the pond will hold and maintain enough water to be useful for fire protection. In addition, the ENF should have clearly demonstrated a need for a fire pond on this location. BRPC does not believe that the project is of a scale that it requires an EIR. However, we offer to MEPA, the DEP and the applicant these recommendations:

- The applicant should conduct a more thorough alternatives analysis to demonstrate that there are truly no other options to altering 7,000 sf of wetlands. The ENF should identify existing water sources for fire protection and their proximity to the project site. Had the applicant approached neighboring property owners about locating the pond elsewhere? Did the applicant consider erecting a water tower or other storage facility?
- The applicant should explain how the project will not negatively impact the flow regime, quantity and quality of the water from the intermittent stream to the Konkapot tributary.
- The applicant, landscape consultant and construction crew should take precautions against further spread of invasive species during their removal. Flowers, seeds and clippings should be carefully handled and destroyed.
- The applicant and her consultant should clearly state that no invasive species will be planted at the site and revise the planting list to remove a banned species and all non-native species.
- The applicant should explain how she expects to monitor and prohibit re-colonization of invasive plant species at the site.
- The applicant should consult with Mass. Fish & Wildlife prior to releasing any fish or other aquatic species into the pond.

Final comments were forwarded to MEPA after their approval by the Berkshire Regional Planning Commission's Executive Committee at their meeting on September 5, 2007.