



## ifarm LLC Pond and Dam Maintenance Plan

55 Towne Road

May 29, 2018

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Sometime in the 1970s a small dam was constructed by the previous farm owner, Richard Price and neighbor Melvin Prohl, to create a pond on the north side of the lane approaching ifarm (see Fig. 1 below, USGS topographic quadrangle). The dam is approximately 25 feet long dam constructed of two, 12-inch wide concrete walls separated by 2 feet of earth (see Fig. 2, below). The depth of the two concrete walls is unknown. A 5-foot wide spillway was constructed downstream of the dam. The dam is not recognized by the MA Bureau of Geographic Information or by the MA Office of Dam Safety.

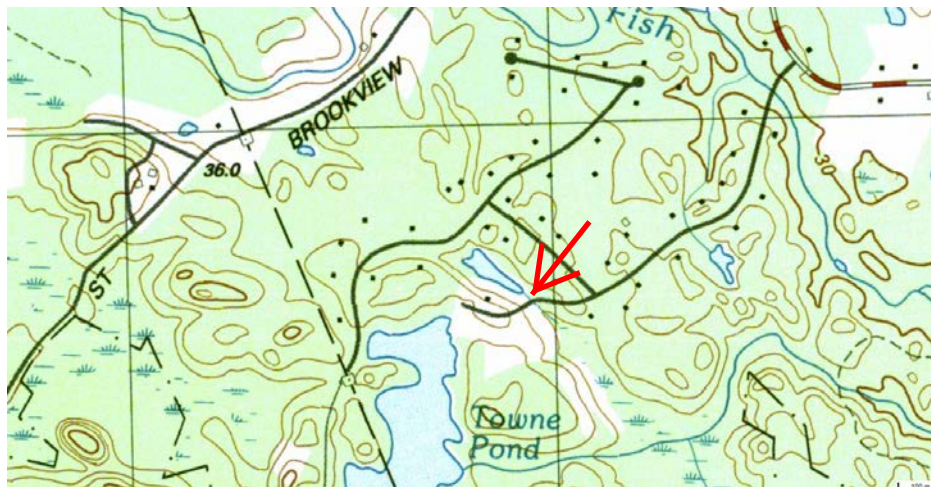


Fig. 1 USGS Site Locus

The pond created by the dam is approximately 1.5 acres in size, but approximately .2 acres of the southwestern end is within ifarm property, including the dam. The pond provides a source of water for crop irrigation. Additionally, a newly installed dry hydrant located just behind the dam, provides fire protection not only for ifarm structures but also for homes in the surrounding neighborhood.

Over the past four decades, much sediment has accumulated in front of the dam, making inspection and maintenance of the structure impossible. ifarm is proposing to remove the accumulated sediment and debris in front of the dam in order to facilitate an inspection, and to address any repairs to the dam or spillway that may be necessary in order to maintain the flood storage volume within the pond.

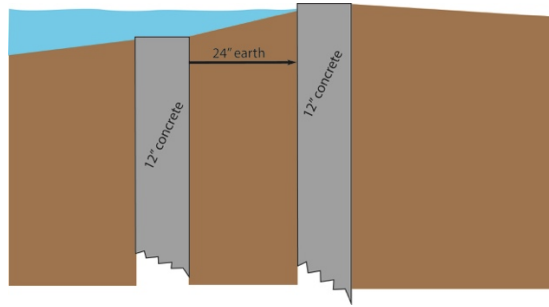


Fig. 2: Estimated Dam Construction.

This work is qualified under the agricultural exemption provisions of the Massachusetts Wetlands Protection Act and Town of Boxford Wetlands Bylaw which specifically exempts from review “work performed for the normal maintenance or improvement of land in agricultural and aquacultural use.” The Massachusetts Wetlands Protection Act Regulations (310 CMR 10.04) further define land in agricultural use as land within resource areas or the Buffer Zone which presently and primarily is used in producing or raising one or more agricultural commodities for commercial purposes. Such work may include,

“... the cleaning, clearing, grading, repairing, dredging, or restoring of existing man-made or natural water management systems such as reservoirs, farm ponds, irrigation systems, field ditches, cross ditches, canals/channels, grass waterways, dikes, sub-surface drainage systems, watering facilities, water transport systems, vents, and water storage systems, all in order to provide drainage, prevent erosion, provide more effective use of water, or provide for efficient use of equipment, and all for the purpose of maintaining favorable conditions for ongoing growing or raising of agricultural commodities...”



View looking upstream of spillway and dam, 4-20-18.



View across dam, 4-20-18.



Close-up of dam and spillway with debris 4-20-18.

Proposed work includes some temporary impacts to Land Under Water (LUW) resource to remove accumulated sediment within 6 feet of the front of the dam. This material will be excavated at a time of low water level when there is no flow over the spillway. Excavated sediment will be stockpiled outside of the 100-foot Buffer Zone to state and locally jurisdictional wetland resource areas. In addition to temporary LUW impacts, there may be some temporary disturbance to Buffer Zone to access and remove the branches, leaves and debris on top of the dam. This material will also be disposed of outside of the Buffer Zone. No permanent impact to resource areas is proposed.

The dam is believed to be in good condition at this time and no repairs are currently anticipated unless upon removal of material and further inspection, modifications are necessary. Cleaning out of material is expected to occur not more than once annually. No changes to dam height or modification to water levels are being proposed.

ifarm requests confirmation from the Boxford Conservation Commission that work associated with the clean out in front of, on top of and immediately downstream of the dam is exempt from the Mass. Wetlands Protection Act and Boxford Wetlands Bylaw as normal maintenance of structures associated with an exempt agricultural activity as described above.