dcr
Massachusetts

July 17, 2024

Town of Medfield
Board of Selectmen
459 Main St
Medfield, MA 02052

Subject: **Request for status update concerning outstanding Certificate(s) of Non-Compliance and Dam Safety Order(s)**

Dam Name: **Danielson Mill Dam**
Location of Dam: **Medfield**
National ID No.: **MA03351**
Hazard Potential: **Significant**
Known Condition: **POOR**

Dear Dam Owner,

You are receiving this notice as the above-listed dam(s) remain under an outstanding Certificate of Non-Compliance and Dam Safety Order, copy(ies) enclosed for your reference. The Office of Dam Safety (ODS) is contacting you to request a formal status update concerning your efforts and timeline to bring the dam(s) into compliance, including your chosen alternative of repair, partial breach, or complete removal; the status of design and permitting efforts to date; and estimated construction start date(s).

The ODS would also like to share some available grant funding information with you. The following are a list of grant opportunities for which municipalities are eligible to apply for various phases of dam related projects:

- Dam and Seawall Repair or Removal Program: https://www.mass.gov/service-details/dam-and-seawall-repair-or-removal-program-grants-and-funds
- Municipal Vulnerability Preparedness Program: https://www.mass.gov/municipal-vulnerability-preparedness-mvp-program
- Section 319 Nonpoint Source Competitive Grants Program: https://www.mass.gov/info-details/grants-financial-assistance-watersheds-water-quality
- Department of Fish & Game, Division of Ecological Restoration: http://www.mass.gov/der, Chris Hirsch, Chris.Hirsch@mass.gov

Please note, the ODS is not affiliated with the above-listed grant programs. If interested, you will need to inquire directly with each program for eligibility criteria and any guidance pertaining to the application process and deadlines.

Please contact the ODS to provide a status update concerning your timeline to bring the dam into compliance at dam.safety@mass.gov. ODS can also be reached at 617-620-8583 with any questions you may have relating to dam safety regulations.

Thank you for your anticipated cooperation.

Sincerely,

William C. Salomaa, Director
Office of Dam Safety

Enclosure: Certificate(s) of Non-Compliance and Dam Safety Order(s)

dcr
Massachusetts

February 12, 2018
Certified Mail No. 7009 1680 0000 6390 9880
Return Receipt Requested

Town of Medfield
c/o Board of Selectmen
459 Main Street
Medfield, MA 02052

Subject: **CERTIFICATE OF NON-COMPLIANCE and DAM SAFETY ORDER**

Dam Name:	Danielson Mill Dam
Location:	Medfield
National ID No:	MA03351
Known Condition:	Poor
Hazard Potential:	Significant
Norfolk Registry of Deeds:	Book 10282, Page 155

Dear Board of Selectmen:

In accordance with 302 CMR 10.08, the Department of Conservation and Recreation (DCR), Office of Dam Safety (ODS) has determined that Danielson Mill Dam does not meet accepted dam safety standards and is a potential threat to public safety. Therefore, DCR hereby issues a **CERTIFICATE OF NON-COMPLIANCE and DAM SAFETY ORDER**.

ODS records indicate that the Town of Medfield is the Owner of the Danielson Mill Dam, National Inventory of Dams No. MA03351. ODS classifies the dam as a **Small Size, Significant Hazard Potential** Structure. Significant Hazard Potential Dams are dams that may cause the loss of life and property damage in the event of dam failure.

On November 25, 2014 and more recently on October 18, 2017, inspections of the Danielson Mill Dam were performed by engineering consultants Polaris Consultants, LLC and Tighe & Bond, Inc., respectively. As a result of this inspection, the dam was determined to be **STRUCTURALLY DEFICIENT** and in **POOR** condition. The dam has been found to be in need of repair, breaching or removal to bring the dam into compliance with dam safety regulations.

The CERTIFICATE OF NON-COMPLIANCE is based on the above-referenced inspection report results which listed the observance of many deficiencies, including but not limited to:

- Small trees and brush were growing on the upstream slope, which obscured observation of the slope.
- Riprap slope protection on the upstream slope was sparse.
- A small sinkhole was observed in the embankment crest along the right upstream spillway return wall.
- A small sinkhole was observed in the embankment crest at the left downstream corner of the spillway bridge/lintel slab. There were voids and missing stones in the left downstream spillway training wall below the sinkhole, and there was evidence of soil migration through the voids. Based on photos provided in the 2014 Phase I report, the soil migration appears to have been present at the time of that inspection but was not noted in the report.
- Severe deterioration of the vertical timbers in the downstream spillway training walls, with complete section loss in areas. Based on photos provided in the 2014 Phase I report, this condition appears to have been present at the time of that inspection but was not noted in the report.
- Dense brush was growing along the right downstream toe, which prevented access to and obscured observation of the saturated areas and two areas of seepage downstream of the right embankment.

These foregoing deficiencies compromise the structural integrity of the dam and present a potential threat to public safety. ODS has determined that the dam needs to be repaired, breached or removed in order to bring the dam into compliance with dam safety regulations.

As stated in the November 25, 2014 report, Danielson Mill Dam is located upstream of Homestead Drive. After leaving the dam, the west branch of the Nantasket River flows under Homestead Drive through a 30-inch reinforced concrete pipe, through a wooded area, under Route 27, and into the Charles River flood plain. Several residences are located downstream of the dam. It appears that a failure of the dam at maximum pool will first pond behind the Homestead Drive embankment, which is visually 4 to 5 feet above the dam. Water will pond behind the embankment and cross under the embankment through the culvert. Flooding of residences between Danielson Pond and the Charles River is possible.

G.L. c. 253, Sections 44-48 and 302 CMR 10.00 set forth the jurisdiction for ODS and its authority to take action and order actions to be taken. For your information a copy of the Dam Safety Regulations, 302 CMR 10.00 Dam Safety, can be found on the ODS website.

DAM SAFETY ORDER:

In accordance with the authority of G.L. c. 253, Section 47, 302 CMR 10.07 and 10.08 you are hereby **ORDERED** to comply with the following:

1) **Conduct Follow-up Inspections:** You shall complete follow-up visual inspections at six (6)-month intervals, conducted by a registered professional civil engineer qualified to conduct dam inspections, at your cost, until adequate repairs are made or the dam is adequately breached. You shall submit the first Follow-up inspection to ODS no later than **April 18, 2018**.

   Follow-up inspections are to be summary in format and shall provide a written description, including photographs, of any changes in condition. Your engineer is to use the attached ODS Poor Condition Dam Follow-up Inspection Form to report follow-up inspection findings. The form is also available electronically on the ODS web site. Your engineer shall include a cover letter on engineering firm letterhead that briefly summarizes the current follow-up inspection and findings.

   You shall submit one (1) hard copy printed double-sided and one (1) electronic pdf copy of all completed follow-up visual inspection reports to ODS within thirty (30) days of the date of follow-up inspection field work.

2) **Conduct Phase II Inspection and Investigations**. You shall hire at your cost, a qualified registered professional engineer with dam engineering experience (engineer) to conduct a Phase II Inspection and Investigation of the dam to evaluate the structural integrity and spillway hydraulic adequacy of your dam and to develop/implement a plan to bring the dam into compliance with dam safety regulations by adequately repairing, breaching or removing the dam (see attached Phase II Investigation Outline).

   a. You shall commence the Phase II Inspection and Investigation no later than **April 30, 2018**. The Phase II Inspection and Investigation is to conform to the attached Phase II Investigation Outline. You are to, in a letter to ODS, no later than **April 16, 2018,** identify your selected engineer and inform ODS of the start date of the Phase II work.

   b. The Phase II Inspection and Investigation is to be completed, signed and stamped by your engineer and copies of the Phase II final report are to be delivered to ODS no later than **July 31, 2018**.

      You shall include a cover letter with the submitted Phase II report which describes your selected alternative to bring the dam into compliance with dam safety regulations. The owner shall submit a statement of your intent to implement inspection report recommendations to address structural and operational deficiencies to ODS upon submission of the required Phase II Inspection and Investigation completed by your engineer.

3) **Bring the dam into compliance and complete all repair, breach or removal work no later than July 31, 2019.** With your Phase II submittal, you must also provide a proposed timeline to design, permit and construct the selected alternative to repair, breach or remove the dam. The selected alternative must be completed, and the dam brought into compliance with Dam Safety regulations, by July 31, 2019.

4) **Additional Requirements:**
   a. You shall furnish copies of all required submittals listed above via certified mail.

   b. In order to maintain compliance with the Commonwealth's Wetlands Protection Laws you may have to seek requisite approval from your local Conservation Commission in accordance with G.L. c. 131, §40. You are obligated to contact and maintain communication with the Medfield Conservation Commission and any other local, state or federal permitting agency the ensure compliance with the Wetlands Protection Act and any other regulatory requirements.

   c. You must inform the following parties about the condition of the dam and your developing plans to bring the dam into compliance with dam safety regulations: all abutters of the impoundment upstream; property owners within one-half mile downstream of the Danielson Mill Dam; Division of Fisheries & Wildlife, Northeast District, 85 Fitchburg Rd, Ayer, MA 01432; Department of Environmental Protection, Central Region, 8 New Bond St, Worcester, MA 01606; Medfield Conservation Commission; Medfield Emergency Management Director.

Please be advised that in accordance with G.L. c. 253, § 47, "any person who fails to comply with the provisions of this chapter or of any order, regulation or requirement of the department relative to dam safety, shall be fined an amount not to exceed $5,000 for each offense, to be fixed by the court." Furthermore, each violation shall be regarded as a separate and distinct offense and, in case of a continuing violation, each day's continuance thereof shall be deemed to be a separate and distinct offense.

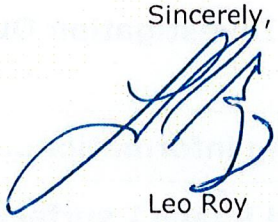
Nothing in this order releases the owner from the requirements of any prior Dam Safety Order issued for this dam.

In accordance with 302 CMR 10.08, this CERTIFICATE OF NON-COMPLIANCE and DAM SAFETY ORDER will be recorded by the DCR at the Registry of Deeds in the county where the dam lies. Issuance of a Certificate of Compliance following adequate repair or breaching of the dam will be required to discharge the CERTIFICATE OF NON-COMPLIANCE and DAM SAFETY ORDER.

Please direct any technical questions, correspondence, or submittals to Emily Caruso, Department of Conservation and Recreation, Office of Dam Safety, 180 Beaman Street, West Boylston, MA 01583 or Emily.Caruso@state.ma.us. Other questions regarding process and administration of Dam Safety regulations should be directed to Bill Salomaa, Director of Office of Dam Safety, at William.Salomaa@state.ma.us. Additional dam safety information can be found at the DCR-ODS website: http://www.mass.gov/eea/agencies/dcr/conservation/dam-safety/.

Thank you for your cooperation.

Sincerely,



Leo Roy
Commissioner

CC: Senator Shawn Dooley
Representative Paul R. Feeney
Maurice Goulet, Medfield DPW Director
Medfield Emergency Management Director
Medfield Conservation Commission
Barbara Newman, U.S. Army Corps
Central Region, DEP
Deirdre Buckley, MEPA
Northeast District, DFW
Rob Lowell, DCR
William Salomaa, DCR
Ariana Johnson, Esq., DCR
Nick Wildman, DER

Department of Conservation and Recreation
Office of Dam Safety
Phase II Inspection and Investigation Outline

I.	Review of existing information.....
II.	Updated Detailed Phase I surface inspection in compliance with Office of Dam Safety Phase I Inspection format.....
III.	Subsurface Investigations – borings, sampling, analysis.....
IV.	Topographic Survey, wetlands flagging/delineation, of sufficient detail to support not only the Phase II effort, but sufficient for the future implementation of design phase.....
V.	Stability and seepage analyses – Seismic and static stability evaluation of dam (upstream and downstream slopes, internal materials), seepage potential, internal erosion potential, piping potential.....
VI.	Hydrologic/Hydraulic Analysis and spillway inadequacy resolution.....
VII.	Alternatives analysis and presentation of conceptual designs and associated estimated design, permitting and construction costs to bring the dam structure into compliance with Chapter 253 Section 44-48 and 302 CMR 10.00 Dam Safety Regulations by either executing selected repair plan or breach plan.....
VIII.	Final Report Presented to the Office of Dam Safety.....

Commonwealth of Massachusetts
Department of Conservation and Recreation
Office of Dam Safety Poor Condition Dam Follow-up Inspection Form

(Complete this inspection form and provide a cover letter on consulting firm letterhead that briefly summarizes the current follow-up inspection and findings. The cover letter shall be signed and stamped by the Registered Professional Engineer in charge of the inspection)

Dam Name:
Dam Owner:
Nat. ID Number:
Hazard Potential:
Location of Dam (town):
Coordinate location (lat, long):
Date of Inspection:
Weather:

Consultant Inspector(s): **firm name and name of Registered Professional Engineer in charge of inspection.**

Others in Attendance at Field Inspection: **include list of names, affiliation and phone numbers.**

Attachments: **Updated site sketch with photo locations, Updated photos, and copy of locus map from Phase I report and other applicable attachments.**

I. **Previous Inspection date/Overall Condition:**
- Date of most recent formal Phase I Inspection Report:
- List the overall condition reported in most recent Phase I Inspection Report:

II. **Previous Inspection Deficiencies:**
- List identified deficiencies in the most recent Phase I Inspection Report:

III. **Overall Condition of Dam at the Time of the Current Follow-up Inspection:**
a. **State the current condition**
b. **Have conditions changed since the previous inspection? Yes or no.**

IV. **Comparison of Current Conditions to Condition Listed in Previous Phase I Inspection Report:**
a. **Have any of the deficiencies listed in the previous Phase I Inspection Report worsened?**
b. **If yes, list the changes.**
c. **Are there any additional deficiencies that have been identified in the current inspection?**

d. **If yes, list the deficiencies and describe.**

V. **Dam Safety Orders:**

- **List dam safety orders that have been issued to the dam owner pertaining to this dam.**

VI. **Maintenance:**

1. Indicate if there exists an operation and maintenance plan for the dam.
2. Indicate if it appears the dam is being maintained.

VII. **Recommendations:**

VIII. **Other Comments or Observations:**

IX. **Updated Site Sketch with Photo Locations:**

X. **Updated Photos:**

XI. **Copy of Locus Map from Phase I Report:**

XII. **Other applicable attachment:**