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*Via Electronic Mail*

January 20, 2026

Mr. Alexander Carli-Dorsey  
U.S. Environmental Protection Agency, New England Region  
Five Post Office Square  
Suite 100  
Boston, MA 02109

**Re: GE-Pittsfield/Housatonic River Site  
Rest of River (GECD850)  
2025 Annual Inspection Report for Columbia Mill Dam**

Dear Mr. Carli-Dorsey:

On November 20, 2025, GE's consultants from GZA GeoEnvironmental, Inc. performed the 2025 annual visual inspection of the Columbia Mill Dam in accordance with the EPA-approved Monitoring and Maintenance Plan for this dam. Enclosed is GZA's report on this annual inspection, including photographs, the annual dam inspection checklist, and an updated maintenance tracking table.

Please let me know if you have any questions about the enclosed inspection report.

Very truly yours,

Kevin G. Mooney  
Senior Project Manager

Enclosures

Cc: (via electronic mail)

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John Kilborn, EPA  
Christopher Ferry, ASRC Federal  
Thomas Czelusniak, HDR Inc.  
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James Bieke, Counsel for GE  
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GE Internal Repository



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## Visual Inspection

# 2025 Annual Visual Inspection Report Columbia Mill Dam (MA00260) South Lee, Massachusetts

Date of Inspection: November 20, 2025

Date of Report: January 20, 2026

File No. 01.019896.72



### PREPARED FOR:

General Electric Company  
Pittsfield, Massachusetts

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## **PREFACE**

The assessment of the general condition of the dam reported herein was based upon available data and visual inspections. Detailed investigations and analyses involving topographic mapping, subsurface investigations, testing and detailed computational evaluations were beyond the scope of this report unless reported otherwise.

In reviewing this report, it should be realized that the reported condition of the dam was based on observations of field conditions at the time of inspection, along with data available to the inspection team.

It is critical to note that the condition of the dam depends on numerous and constantly changing internal and external conditions and is evolutionary in nature. It would be incorrect to assume that the reported condition of the dam will continue to represent the condition of the dam at some point in the future. Only through continued care and inspection can there be any chance that unsafe conditions be detected.



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## 1.0 INTRODUCTION

The General Electric Company (GE) retained GZA GeoEnvironmental, Inc. (GZA) to perform an annual visual inspection of the Columbia Mill Dam (the Dam) on the Housatonic River in Lee, Berkshire County, Massachusetts, which is owned and operated by Lenox Development, LLC (Lenox). GZA performed the inspection on November 20, 2025 and has developed this report summarizing the results of the inspection. This report is subject to the limitations in **Appendix A**.

## 2.0 PURPOSE

Annual visual inspections of Columbia Mill Dam are required by GE's Monitoring and Maintenance Plan (M&M Plan) for Columbia Mill Dam, Revision 1, dated June 30, 2023, as conditionally approved by the United States Environmental Protection Agency (EPA) on August 3, 2023.

## 3.0 INSPECTION SUMMARY

### 3.1 GENERAL

On November 20, 2025, Jonathan Andrews, Leslie Decristofaro, and Mengxuan Zhao from GZA (representing GE) and Tom Czelusniak from HDR (representing EPA) mobilized to Columbia Mill and performed a visual inspection of the Dam. The inspection team was joined by Thom Clapper, the Dam Caretaker and Owner's representative, for access through the mill, gate operation, and inspection of the left side of the dam. The weather was sunny, in the upper 30s to low 40s degrees Fahrenheit, and the upstream pool level was estimated at about six inches above the spillway crest.

Overall, the conditions of the Dam were similar to those observed during GZA's September 3, 2024 annual inspection (described in a report submitted to EPA on November 1, 2024) and the most recent quarterly inspection conducted by GZA on August 12, 2025.

A summary of inspection observations at each structure is provided below. A site sketch and photo location map are provided on **Figure 1** and **Figure 2**, respectively. Photographs from the inspection are provided in **Appendix B** and the annual dam inspection checklist is provided in **Appendix C**. In addition, an updated maintenance tracking table is provided in **Appendix D**.

### 3.2 CONCRETE DAM / PRIMARY SPILLWAY (SPILLWAY)

The spillway was overtopping during the inspection; therefore, the downstream face of the spillway, spillway toe, and other areas downstream of the spillway were partially obscured by flow and difficult to observe.

Logs were observed on the upstream face, crest, and downstream face of the spillway. The logs near the left side of the spillway appeared to be slightly impeding flow. An abandoned effluent pipe was also observed on the left side of the spillway. Significant vegetation growth was observed upstream on the right side of the Dam.

As during prior inspections, minor cracking, spalling, and efflorescence were observed on both the left- and right-side downstream training walls. The right training wall appears to be constructed of concrete and stone masonry with shotcrete facing. As also observed previously, a crack was observed in the shotcrete facing near the top of the right training wall. The crack was up to about three inches wide and was located near a change in top of wall slope.



There was moderate cracking, spalling, and exposed reinforcement on the exterior wall of the mill building (on the left side of the Dam). These observations were similar to those during the 2024 annual inspection and more recent quarterly inspections. Leakage at the base of the mill wall that was observed during past recent quarterly inspections was not observed, likely obscured by flow.

As described in the 2024 annual inspection report, temporary repairs had been performed in July of 2024 to help mitigate the vortex-causing condition at the upstream left side of spillway observed during the August 2022 annual inspection. The repairs generally consisted of placement of waterstop and hydraulic cement along a crack/void at the interface between the upstream left side of the spillway and the right sluice gate training wall, and placement of waterstop, grout, and hydraulic cement in an open joint along the spillway crest. During the November 2025 annual inspection, the repairs appeared intact and no surficial indications of the former vortex were observed.

A minor irregularity in flow (non-uniform) over the spillway had been observed near the right side of the spillway during the third quarterly inspection of 2025 (held on August 12, 2025), during which there was an estimated three inches of flow over the spillway. This minor flow irregularity was not observed during the current inspection, during which there was an estimated six inches of flow over the spillway.

### 3.3 SLUICEWAY OUTLET WORKS (SLUICEWAY STRUCTURE)

The sluiceway structure was observed to be in adequate condition. As during prior inspections, minor cracking and spalling of the upstream dividing wall between the sluiceway and spillway were observed, and minor cracking and spalling of the downstream concrete sluiceway structure were also observed.

The sluice (slide) gate was operated by the Caretaker during the inspection. The gate was closed at the start of the inspection and then fully opened using a 500-pound chainfall attached to the operating wheel. Gate closure was by self-weight. The gate operation appeared smooth. The Caretaker reported that the operator wheel was last used two to three years ago and that bolts (which were removed to allow the gate to be opened) could be re-inserted at the operator base to allow wheel usage. GZA probed for sediment upstream of the sluice gate prior to gate operation. Probing indicated the presence of approximately ½ to one inch of sediment thickness within about one to two feet upstream of the gate.

The internal flume (internal sluiceway) inside the mill building was observed during this annual inspection. Some apparent sediment buildup was observed, as was the case during previous inspections; but the sediment could not be measured due to safety concerns around the opening in the mill building floor that provides access to the flume below. There is a gate that controls flow into the flume upstream of this opening. Based on discussions with the Dam Caretaker, the internal flume gate has not been operated in 10 to 15 years. Since there is water in the flume, it is assumed that this gate leaks.

### 3.4 RIGHT EMBANKMENT

The right embankment was observed to be in adequate condition. The vegetation along the top of embankment (crest) and portions of the downstream slope had been recently cut. Significant vegetation was present along the upstream slope and upper portion of the downstream slopes. Although the vegetation was dormant, it partially obscured observations in vegetated areas. Some of the recently cut vegetation had been discarded at a portion of the downstream toe of the embankment, which also partially obscured observation of the toe.



As noted during prior inspections, a slight bulge in the center of the stone masonry wall downstream of the embankment continued to be observed. However, no distress, cracking, offsets, or signs of displacement or ongoing movement were observed.

### 3.5 DOWNSTREAM AREA / MISCELLANEOUS

The downstream area of Columbia Mill was generally found to be in good condition, with the exception of leaning and partially failed portions of a retaining wall above the left riverbank approximately 100 to 200 feet downstream of the Dam. The condition of the wall appeared to be worse than observed in past recent inspections. The partially failed retaining wall does not hinder access to the downstream toe. No other signs of slides, sloughs, scarps, or seepage downstream of the Dam were observed. Access to the Dam from the downstream toe and the right side of the Dam was adequately maintained.

No warning signs were observed in the vicinity of the Dam.

In accordance with the M&M Plan, at least once every five years, the Columbia Mill impoundment is to be drawn down, if feasible, to expose the downstream face of the primary spillway and the boulder-lined downstream splash area at the toe of the Dam and allow observation of potential scour areas at the downstream spillway toe. As noted in the 2024 annual inspection report, in lieu of such drawdown, during the July 2024 temporary repair program, GZA was able to observe the conditions of the downstream face of the primary spillway and boulder-lined downstream splash area at the toe of the Dam in a nearly dewatered state. GZA's observations at that time were described in the 2024 annual inspection report.

## 4.0 **RECOMMENDATIONS**

The following are GZA's recommendations for continued monitoring and maintenance of the Dam.

### 4.1 MAINTENANCE AND MONITORING RECOMMENDATIONS

GZA recommends the following recurrent maintenance and monitoring activities that do not require engineering design:<sup>1</sup>

1. Visually monitor the left upstream side of the spillway where the former vortex had been observed during future quarterly and annual inspections [Checklist Item 5].
2. Visually monitor the continued performance of the 2024 temporary repairs during future inspections and probe the crest joint on the right side of the spillway during periods of low flow, and if necessary, make further repairs [Checklist Items 5 and 17].
3. Remove the buildup of debris at the sluice gate, spillway approach, and the crest and downstream face of the spillway. Also remove the logs that are impeding flow and the abandoned effluent pipe on the left side of the spillway. Continue to monitor debris buildup within the spillway channel and remove it if it is determined to be impeding flow. [Checklist Items 6, 13, 19, 37].

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<sup>1</sup> GZA's recommendations are cross-referenced to the corresponding items in the inspection checklist in **Appendix C**.





4. Visually monitor the diagonal crack in the downstream spillway face on a biennial basis (every two years) as low flow conditions permit [Checklist Item 7].
5. Visually monitor the area of irregular spillway crest overflow [Checklist Item 19].
6. Continue clearing inappropriate vegetative growth and debris on the upstream and downstream slopes of the Dam, abutment contacts, and access roads, and maintain grass cover on the right embankment. [Checklist Items 22, 50, 51, 57, 62, 69].
7. Visually monitor the cracks on the right downstream training wall and the left training wall of the spillway/right wall of the external sluiceway, including the horizontal crack on top of the right concrete training wall [Checklist Items 25, 41, 42].
8. Visually monitor leakage through base of the mill foundation wall between internal sluiceway and downstream channel [Checklist Item 31].
9. Visually monitor the moderate cracking, spalling, and exposed reinforcement on the downstream mill foundation walls [Checklist Item 32].
10. Visually monitor the leakage through the internal sluiceway (flume) that discharges through the mill building downstream of the sluiceway into the Housatonic River [Checklist Item 40].
11. Remove the remaining previously cut vegetation from downstream of the right embankment to allow an unobstructed view of the right embankment toe [Checklist Item 51].
12. Visually monitor the bulged masonry wall on the downstream side of the right embankment [Checklist Item 53].
13. Visually monitor leaning/partially failed retaining wall above left downstream riverbank for potential hindrance to downstream toe access [Checklist Item 65].

It is also noted that GE informed the Dam owner of the absence of warning signs near the Dam via email on January 5, 2024, and has notified the owner again in January 2026 [Checklist Item 70].

#### 4.2 REPAIR RECOMMENDATIONS

GZA does not have any repair recommendations at this time.



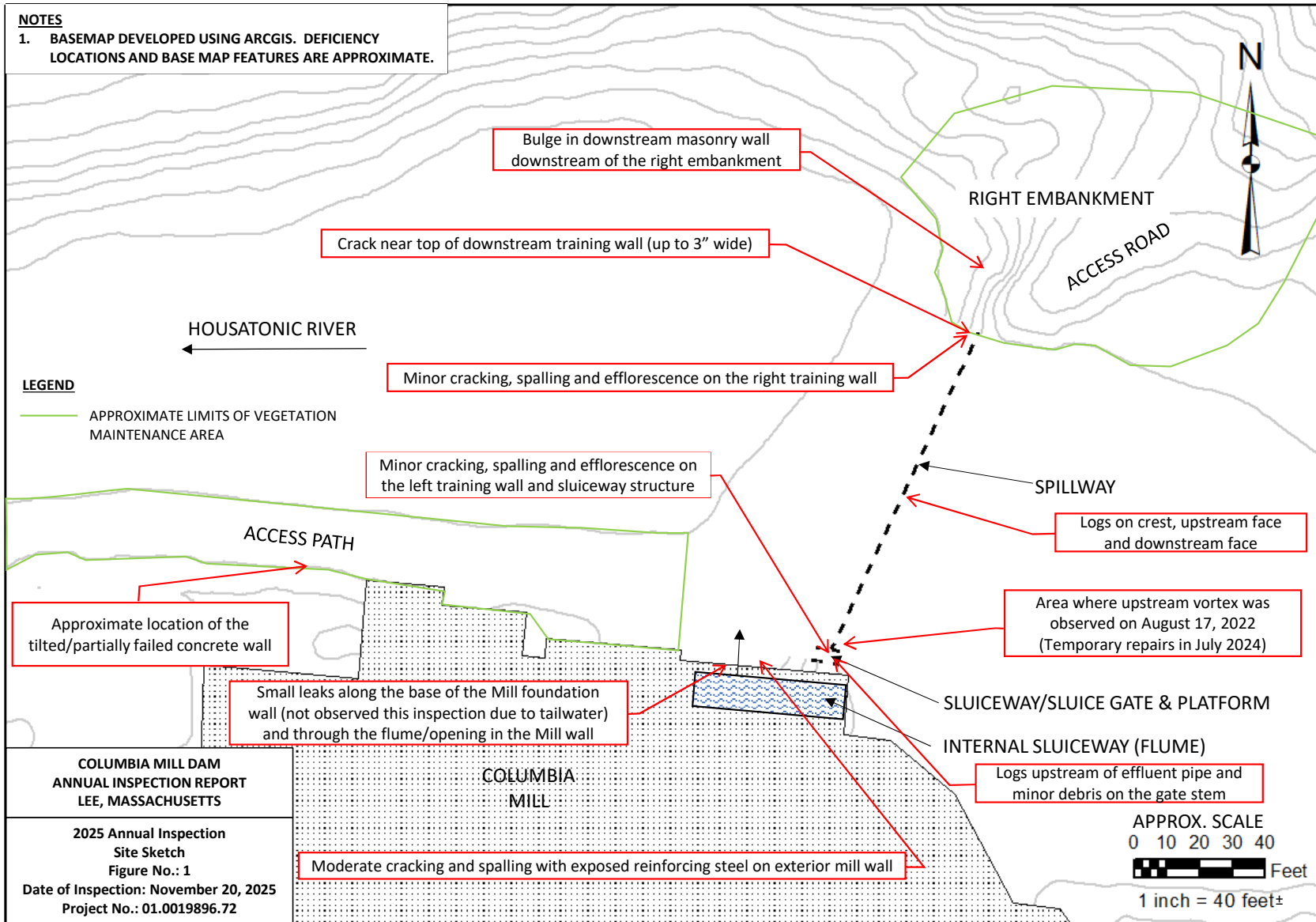
## Figures

**NOTES**

1. BASEMAP DEVELOPED USING ARCGIS. DEFICIENCY LOCATIONS AND BASE MAP FEATURES ARE APPROXIMATE.

**LEGEND**

— APPROXIMATE LIMITS OF VEGETATION MAINTENANCE AREA

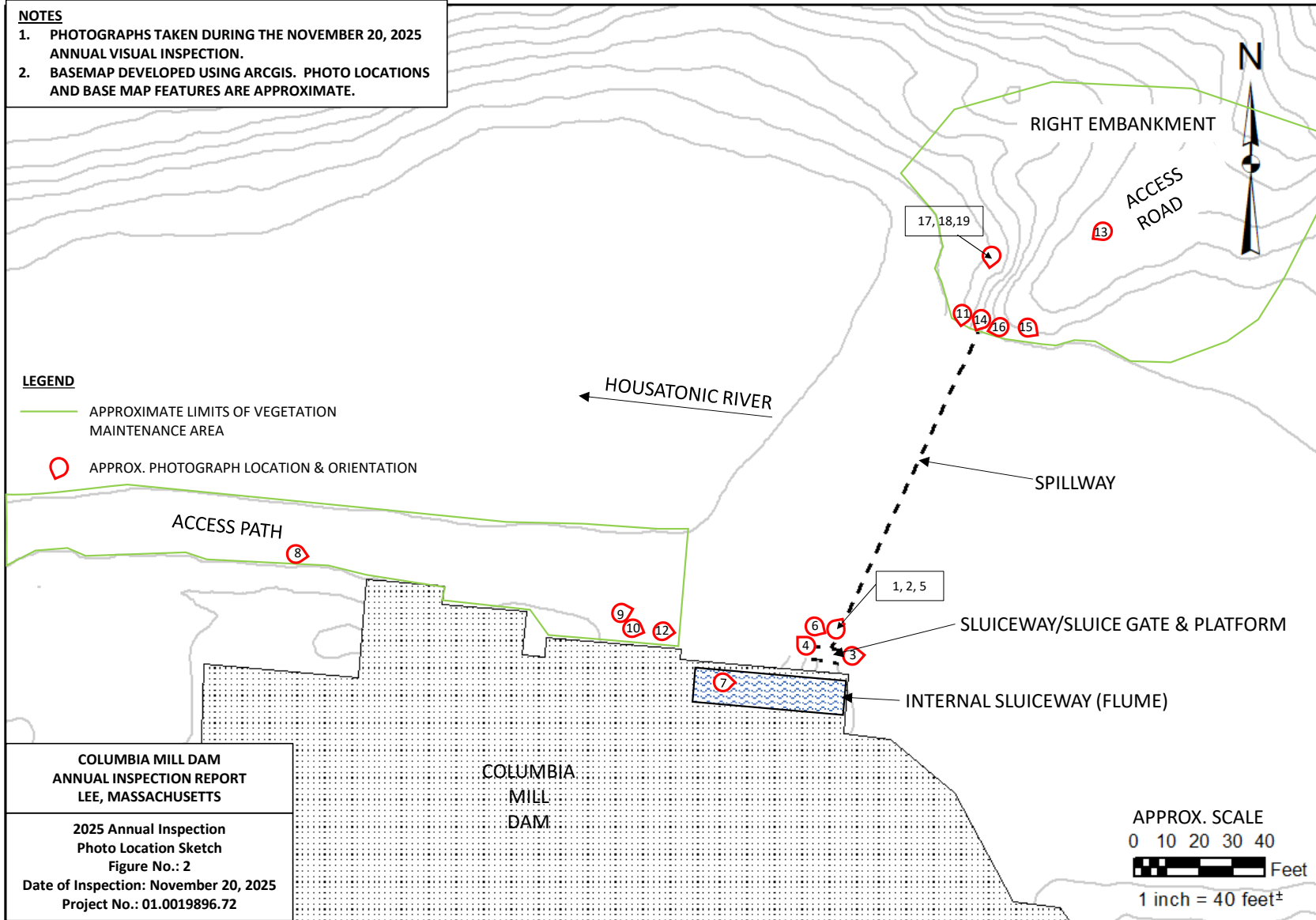


**NOTES**

1. PHOTOGRAPHS TAKEN DURING THE NOVEMBER 20, 2025 ANNUAL VISUAL INSPECTION.
2. BASEMAP DEVELOPED USING ARCGIS. PHOTO LOCATIONS AND BASE MAP FEATURES ARE APPROXIMATE.

**LEGEND**

- APPROXIMATE LIMITS OF VEGETATION MAINTENANCE AREA
- APPROX. PHOTOGRAPH LOCATION & ORIENTATION



COLUMBIA MILL DAM  
ANNUAL INSPECTION REPORT  
LEE, MASSACHUSETTS

2025 Annual Inspection  
Photo Location Sketch  
Figure No.: 2  
Date of Inspection: November 20, 2025  
Project No.: 01.0019896.72



## **Appendix A – Limitations**



## USE OF REPORT

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of General Electric (Client) for the stated purpose(s) and location(s) identified in the Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

## STANDARD OF CARE

2. Our findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Report and/or proposal, and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).
3. Our services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made.

## SUBSURFACE CONDITIONS

4. If presented, the generalized soil profile(s) and description, along with the conclusions and recommendations provided in our Report, are based in part on widely-spaced subsurface explorations by GZA and/or others, with a limited number of soil and/or rock samples and groundwater /piezometers data and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs. The nature and extent of variations between these explorations may not become evident until further exploration or construction. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the conclusions and recommendations of this report.
5. Water level readings have been made in test holes (as described in the Report), monitoring wells and piezometers, at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this Report. Fluctuations in the groundwater and piezometer levels, however, occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, reservoir and tailwater levels, the presence of subsurface utilities, and/or natural or artificially induced perturbations.

## GENERAL

6. The observations described in this report were made under the conditions stated therein. The conclusions presented were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the Client.
7. In preparing this report, GZA relied on certain information provided by the Client, state and local officials, and other parties referenced therein available to GZA at the time of the evaluation. GZA did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this evaluation.
8. Any GZA hydrologic analysis presented herein is for the rainfall volumes and distributions stated herein. For storm conditions other than those analyzed, the response of the site's spillway, impoundment, and drainage network has not been evaluated.



9. Observations were made of the site and of structures on the site as indicated within the report. Where access to portions of the structure or site, or to structures on the site was unavailable or limited, GZA renders no opinion as to the condition of that portion of the site or structure. In particular, it is noted that water levels in the impoundment and elsewhere and/or flow over the spillway may have limited GZA's ability to make observations of underwater portions of the structure. Excessive vegetation, when present, also inhibits observations.
10. In reviewing this Report, it should be realized that the reported condition of the dam is based on observations of field conditions during the course of this study along with data made available to GZA. It is important to note that the condition of a dam depends on numerous and constantly changing internal and external conditions, and is evolutionary in nature. It would be incorrect to assume that the present condition of the dam will continue to represent the condition of the dam at some point in the future. Only through continued inspection and care can there be any chance that unsafe conditions be detected.

#### **COMPLIANCE WITH CODES AND REGULATIONS**

11. We used reasonable care in identifying and interpreting applicable codes and regulations. These codes and regulations are subject to various, and possibly contradictory, interpretations. Compliance with codes and regulations by other parties is beyond our control.
12. This scope of work does not include an assessment of the need for fences, gates, no-trespassing signs, repairs to existing fences and railings and other items which may be needed to minimize trespass and provide greater security for the facility and safety to the public. An evaluation of the project for compliance with OSHA rules and regulations is also excluded.

#### **COST ESTIMATES**

13. Unless otherwise stated, our cost estimates are for comparative, or general planning purposes. These estimates may involve approximate quantity evaluations and may not be sufficiently accurate to develop construction bids, or to predict the actual cost of work addressed in this Report. Further, since we have no control over the labor and material costs required to plan and execute the anticipated work, our estimates were made using our experience and readily available information. Actual costs may vary over time and could be significantly more, or less, than stated in the Report.

#### **ADDITIONAL SERVICES**


14. It is recommended that GZA be retained to provide services during any future: site observations, explorations, evaluations, design, implementation activities, construction and/or implementation of remedial measures recommended in this Report. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.



## **Appendix B – Photographs**






<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Columbia Mill Dam (MA00260) Lee, Massachusetts	<b>Project No.</b> 01.0019896.72
<b>Photo No.</b> 1	<b>Date:</b> 11/20/2025		
<b>Direction Photo Taken:</b> Right.			
<b>Description:</b> Overview of the spillway and right side of the dam from the sluiceway platform. Note logs on the spillway and downstream toe. Logs appeared to be slightly impeding flow.  Also note effluent pipe (red arrow) and reedy vegetation on upstream side of right embankment (red circle).			
<b>Photo No.</b> 2	<b>Date:</b> 11/20/2025		
<b>Direction Photo Taken:</b> Right.			
<b>Description:</b> Closeup of the right-side training wall. Note minor concrete and shotcrete facing cracks and efflorescence.			






<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Columbia Mill Dam (MA00260) Lee, MA	<b>Project No.</b> 01.0019896.72
<b>Photo No.</b> 3	<b>Date:</b> 11/20/2025		
<b>Direction Photo Taken:</b> Upstream.			
<b>Description:</b> Impoundment from the sluiceway platform.  Note debris in the approach area.			

<b>Photo No.</b> 4	<b>Date:</b> 11/20/2025	
<b>Direction Photo Taken:</b> Downstream.		
<b>Description:</b> River downstream of the dam from the sluiceway platform.		






<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Columbia Mill Dam (MA00260) Lee, MA	<b>Project No.</b> 01.0019896.72
<b>Photo No.</b> 5	<b>Date:</b> 11/20/2025		
<b>Direction Photo Taken:</b> Downward.			
<b>Description:</b> Area where upstream vortex was observed on August 17, 2022.  Temporary repairs performed on July 29 and 30, 2024. Repairs appeared intact.			

<b>Photo No.</b> 6	<b>Date:</b> 11/20/2025	
<b>Direction Photo Taken:</b> Upstream.		
<b>Description:</b> The sluiceway gate was subsequently operated to its fully open position during the current inspection. Sediment buildup was estimated to be about ½- to 1-inch thick (within about 1- to 2-feet upstream of the gate).		






<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Columbia Mill Dam (MA00260) Lee, MA	<b>Project No.</b> 01.0019896.72
<b>Photo No.</b> 7	<b>Date:</b> 11/20/2025		
<b>Direction Photo Taken:</b> Upstream and downward.			
<b>Description:</b> Opening in mill floor slab / internal sluiceway roof. Photo taken inside the mill building.  The internal flume gate upstream of this opening was last operated 10- to 15- years ago (per caretaker).			

<b>Photo No.</b> 8	<b>Date:</b> 11/20/2025
<b>Direction Photo Taken:</b> Upstream.	
<b>Description:</b> Access path along left bank of the river to the downstream left toe of the dam.  Note: The tilted and partially failed concrete retaining wall (red arrow) did not appear to be hindering access.	

A photograph showing a grassy path leading towards a body of water. Two people wearing high-visibility vests are walking away from the camera. On the right side, there is a concrete retaining wall that appears tilted and partially failed. A red arrow points to this wall. In the background, there are trees and a building. The sky is blue with some clouds.





<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Columbia Mill Dam (MA00260) Lee, MA	<b>Project No.</b> 01.0019896.72
<b>Photo No.</b> 9	<b>Date:</b> 11/20/2025		
<b>Direction Photo Taken:</b> Upstream.			
<b>Description:</b> Downstream face of the spillway. About 6-inches of water was flowing over the spillway crest at the time of the inspection.  Note logs on spillway downstream face at the center and on the left side (photo right).			

<b>Photo No.</b> 10	<b>Date:</b> 11/20/2025	
<b>Direction Photo Taken:</b> Upstream.		
<b>Description:</b> Left side of the dam including the sluiceway and mill building wall downstream of the dam.		





<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Columbia Mill Dam (MA00260) Lee, MA	<b>Project No.</b> 01.0019896.72
<b>Photo No.</b> 11	<b>Date:</b> 11/20/2025		
<b>Direction Photo Taken:</b> Left.			
<b>Description:</b> Mill building exterior wall downstream of the dam.  Note moderate spalling of the concrete and exposed reinforcing steel of the mill building wall.			

<b>Photo No.</b> 12	<b>Date:</b> 11/20/2025	
<b>Direction Photo Taken:</b> Upstream.		
<b>Description:</b> Downstream side of the sluiceway.  Note: Previously observed diagonal crack on downstream face obscured by flow.		





<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Columbia Mill Dam (MA00260) Lee, MA	<b>Project No.</b> 01.0019896.72
<b>Photo No.</b> 13	<b>Date:</b> 11/20/2025		
<b>Direction Photo Taken:</b> Left and downstream.			
<b>Description:</b> Access to the right side of the dam.			

<b>Photo No.</b> 14	<b>Date:</b> 11/20/2025	
<b>Direction Photo Taken:</b> Left.		
<b>Description:</b> Overview of the spillway and left side of the dam from the right embankment.		






<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Columbia Mill Dam (MA00260) Lee, MA	<b>Project No.</b> 01.0019896.72
<b>Photo No.</b> 15	<b>Date:</b> 11/20/2025		
<b>Direction Photo Taken:</b> Upstream.			
<b>Description:</b> Impoundment from the right embankment.			

<b>Photo No.</b> 16	<b>Date:</b> 11/20/2025	
<b>Direction Photo Taken:</b> Downstream.		
<b>Description:</b> River downstream of the dam from the right embankment.		






<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Columbia Mill Dam (MA00260) Lee, MA	<b>Project No.</b> 01.0019896.72
<b>Photo No.</b> 17	<b>Date:</b> 11/20/2025		
<b>Direction Photo Taken:</b> Left.			
<b>Description:</b> Downstream slope of the right embankment.  Note slight “bulge” in center of stone masonry wall. No apparent signs of tilting, offset, displacement, or missing stone masonry pieces noted.			

<b>Photo No.</b> 18	<b>Date:</b> 11/20/2025	
<b>Direction Photo Taken:</b> Left.		
<b>Description:</b> Right-side downstream right training wall.  The wall appears to have been constructed of stone masonry and then faced with shotcrete.		




<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Columbia Mill Dam (MA00260) Lee, MA	<b>Project No.</b> 01.0019896.72
<b>Photo No.</b> 19	<b>Date:</b> 11/20/2025		
<b>Direction Photo Taken:</b> Left.			
<b>Description:</b> Closeup of the crack in the right-side training wall shotcrete coating.  See Photo 18 for location.			



## **Appendix C – Inspection Checklist**



## ANNUAL DAM INSPECTION CHECKLIST

Name of Dam:	Columbia Mill Dam	I.D. No.:	MA00260																											
Location:	Lee, Massachusetts Town, State																													
Owner:	Lenox Development, LLC	River / Stream:	Housatonic River																											
MassDCR Classification Data:	Intermediate Size		Significant Hazard																											
PHYSICAL DATA:	timber crib, boulder-filled, concrete-faced Type of Dam	25 feet to Primary Spillway Crest Height of Dam	90 acre-feet Normal Pool Storage Capacity																											
ELEVATIONS:	908 ft (NGVD29) Normal Pool	6 in± over crest; Approx. el. 908.5 ft Pool at Inspection																												
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Names of Individuals at Inspection</th> <th style="text-align: left; border-bottom: 1px solid black;">Title/Position</th> <th style="text-align: left; border-bottom: 1px solid black;">Organization</th> </tr> </thead> <tbody> <tr> <td>Jonathan D. Andrews, P.E.</td> <td>Associate Principal</td> <td>GZA GeoEnvironmental, Inc.</td> </tr> <tr> <td>Leslie Decristofaro, E.I.T.</td> <td>Engineer I</td> <td>GZA GeoEnvironmental, Inc.</td> </tr> <tr> <td>Mengxuan Zhao, Ph.D., E.I.T</td> <td>Assistant Project Manager</td> <td>GZA GeoEnvironmental, Inc.</td> </tr> <tr> <td>Thomas Czelusniak</td> <td>Remediation Systems Manager</td> <td>HDR</td> </tr> <tr> <td>Thom Clapper (part-time)</td> <td>Caretaker</td> <td>Lenox Development, LLC</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>				Names of Individuals at Inspection	Title/Position	Organization	Jonathan D. Andrews, P.E.	Associate Principal	GZA GeoEnvironmental, Inc.	Leslie Decristofaro, E.I.T.	Engineer I	GZA GeoEnvironmental, Inc.	Mengxuan Zhao, Ph.D., E.I.T	Assistant Project Manager	GZA GeoEnvironmental, Inc.	Thomas Czelusniak	Remediation Systems Manager	HDR	Thom Clapper (part-time)	Caretaker	Lenox Development, LLC									
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DATE OF INSPECTION:	November 20, 2025																													
WEATHER:	Sunny	TEMPERATURE:	30s / 40s - deg F																											
<p>This is to certify that the above dam has been inspected and the following are the results of this inspection.</p> <div style="text-align: center; margin-top: 20px;">               _____              SIGNATURE OF INSPECTOR           </div>																														

Name of Dam: Columbia Mill DamI.D. No.: MA00260Inspection Date: November 20, 2025

AREA INSPECTED	CONCRETE DAM / PRIMARY SPILLWAY 1 of 2			CHECK ( ) ACTION NEEDED		
	ITEM NO.	CONDITION	OBSERVATIONS	MONITOR	MAINTAIN	REPAIR
UPSTREAM FACE	1	Surface Conditions	Generally obscured by flow and impoundment.			
	2	Condition of Joints	Generally obscured by flow and impoundment.			
	3	Unusual Movement	Generally obscured by flow and impoundment.			
	4	Abutment-Dam Contacts	Generally obscured by flow and impoundment.			
	5	Vortices (if any)	None observed during this inspection.	X		
	6	Debris	Logs on upstream face at left side and center.	X	X	
DOWNSTREAM FACE	7	Surface Conditions	Generally obscured by flow. Previously observed diagonal crack not observed.	X		
	8	Condition of Joints	Generally obscured by flow.			
	9	Unusual Movement	Generally obscured by flow.			
	10	Abutment-Dam Contacts	Generally obscured by flow.			
	11	Drains	None observed.			
	12	Leakage	Generally obscured by flow.			
	13	Debris	Logs on the downstream face and crest at center and left side.	X	X	
CREST	14	Surface Conditions	Generally obscured by flow.			
	15	Horizontal Alignment	Appears to be in adequate alignment.			
	16	Vertical Alignment	Appears to be in adequate alignment.			
	17	Condition of Joints	Generally obscured by flow & impoundment. Area of 2024 temporary repairs appeared intact with no observed vortex.	X		
	18	Unusual Movement	Generally obscured by flow.			
	19	General	Logs on crest at left side and center.	X	X	

ADDITIONAL COMMENTS: REFER TO ITEM NO. IF APPLICABLE

Items 5, 7, and 17: During the August, 2022 annual inspection, a small vortex had been observed on the left side of the spillway, upstream of the crest. A diagonal crack in the downstream face of the left side of the spillway had also been observed. The area where the vortex was observed was temporarily repaired in July 2024. In addition, a separation of the concrete joint at the weir crest had been observed during past inspections. This condition was also temporarily repaired in July of 2024 and the downstream diagonal crack was probed with no penetration, separation, or leakage observed. These areas will continue to be monitored for the need for further repairs.

Items 6, 13, 19: Logs are slightly impeding flow and should be removed from the dam crest and upstream face. An abandoned effluent pipe was also observed on the left side of the spillway and should be removed.

Item 19: An area of irregular flow near the right side of the spillway had been observed during the 2025 third quarterly inspection. It was not observed during current inspection.

Name of Dam: Columbia Mill DamI.D. No.: MA00260Inspection Date: November 20, 2025

AREA INSPECTED	CONCRETE DAM / PRIMARY SPILLWAY 2 of 2			CHECK ( ) ACTION NEEDED		
	ITEM NO.	CONDITION	OBSERVATIONS	MONITOR	MAINTAIN	REPAIR
UPSTREAM CHANNEL	20	Slide, Slough, Scarp	None observed.			
	21	Erosion	None observed.			
	22	Vegetation Condition	Significant vegetation growth observed upstream of the right side of the dam.		X	
	23	Debris	No above-water upstream debris observed			
	24	Seepage	None observed.			
DOWNSTREAM CHANNEL	25	Training Walls	Minor cracking, spalling, and efflorescence observed on both the left and right side.	X		
	26	Riprap Condition (e.g. displ.)	Appeared to be in-place.			
	27	Unusual Movement	None observed.			
	28	Discharge Area	Downstream boulder field appeared adequate - partially obscured by spillway flow.			
	29	Downstream Area	Housatonic River - no unusual observations.			
	30	Sinkholes, Scour Holes, etc.	None observed.			
	31	Foundation Seepage	Obscured by flow.	X		
	32	Exterior Mill Wall and Internal Sluiceway Discharge Condition	Moderate cracking, spalling, and exposed reinforcement observed on mill wall. Minor flow inside the internal sluiceway (flume), discharging through an opening in the mill building wall. Opening may be former gate location.	X		

**ADDITIONAL COMMENTS: REFER TO ITEM NO. IF APPLICABLE**

Item 22: Significant vegetation was observed along the upstream right embankment. The vegetation along the embankment crest had been recently removed by the Dam Caretaker. Vegetation should continue to be maintained to allow for unimpeded observation of the Dam.

Item 25: Minor cracking, spalling, and efflorescence observed on both the left and right spillway training walls. The left training wall is considered to be the concrete wall that separates the spillway from the sluiceway. The right training wall appears to be constructed of concrete and stone masonry with shotcrete facing. A crack, up to about 3 inches wide, was observed near the top of the right training wall shotcrete near a change in top of wall slope. These conditions should continue to be monitored.

Item 31: Previously observed minor leakage at the base of the mill foundation wall was not observed, likely due to flow. The source of that leakage is likely from the internal flume. This condition should continue to be monitored.

Item 32: Moderate cracking, spalling, and exposed reinforcement of the exterior wall of the mill building were observed. This condition is similar to what has been previously observed. Minor seeps upstream of the opening in the mill building had been observed during past inspections but not during this inspection (obscured by flow). These conditions should continue to be monitored.

Name of Dam: Columbia Mill DamI.D. No.: MA00260Inspection Date: November 20, 2025

AREA INSPECTED	SLUCEWAY OUTLET WORKS 1 of 1			CHECK ( ) ACTION NEEDED		
	ITEM NO.	CONDITION	OBSERVATIONS	MONITOR	MAINTAIN	REPAIR
SLUCE GATE & CONTROLS	33	Intake Area	Probing from gate platform indicated approximately ½- to 1-inch upstream sediment buildup.			
	34	Stoplog Grooves	No stoplog grooves observed. Sluice gate slots appeared to be in adequate condition.			
	35	Gate U/S Face	Appeared adequate condition.			
	36	Gate D/S Face	Appeared adequate condition.			
	37	Gate Stem	Minor grassy/weedy debris buildup on the gate stem.	X	X	
	38	Gate Operator	Caretaker operated gate during inspection using chainfall hoist. Wheel operator not used.			
	39	Gate Leakage	Some leakage at base of gate.	X		
	40	Other	Internal flume observed from opening in mill floor.	X		
SLUCEWAY OUTLET STRUCTURE	41	U/S Concrete Condition	Minor cracking and spalling of the dividing wall between sluiceway and spillway.	X		
	42	D/S Concrete Condition	Minor cracking and spalling of the concrete sluiceway structure.	X		
	43	Seepage	None observed.			
	44	Discharge Area	Clear.			
	45	Debris	None observed.			
<p>ADDITIONAL COMMENTS: REFER TO ITEM NO. IF APPLICABLE</p> <p>Item 37: Debris is not currently impeding flow in this area; however, debris should be removed from the gate stem if it is impeding flow.</p> <p>Item 38: During inspection, Caretaker fully opened and then fully closed gate. Gate opening was via 500-pound chainfall hoist. Gate closing was via self-weight. Gate operated smoothly. The gate should continue to be exercised annually.</p> <p>Item 39 and 44: The gate was in the fully closed position at the start and end of the inspection. Gate outflow and gate leakage discharged downstream unimpeded.</p> <p>Item 40: There is an internal sluiceway (flume) that extends through the mill building and discharges into the Housatonic (approx. 1 foot± discharge flow depth). Discharge appeared clear. There is a submerged upstream trash rack and upstream gate control of flume inflow. Debris was observed upstream of the gate. Per the Caretaker, the gate has not been operated in 10 to 15 years. Since there is water in the flume, it is assumed that the gate leaks. This condition should continue to be monitored.</p> <p>Item 41 and 42: Minor cracking and spalling of the concrete sluiceway structure were observed. This condition should continue to be monitored.</p>						

Name of Dam: Columbia Mill DamI.D. No.: MA00260Inspection Date: November 20, 2025

AREA INSPECTED	RIGHT EMBANKMENT 1 of 1			CHECK ( ) ACTION NEEDED		
	ITEM NO.	CONDITION	OBSERVATIONS	MONITOR	MAINTAIN	REPAIR
UPSTREAM SLOPE	46	Surface Conditions	Appeared adequate condition.			
	47	Surface Protection	Riprap observed in some locations.			
	48	Unusual Movement	None observed.			
	49	Abutment-Dam Contacts	Continuation of right-side training wall into the upstream side of the right embankment.			
	50	Vegetation	Vegetation overgrowth obscured observations of upstream stone masonry wall.		X	
DOWNSTREAM SLOPE	51	Surface Conditions	Appeared adequate. Vegetation obscured slope and toe. Cut vegetation obscured toe.		X	
	52	Masonry Wall Condition	Unpointed stone masonry wall; pointing present near left side interface with left training wall.			
	53	Unusual Movement	Slight bulge (horizontal misalignment) in the center of the stone masonry wall.	X		
	54	Abutment-Dam Contacts	Appeared adequate condition.			
	55	Drains	None observed.			
	56	Leakage	None observed.			
	57	Vegetation	Vegetation overgrowth partially obscured observations of the downstream slope.		X	
CREST	58	Surface Conditions	Appeared adequate condition.			
	59	Horizontal Alignment	Appeared adequate.			
	60	Vertical Alignment	Appeared adequate.			
	61	Unusual Movement	None observed.			
	62	Vegetation	Vegetation recently cut / removed. Minimal grass cover observed.		X	
ADDITIONAL COMMENTS: REFER TO ITEM NO. IF APPLICABLE Item 49: Right-side training wall partially concrete-faced and partially stone masonry-faced. Stone masonry is pointed. Items 50, 57, 62: Vegetation along the embankment crest and lower portions of the downstream slope had recently cut and removed by the Caretaker. Significant vegetation growth was observed along the upstream slope and upper portion of the downstream slope. Some minor debris from vegetation removal was still present at downstream toe impeding observation. Vegetation should be maintained to allow for continued observation of the right embankment. Item 51: Cut vegetation was discarded at the toe of the embankment. The vegetation should be removed beyond the limits of the Dam to allow for unobscured observation. Item 52: Downstream of the stone masonry wall is a smaller concrete wall connected to the downstream end of the left training wall. Cracking & spalling were observed near intersection of training wall and smaller wall. Item 53: In stone masonry wall, no tilting, offset, displacement, vertical misalignment, or missing stone masonry pieces observed apart from the bulge noted above. Item 62: Vegetation will continue to be maintained during regular scheduled maintenance activities in 2026.						



Name of Dam: Columbia Mill DamI.D. No.: MA00260Inspection Date: November 20, 2025

AREA INSPECTED	DOWNSTREAM AREA AND MISC. 1 of 1			CHECK ( ) ACTION NEEDED		
	ITEM NO.	CONDITION	OBSERVATIONS	MONITOR	MAINTAIN	REPAIR
DOWNSTREAM AREA	63	Abutment Seepage	None observed.			
	64	Training Walls	See "CONCRETE DAM / PRIMARY SPILLWAY" Item 25.			
	65	Slide, Slough, Scarp	None observed except left bank wall approx. 100 to 200 feet downstream of dam is leaning.	X		
	66	Drainage System	None observed. Spillway, sluiceway and internal flume discharge into the Housatonic River.			
	67	Downstream Hazard Description	Wooded on right bank; mill building complex on the left bank; residential, commercial, and Rt. 20 / W. Center Street within 1-mile of downstream.			
MISCELLANEOUS	68	Impoundment Banks	Steep and vegetated.			
	69	Access Roads	Approx. 1,500-foot long grass-covered access road from Golden Hill Road to right embankment; grass covered access road to the left downstream toe area via cleared path between mill and river; paved access road to the mill building on the left side of the dam.		X	
	70	Signage	None observed. GE advised owner on January 5, 2024 via email.			
	71	Fences / Railing	Gate operator platform and railings appeared to be in adequate condition.			
	72	Security / Access	Security chain / wire rope at the left and right-side access roads.			

ADDITIONAL COMMENTS: REFER TO ITEM NO. IF APPLICABLE

Item 65: Portions of retaining wall above left riverbank approx. 100 to 200 feet downstream of the dam were leaning and partially failed. Retaining wall condition did not hinder access to downstream toe of Dam.

Item 69: Vegetation had been recently cut and removed by the Caretaker on the right-side and downstream toe access roads. Vegetation should continue to be maintained to allow access to the Dam.

Item 70: GE will notify owner again about absence of signage.

Item 72: Mill access road leading to left side of Dam is controlled by a locked security chain. Access road to right embankment is controlled by a locked wire rope on Golden Hill Road. Access to left spillway abutment, sluiceway gate platform, and internal flume is through locked mill building.



## **Appendix D – Maintenance Tracking Table**

**Columbia Mill Dam – Maintenance Tracking Sheet – dated January 20, 2026 (based on the November 20, 2025 Annual Inspection)**

<b>Condition Observed Requiring Monitoring or Maintenance/Repair</b>	<b>When Observed</b>	<b>Proposed Response</b>	<b>Status</b>
1. Temporary repairs to area of former vortex near left side of gate platform	The area was temporarily repaired in July of 2024.	Continue to monitor during future inspections.	The temporary repairs appeared intact during the November 2025 annual inspection; no vortices were noted. The repairs will continue to be monitored.
2. Crack in the downstream face of the spillway on the left side	August 2022 visual inspection; observed, probed, and measured during the July 2024 temporary repairs; not observed during November 2025 annual inspection due to spillway flow.	Visually monitor during low flow conditions.	Not observed during the current inspection due to spillway flow. The diagonal crack had been observed, probed, and measured during the July 2024 temporary repairs. No apparent separation, opening of, or leakage from the diagonal crack had been observed at that time, and thus no repairs were made in 2024. This area will continue to be monitored during low flow conditions.
3. Temporary repairs to the former reparation of the concrete joint at the weir crest	The left side of this separation was temporarily repaired in July of 2024.	Continue to monitor; probe the right side of the spillway crest joint during a low flow period; repair as necessary.	During the current inspection, the temporary repairs were not observed due to flow over the spillway. The repairs will be monitored during a low flow period and, if necessary, further repairs will be made.
4. Vegetation on the right embankment	Since the August 2022 visual inspection.	Continue to clear inappropriate vegetation and maintain grass cover.	Vegetation remained on the upstream and downstream slopes of the right embankment and access roads. It should be cleared as necessary.
5. Previously cut/removed vegetation partially obstructing observation of the toe of the right embankment	Since the November 2023 annual inspection.	Remove the previous cut vegetation from the toe of the right embankment.	Vegetation will be removed by the Dam Caretaker.

**Columbia Mill Dam – Maintenance Tracking Sheet – dated January 20, 2026 (based on the November 20, 2025 Annual Inspection)**

<b>Condition Observed Requiring Monitoring or Maintenance/Repair</b>	<b>When Observed</b>	<b>Proposed Response</b>	<b>Status</b>
6. Debris on the left side and center of the spillway, including logs and an abandoned effluent pipe on the left side of the spillway	Since the August 2022 visual inspection.	Remove debris and continue monitoring	Logs and debris were observed with logs slightly impeding flow on the left upstream side of the crest. The debris and logs on the left upstream side of the spillway and the abandoned effluent pipe on the left side of the spillway should be removed.
7. Cracks in the left and right downstream training walls	Since the August 2022 visual inspection.	Continue to monitor.	The cracks in the left and right downstream training walls will continue to be monitored during future inspections.
8. Moderate cracking, spalling, and exposed reinforcement on the mill foundation wall	Since the August 2022 visual inspection.	Continue to monitor.	The mill wall will continue to be monitored during future inspections.
9. Minor leakage through the base of the mill foundation wall	Since the August 2022 visual inspection (but not in November 2025 annual inspection due to spillway flow).	Continue to monitor.	Not observed during the current inspection due to spillway flow. The minor leakage through the mill foundation wall will continue to be monitored during future inspections.
10. Leakage through the internal sluiceway (flume).	Since the November 2023 annual inspection.	Continue to monitor.	The leakage through the internal sluiceway flume will continue to be monitored during future inspections.
11. Bulge in the stone masonry wall downstream of the right embankment	Since the November 2023 annual inspection.	Continue to monitor.	The stone masonry wall will continue to be monitored during future inspections.
12. Irregular flow (non-uniform) over the crest at the right side of the spillway	Second quarterly inspection of 2025, but not in November 2025 annual inspection.	Continue to monitor.	An irregularity in the flow over the crest at the right side of the spillway had been observed during the second quarterly inspection in 2025, at which time flow over the spillway measured about three inches. Not observed during November 2025 annual inspection. This area will continue to be monitored, particularly during low flow conditions.

**Columbia Mill Dam – Maintenance Tracking Sheet – dated January 20, 2026 (based on the November 20, 2025 Annual Inspection)**

<b>Condition Observed Requiring Monitoring or Maintenance/Repair</b>	<b>When Observed</b>	<b>Proposed Response</b>	<b>Status</b>
13. Leaning/partially failed retaining wall to the left and about 100 to 200 feet downstream of the dam	November 2025 annual inspection.	Continue to monitor.	The condition of the wall appeared worse during the November 2025 annual inspection compared to past recent inspections. The wall is located about 100 to 200 feet downstream of the Dam. The wall is not hindering access to the downstream toe. The wall will continue to be monitored during future inspections.



GZA GeoEnvironmental, Inc.