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*Via Electronic Mail*

November 10, 2025

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)  
Phase 1 Inspection/Evaluation Report for Woods Pond Dam**

Dear Mr. Carli-Dorsey:

On August 12, 2025, GE's consultants from GZA GeoEnvironmental, Inc. performed a biennial Phase 1 inspection/evaluation of Woods Pond Dam. Enclosed is GE's report on that inspection/evaluation, prepared by GZA. That inspection was conducted and this report prepared in accordance with GE's June 17, 2019 Operation, Monitoring, and Maintenance (OM&M) Plan for Woods Pond Dam, as amended in September 2020, because GE's revised OM&M Plan for this dam, submitted in December 2024, was not conditionally approved by EPA until October 21, 2025 and will be revised again in response to that letter.

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

Very truly yours,

Kevin G. Mooney  
Senior Project Manager

Enclosure

Cc: (via electronic mail)

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John Kilborn, EPA  
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GE Internal Repository

**WOODS POND DAM**  
**PHASE 1**  
**INSPECTION / EVALUATION REPORT**



**Dam Name: Woods Pond Dam**

**NID ID#: MA00731**

**Owner: General Electric Company**

**Town: Lee & Lenox, Massachusetts**

**Consultant: GZA GeoEnvironmental, Inc.**

**Date of Inspection: August 12, 2025**

**Date of Report: November 10, 2025**





## EXECUTIVE SUMMARY

This report summarizes the results of the Phase 1 visual dam inspection conducted by GZA GeoEnvironmental, Inc. (GZA) on behalf of the General Electric Company (GE) on August 12, 2025 at Woods Pond Dam in Lee and Lenox, Massachusetts (the Dam). This inspection was conducted in accordance with GE's revised Operation, Monitoring, and Maintenance Plan (OM&M Plan) for Woods Pond Dam, dated June 25, 2019, as approved by the United States Environmental Protection Agency (EPA) on July 17, 2019, and amended on September 4, 2020. Although a further revised OM&M Plan for Woods Pond Dam was submitted to EPA on December 19, 2024, that revised plan was not conditionally approved by EPA until October 21, 2025 and will be revised again in December 2025 in response to that conditional approval. Since the Phase 1 dam inspection was conducted prior to receiving that conditional approval, it was conducted, and this Phase 1 report was prepared, in accordance with the previously approved OM&M Plan.

As required by the 2019 OM&M Plan, this Phase 1 inspection was performed with the impoundment lowered to allow visual observation of the spillway in the dry.

In general, the overall condition of the Woods Pond Dam during August 12, 2025 Phase 1 visual dam inspection was judged to be **SATISFACTORY**. This overall condition rating remains unchanged from the previous Phase 1 inspection conducted on November 14, 2023. Based on the results of this inspection, the Dam is in compliance with Massachusetts Department of Conservation and Recreation (MassDCR) Office of Dam Safety (ODS) regulations.

During the August 12, 2025 visual inspection, the Dam was found to have the following unusual conditions of note (several of which had also been noted in the prior Phase 1 inspection and/or in intervening quarterly inspections):

1. A gap was observed between riprap stones at the downstream toe of the right abutment non-overflow gravity section. The gap measured approximately 2.5 feet in diameter and two feet deep and was probed upstream (towards the gravity section) to about one foot deep. This observation is similar to that in recent past inspections.
2. Minor cracking and efflorescence in the left and right training walls were observed. These included minor cracks with efflorescence in the left downstream training wall, specifically on the upstream portion of the wall. In addition, minor exposed concrete aggregate and historical orange staining of concrete were observed around a horizontal joint at the water level at the right downstream training wall, as was the case in prior inspections. The joint was wet at the time of the inspection, and there were no signs of active leakage or soil migration observed. This staining and deterioration have been monitored for several years with little change and appear to be a stable condition.
3. Missing mortar in the stone masonry joints near the water level was observed at the left raceway channel wall upstream of the raceway closure structure on either side of a "concrete patch." This portion of the wall is typically submerged during normal flow inspections. The wall appeared stable with no signs of movement, tilting or settlement. Significant vegetation growth was also observed above this left upstream wall.



4. On the eastern side slope of the raceway outside GE property, a utility pole was seen to be leaning toward the channel. This condition has been observed in prior inspections and does not present any issues relating to dam safety.
5. Deterioration of the upstream left wall of the raceway embankment (upstream of the Dam) appears to have worsened since the last Phase 1 inspection in 2023, particularly near the normal pool level. Additionally, vegetation at the interface between the left wall and grouted riprap was observed.
6. The stone masonry wall in the raceway approach area was tilted, as it was in prior inspections. This tilt has been monitored for several years with no changes and appears to be in stable condition.
7. Relatively small holes/gaps (two to four inches in maximum plan dimension) were observed in the slush-grouted riprap on the raceway embankment crest upstream of the Dam. These observations are generally consistent with those in recent prior inspections.
8. There is a vertical crack and horizontal area of eroded concrete in the right upstream training wall of the raceway stoplog sluice structure (downstream control structure). These areas appear to have been previously repaired.
9. Minor cracking, efflorescence, and wet spots were observed on the downstream training walls of the raceway stoplog sluice structure (downstream closure), as was the case in some prior inspections. This condition continues to be monitored with little change and appears to be a stable condition.
10. Minor silt buildup (less than one foot) has recently been measured in monitoring well BH-2. Well BH-2 was not measured during the 2025 Phase 1, as there was a wasp nest in the casing preventing safe access. Minor silt buildup has been measured in previous inspections and is not impacting the effectiveness of the monitoring well.

GZA recommends that a number of specific activities be conducted to address the above-described conditions in addition to complying with the regular maintenance and repair requirements specified in the applicable OM&M Plan. Those recommended activities and their current status are as follows:

### Studies and Analyses

There are no studies and analyses recommended at this time.

### Monitoring and Maintenance

GZA recommends that the Dam be maintained and monitored in accordance with the applicable OM&M Plan. In addition, the following items should be monitored and maintained:

Recommendation	Current Status/Schedule
1. Continue to monitor the gap between riprap stones at the downstream toe of the right abutment non-overflow gravity section.	This area is and will continue to be monitored during quarterly and biennial inspections.



Recommendation	Current Status/Schedule
<p>2. Continue to monitor the minor cracking and efflorescence in the left and right downstream training walls, including the minor exposed concrete aggregate and historical orange staining of concrete that was observed around a horizontal joint at the water level at the right downstream training wall. Continue to look for signs of soil migration.</p>	<p>This area is and will continue to be monitored during quarterly and biennial inspections.</p>
<p>3. Continue to monitor the utility pole that was seen to be leaning toward the raceway channel on the eastern side slope of the raceway outside GE property.</p>	<p>This pole is and will continue to be monitored during quarterly and biennial inspections.</p>
<p>4. Continue to monitor the tilt in the stone masonry wall in the raceway approach area, but use a revised method to monitor the stone masonry. The current monitoring point was established in August 2020 and involves dropping a plumb bob vertically down from the top of the tilted wall to where the wall meets the reservoir level and then measuring the horizontal distance between the wall at the water level and the top of the wall. This method can present potential safety concerns, as it requires the inspector to stand at and reach over the edge of the masonry wall to obtain the measurement. We recommend an alternative measurement method, such as installing a witness stake at a known distance from marked point on the edge of the masonry wall and measuring the distance between the witness stake and marked wall point.</p>	<p>This area is and will continue to be monitored during quarterly and biennial inspections. The improved monitoring method will be initiated by the end of the second quarter in 2026.</p>
<p>5. Monitor the vertical crack and horizontal area of eroded concrete in the right upstream training wall of the raceway stoplog sluice structure (downstream control structure).</p>	<p>This area is and will continue to be monitored during quarterly and biennial inspections. Special attention will be paid to this area during periods of low flow.</p>



Recommendation	Current Status/Schedule
6. Continue to monitor the minor cracking, efflorescence, and wet spots observed on the downstream training walls of the raceway stoplog sluice structure (downstream closure). Continue to look for signs of seepage at this location.	This area is and will continue to be monitored during quarterly and biennial inspections.
7. Minor silt buildup (less than one foot) was observed in monitoring well BH-2 during past inspections. The minor silt buildup is not impacting the effectiveness of the monitoring well.	Silt levels in the observation wells will continue to be measured and monitored during quarterly and biennial inspections.

### Minor Repairs

GZA recommends that the following minor repairs be performed at the Dam:

Recommendation	Current Status/Schedule
1. Repair the area in the left raceway channel wall upstream of the raceway closure structure where missing mortar was observed in the stone masonry joints near the water level. Additionally, remove the significant vegetation growth in this area.	Repairs will be made to the left raceway channel wall upstream of the raceway closure structure prior to the next Phase 1 inspection, to be conducted in 2027. In addition, the vegetation will be removed during regularly scheduled maintenance activities in 2026.
2. Repair the deterioration of the left wall of the raceway embankment upstream of the dam. Additionally, remove the vegetation growth at the interface between the left wall and grouted riprap.	Repairs will be made to the left wall of the raceway embankment upstream of the Dam prior to the next Phase 1 inspection, to be conducted in 2027. In addition, the vegetation will be removed during regularly scheduled maintenance activities in 2026.
3. Repair / fill in the relatively small holes/gaps in the slush-grouted riprap on the raceway embankment crest upstream of the dam.	Repairs will be made to the slush-grouted riprap on the raceway embankment crest upstream of the Dam prior to the next Phase 1 inspection, to be conducted in 2027.

### Remedial Modifications

There are no remedial modifications recommended at this time.

## Dam Evaluation Summary Detail Sheet

1. NID ID:		MA00731	4. Inspection Date:		August 12, 2025
2. Dam Name:		Woods Pond Dam	5. Last Insp. Date:		November 14, 2023
3. Dam Location:		Lee, MA	6. Next Inspection:		August 12, 2027
7. Inspector:		Jonathan D. Andrews, P.E.			
8. Consultant:		GZA GeoEnvironmental, Inc.			
9. Hazard Code:		Significant	9a. Is Hazard Code Change Requested?:		No
10. Insp. Frequency: 5 Years		11. Overall Physical Condition of Dam:			SATISFACTORY
12. Spillway Capacity (% SDF)		>100% SDF w/ no actions by Caretaker			
E1. Design Methodology:		4	E7. Low-Level Discharge Capacity:		4
E2. Level of Maintenance:		4	E8. Low-Level Outlet Physical Condition:		4
E3. Emergency Action Plan:		5	E9. Spillway Design Flood Capacity:		5
E4. Embankment Seepage:		4	E10. Overall Physical Condition of the Dam:		4
E5. Embankment Condition:		4	E11. Estimated Repair Cost:		Not applicable
E6. Concrete Condition:		4			

### Evaluation Description

#### E1: DESIGN METHODOLOGY

1. Unknown Design – no design records available
2. No design or post-design analyses
3. No analyses, but dam features appear suitable
4. Design or post design analysis show dam meets most criteria
5. State of the art design – design records available & dam meets all criteria

#### E2: LEVEL OF MAINTENANCE

1. Dam in disrepair, no evidence of maintenance, no O&M manual
2. Dam in poor level of upkeep, very little maintenance, no O&M manual
3. Dam in fair level of upkeep, some maintenance and standard procedures
4. Adequate level of maintenance and standard procedures
5. Dam well maintained, detailed maintenance plan that is executed

#### E3: EMERGENCY ACTION PLAN

1. No plan or idea of what to do in the event of an emergency
2. Some idea but no written plan
3. No formal plan but well thought out
4. Available written plan that needs updating
5. Detailed, updated written plan available and filed with MADCR, annual training

#### E4: SEEPAGE (Embankments, Foundations, & Abutments)

1. Severe piping and/or seepage with no monitoring
2. Evidence of monitored piping and seepage
3. No piping but uncontrolled seepage
4. Minor seepage or high volumes of seepage with filtered collection
5. No seepage or minor seepage with filtered collection

#### E5: EMBANKMENT CONDITION (See Note 1)

1. Severe erosion and/or large trees
2. Significant erosion or significant woody vegetation
3. Brush and exposed embankment soils, or moderate erosion
4. Unmaintained grass, rodent activity and maintainable erosion
5. Well maintained healthy uniform grass cover

#### E6: CONCRETE CONDITION (See Note 2)

1. Major cracks, misalignment, discontinuities causing leaks, seepage or stability concerns
2. Cracks with misalignment inclusive of transverse cracks with no misalignment but with potential for significant structural degradation
3. Significant longitudinal cracking and minor transverse cracking
4. Spalling and minor surface cracking
5. No apparent deficiencies

#### E7: LOW-LEVEL OUTLET DISCHARGE CAPACITY

1. No low level outlet, no provisions (e.g. pumps, siphons) for emptying pond
2. No operable outlet, plans for emptying pond, but no equipment
3. Outlet with insufficient drawdown capacity, pumping equipment available
4. Operable gate with sufficient drawdown capacity
5. Operable gate with capacity greater than necessary

#### E8: LOW-LEVEL OUTLET PHYSICAL CONDITION

1. Outlet inoperative needs replacement, non-existent or inaccessible
2. Outlet inoperative needs repair
3. Outlet operable but needs repair
4. Outlet operable but needs maintenance
5. Outlet and operator operable and well maintained

#### E9: SPILLWAY DESIGN FLOOD CAPACITY

1. 0 - 50% of the SDF or unknown
2. 50-90% of the SDF
3. 90 - 100% of the SDF
4. >100% of the SDF with actions required by caretaker (e.g. open outlet)
5. >100% of the SDF with no actions required by caretaker

#### E10: OVERALL PHYSICAL CONDITION OF DAM

1. UNSAFE – Major structural, operational, and maintenance deficiencies exist under normal operating conditions
2. POOR - Significant structural, operation and maintenance deficiencies are clearly recognized under normal loading conditions
3. FAIR - Significant operational and maintenance deficiencies, no structural deficiencies. Potential deficiencies exist under unusual loading conditions that may realistically occur. Can be used when uncertainties exist as to critical parameters
4. SATISFACTORY - Minor operational and maintenance deficiencies. Infrequent hydrologic events would probably result in deficiencies.
5. GOOD - No existing or potential deficiencies recognized. Safe performance is expected under all loading including SDF

#### E11: ESTIMATED REPAIR COST

Estimation of the total cost to address all identified structural, operational, maintenance deficiencies. Cost shall be developed utilizing standard estimating guides and procedures

### Changes/Deviations to Database Information since Last Inspection

Owner conducts biennial inspections (every 2-years) in accordance with the current Operations, Monitoring, and Maintenance Plan.






## PREFACE

The assessment of the general condition of the Woods Pond 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.



11/10/2025  
Jonathan D. Andrews, P.E.

Massachusetts License No.: 46462  
Principal-In-Charge  
**GZA GeoEnvironmental, Inc.**



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## **1.0 DESCRIPTION OF PROJECT**

### **1.1 GENERAL**

#### **1.1.1 Authority**

The General Electric Company (GE) retained GZA GeoEnvironmental, Inc. (GZA) to perform a visual inspection/evaluation and develop a report of conditions for the Woods Pond Dam (the Dam) along the Housatonic River in Lee and Lenox, Berkshire County, Massachusetts, as required by GE's revised Operation, Monitoring, and Maintenance Plan (OM&M Plan) for Woods Pond Dam, dated June 25, 2019, as approved by the United States Environmental Protection Agency (EPA) on July 17, 2019, and amended on September 4, 2020 (approved by EPA on September 22, 2020). That inspection was conducted on August 12, 2025.

It should be noted that a further revised OM&M Plan for Woods Pond Dam was submitted to EPA on December 19, 2024. That further revised OM&M Plan was conditionally approved by EPA in a letter dated October 21, 2025, which required GE to revise that plan again by December 22, 2025. In the meantime, since this Phase 1 visual dam inspection was conducted prior to receiving EPA's conditional approval of the December 19, 2024 OM&M Plan, it was conducted in accordance with the 2019 OM&M Plan as amended, and this Phase 1 report was prepared in accordance with that plan (with some descriptive information in Sections 1.2 and 1.3 updated from the more recent OM&M Plan).

This inspection was performed and this report was prepared in compliance with Section 3.2 of the 2019 OM&M Plan (which requires biennial Phase 1 engineering inspections of this Dam) and with 302 CMR 10.07 of the Massachusetts dam safety regulations. This report is subject to the Limitations in **Appendix A**.

#### **1.1.2 Purpose of Work**

The purpose of the August 2025 Phase 1 engineering investigation/evaluation was to inspect and evaluate the present condition of the Dam and appurtenant structures in order to provide information that will assist in both prioritizing dam repair needs and planning/conducting maintenance and operations.

The investigation was divided into three parts: (1) obtain and review available prior reports, investigations, and data pertaining to the Dam and appurtenant structures; (2) perform a visual inspection of the Dam; and (3) prepare and submit a report presenting the evaluation of the structure, including recommendations for maintenance, repair, and remedial actions (if warranted).

#### **1.1.3 Definitions**

To provide the reader with a better understanding of the report, definitions of commonly used terms associated with Dams are provided in **Appendix E**. Many of these terms may be included in this report. The terms are presented under common categories associated with dams, which include: (1) orientation; (2) dam components; (3) size classification; (4) hazard classification; and (5) miscellaneous.

Elevations used in this report are referenced to the National Geodetic Vertical Datum of 1929 (NGVD29).



## 1.2 DESCRIPTION OF DAM

### 1.2.1 Location

Towns: Lee and Lenox

County: Berkshire

The left (east) abutment of Woods Pond Dam is located off Valley Street in Lee and can be accessed by vehicle. Valley Street extends through an industrial complex into a parking lot. A locked chain link fence controls access from the parking lot to the raceway embankment which leads to the Dam. The right (west) abutment is off Crystal Street in Lenox, adjacent to a set of railroad tracks.

The location of the Dam is shown on the United States Geological Survey (USGS) East Lee, MA topographic map (see **Figure 1**). The approximate coordinates are:

Latitude: 42.347173 N Longitude: 73.244588 W

### 1.2.2 Owner/Caretaker, Dam Safety Engineer, and Contractor

The General Electric Company (GE) is the owner of the Woods Pond Dam and is responsible for overseeing the operations and maintenance of the Dam. The current caretaker on GE's behalf is:

Kevin Mooney  
GE Aerospace  
1 Plastics Avenue  
Pittsfield, MA 01201  
Daytime Phone: (413) 448-6610  
Cell Phone: (413) 441-4619

The current alternate caretaker on GE's behalf is:

Matthew Calacone  
GE Aerospace  
1 Plastics Avenue  
Pittsfield, MA 01201  
Daytime Phone: (413) 553-6614  
Cell Phone: (413) 822-0082

GE has retained a professional engineer experienced in dam safety and engineering to perform routine inspections of the Dam, including inspections following flooding or storm events as needed, conduct biennial Phase 1 inspections/evaluations, and review other dam issues on an as-needed basis. The current consulting dam safety engineer is:

GZA GeoEnvironmental, Inc. (Jonathan D. Andrews, P.E., or other qualified dam safety engineer)  
249 Vanderbilt Avenue  
Norwood, Massachusetts 02062  
Office: (781) 278-5808  
Cell: (781) 983-2881



GE has retained a licensed contractor experienced with operation and maintenance of dams to perform routine maintenance and operation activities at the Dam, as well as to respond to dam safety issues on an as needed basis. The current contractor is:

LB Corporation (Steve Garrity)  
95 Marble Street  
Lee, Massachusetts 01238  
Office: (413) 243-1072  
Cell: (413) 441-1412

See **Table 1.1** (in Section 1.4 below) for additional information.

### 1.2.3 Purpose of the Dam

There have been two dams impounding Woods Pond at this location. The original Woods Pond Dam was a timber crib dam built between 1876 and 1882. It was located about 80 to 250 feet upstream of the current Dam. The purpose of the original dam was to divert water to an adjacent mill. The purpose of the current Dam (circa 1989) is to impound Woods Pond reservoir, including impounding existing sediments that are impacted by polychlorinated biphenyls.

### 1.2.4 Description of the Dam and Appurtenances

Woods Pond Dam is a run-of-the-river structure consisting of the following (moving from right/west to left/east) a concrete section as the right abutment, a primary spillway, a sheetpile cell filled with concrete as the left abutment section, and a raceway closure structure which controls flow into the raceway channel.

Additionally, a raceway embankment extends both upstream and downstream of the left abutment cellular sheetpiles. Outflow at the downstream end of the raceway channel is controlled by the raceway stoplog sluice structure.

The raceway channel is no longer used to feed the downstream mill, and the raceway embankment no longer impounds the reservoir or serves a functional role in the current Dam.

A labeled aerial image of the Dam and its appurtenances is shown below. An aerial photograph of the Dam and surrounding area is shown on **Figure 2**.





Source: GZA ArcGIS Mapper Tool

The right abutment is a concrete structure with a sloped downstream face and formed concrete walls on the upstream and downstream sides and extends approximately 60 feet between the railroad tracks and the spillway. The top elevation of the non-overflow gravity section is 954.0 feet. The right abutment is referred to as the non-overflow gravity section on the record drawings. Although this structure is termed “non-overflow,” this section of the Dam is designed to overflow during the applicable Spillway Design Flood (SDF).

The spillway is an uncontrolled, ogee-shaped concrete weir with a top elevation between 948.2 and 948.4 feet. The spillway is approximately 140 feet long. The left abutment section extends approximately 60 feet between the spillway and the raceway closure structure and consists of steel sheetpile cells filled and capped with concrete. The sheetpiles were driven to bedrock during construction. The top elevation of the left abutment section is 954.0 feet and it is about 21 feet wide. Similar to the right abutment section, the left abutment section is designed to overflow during the applicable SDF.

The raceway closure structure is located on the left side of the Dam between the left abutment and riverbank. It is a cast-in-place concrete control structure that can hold up to five two-foot-high steel and concrete stoplogs that are lifted into place using a gantry crane and hoist. The stoplogs are used to control flow into the raceway channel that extends parallel to the river downstream of the Dam for approximately 350 feet. A one-inch spacer is typically located between the second and third stoplogs at about elevation of 948.0 feet to provide flow into the raceway channel to mitigate downstream water stagnation.



The raceway embankment extends parallel to the river for approximately 450 feet, extending both upstream and downstream of the Dam's left abutment section. Although connected to the current Dam, the raceway embankment serves no functional role in the current Dam and no longer impounds the reservoir. The upstream section is the left abutment of the previous upstream dam. The right (river) embankment slopes are protected by grouted riprap and the left side has vertical stone masonry walls that line the raceway channel upstream of the raceway closure structure. The downstream section forms the 350-foot boundary between the raceway channel and the river. Immediately downstream of the left abutment, the raceway embankment slopes are protected by grouted riprap on both sides of the embankment for approximately 25 feet. The remainder of the raceway embankment slopes are surfaced with riprap. The raceway embankment ends at the downstream raceway channel outlet (raceway stoplog sluice structure).

The downstream outlet of the raceway channel is a controlled concrete and masonry structure referred to as the raceway stoplog sluice structure. The purpose of the raceway stoplog sluice structure is to control water levels in the raceway channel and in the downstream Valley Mill Pond. The controls consist of up to seven, 14-inch-high steel stoplogs. A truck-mounted crane can be mobilized to install and remove the stoplog controls. Three of the stoplogs are typically left in place to maintain the raceway and Valley Mill Pond level between the Woods Pond impoundment and river tailwater levels.

Instrumentation at the Dam consists of a staff gage on the right upstream training wall and raceway closure structure. An additional staff gage is located at the downstream raceway stoplog sluice structure. Downstream raceway embankment instrumentation consists of three open standpipe observation wells (historically referred to as piezometers). These wells are labeled (from downstream to upstream) B-1, B-2, and B-3. GE is in the process of installing automated pond water sampling equipment at the right and left training walls. The sampling equipment serves no dam-related function.

The most recent topographic/bathymetric survey of the Dam was conducted during the week of July 7, 2025 and is discussed in Section 1.3.7 below

#### 1.2.5 Operations and Maintenance

As stated in Section 1.2.2, GE is the owner of the Woods Pond Dam and is responsible for overseeing the operations and maintenance of the Dam. See Section 1.2.2 and **Table 1.1** (in Section 1.4 below) for additional information.

#### 1.2.6 DCR Size Classification

Woods Pond Dam has a height of approximately 17.6 feet and a maximum storage capacity of 5,300 acre-feet. Refer to **Appendix E** for definitions of height of dam and storage. In accordance with the classification procedures of the MassDCR Office of Dam Safety (ODS), under the Massachusetts dam safety regulations in 302 CMR 10.00, Woods Pond Dam is a **Large** size structure based on maximum storage above 1,000 acre-feet.

#### 1.2.7 DCR Hazard Potential Classification

In accordance with MassDCR ODS classification procedures, under the Massachusetts dam safety regulations, Woods Pond Dam is classified as a dam with **Significant Hazard** potential. This hazard class assessment is consistent with the hazard class for the Dam on record with the MassDCR ODS.





### 1.3 PERTINENT ENGINEERING DATA

#### 1.3.1 Drainage Area

The drainage area for Woods Pond Dam is approximately 170 square miles and encompasses land within the Housatonic River Valley Wildlife Management Area. The drainage area is hilly with marshes and bogs. The drainage area is delineated on **Figure 3** and the dam and downstream area is shown on **Figure 4**.

#### 1.3.2 Reservoir

Reservoir surface area and storage volume data presented below are based on previous analyses, as well as data developed for the 2007 *Structural Integrity Assessment and Inspection/Evaluation Report* (MWH, 2007). They are:

Condition	Elevation (feet)	Storage Volume (acre-feet)
Normal Pool	948.8±	460
Maximum Pool	955.8	5300
SDF	955.8	5300

See **Table 1.1** (Section 1.4 below) for additional information.

#### 1.3.3 Discharges at the Dam Site

Woods Pond Dam's spillway continuously discharges water unless the raceway closure structure stoplogs are removed to divert and convey the full flow of the Housatonic River through the raceway channel. A low volume of water also consistently discharges, via one-inch spacers between the raceway closure structure stoplogs, through the raceway channel and through the downstream raceway stoplog sluice structure back to the river downstream of the Dam.

The estimated 500-year SDF event pool elevation is about 955.8 feet, which would overtop the Dam by 1.8 feet. The Dam was designed to overtop and act as a broad-crested weir outside of the ogee-weir spillway, safely passing flood flows downstream.

See Section 2.6 of this report for more detail.

#### 1.3.4 General Elevations (feet, NGVD29)<sup>1</sup>

A. Top of Dam:	954.0±
B. Spillway Design Flood Pool:	955.8 (designed to overtop during SDF)
C. Normal Pool:	948.8±
D. Spillway Crest:	948.2 to 948.4 (948.4 is mid-point of spillway crest)
E. Low Level Outlet Invert:	944.0±
F. Streambed at Toe of the Dam:	936.5 to 942.0

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<sup>1</sup> These elevations have been updated (as necessary) based on the July 2025 topographic and bathymetric survey, conducted by Hill Engineers, Architects, and Planners.



- G. Low Point along Toe of the Dam: 936.5
- H. Upstream Water at Time of Inspection: 948.1± (just below the spillway crest; dewatered inspection)
- I. Downstream Water at Time of Inspection: 941.6± (about the toe elevation; dewatered inspection)

#### 1.3.5 Main Spillway Data

- A. Type: Concrete, ogee-shaped, uncontrolled
- B. Weir Length: 140.0 feet
- C. Weir Crest Elevation: 948.2 to 948.4 (ft. NGVD29; 948.4 is mid-point of spillway crest)
- D. Upstream Channel: Housatonic River/Woods Pond
- E. Downstream Channel: Housatonic River
- F. Channel Bottom Elevation: 934.7 feet NGVD29

#### 1.3.6 Outlet Structure

- A. Type: Stoplog-controlled reinforced concrete (raceway closure structure)
- B. Opening Width: 8.0 feet
- C. Operating Elevation at Structure: 944.4 to 954.0 feet, NGVD29
- D. Upstream Control: Stoplogs at raceway closure structure
- E. Downstream Control: Stoplogs at raceway stoplog sluice structure

#### 1.3.7 Survey/Elevation Information

The most recent topographic/bathymetric survey of the Dam was conducted during the week of July 7, 2025 by Hill Engineers, Architects, and Planners. The July 2025 survey was performed to allow for a comparison of key elevations to the previous topographic and bathymetric surveys, conducted by Foresight Land Services in February and August 2020 and shown on a plan dated October 6, 2020. Overall, the 2020 and July 2025 topographic and bathymetric surveys were similar, with no notable differences in key elevations or apparent sediment accumulation noted.

The key elevations monitored are shown on the most recent topographic and bathymetric survey plan, dated July 2025, which is provided in **Appendix F**, and are presented in the following table.



Point	Location	2025 Surveyed Elevation, feet NGVD 29 (see Appendix F)
A	Right side spillway abutment (chiseled square TBM 1)	954.07
B	Left side spillway abutment (center of concrete)	954.2
C	BH-1 (on raceway embankment; ground elevation)	952.8
D	BH-2 (on raceway embankment, ground elevation)	953.6
E	BH-3 (on raceway embankment, ground elevation)	953.8
F	Spillway Midpoint	948.4
G	Sill of Raceway Stoplog Sluice Structure (concrete below the stoplogs)	941.6
H	Sill of Raceway Closure Structure (bottom sill)	944.2
I	Right Side Platform (chiseled square TBM 2)	954.22
J	Downstream End of Raceway (chiseled square TBM 3)	951.82

#### 1.3.8 Design and Construction Records and History

The current Dam was constructed in two phases in 1989 and in 1991 to replace the previous dam that was about 80 to 250 feet upstream of the current Dam. The first phase included the construction of the raceway closure structure, and the second phase was the replacement of the spillway and non-overflow gravity section. Drawings and construction records are available from GE. A pre-construction geotechnical exploration program conducted in 1988 determined that the Dam and appurtenant structures are founded on shallow “marbleized” bedrock, which is vertically bedded and is generally finely grained, hard with variable medium to close joint spacing. Details of the subsurface field investigation can be found in the Design Report for Woods Pond Dam Rehabilitation (Harza Engineering, 1989).

At EPA’s direction, GE installed warning signs at Woods Pond Dam in November and December of 2020, with the format, wording, and locations of those signs approved by EPA.

In spring 2021, the area just upstream of the left abutment near Valley Street was found to have missing soil from underneath the grouted riprap, and from between the two sets of upstream sheetpiles. One of those sets of sheetpiles, oriented from left to right, comprises the Dam; and the other set, oriented diagonally, is not integral to the dam structure and seems to have been constructed to provide protection to Valley Street. The size of the area missing soil was about five feet wide, five feet deep, and one to three feet high. The upstream-most sheetpile was not in contact with the old raceway training wall, which may have contributed to soil erosion. Although this was not a condition of the Dam itself and would not have affected the safety of the Dam, GE excavated the area, replaced the soil, and slush grouted the surface in September 2021.

#### 1.3.9 Operating Records

Quarterly visual inspections of the dam include readings of the observation wells installed in the downstream raceway embankment. These records are maintained by the Caretaker and submitted to EPA in the quarterly inspection reports.

A summary of collected instrumentation data and water level records is included as **Appendix G**.

### 1.4 SUMMARY DATA TABLE

See the following page for **Table 1.1, Summary Data Table**.



### 1.1 Summary Data Table

Required Phase I Report Data	Data Provided by the Inspecting Engineer
National ID #	MA00731
Dam Name	Woods Pond Dam
Dam Name (Alternate)	Valley Mill Dam (former Woods Pond Dam)
River Name	Housatonic River
Impoundment Name	Woods Pond or Woods Pond Reservoir
Hazard Class	Significant
Size Class	Large
Dam Type	Concrete / sheetpile with riprap abutments
Dam Purpose	Impound Woods Pond Reservoir / PCB sediments
Structural Height of Dam (feet)	17.6
Hydraulic Height of Dam (feet)	11.9
Drainage Area (sq. mi.)	170
Reservoir Surface Area (acres)	122
Normal Impoundment Volume (acre-feet)	460 at El. 948.8'
Max Impoundment Volume ((top of dam) acre-feet)	5,300 at El. 955.8'
SDF Impoundment Volume (acre-feet)	5,300 at El. 955.8'
Spillway Type	Concrete ogee
Spillway Length (feet)	140
Freeboard at Normal Pool (feet)	5.2
Principal Spillway Capacity (cfs)	12,100 at El. 955.8'
Auxiliary Spillway Capacity(cfs)	Not applicable
Low-Level Outlet Capacity (cfs)	850 at El. 955.8' (no stoplogs)
Spillway Design Flood (flow rate - cfs)	500-year / 12,100
Winter Drawdown (feet below normal pool)	Not applicable
Drawdown Impoundment Vol. (acre-feet)	Not applicable
Latitude	42.347173 N
Longitude	73.244588 W
City/Town	Lee
County Name	Berkshire
Public Road on Crest	No
Public Bridge over Spillway	No
EAP Date (if applicable)	12/1/2024
Owner Name	General Electric Company
Owner Address	1 Plastics Avenue
Owner Town	Pittsfield, MA 01201
Owner Phone	413-448-6610
Owner Emergency Phone	413-441-4619
Owner Type	Private
Caretaker Name	Kevin Mooney, Senior PM
Caretaker Address	1 Plastics Avenue
Caretaker Town	Pittsfield, MA 01201
Caretaker Phone	413-448-6610
Caretaker Emergency Phone	413-441-4919
Date of Field Inspection	8/12/2025
Consultant Firm Name	GZA GeoEnvironmental, Inc.
Inspecting Engineer	Jonathan D. Andrews, P.E.
Engineer Phone Number	(781) 983-2881



## 2.0 INSPECTION

### 2.1 VISUAL INSPECTION

Woods Pond Dam was inspected on August 12, 2025, by Jonathan Andrews, P.E., Seth Krause, P.E., Leslie DeCristofaro, E.I.T., Lexus T. Pattershall, E.I.T., and Ray Mullin, E.I.T. of GZA. Bill Gop (Town of Lenox, Department of Public Works), Tom Czelusniak (HDR representing EPA), and Alex Carli-Dorsey (EPA), were also present during the inspection.

On September 4, 2020, in response to a prior directive from EPA, GE submitted an Amendment to the 2019 OM&M Plan stating that the biennial Phase 1 inspections of Woods Pond Dam would be conducted on a schedule that alternates between normal-flow and low-flow conditions, so that the spillway could be dewatered and observed under low-flow conditions every four years. The previous Phase 1 inspection, conducted on November 14, 2023, was conducted under normal-flow conditions, and this (latest) Phase 1 inspection, conducted August 12, 2025, was conducted under low-flow conditions with the impoundment water level lowered to allow visual observation of the spillway in the dry.

At the time of the August 12, 2025, inspection, the weather was sunny, and the temperature was in the 80s °F. Photographs to document the current conditions of the Dam were taken during the inspection and are included in **Appendix B**. A site plan with photograph locations is provided on **Figure 5**, and a site sketch showing unusual conditions of note is provided on **Figure 6**. The approximate elevation of the impoundment at the time of inspection was about El. 948.1± feet, just below the spillway crest. Underwater areas were not inspected during this inspection, although, as noted above, the impoundment was lowered so the spillway could be observed in the dry. A copy of the inspection checklist is provided in **Appendix C**.

#### 2.1.1 General Findings

In general, the Dam was found to be in **SATISFACTORY** condition, which remains unchanged from the previous Phase 1 inspection conducted in November 2023. It should be noted that the 1989 General Design Report indicates that floods up to and including the SDF (500-year flood) are expected to be passed without causing the failure of the dam structures, as the abutments have been designed to withstand overtopping during the SDF. Likewise, the General Design Report states that the minimum factors of safety for structural stability, as established by the Office of Dam Safety, are met or exceeded.

Specific conditions identified during this Phase 1 inspection are described in more detail in the sections below:

#### 2.1.2 Dam

##### *Left Abutment Section*

The crest of the left side of the Dam was observed to be in satisfactory condition. The upstream and downstream sheetpile faces were protected and obscured by riprap making them difficult to observe.



### *Right Abutment Section*

On the right side (right abutment / non-overflow gravity section), the concrete section was observed to be in satisfactory condition. Minor vegetative growth was observed in the riprap that protects the upstream and downstream sides of the concrete; however, this condition did not obstruct observation. Vegetative clearing had been completed prior to the inspection, but some vegetation began to regrow ahead of the inspection. Vegetative clearing will continue to be completed prior and as close to scheduled inspections as practicable.

A gap between riprap stones at the downstream toe of the riprap was observed. The gap measured approximately 2.5 feet in diameter and two feet deep, and was probed upstream (towards the gravity section) to about one foot deep. Due to the size of the riprap, it is not unexpected to see gaps between the large riprap stones. There were no signs of seepage through this gap. This observation is similar to that in past inspections.

### 2.1.3 Appurtenant Structures

#### *Spillway*

As noted above, this Phase 1 inspection was conducted under dewatered conditions, allowing unobstructed observation of the downstream face and toe of the spillway.

Overall, the downstream face of the spillway was observed to be in satisfactory condition. The concrete was uniform and appeared sound with no notable signs of deterioration. The spillway was observed to be in good alignment, with no signs of movement or displacement.

There were no obvious signs of scour or erosion at the toe of the spillway. The toe of the spillway was probed for signs of undermining, with no significant areas of undermining observed. Overall, the conditions at the toe of the spillway were similar to the last dewatered inspection, which had been conducted in 2021.

Minor cracking and efflorescence in the left and right trainings walls were observed. These included minor cracks with efflorescence in the left downstream training wall. In addition, the right downstream training wall was observed to have minor exposed concrete aggregate and historical orange staining around a horizontal joint near the water level. The joint was wet at the time of the inspection with no signs of active leakage or signs of soil migration observed. These conditions are similar to previous inspections and appear to be stable.

#### *Raceway Closure Structure*

The Raceway Closure Structure was observed to be in satisfactory condition. The upper stoplog was raised at the time of the inspection to temporarily lower the river and allow for a dewatered inspection of spillway. Two stoplogs remained in place. There were no issues reported with the operation of the stoplogs and the stoplogs and stoplog slots appeared to be in good working order.

The sheetpiles upstream of the structure were intact with no significant signs of deterioration or displacement.

A concrete patch is present on the left raceway channel wall upstream of the raceway closure structure. Missing mortar in the stone masonry joints near the normal pool level was observed at the left raceway channel wall upstream of the raceway closure structure on either side of the concrete patch. This portion of the wall is typically



submerged during normal flow inspections. The wall appeared stable with no signs of movement, tilting, or settlement. Significant vegetation growth was observed above the left upstream wall.

About halfway down the left side of the raceway, downstream of the closure structure, a utility pole is leaning toward the raceway channel. This condition has been observed since 2019. The angle of the utility pole does not appear to have changed since the previous inspections. No indications of slope instability were observed. It should be noted that this utility pole is not located on GE's property and that the stability of this area does not affect the stability of the Dam.

#### *Raceway Embankment*

The raceway embankment is a related, but not integral, dam structure. Slight unevenness of the crest was observed, as noted in the previous Phase 1 inspection checklist. The upstream (left) and downstream (right) slopes are protected by riprap armoring, which appeared to be in good condition.

In general, deterioration of the left wall of the raceway embankment upstream of the dam appears to have worsened since the last Phase 1 inspection in 2023. Additionally, vegetation at the interface between the left wall and grouted riprap was observed.

On the left side of the upstream end of the raceway embankment located upstream of the Dam, the stone masonry wall appears to have undergone tilting into the raceway approach channel at some point in the past, as has been noted in several previous inspections. A monitoring point was installed in August 2020. Measurements of the tilt, including the current inspection, have been consistently about 5.5 inches toward the raceway since installation of the monitoring point. As discussed in Section 3 of this report, we recommend adoption of an alternative measurement method to enhance the safety of making these wall tilt measurements.

Relatively small holes/gaps (two to four inches in maximum plan dimension) were observed in the slush-grouted riprap on the raceway embankment crest upstream of the dam. These observations are generally consistent with those in recent previous inspections.

#### *Raceway Stoplog Sluice Structure*

Stoplogs were removed at the time of the inspection, conveying more flow than usual through the downstream raceway stoplog sluice structure, allowing the spillway to be bypassed to facilitate the dewatered inspection. No issues were reported with the operation of the stop logs.

Based on visual observations, sediment did not interfere with the flow of water through the raceway or at the upstream or downstream controls. The reservoir, river, and raceway levels prevented observation of sediment below the flow line. Sediment was not visible in the flowing water.

There is a vertical crack and horizontal area of eroded concrete in the right upstream training wall of the raceway stoplog sluice structure (downstream control structure).

Seepage had been previously observed at the bottom of the right and left training walls downstream of the raceway stoplog sluice structure (downstream control). Slight, clear seepage has also historically been observed at the vertical walls of the downstream stoplog structure in the area where the grouting program was reportedly performed in 1991. The lack of cloudy seepage discharge during such inspections indicates that soil is not being



transported from behind the wall. During the August 2025 inspection, wet spots were observed on the training walls downstream of the stoplog sluice structure (likely due to flow through the sluice structure); however, no active seepage or leakage was observed. Additionally, a vertical crack was observed in the right downstream concrete training wall, along with vertical and longitudinal cracking. Efflorescence was observed on the left downstream training wall. These conditions are similar to observations from past inspections.

#### 2.1.4 Instrumentation

Instrumentation on the raceway embankment includes three active observation wells, B-1, B-2, and B-3, constructed as open PVC standpipes contained within locked protective casing. Their locations are shown on **Figures 5** and **6**. The internal standpipes are marked with the observation well labels, and the locations are marked with traffic cones for visibility.

Monitoring wells BH-1 and BH-3 were measured, and data were collected in accordance with Section 3.1.2 of the OM&M Plan. Well BH-2 was not accessed or measured due to a wasp nest in the casing preventing safe access. The water elevation data in the monitoring wells, along with those in the impoundment, the raceway channel, and the river downstream of the Dam, from 2010 through the date of the August 2025 inspection are presented in **Appendix G**. The water levels in the monitoring wells are generally between those in the raceway and those in the river downstream, and are within the historical ranges presented in Section 8 of Appendix C to the 2019 OM&M Plan.

Since the last Phase 1 inspection in 2023, three new staff gages have been installed at and near the dam: (1) on the right upstream training wall, (2) on the left raceway channel wall upstream of the raceway closure structure (on the concrete patch), and (3) on the right downstream training wall downstream of the raceway stoplog sluice structure.

#### 2.1.5 Downstream Area

The downstream area is the Housatonic River. There is a mill building on the left side of the river and train tracks on the right. The river banks downstream of the Dam appeared to be in satisfactory condition with no signs of erosion, sloughing, or instability.

#### 2.1.6 Reservoir Area

The reservoir is an impoundment of the Housatonic River. The river banks upstream of the Dam appeared to be in satisfactory condition with no signs of erosion, sloughing, or instability.

### 2.2 CARETAKER INTERVIEW

Kevin Mooney, GE's Dam Caretaker, and GE's Dam Contractor, LB Corporation, were available prior to the visual inspection of the Dam. GZA maintains regular communication with both the Caretaker and the Dam Contractor regarding the operations, monitoring, and maintenance of the Dam.

### 2.3 INSPECTION AND MAINTENANCE PROCEDURES

This section briefly summarizes the inspection and maintenance procedures that were specified in the June 2019 OM&M Plan and the September 4, 2020 amendment to the plan and were thus in effect at the time of the August





2025 Phase 1 inspection. Note that the future inspection and maintenance procedures will be those specified in the revised OM&M Plan for Woods Pond Dam that will be submitted in December 2025 in response to EPA's conditional approval letter of October 21, 2025 for the December 2024 revised plan.

### 2.3.1 Inspection Procedures

Section 3 of the 2019 OM&M Plan requires the Dam to be inspected by GZA personnel on GE's behalf on a quarterly basis using the forms in Appendix C to that OM&M Plan. In addition to visually inspecting the Dam, the quarterly inspections include photographing specific locations and recording monitoring well levels. That OM&M Plan also requires biennial Phase 1 inspections, as well as post-storm, ice-out, and post-earthquake inspections as warranted.

GE monitors the USGS Advanced Hydrologic Prediction Service, which forecasts river flows on the Housatonic River in Great Barrington. All stoplogs are generally kept in place, with a small spacer placed below the raceway closure structure (upstream control) stoplog to allow some flow into the raceway channel.

The following inspections have been conducted since the November 2023 Phase 1 inspection/evaluation:

- Post-storm inspection on December 21, 2023;
- Quarterly inspections on February 26, May 21, September 3, and November 19, 2024, and February 11 and May 20, 2025; and
- The recent Phase 1 inspection (dewatered) on August 12, 2025.

### 2.3.2 Maintenance of Dam and Operating Facilities

Sections 4.1 and 4.2 of the 2019 OM&M Plan set forth requirements for maintenance of the Dam. Maintenance includes, but is not limited to, vegetative maintenance, cleaning debris from the spillway, stoplog system maintenance, minor erosion repair, rodent damage control, slope traffic damage control, seepage damage control, riprap damage control, sediment removal where necessary concrete and masonry maintenance, metal component maintenance, instrumentation repair, security item repair, and sign maintenance. GE performs additional maintenance activities as they are required after identification during inspections.

A summary of the monitoring, maintenance, and repair items that were identified at or since the 2023 Phase 1 inspection (including those observed during the August 12, 2025 Phase 1 inspection) and that had not been addressed as of the date of the last prior quarterly inspection (in May 2025) is provided in the maintenance tracking table in **Appendix H**, along with their current status (e.g., completed, scheduled, subject to ongoing monitoring).

## 2.4 EMERGENCY WARNING SYSTEM

There is no physical early warning system at Woods Pond Dam. Quarterly inspections of the Dam are conducted by dam safety engineers. An Emergency Action Plan (EAP) was developed in 2000, and is updated annually, with the most recent major revision in December 2024, which was attached as Appendix B to the revised OM&M Plan submitted to EPA in December 2024 (also conditionally approved by EPA). The December 2024 EAP represents the latest EAP update/submission, but will be revised as part of the upcoming (December 2025) revision of the OM&M Plan.



Note that GZA performed an updated dam break analysis and generated updated inundation maps for Woods Pond Dam in accordance with current industry standards. Results were included in the December 2024 EAP and are summarized at the end of Section 2.6 of this report.

## 2.5 AWARENESS OF POTENTIAL DAM RELATED SAFETY HAZARDS AT, NEAR, AND ON DAMS

Primary access to the Dam is via the downstream end of the raceway embankment through a locked access gate. The Dam may also be accessed to the left of the raceway channel near the raceway closure structure (upstream control) through a locked access gate, or via the right abutment by crossing a set of railroad tracks. Dam warning signs are installed upstream and downstream of the Dam, and a buoy line is installed upstream of the Dam.

## 2.6 HYDROLOGIC/HYDRAULIC DATA

A hydrologic/hydraulic (H&H) analysis was performed as part of the 1998 Phase 1 evaluation. According to the report on that evaluation, flood frequency was computed at the USGS Housatonic River stream gage near Great Barrington. The record from 1914 through 1996 was input into the Hydraulic Engineering Center - Water Resources Council computer program. The results of the analysis were that the 100-year peak flow is 11,700 cubic feet per second (cfs) and that the 500-year peak flow is 16,400 cfs at the gage. Applying a drainage area ratio to the calculated numbers, the expected 100-year peak flow at the Dam is 8,600 cfs and the 500-year flow would be about 12,100 cfs.

According to the 2007 Phase 1 inspection report, the estimated flood elevation for a 500-year flood event is about 955.8 feet, which would overtop the Dam by 1.8 feet. The duration of overtopping was estimated to be about 37.5 hours. The Dam was designed to act as a broad-crested weir outside of the ogee-weir spillway; thus, anticipated overtopping was not considered to be a deficiency. Some bypass flooding to the west of the inundated non-overflow right section would occur during flooding events. The 2007 report indicated that evaluation of flood flows along this railroad bed area indicated that the bypass flow should not result in the failure of the project structures.

As previously mentioned, the 1989 General Design Report indicates that floods up to and including the SDF (500-year flood) are expected to be passed without causing the failure of the dam structures, as the abutments have been designed to withstand overtopping during the SDF.

The H&H data below were compiled from previous reports made available by GE.

A. SDF Return Period	500 year
B. Precipitation (inches) and methodology	Not available
C. SDF Inflow (cfs)	Not available
D. SDF Outflow (cfs)	12,100 cfs
E. Principal Spillway Capacity (cfs)	12,100 cfs ( <i>including overtopping of both abutments</i> )
F. Auxiliary Spillway Capacity (cfs)	Not applicable
G. Low-level Outlet Capacity without stoplogs(cfs)	850 cfs
H. Percentage of the SDF passing	100%



- |  |            |
|--|------------|
| I. Maximum Depth of Overtopping for SDF (ft) | 1.8 feet   |
| J. Maximum Duration of Overtopping for SDF   | 37.5 hours |

As also mentioned above, an updated dam break analysis for the Woods Pond Dam was conducted by GZA and presented in the December 2024 EAP. This dam break analysis uses the current configuration of Woods Pond Dam. Attachment A to the December 2024 EAP describes the current dam break analysis as follows:

“The objective of the dam break analysis was to determine the resultant flooding depths caused by a breach of the Woods Pond Dam and to estimate the travel time of the flood wave as it progresses downstream. This analysis was performed using the U.S. Army Corps of Engineers HEC-RAS 2D version 6.5. The dam break scenario is consistent with Massachusetts dam breach standards for significant hazard dams as specified in 302 CMR 10 Dam Safety 10.11(2). The dam break consists of a full breach of the dam earthen embankment while the impoundment level is at the top of embankment elevation and the downstream area has fair-weather conditions. HEC-RAS calculates the peak outflow of the dam based on the breach geometry and the size of the reservoir. The model then estimates the flood wave as it travels downstream.

The results of the simulation indicated the peak flow through the dam breach to be approximately 9,600 cfs. At Golden Hill Road, 2.0 miles downstream of Woods Pond Dam, the peak flow was 5,200 cfs. At Park Street, 3.9 miles downstream of the Woods Pond Dam, the peak flow was 5,000 cfs with an incremental rise of 12.4 feet. At the Railroad bridge, 8.5 miles downstream of Woods Pond Dam, the peak flow has attenuated to 2,300 cfs as a result of available floodplain storage. At the Glendale Hydroelectric Project Dam, 16.2 miles downstream of Woods Ponds Dam, the peak flow was 1,500 cfs with an incremental rise of 2.0 feet. None of the downstream dams are considered High Hazard structures.

The flood wave is contained within the river channel by 16 miles downstream of Woods Pond Dam. Therefore, the Risingdale Neighborhood in the Town of Great Barrington approximately 19 miles downstream of the Woods Pond Dam is not anticipated to be significantly inundated by the significant hazard dam breach scenario and is thus not mapped.”

Based on the information contained in 1989 General Design Report and the updated dam break analysis, it is GZA’s opinion that the Dam has sufficient spillway capacity, including overtopping of the raceway and non-overflow section, to accommodate the SDF required by MassDCR ODS regulations.

## 2.7 STRUCTURAL STABILITY

The 1989 General Design Report states that the minimum factors of safety for structural stability, as established by the MassDCR Office of Dam Safety, are met or exceeded for Woods Pond Dam. A revised stability analysis was performed by Harza in 2001, which also stated that the minimum factors of safety for structural stability, as established by the MassDCR ODS, are met or exceeded for the Dam.

The June 2017 report on the December 2016 Phase 1 inspection/evaluation indicated that changes made to the raceway embankment since the prior stability analysis included:

- Addition of riprap on the slopes of the embankment and on the riverside slope;



- Filling of the narrow area which was identified as the critical section; and
- Flattening of oversteep slopes.

GZA concurs with the previous report in its assumption that these changes constitute an improvement to the stability of the raceway embankment.

According to previous reports, the lowest spot near the Dam is along the railroad tracks at the right end. The 2007 Structural Integrity Report noted that previous analyses indicate that even if the railroad tracks are overtopped, they will not fail due to the size and geometry of the railroad ballast and other features. GE added additional riprap behind the right abutment to further increase the factor of safety against scour in the area.

Previous stability analyses assumed linear reductions in piezometric uplift pressures for stability analysis of gravity sections and observed piezometric levels for raceway embankment stability analyses. These analyses indicated adequate factors of safety for structural stability.

No visual indications of structural instability of the dam structures were observed during this inspection.



### 3.0 ASSESSMENTS AND RECOMMENDATIONS

#### 3.1 ASSESSMENTS

In general, the overall condition of the Woods Pond Dam during the August 12, 2025, Phase 1 visual inspection was judged to be **SATISFACTORY**. This overall condition rating remains unchanged from the previous Phase 1 inspection conducted in November 2023. Based on the results of this inspection, the Dam is in compliance with MassDCR ODS regulations.

During the August 12, 2025, visual inspection, the Dam was found to have the following unusual conditions of note (several of which had also been noted in the prior Phase 1 inspection and/or in intervening quarterly inspections):

1. A gap was observed between riprap stones at the downstream toe of the right abutment non-overflow gravity section. The gap measured approximately 2.5 feet in diameter and two feet deep, and was probed upstream (towards the gravity section) to about one foot deep. This observation is similar to that in recent past inspections.
2. Minor cracking and efflorescence in the left and right training walls were observed. These included minor cracks with efflorescence in the left downstream training wall, specifically on the upstream portion of the wall. In addition, minor exposed concrete aggregate and historical orange staining of concrete were observed around a horizontal joint at the water level at the right downstream training wall, as was the case in prior inspections. The joint was wet at the time of the inspection, and there were no signs of active leakage or soil migration observed. This staining and deterioration have been monitored for several years with little change and appears to be a stable condition.
3. Missing mortar in the stone masonry joints near the water level was observed at the left raceway channel wall upstream of the raceway closure structure on either side of the "concrete patch." This portion of the wall is typically submerged during normal flow inspections. The wall appeared stable with no signs of movement, tilting or settlement. Significant vegetation growth was also observed above this left upstream wall.
4. On the eastern side slope of the raceway outside GE property, a utility pole was seen to be leaning toward the channel. This condition has been observed in prior inspections and does not present any issues relating to dam safety.
5. Deterioration of the upstream left wall of the raceway embankment (upstream of the Dam) appears to have worsened since the last Phase 1 inspection in 2023, particularly near the normal pool level. Additionally, vegetation at the interface between the left wall and grouted riprap was observed.
6. The stone masonry wall in the raceway approach area was tilted, as it was in prior inspections. This tilt has been monitored for several years with no changes and appears to be in stable condition.
7. Relatively small holes/gaps (two to four inches in maximum plan dimension) were observed in the slush-grouted riprap on the raceway embankment crest upstream of the Dam. These observations are generally consistent with those in recent inspections.



8. There is a vertical crack and horizontal area of eroded concrete in the right upstream training wall of the raceway stoplog sluice structure (downstream control structure). These areas appear to have been previously repaired.
9. Minor cracking, efflorescence, and wet spots were observed on the downstream training walls of the raceway stoplog sluice structure (downstream closure), as was the case in some prior inspections. This condition continues to be monitored with little change and appears to be a stable condition.
10. Minor silt buildup (less than one foot) has recently been measured in monitoring well BH-2. Well BH-2 was not measured during the 2025 Phase 1, as there was a wasp nest in the casing preventing safe access. Minor silt buildup has been measured in previous inspections and is not impacting the effectiveness of the monitoring well.

The locations of these conditions are shown on **Figure 6**.

The following table presents a comparison of the unusual conditions of note identified during the prior Phase 1 inspection conducted in November 2023 to current conditions and the actions taken to address them.

<b><i>Unusual Condition Identified in 2023 Phase 1 Inspection</i></b>	<b><i>Resolution or Current Condition</i></b>
The stone masonry wall in the raceway approach area was observed to be tilted, as it was in prior inspections. This tilt had been monitored for several years with no changes and appears to be a stable condition.	No significant change was observed during this Phase 1 inspection. The condition continues to be monitored during quarterly and Phase 1 inspections.
Minor deterioration and historical orange staining of concrete were observed around a horizontal joint at the water level at the right downstream training wall, as was the case in prior inspections. No signs of soil migration were observed. This staining and deterioration had been monitored for several years with little change and appear to constitute a stable condition.	No significant change was observed during this Phase 1 inspection. The condition continues to be monitored during quarterly and Phase 1 inspections.
Two logs were observed to be lodged on the crest of the spillway near the right training wall. The logs did not appear to be impeding flow over the spillway.	Not observed during this Phase 1 inspection. Logs and debris observed on the spillway will continue to be removed as part of regularly scheduled maintenance, particularly if they are observed to be impeding flow over the spillway.
Minor cracking, efflorescence, and wet spots were observed on the downstream training walls of the raceway stoplog sluice structure (downstream closure), as was the case in some prior inspections. This condition continues to be monitored with little change and appears to be a stable condition.	No significant change was observed during this Phase 1 inspection. The condition continues to be monitored during quarterly and Phase 1 inspections.



<b><i>Unusual Condition Identified in 2023 Phase 1 Inspection</i></b>	<b><i>Resolution or Current Condition</i></b>
The two staff gages installed at the Dam – one on the upstream left spillway training wall and one on the downstream right stoplog sluice structure (downstream closure) – were becoming difficult to read due to faded numbers, particularly where normal water levels fluctuate.	These staff gages were replaced in 2024. Since the last Phase 1 inspection in 2023, three new staff gages have been installed at the dam: (1) on the right upstream training wall, (2) on the left raceway channel wall upstream of the raceway closure structure (on the “concrete patch”), and (3) on the right downstream training wall downstream of the raceway stoplog sluice structure.
On the eastern side slope of the raceway outside GE property, a utility pole was seen to be leaning toward the channel, and vegetation downstream of that pole has grown toward the raceway. These conditions had been observed in prior inspections and do not present any issues relating to dam safety.	No significant change was observed during this Phase 1 inspection. The condition continues to be monitored during quarterly and Phase 1 inspections.

### 3.2 RECOMMENDED ACTIVITIES

GZA recommends the activities described below to address the unusual conditions listed at the beginning of Section 3.1, in addition to complying with the regular maintenance and repair requirements specified in the applicable OM&M Plan.

#### 3.2.1 Studies and Analyses

There are no studies and analyses recommended at this time.

The 2023 Phase 1 Inspection Report recommended that an updated dam break analysis be performed and incorporated into the 2024 EAP update by the end of 2024. An updated dam break analysis was performed and included in the 2024 EAP update, as described in Section 2.6 of this report.

#### 3.2.2 Monitoring and Maintenance

GZA recommends that the Dam be maintained and monitored in accordance with the applicable OM&M Plan. In addition, the following items should be monitored and maintained:

<b>Recommendation</b>	<b>Current Status/Schedule</b>
1. Continue to monitor the gap between riprap stones at the downstream toe of the right abutment non-overflow gravity section.	This area is and will continue to be monitored during quarterly and biennial inspections.



Recommendation	Current Status/Schedule
<p>2. Continue to monitor the minor cracking and efflorescence in the left and right downstream training walls, including the minor exposed concrete aggregate and historical orange staining of concrete that was observed around a horizontal joint at the water level at the right downstream training wall. Continue to look for signs of soil migration.</p>	<p>This area is and will continue to be monitored during quarterly and biennial inspections.</p>
<p>3. Continue to monitor the utility pole that was seen to be leaning toward the raceway channel on the eastern side slope of the raceway outside GE property.</p>	<p>This pole is and will continue to be monitored during quarterly and biennial inspections.</p>
<p>4. Continue to monitor the tilt in the stone masonry wall in the raceway approach area, but use a revised method to monitor the stone masonry. The current monitoring point was established in August 2020 and involves dropping a plumb bob vertically down from the top of the tilted wall to where the wall meets the reservoir level and then measuring the horizontal distance between the wall at the water level and the top of the wall. This method can present potential safety concerns, as it requires the inspector to stand at and reach over the edge of the masonry wall to obtain the measurement. We recommend an alternative measurement method, such as installing a witness stake at a known distance from marked point on the edge of the masonry wall and measuring the distance between the witness stake and marked wall point.</p>	<p>This area is and will continue to be monitored during quarterly and biennial inspections. The improved monitoring method will be initiated by the end of the second quarter in 2026.</p>
<p>5. Monitor the vertical crack and horizontal area of eroded concrete in the right upstream training wall of the raceway stoplog sluice structure (downstream control structure).</p>	<p>This area is and will continue to be monitored during quarterly and biennial inspections. Special attention will be paid to this area during periods of low flow.</p>
<p>6. Continue to monitor the minor cracking, efflorescence, and wet spots observed on the downstream training walls of the raceway stoplog sluice structure (downstream closure).</p>	<p>This area is and will continue to be monitored during quarterly and biennial inspections.</p>





Recommendation	Current Status/Schedule
Continue to look for signs of seepage at this location.	
7. Minor silt buildup (less than one foot) was observed in monitoring well BH-2 during past inspections. The minor silt buildup is not impacting the effectiveness of the monitoring well.	Silt levels in the observation wells will continue to be measured and monitored during quarterly and biennial inspections.

### 3.2.3 Minor Repairs

GZA recommends that the following minor repairs be performed at the Dam:

Recommendation	Current Status/Schedule
1. Repair the area in the left raceway channel wall upstream of the raceway closure structure where missing mortar was observed in the stone masonry joints near the water level. Additionally, remove the significant vegetation growth in this area.	Repairs will be made to the left raceway channel wall upstream of the raceway closure structure prior to the next Phase 1 inspection, to be conducted in 2027. In addition, the vegetation will be removed during regularly scheduled maintenance activities in 2026.
2. Repair the deterioration of the left wall of the raceway embankment upstream of the dam. Additionally, remove the vegetation growth at the interface between the left wall and grouted riprap.	Repairs will be made to the left wall of the raceway embankment upstream of the Dam prior to the next Phase 1 inspection, to be conducted in 2027. In addition, the vegetation will be removed during regularly scheduled maintenance activities in 2026.
3. Repair / fill in the relatively small holes/gaps in the slush-grouted riprap on the raceway embankment crest upstream of the dam.	Repairs will be made to the slush-grouted riprap on the raceway embankment crest upstream of the Dam prior to the next Phase 1 inspection, to be conducted in 2027.

### 3.3 REMEDIAL MODIFICATIONS

There are no remedial modifications recommended at this time.

### 3.4 ALTERNATIVES

There are no alternatives that need to be considered at this time. Dam removal is not considered a feasible alternative due to the importance of the impoundment to local flood control and impounding existing sediments



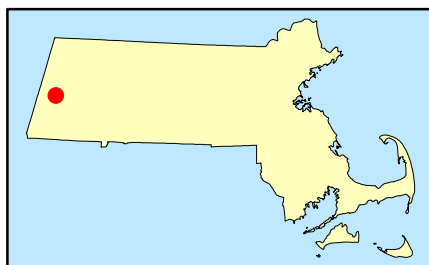
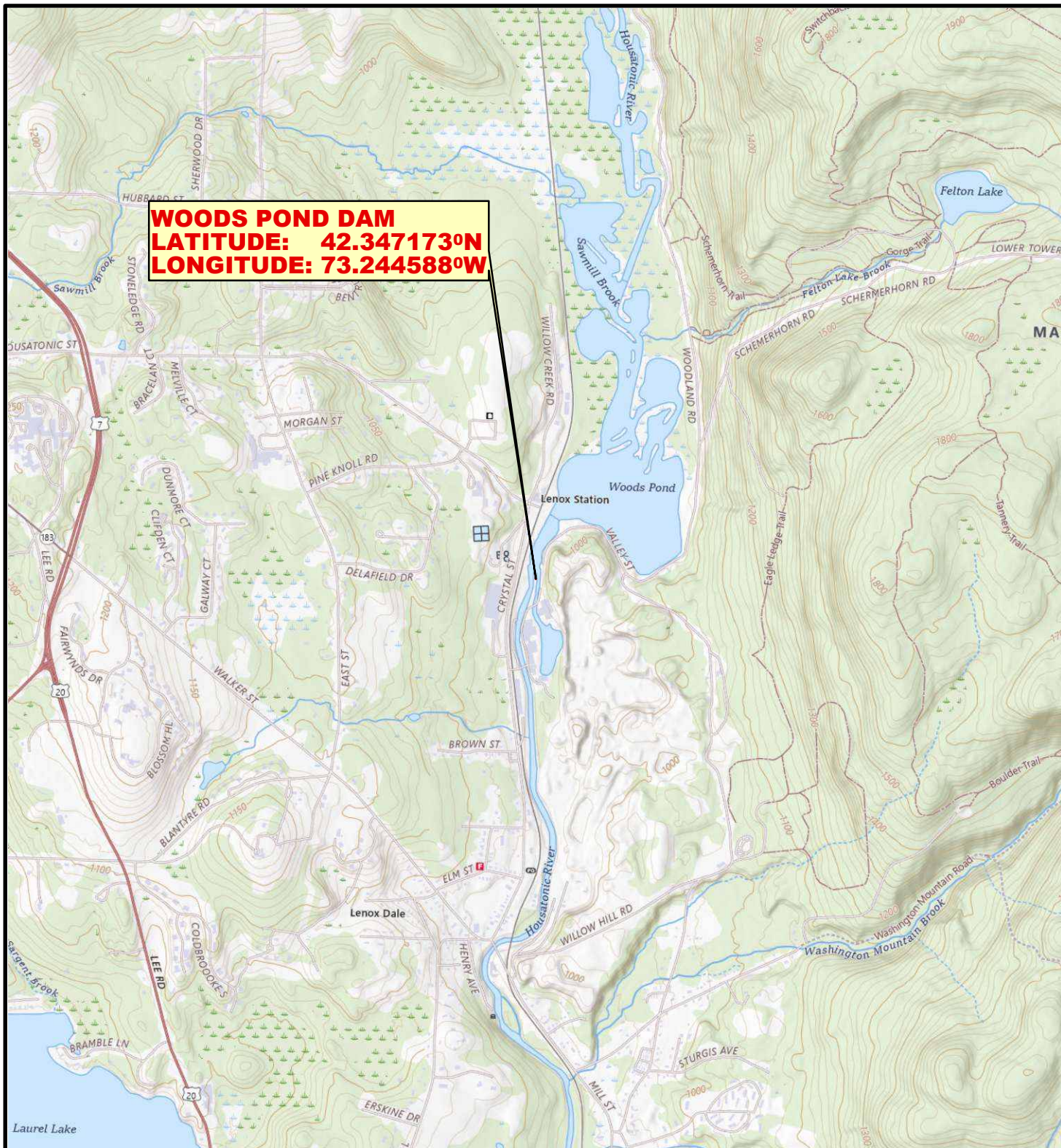
that are impacted by polychlorinated biphenyls. Maintenance-level work and minor repairs are considered necessary to maintain the safety and functionality of the Dam in the long term.

### 3.5 OPINION OF PROBABLE CONSTRUCTION COSTS

Since only minor repairs and no remedial modifications are recommended at this time, a cost estimate has not been prepared.



## FIGURES



SOURCE : THIS MAP CONTAINS THE USGS NATIONAL TOPOGRAPHIC MAP SERVICE; NATIONAL BOUNDARIES DATASET, 3DEP ELEVATION PROGRAM, GEOGRAPHIC NAMES INFORMATION SYSTEM, NATIONAL HYDROGRAPHY DATASET, NATIONAL LAND COVER DATABASE, NATIONAL STRUCTURES DATASET AND NATIONAL TRANSPORTATION DATASET; USGS GLOBAL ECOSYSTEMS; US CENSUS BUREAU TIGER/LINE DATA; USFS ROAD DATA; NATURAL EARTH DATA; U.S. DEPARTMENT OF STATE HUMANITARIAN INFORMATION UNIT; AND NOAA NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION, U.S. COASTAL RELIEF MODEL. DATA REFRESHED APRIL, 2023.



Data Supplied by :



PROJ. MGR.: SDK  
DESIGNED BY: LTP  
REVIEWED BY: JDA  
OPERATOR: LTP

DATE: 08-19-2025

## LOCUS PLAN

WOODS POND DAM  
LEE / LENOX, MASSACHUSETTS

JOB NO.  
01.0019896.81

FIGURE NO.  
**1**





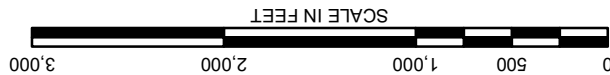
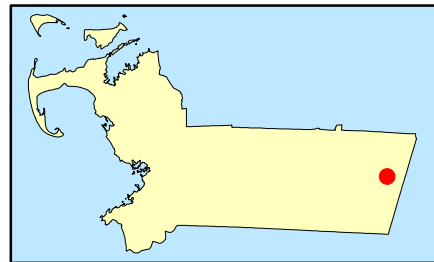
PROJ. MGR.: SDK  
DESIGNED BY: LTP  
REVIEWED BY: JDA  
OPERATOR: LTP  
DATE: 08-19-2025

WOODS POND DAM  
LEE / LENOX, MASSACHUSETTS

FIGURE NO.  
**2**

JOB NO.  
01.0019896.81

AERIAL PHOTOGRAPH



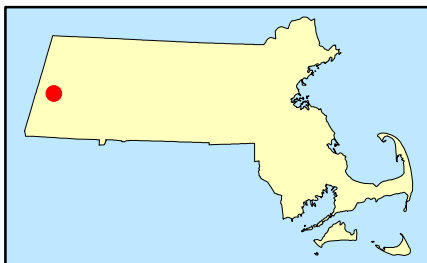
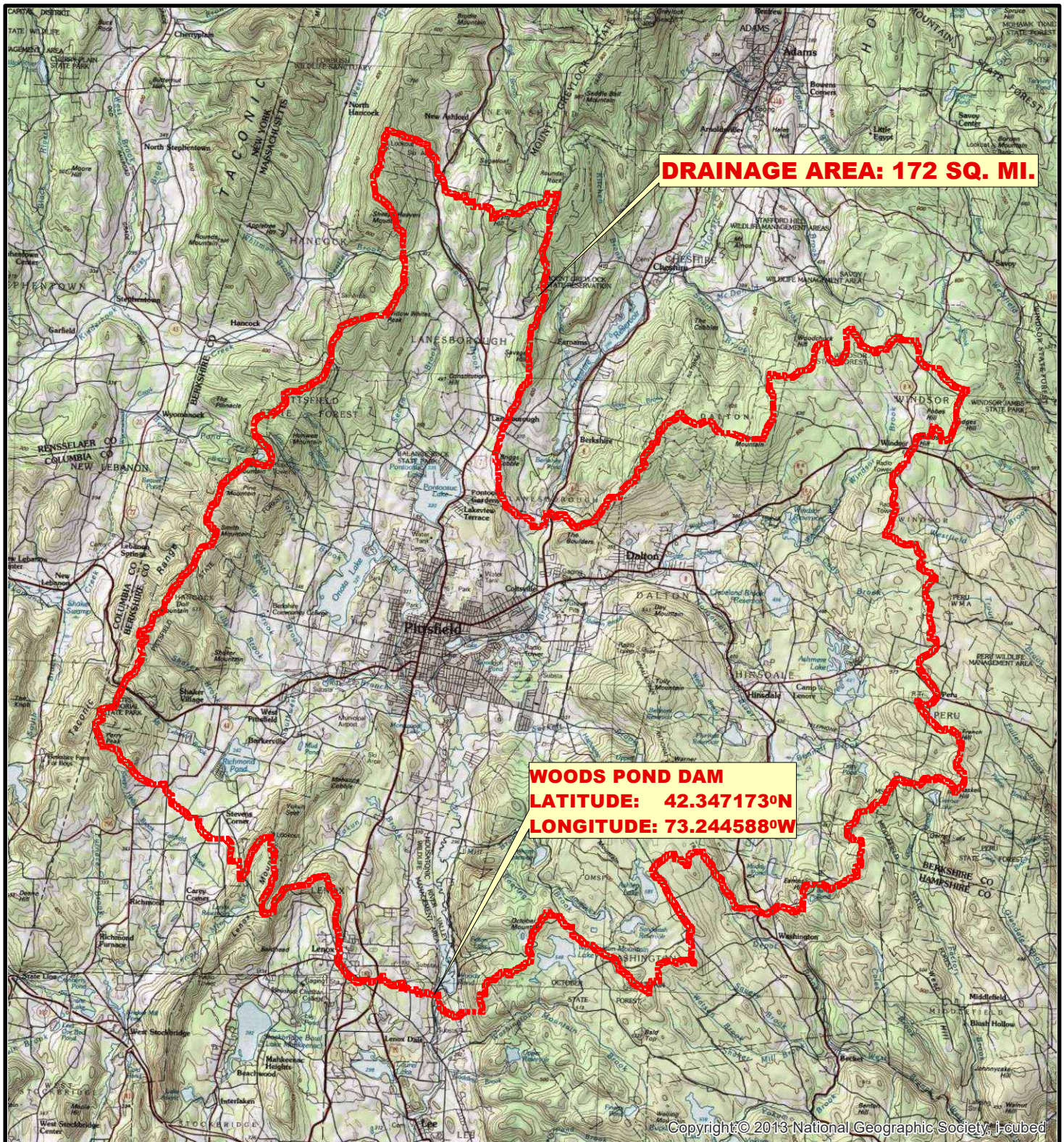
Data Supplied by :

SOURCE: THE 2023 AERIAL IMAGERY MAP SERVICE WAS DISTRIBUTED BY MASSGIS ON MAY 3, 2024. THE FUNDING FOR THIS IMAGERY WAS PROVIDED BY MASSDOT, THE STATE 911 DEPARTMENT AND THE EXECUTIVE OFFICE OF TECHNOLOGY SERVICES AND SECURITY (EOTSS).

**WOODS POND DAM**  
**LATITUDE: 42.347173°N**  
**LONGITUDE: 73.244588°W**







SOURCE : THIS MAP CONTAINS THE ESRI ARCGIS ONLINE USA TOPOGRAPHIC MAP SERVICE, PUBLISHED JUNE 19, 2019 BY ESRI ARCGIS SERVICES AND UPDATED AS NEEDED. THIS SERVICE USES UNIFORM NATIONALLY RECOGNIZED DATUM AND CARTOGRAPHY STANDARDS AND A VARIETY OF AVAILABLE SOURCES FROM SEVERAL DATA PROVIDERS.

DRAINAGE AREA DELINEATED BY STREAMSTATS PROVIDED BY THE UNITED STATES GEOLOGICAL SURVEY



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PROJ. MGR.: SDK  
DESIGNED BY: LTP  
REVIEWED BY: JDA  
OPERATOR: LTP

DATE: 08-19-2025

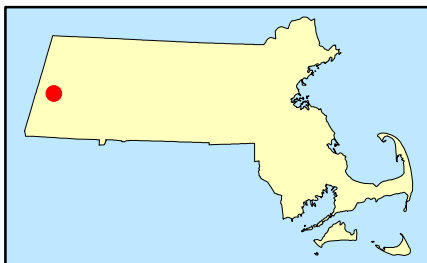
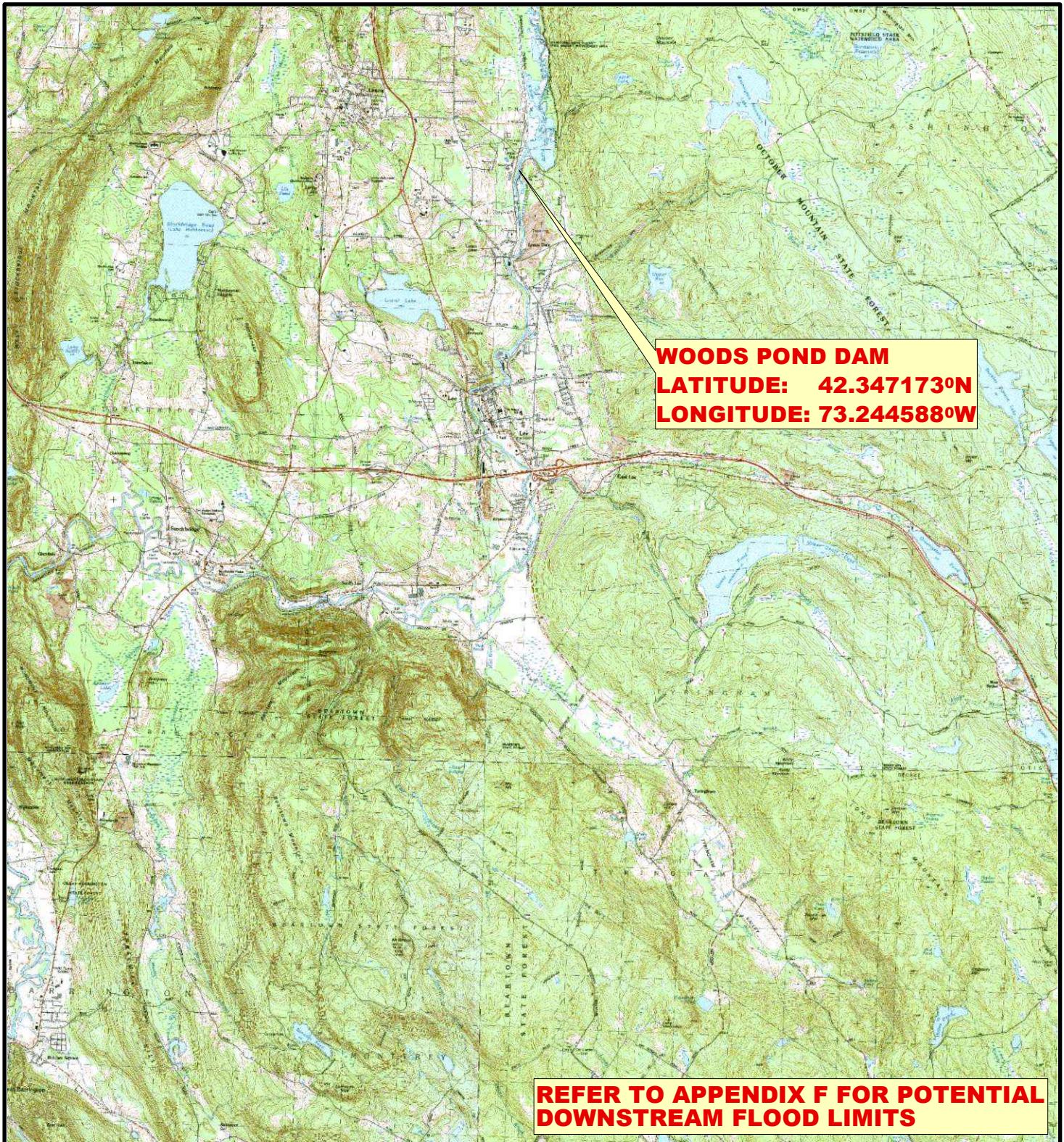
DRAINAGE AREA

WOODS POND DAM  
LEE / LENOX, MASSACHUSETTS

JOB NO.  
01.0019896.81

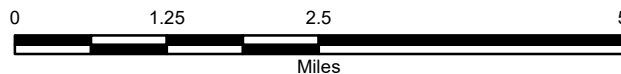
FIGURE NO.  
**3**





SOURCE : THIS MAP CONTAINS THE MASSGIS SCANNED THE USGS TOPOGRAPHIC QUADRANGLES TO CREATE A DIGITAL DATABASE THAT CAN PROVIDE IMAGES OF THE PAPER MAPS, PUBLISHED OCTOBER 14, 2022. THESE IMAGES CAN BE USED AS A BACKDROP FOR PLOTTING VECTOR DATA AND FOR INTERPRETATION AND ANALYSIS. THIS SERVICE USES UNIFORM NATIONALLY RECOGNIZED DATUM AND CARTOGRAPHY STANDARDS AND A VARIETY OF AVAILABLE SOURCES FROM SEVERAL DATA PROVIDERS.

Data Supplied by :



PROJ. MGR.: SDK  
DESIGNED BY: LTP  
REVIEWED BY: JDA  
OPERATOR: LTP

DATE: 08-19-2025

## DAM AND DOWNSTREAM AREA

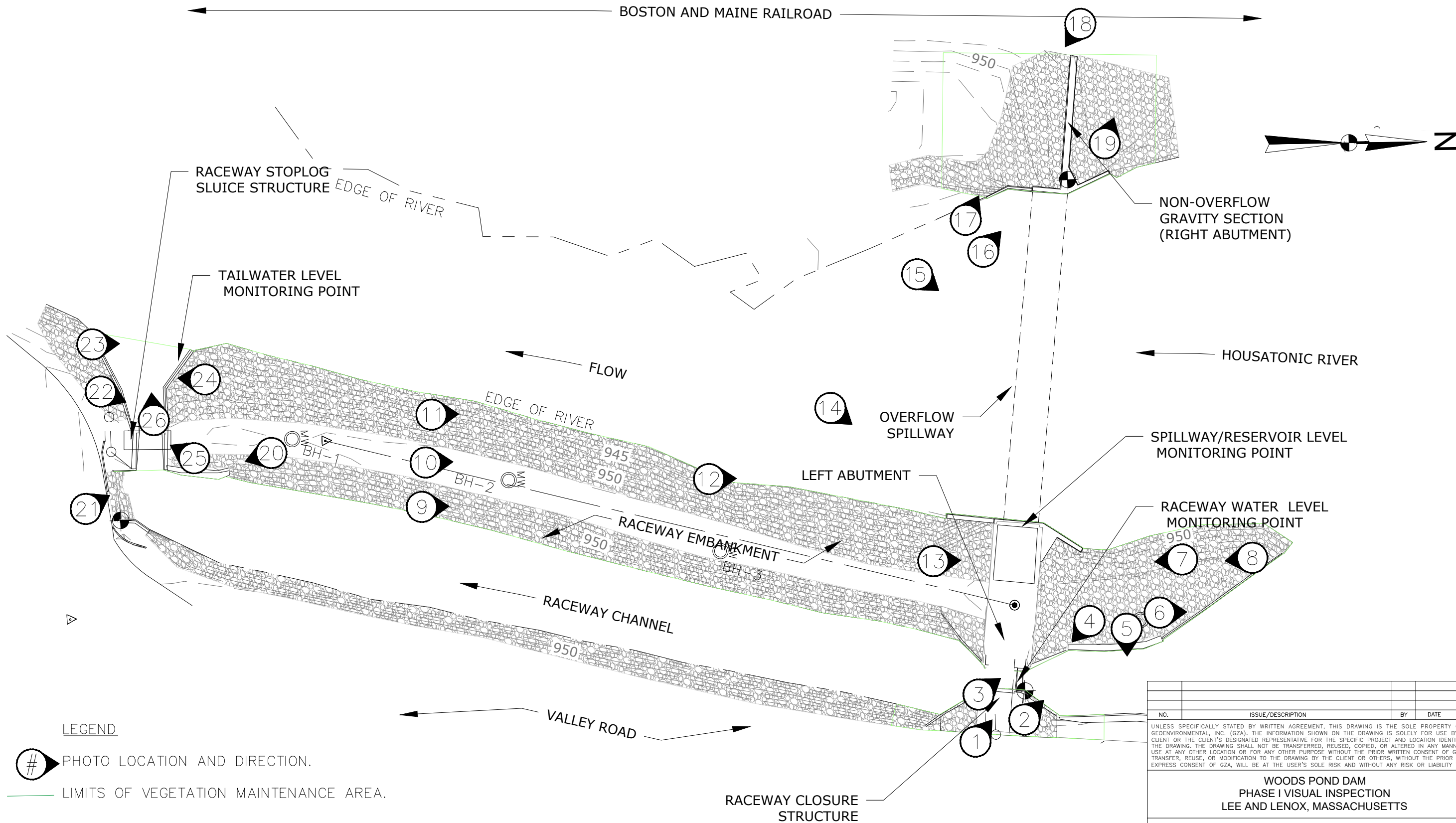
WOODS POND DAM  
LEE / LENOX, MASSACHUSETTS

JOB NO.  
01.0019896.81

FIGURE NO.  
**4**



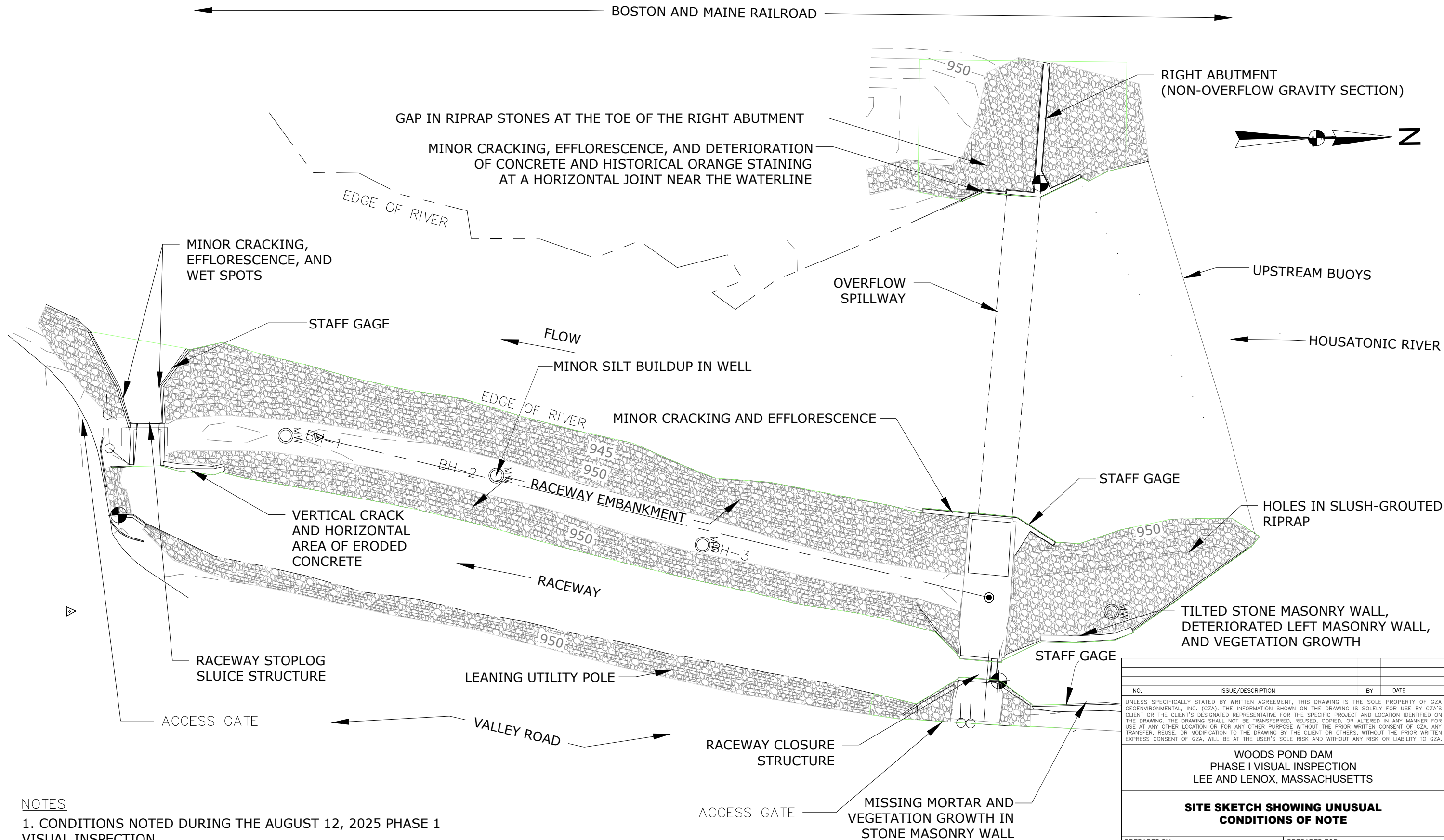
©2025 - GZA GeoEnvironmental, Inc. GZA-\\GZANOR\JOBS\19,000-20,999\19896-81\3-WORK\05 - PHASE 1 INSPECTIONS\2025 08 12 - WOODS POND DAM PHASE I INSPECTION\FIGURES\CAD\WPD BIENNIAL FIG



NO.		ISSUE/DESCRIPTION	BY	DATE
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WOODS POND DAM PHASE I VISUAL INSPECTION LEE AND LENOX, MASSACHUSETTS				
SITE PLAN AND PHOTO LOCATIONS				
PREPARED BY: <b>GZA</b> GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: GENERAL ELECTRIC COMPANY		
PROJ MGR: SDK	REVIEWED BY: JDA	CHECKED BY: ABB	FIG	
DESIGNED BY: LTP	DRAWN BY: LTP	SCALE: 1" = 40'	5	
DATE: August 2025	PROJECT NO. 19896.81	REVISION NO.	SHEET NO. 1 OF 1	



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**NOTES**

1. CONDITIONS NOTED DURING THE AUGUST 12, 2025 PHASE 1 VISUAL INSPECTION.
2. BASEMAP FROM A TOPOGRAPHIC SURVEY ENTITLED "WOODS POND DAM, LEE/LENOX, MASSACHUSETTS", PREPARED BY FORESIGHT LAND SERVICES, DATED MAY 1, 2020.

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WOODS POND DAM PHASE I VISUAL INSPECTION LEE AND LENOX, MASSACHUSETTS				
SITE SKETCH SHOWING UNUSUAL CONDITIONS OF NOTE				
PREPARED BY: <b>GZA</b> GeoEnvironmental, Inc. Engineers and Scientists www.gza.com			PREPARED FOR: GENERAL ELECTRIC COMPANY	
PROJ MGR: SDK	REVIEWED BY: JDA	CHECKED BY: ABB	FIG 6	
DESIGNED BY: LTP	DRAWN BY: LTP	SCALE: 1" = 40'	SHEET NO. 1 OF 1	
DATE: August 2025	PROJECT NO. 19896.81	REVISION NO.		



## **APPENDIX A – LIMITATIONS**



## **DAM ENGINEERING REPORT LIMITATIONS**

### Use of Report

1. GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of the General Electric Company, (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.

### General

4. 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.
5. 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.
6. 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.
7. 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.
8. 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

9. 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.
10. This scope of work does not include an assessment of the need for fences, gates, no trespassing signs, swimming or boating barriers, 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.

### Additional Services

11. 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**





## Photographic Log

<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Woods Pond Dam (MA00731), Lee/Lenox, MA	<b>Project No.</b> 01.0019896.81
<b>Photo No.</b> 1	<b>Date:</b> 8/12/2025		
<b>Direction Photo Taken:</b> Right/Upstream			
<b>Description:</b> Raceway closure structure (upstream control).			


<b>Photo No.</b> 2	<b>Date:</b> 8/12/2025
<b>Direction Photo Taken:</b> Right/Upstream	
<b>Description:</b> Tilted masonry wall along the left upstream side of the raceway embankment (right side of raceway channel approach). Tilt measured about 5.5 to 6 inches out of plumb, similar to past inspections.  Further deterioration of this left wall was noted during the inspection, particularly near the normal pool level.	







## Photographic Log

<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Woods Pond Dam (MA00731), Lee/Lenox, MA	<b>Project No.</b> 01.0019896.81
<b>Photo No.</b> 3	<b>Date:</b> 8/12/2025		
<b>Direction Photo Taken:</b> Upstream			
<b>Description:</b> Downstream side of the raceway closure structure (upstream control) stoplogs. Upper stoplog had been temporarily raised to lower pool and allow dewatered inspection of spillway. Two stoplogs in-place below water level.			

<b>Photo No.</b> 4	<b>Date:</b> 8/12/2025	
<b>Direction Photo Taken:</b> Downstream/Left		
<b>Description:</b> Approach area to the raceway closure structure (upstream control).		





## Photographic Log

<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Woods Pond Dam (MA00731), Lee/Lenox, MA	<b>Project No.</b> 01.0019896.81
<b>Photo No.</b> 5	<b>Date:</b> 8/12/2025		
<b>Direction Photo Taken:</b> Left			
<b>Description:</b> Left raceway channel wall upstream of the raceway closure structure.  Note missing mortar near pool level, visible due to temporarily lowered reservoir as part of the dewatered inspection (red circles). Also note the heavy vegetation above the wall.			


<b>Photo No.</b> 6	<b>Date:</b> 8/12/2025
<b>Direction Photo Taken:</b> Upstream	
<b>Description:</b> Left wall of the raceway embankment upstream of the dam. Note vegetation growth in the grouted riprap.	








## Photographic Log


<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Woods Pond Dam (MA00731), Lee/Lenox, MA	<b>Project No.</b> 01.0019896.81
<b>Photo No.</b> 7	<b>Date:</b> 8/12/2025		
<b>Direction Photo Taken:</b> Downstream			
<b>Description:</b> Close-up of previously observed holes and cracks within the slush-grouted riprap on the raceway embankment upstream of the dam.			

<b>Photo No.</b> 8	<b>Date:</b> 8/12/2025	
<b>Direction Photo Taken:</b> Downstream		
<b>Description:</b> Overview of the raceway embankment upstream of the dam. Note the utility pole leaning towards the raceway channel (red circle; also see Photo 9).		





## Photographic Log

<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Woods Pond Dam (MA00731), Lee/Lenox, MA	<b>Project No.</b> 01.0019896.81
<b>Photo No.</b> 9	<b>Date:</b> 8/12/2025		
<b>Direction Photo Taken:</b> Upstream			
<b>Description:</b> Overview of the raceway channel and raceway embankment slope downstream of the dam. Note the utility pole leaning towards the raceway channel (red circle; also see Photo 8)			

<b>Photo No.</b> 10	<b>Date:</b> 8/12/2025	
<b>Direction Photo Taken:</b> Upstream		
<b>Description:</b> Overview of the raceway embankment downstream of the dam. Note slight unevenness of the top of embankment (crest).		





## Photographic Log

<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Woods Pond Dam (MA00731), Lee/Lenox, MA	<b>Project No.</b> 01.0019896.81
<b>Photo No.</b> 11	<b>Date:</b> 8/12/2025		
<b>Direction Photo Taken:</b> Upstream			
<b>Description:</b> Overview of discharge channel and Woods Pond Dam.  Note pool was lowered to allow dewatered spillway inspection. There was no active discharge over the spillway at the time of the inspection.			

<b>Photo No.</b> 12	<b>Date:</b> 8/12/2025	
<b>Direction Photo Taken:</b> Upstream		
<b>Description:</b> Overview of the Woods Pond Dam spillway. Note buoy line upstream of the spillway crest and lowered pool to allow for a dewatered spillway inspection.		





## Photographic Log

<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Woods Pond Dam (MA00731), Lee/Lenox, MA	<b>Project No.</b> 01.0019896.81
<b>Photo No.</b> 13	<b>Date:</b> 8/12/2025		
<b>Direction Photo Taken:</b> Upstream			
<b>Description:</b> Overview of the Left Abutment.			


<b>Photo No.</b> 14	<b>Date:</b> 8/12/2025
<b>Direction Photo Taken:</b> Upstream/Left	
<b>Description:</b> Overview of the left spillway training wall. Note the minor cracks with efflorescence, specifically on the downstream portion of the wall (red arrow).	







## Photographic Log


<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Woods Pond Dam (MA00731), Lee/Lenox, MA	<b>Project No.</b> 01.0019896.81
<b>Photo No.</b> 15	<b>Date:</b> 8/12/2025		
<b>Direction Photo Taken:</b> Left			
<b>Description:</b> Overview of dewatered spillway downstream face. Note the mossy growth along the downstream face.			

<b>Photo No.</b> 16	<b>Date:</b> 8/12/2025	
<b>Direction Photo Taken:</b> Right		
<b>Description:</b> Right spillway training wall. Note orange staining and minor deterioration at the horizontal joint; similar to past inspections. The joint was wet at the time of inspection with no active leakage or signs of soil migration observed.		





## Photographic Log


<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Woods Pond Dam (MA00731), Lee/Lenox, MA	<b>Project No.</b> 01.0019896.81
<b>Photo No.</b> 17	<b>Date:</b> 8/12/2025		
<b>Direction Photo Taken:</b> Left			
<b>Description:</b> Gap between riprap stones at the downstream toe of the right abutment non-overflow gravity section. The gap measured approximately 2.5 feet in diameter, 2 feet deep, and was probed upstream (towards the gravity section) to about 1-foot deep, which is similar to previous inspections.			

<b>Photo No.</b> 18	<b>Date:</b> 8/12/2025	
<b>Direction Photo Taken:</b> Left		
<b>Description:</b> Downstream riprap slope protection at the right non-overflow gravity section. Note safety signage is installed and in good condition.		





## Photographic Log

<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Woods Pond Dam (MA00731), Lee/Lenox, MA	<b>Project No.</b> 01.0019896.81
<b>Photo No.</b> 19	<b>Date:</b> 8/12/2025		
<b>Direction Photo Taken:</b> Right			
<b>Description:</b> Upstream riprap slope protection at right non-overflow section of dam.			


<b>Photo No.</b> 20	<b>Date:</b> 8/12/2025	
<b>Direction Photo Taken:</b> Downstream		
<b>Description:</b> Culvert at the downstream end of the raceway channel. Culvert leads to Mill Pond.		





## Photographic Log

<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Woods Pond Dam (MA00731), Lee/Lenox, MA	<b>Project No.</b> 01.0019896.81
<b>Photo No.</b> 21	<b>Date:</b> 8/12/2025		
<b>Direction Photo Taken:</b> Right			
<b>Description:</b> The right upstream training wall of the raceway stoplog sluice structure (downstream control structure). Note vertical crack and horizontal area of eroded concrete (red arrows).			

<b>Photo No.</b> 22	<b>Date:</b> 8/12/2025	
<b>Direction Photo Taken:</b> Left		
<b>Description:</b> Downstream side of the raceway stoplog sluice structure (downstream control structure). More flow than usual was observed flowing through the downstream control structure, as the spillway was bypassed to allow for a dewatered inspection.		





## Photographic Log

<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Woods Pond Dam (MA00731), Lee/Lenox, MA	<b>Project No.</b> 01.0019896.81
<b>Photo No.</b> 23	<b>Date:</b> 8/12/2025		
<b>Direction Photo Taken:</b> Upstream			
<b>Description:</b> Right downstream training wall of stoplog sluice structure (downstream control structure). Note vertical crack in the concrete (red arrow).			

<b>Photo No.</b> 24	<b>Date:</b> 8/12/2025		
<b>Direction Photo Taken:</b> Downstream			
<b>Description:</b> Left downstream training wall of raceway stoplog sluice structure (downstream control structure). Note minor wet spot (red circle), vertical and longitudinal cracking, and efflorescence.			





## Photographic Log

<b>Client Name:</b> General Electric Company		<b>Site Location:</b> Woods Pond Dam (MA00731), Lee/Lenox, MA	<b>Project No.</b> 01.0019896.81
<b>Photo No.</b> 25	<b>Date:</b> 8/12/2025		
<b>Direction Photo Taken:</b> Downstream			
<b>Description:</b> Bridge over the raceway stoplog sluice structure.			


<b>Photo No.</b> 26	<b>Date:</b> 8/12/2025	
<b>Direction Photo Taken:</b> Right		
<b>Description:</b> River downstream of the raceway stoplog sluice structure.		



## **APPENDIX C – INSPECTION CHECKLIST**

### DAM SAFETY INSPECTION CHECKLIST

NAME OF DAM: <u>Woods Pond Dam</u>	STATE ID #: <u>1-2-150-11</u>
REGISTERED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	NID ID #: <u>MA00731</u>
STATE SIZE CLASSIFICATION: <u>Large</u>	STATE HAZARD CLASSIFICATION: <u>Significant</u>
	CHANGE IN HAZARD CLASSIFICATION REQUESTED?: <u>No</u>
<u><b>DAM LOCATION INFORMATION</b></u>	
CITY/TOWN: <u>Lee</u>	COUNTY: <u>Berkshire</u>
DAM LOCATION: <u>100 Valley St, Lenox, MA 01240</u> (street address if known)	ALTERNATE DAM NAME: <u>Valley Mill Dam (former Woods Pond Dam)</u>
USGS QUAD.: <u>Housatonic</u>	LAT.: <u>42.347173 N</u> LONG.: <u>73.244588 W</u>
DRAINAGE BASIN: <u>Housatonic</u>	RIVER: <u>Housatonic River</u>
IMPOUNDMENT NAME(S): <u>Woods Pond or Woods Pond Reservoir</u>	
<u><b>GENERAL DAM INFORMATION</b></u>	
TYPE OF DAM: <u>Concrete / sheetpile with riprap abutments</u>	OVERALL LENGTH (FT): <u>298</u>
PURPOSE OF DAM: <u>Impound Woods Pond Reservoir / PCB sediments</u>	NORMAL POOL STORAGE (ACRE-FT): <u>460 at El. 948.8'</u>
YEAR BUILT: <u>1864, rebuilt 150' downstream in 1989 (current configuration)</u>	MAXIMUM POOL STORAGE (ACRE-FT): <u>5,300 at El. 955.8'</u>
STRUCTURAL HEIGHT (FT): <u>17.6</u>	EL. NORMAL POOL (FT): <u>948.8±</u>
HYDRAULIC HEIGHT (FT): <u>11.9</u>	EL. MAXIMUM POOL (FT): <u>955.8</u>
<u><b>FOR INTERNAL MADCR USE ONLY</b></u>	
FOLLOW-UP INSPECTION REQUIRED: <input type="checkbox"/> YES <input type="checkbox"/> NO	CONDITIONAL LETTER: <input type="checkbox"/> YES <input type="checkbox"/> NO

NAME OF DAM: <u>Woods Pond Dam</u>		STATE ID #: <u>1-2-150-11</u>	
INSPECTION DATE: <u>August 12, 2025</u>		NID ID #: <u>MA00731</u>	
<u>INSPECTION SUMMARY</u>			
DATE OF INSPECTION: <u>August 12, 2025</u>		DATE OF PREVIOUS INSPECTION: <u>November 14, 2023</u>	
TEMPERATURE/WEATHER: <u>80s F / Sunny</u>		ARMY CORPS PHASE I: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If YES, date _____	
CONSULTANT: <u>GZA GeoEnvironmental, Inc.</u>		PREVIOUS DCR PHASE I: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If YES, date <u>11/14/2023</u>	
BENCHMARK/DATUM: <u>NGVD29</u>			
OVERALL PHYSICAL CONDITION OF DAM: <u>SATISFACTORY</u>		DATE OF LAST REHABILITATION: <u>Late 1980s - major modifications</u>	
SPILLWAY CAPACITY: <u>&gt;100% SDF w/ no actions by Caretaker</u>			
EL. POOL DURING INSP.: <u>948.1± (just below the spillway crest)</u>		EL. TAILWATER DURING INSP.: <u>941.6±</u>	
<u>PERSONS PRESENT AT INSPECTION</u>			
<u>NAME</u>	<u>TITLE/POSITION</u>	<u>REPRESENTING</u>	
Jonathan D. Andrews, P.E.	Principal-in-Charge	GZA GeoEnvironmental, Inc.	
Seth D. Krause, P.E.	Project Manager	GZA GeoEnvironmental, Inc.	
Leslie DeCristofaro, EIT	Engineer I	GZA GeoEnvironmental, Inc.	
Lexus Pattershall, EIT	Engineer I	GZA GeoEnvironmental, Inc.	
Ray Mullin, EIT	Engineer II	GZA GeoEnvironmental, Inc.	
Bill Gop	Operator	Town of Lenox Department of Public Works	
Tom Czelusniak	Remedial Systems Manager	HDR Representing EPA	
Alex Carli-Dorsey	Remedial Project Manager	EPA	
<u>EVALUATION INFORMATION</u>			
		Click on box to select E-code	
E1) TYPE OF DESIGN	4	E8) LOW-LEVEL OUTLET CONDITION	4
E2) LEVEL OF MAINTENANCE	4	E9) SPILLWAY DESIGN FLOOD CAPACITY	5
E3) EMERGENCY ACTION PLAN	5	E10) OVERALL PHYSICAL CONDITION	4
E4) EMBANKMENT SEEPAGE	4	E11) ESTIMATED REPAIR COST	Not applicable
E5) EMBANKMENT CONDITION	4	ROADWAY OVER CREST	NO
E6) CONCRETE CONDITION	4	BRIDGE NEAR DAM	NO
E7) LOW-LEVEL OUTLET CAPACITY	4		
NAME OF INSPECTING ENGINEER: <u>Jonathan D. Andrews, P.E.</u>		SIGNATURE: 	

NAME OF DAM: <u>Woods Pond Dam</u>		STATE ID #: <u>1-2-150-11</u>	
INSPECTION DATE: <u>August 12, 2025</u>		NID ID #: <u>MA00731</u>	
OWNER: ORGANIZATION	<u>General Electric Company</u>	CARETAKER: ORGANIZATION	<u>General Electric Company</u>
NAME/TITLE	<u>Kevin Mooney, Senior PM</u>	NAME/TITLE	<u>Kevin Mooney, Senior PM</u>
STREET	<u>1 Plastics Avenue</u>	STREET	<u>1 Plastics Avenue</u>
TOWN, STATE, ZIP	<u>Pittsfield, MA 01201</u>	TOWN, STATE, ZIP	<u>Pittsfield, MA 01201</u>
PHONE	<u>413-448-6610</u>	PHONE	<u>413-448-6610</u>
EMERGENCY PH. #	<u>413-441-4619</u>	EMERGENCY PH. #	<u>413-441-4919</u>
FAX	<u>-</u>	FAX	<u>-</u>
EMAIL	<u><a href="mailto:kevin.mooney@geaerospace.com">kevin.mooney@geaerospace.com</a></u>	EMAIL	<u><a href="mailto:kevin.mooney@geaerospace.com">kevin.mooney@geaerospace.com</a></u>
OWNER TYPE	<u>Private</u>		
PRIMARY SPILLWAY TYPE	<u>Concrete ogee</u>		
SPILLWAY LENGTH (FT)	<u>140</u>	SPILLWAY CAPACITY (CFS)	<u>12,100 at El. 955.8'</u>
AUXILIARY SPILLWAY TYPE	<u>Not applicable</u>	AUX. SPILLWAY CAPACITY (CFS)	<u>Not applicable</u>
NUMBER OF OUTLETS	<u>One</u>	OUTLET(S) CAPACITY (CFS)	<u>850 at El. 955.8' (no stoplogs)</u>
TYPE OF OUTLETS	<u>Raceway closure structure (stoplogs)</u>	TOTAL DISCHARGE CAPACITY (CFS)	<u>12,950 at El. 955.8'</u>
DRAINAGE AREA (SQ MI)	<u>170</u>	SPILLWAY DESIGN FLOOD (PERIOD/CFS)	<u>500-year / 12,100</u>
HAS DAM BEEN BREACHED OR OVERTOPPED		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	IF YES, PROVIDE DATE(S) <u>Not applicable</u>
FISH LADDER (LIST TYPE IF PRESENT)		<u>Not applicable</u>	
DOES CREST SUPPORT PUBLIC ROAD?		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	IF YES, ROAD NAME: _____
PUBLIC BRIDGE WITHIN 50' OF DAM?		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	IF YES, ROAD/BRIDGE NAME: _____
		MHD BRIDGE NO. (IF APPLICABLE) _____	

NAME OF DAM: <u>Woods Pond Dam</u>		STATE ID #: <u>1-2-150-11</u>			
INSPECTION DATE: <u>August 12, 2025</u>		NID ID #: <u>MA00731</u>			
<b>EMBANKMENT (CREST) - RACEWAY EMBANKMENT</b>					
AREA INSPECTED	CONDITION	OBSERVATIONS	NO ACTION	MONITOR	REPAIR
CREST	1. SURFACE TYPE	Mainly grass downstream of dam. Grouted riprap near dam and upstream of dam.	X		
	2. SURFACE CRACKING	None observed.	X		
	3. SINKHOLES, ANIMAL BURROWS	Some small (2' to 4" plan dim.) holes/gaps in slush-grouted riprap (1)		X	X
	4. VERTICAL ALIGNMENT (DEPRESSIONS)	Slight unevenness throughout.		X	
	5. HORIZONTAL ALIGNMENT	No unusual movement or misalignment observed.	X		
	6. RUTS AND/OR PUDDLES	None observed.	X		
	7. GRASS COVER CONDITION	Full coverage; grass recently mowed.	X		
	8. WOODY VEGETATION (TREES/BRUSH)	None observed.	X		
	9. ABUTMENT CONTACT	The right side of the embankment intersects the dam upstream; the left side intersects the roadway/culvert downstream. No signs of crest settlement, movement, etc.	X		
ADDITIONAL COMMENTS: <u>1) are generally consistent with the last Phase 1.</u> <div style="margin-left: 150px;"> <u>See "Instrumentation" for raceway embankment monitoring wells.</u>  <u>Note: Raceway embankment impounds the raceway channel (raceway embankment does not impound Woods Pond Dam)</u> </div>					

NAME OF DAM: <u>Woods Pond Dam</u>		STATE ID #: <u>1-2-150-11</u>			
INSPECTION DATE: <u>August 12, 2025</u>		NID ID #: <u>MA00731</u>			
<b>EMBANKMENT (D/S SLOPE) - RACEWAY EMBANKMENT</b>					
AREA INSPECTED	CONDITION	OBSERVATIONS	NO ACTION	MONITOR	REPAIR
D/S SLOPE	1. WET AREAS (NO FLOW)	None observed.	X		
	2. SEEPAGE	None observed.	X		
	3. SLIDE, SLOUGH, SCARP	None observed.	X		
	4. EMB.-ABUTMENT CONTACT	The right side of the embankment intersects the dam's left abutment; the left side of the embankment intersects the roadway/culvert (raceway stoplog sluice structure).	X		
	5. SINKHOLE/ANIMAL BURROWS	None observed.	X		
	6. EROSION	Historic holes/gaps (2" to 4" plan dimension) in the slush-grouted riprap.		X	X
	7. UNUSUAL MOVEMENT	None observed.	X		
	8. GRASS COVER CONDITION	Not applicable.	X		
	9. WOODY VEGETATION (TREES/BRUSH)	Within the riprap slope protection.		X	
ADDITIONAL COMMENTS: _____ <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">           Note: Raceway embankment impounds the raceway channel (raceway embankment does not impound Woods Pond Dam)            Downstream slope refers to the riverward (west) slope of the raceway embankment.         </div>					



NAME OF DAM: <u>Woods Pond Dam</u>		STATE ID #: <u>1-2-150-11</u>			
INSPECTION DATE: <u>August 12, 2025</u>		NID ID #: <u>MA00731</u>			
<b>EMBANKMENT (U/S SLOPE) - RACEWAY EMBANKMENT</b>					
AREA INSPECTED	CONDITION	OBSERVATIONS	NO ACTION	MONITOR	REPAIR
U/S SLOPE	1. SLIDE, SLOUGH, SCARP	None observed.	X		
	2. SLOPE PROTECTION TYPE AND COND.	Upstream of dam: the slope is a stone masonry wall that then transitions into sheetpiles near the raceway closure structure. Downstream of the dam: the slope is (1)		X	X
	3. SINKHOLE/ANIMAL BURROWS	None observed.	X		
	4. EMB.-ABUTMENT CONTACT	The right side of the embankment intersects the dam's left abutment; the left side of the embankment intersects the roadway/culvert (raceway stoplog sluice structure).	X		
	5. EROSION	None observed.	X		
	6. UNUSUAL MOVEMENT	Slight tilt in masonry wall upstream of the raceway closure structure inlet; measures ~5.5 to 6 inches out of plumb. Similar to previous observations and inspections.		X	
	7. GRASS COVER CONDITION	Not applicable.	X		
	8. WOODY VEGETATION (TREES/BRUSH)	Minor vegetation growth throughout riprap and in masonry wall joints. (2)		X	
		Upstream slope refers to the raceway channel (east) slope of the raceway embankment.			
	<p>ADDITIONAL COMMENTS: (1) protected by grouted riprap and sheetpiles for approximately 25 feet and continues 325 feet downstream with un-grouted riprap.  Upstream of dam : missing mortar between masonry blocks; mostly at the normal pool level &amp; historic holes/cracks within the slush-grouted riprap, appears worse than 2023 Phase 1. Downstream of dam slope protected with riprap armoring - good coverage/condition.  (2) Tire noted in channel just downstream of the raceway closure structure.</p> <p>Note: Raceway embankment impounds the raceway channel (raceway embankment does not impound Woods Pond Dam).</p>				



NAME OF DAM: <u>Woods Pond Dam</u>		STATE ID #: <u>1-2-150-11</u>			
INSPECTION DATE: <u>August 12, 2025</u>		NID ID #: <u>MA00731</u>			
<b>INSTRUMENTATION</b>					
AREA INSPECTED	CONDITION	OBSERVATIONS	NO ACTION	MONITOR	REPAIR
INSTR.	1. PIEZOMETERS	None.			
	2. OBSERVATION WELLS	Three observation wells on the crest of the raceway embankment; B-1, B-2, B-3. Water levels in BH-1 and BVH-3 measured during inspection. Measurements within (1)		X	
	3. STAFF GAGE AND RECORDER	3 Staff gauges installed in 2024: right upstream training wall, left raceway channel wall upstream of dam, and the right downstream training wall of raceway stoplog sluice structure (downstream control).	X		
	4. WEIRS	None.	X		
	5. INCLINOMETERS	None.	X		
	6. SURVEY MONUMENTS	None.	X		
	7. DRAINS	None.	X		
	8. FREQUENCY OF READINGS	Observation wells are read quarterly.		X	
	9. LOCATION OF READINGS	Taken by GZA during quarterly visual inspections.		X	
ADDITIONAL COMMENTS: (1) expected range. Well BH-2 not accessed or measured due to wasp nest. Minor silt buildup has previously been measured during BH-2 water level readings (Monitor).					

NAME OF DAM: <u>Woods Pond Dam</u>		STATE ID #: <u>1-2-150-11</u>			
INSPECTION DATE: <u>August 12, 2025</u>		NID ID #: <u>MA00731</u>			
<b>DOWNSTREAM AREA</b>					
AREA INSPECTED	CONDITION	OBSERVATIONS	NO ACTION	MONITOR	REPAIR
D/S AREA	1. ABUTMENT LEAKAGE	Previously observed seepage, cracking and efflorescence on left and right downstream training walls of the raceway stoplog sluice structure (downstream control); previously observed seepage reported clear; seepage flow imperceptible. Seepage not observed during this inspection; only a minor wet spot. (1)		X	
	2. FOUNDATION SEEPAGE	None observed.	X		
	3. SLIDE, SLOUGH, SCARP	Previously reported bedrock scour at the toe of the spillway; see survey. Scour not observed during this inspection (underwater).		X	
	4. WEIRS	None.	X		
	5. DRAINAGE SYSTEM	None.	X		
	6. INSTRUMENTATION	See "Instrumentation".	X		
	7. VEGETATION WITHIN 15 FT	None observed.	X		
	8. ACCESSIBILITY	Locked gates at the downstream end of the raceway embankment and left side of the spillway. Access to the right side of the dam is across railroad tracks.	X		
	9. DOWNSTREAM HAZARD DESCRIPTION	Industrial area, residences, and secondary highways.	X		
	10. DATE OF LAST EAP UPDATE	12/1/2024	X		
ADDITIONAL COMMENTS: 1) Vertical crack and horizontal area of eroded concrete on right upstream training wall of raceway stoplog sluice structure. <u>Bridge above the structure is used to operate the stoplogs and provide access to the raceway embankment. There are rotten planks beneath but the bridge the metal bridge expands pass the planks and appears generally stable.</u>  <u>Raceway stoplog closure structure stoplogs were removed prior to inspection. Contractor (LB Corp) indicated no issues with stoplog removal. Stoplog grooves appeared clear.</u>					

NAME OF DAM: <u>Woods Pond Dam</u>		STATE ID #: <u>1-2-150-11</u>
INSPECTION DATE: <u>August 12, 2025</u>		NID ID #: <u>MA00731</u>
<b>MISCELLANEOUS</b>		
AREA INSPECTED	CONDITION	OBSERVATIONS
MISC.	1. RESERVOIR DEPTH (AVG)	Approximately 8 feet at normal pool.
	2. RESERVOIR SHORELINE	Wooded.
	3. RESERVOIR SLOPES	Shallow slopes.
	4. ACCESS ROADS	Access via parking lot downstream of the dam.
	5. SECURITY DEVICES	Locked gates.
	6. WATER PUBLIC HAZARDS & PROTECTION	Buoys installed upstream of the dam.
	7. LAND-SIDE PUBLIC HAZARDS & PROTECTION	Warning signs installed at the abutments and locked gates.
	8. VANDALISM OR TRESPASS	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO      WHAT: n/a
	9. AVAILABILITY OF PLANS	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO      DATE: 1989-1991
	10. AVAILABILITY OF DESIGN CALCS	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO      DATE: 1989-1991
	11. AVAILABILITY OF EAP/LAST UPDATE	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO      DATE: 12/1/2024
	12. AVAILABILITY OF O&M MANUAL	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO      DATE: 6/17/2019 with 9/4/2020 amendment
	13. CARETAKER/OWNER AVAILABLE	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO      DATE: 8/12/2025
	14. CONFINED SPACE ENTRY REQUIRED	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO      PURPOSE: n/a
ADDITIONAL COMMENTS: Raceway Channel Bank (left of the Raceway Channel) Upstream of the raceway closure structure there is: missing mortar between masonry joints near the normal pool level with minor vegetation growth, and vegetation above the masonry wall. Downstream of the raceway closure structure is a utility pole leaning toward the raceway channel.		
Since the last Phase 1 inspection in 2023, three new staff gages have been installed at and near the dam: ( 1 ) on the right upstream training wall, (2) on the left raceway channel wall upstream of the raceway closure structure (on the concrete patch), and (3) on the right training wall downstream of the raceway stoplog sluice structure.		

NAME OF DAM: <u>Woods Pond Dam</u>		STATE ID #: <u>1-2-150-11</u>			
INSPECTION DATE: <u>August 12, 2025</u>		NID ID #: <u>MA00731</u>			
<b>PRIMARY SPILLWAY</b>					
AREA INSPECTED	CONDITION	OBSERVATIONS	NO ACTION	MONITOR	REPAIR
SPILLWAY	1. SPILLWAY TYPE	Concrete overflow weir.	X		
	2. WEIR TYPE	Ogee-shaped.	X		
	3. SPILLWAY CONDITION	No noted deficiencies such as spalling or cracking, however mossy growth (1)		X	
	4. TRAINING WALLS	Minor cracking and efflorescence in the left and right training walls, similar to previous inspections. (2)		X	
	5. SPILLWAY CONTROLS AND CONDITION	None - overflow weir.	X		
	6. UNUSUAL MOVEMENT	None observed.	X		
	7. APPROACH AREA	Housatonic River, clear. Buoys installed upstream of the dam.	X		
	8. DISCHARGE AREA	Housatonic River, clear.	X		
	9. DEBRIS	None observed.	X		
		There were no obvious signs of scour or erosion at the toe of the spillway. The toe of	X		
		the spillway was probed for signs of undermining, with no significant areas of	X		
		undermining observed.	X		
ADDITIONAL COMMENTS: (1) hindered observation of surface conditions. (2) Right downstream training wall has historical orange staining and minor deterioration around a horizontal joint. Condition appears stable and is similar to that observed in previous inspections. The joint was wet at the time of inspection.  River flow was diverted through the raceway closure structure, allowing dewatered inspection of the downstream face of the spillway.					

NAME OF DAM: <u>Woods Pond Dam</u>		STATE ID #: <u>1-2-150-11</u>			
INSPECTION DATE: <u>August 12, 2025</u>		NID ID #: <u>MA00731</u>			
<b>AUXILIARY SPILLWAY (N/A)</b>					
AREA INSPECTED	CONDITION	OBSERVATIONS	NO ACTION	MONITOR	REPAIR
SPILLWAY	1. SPILLWAY TYPE				
	2. WEIR TYPE				
	3. SPILLWAY CONDITION				
	4. TRAINING WALLS				
	5. SPILLWAY CONTROLS AND CONDITION				
	6. UNUSUAL MOVEMENT				
	7. APPROACH AREA				
	8. DISCHARGE AREA				
	9. DEBRIS				
	ADDITIONAL COMMENTS: _____ _____ _____ _____ _____ _____ _____ _____ _____ _____				

NAME OF DAM: <u>Woods Pond Dam</u>		STATE ID #: <u>1-2-150-11</u>			
INSPECTION DATE: <u>August 12, 2025</u>		NID ID #: <u>MA00731</u>			
<b>OUTLET WORKS</b>					
AREA INSPECTED	CONDITION	OBSERVATIONS	NO ACTION	MONITOR	REPAIR
<b>OUTLET WORKS</b>	1. TYPE	Stoplog controlled raceway closure structure.	X		
	2. INTAKE STRUCTURE	Raceway closure structure (upstream control). Sheetpiles wall immediately upstream. (1)		X	X
	3. TRASHRACK	None.	X		
	4. PRIMARY CLOSURE	Steel and concrete stoplogs with small gap between the first and second stoplog to allow inspection spillway downstream face and crest.	X		
	5. SECONDARY CLOSURE	None. See Downstream area for raceway stoplog sluice structure (downstream control).	X		
	6. CONDUIT	N/A. Raceway channel downstream.	X		
	7. OUTLET STRUCTURE/HEADWALL	Sheetpiles wall immediately upstream; good condition. See "Embankment (U/S Slope)".	X		
	8. EROSION ALONG TOE OF DAM	None observed.	X		
	9. SEEPAGE/LEAKAGE	See "Downstream Area".	X		
	10. DEBRIS/BLOCKAGE	None observed.			
	11. UNUSUAL MOVEMENT	None observed.	X		
	12. DOWNSTREAM AREA	See "Downstream Area".	X		
	13. MISCELLANEOUS	Uppermost stoplog removed (lifted above pool level) to lower pool and support dewatered spillway inspection. Contractor (LB Corp) reported no issues with stoplog operation. Stoplog slots appeared clear.	X		
ADDITIONAL COMMENTS: <u>(1) The ladders on either side of the raceway closure structure downstream training walls have bent ladder rungs; left side, third ladder rung and the right side, first ladder rung (Monitor). Upstream of outlet works bank consists of vertical concrete and masonry wall. Mortar is missing from the wall near the normal pool level and vegetation growth is present at top of wall (Repair).</u>					

NAME OF DAM: <u>Woods Pond Dam</u>		STATE ID #: <u>1-2-150-11</u>			
INSPECTION DATE: <u>August 12, 2025</u>		NID ID #: <u>MA00731</u>			
<b>CONCRETE/MASONRY DAMS (CREST)</b>					
AREA INSPECTED	CONDITION	OBSERVATIONS	NO ACTION	MONITOR	REPAIR
CREST	TYPE	Concrete with sheetpiles walls.	X		
	SURFACE CONDITIONS	Good condition.	X		
	CONDITIONS OF JOINTS	Good condition.	X		
	UNUSUAL MOVEMENT	None observed.	X		
	HORIZONTAL ALIGNMENT	No unusual movement or misalignment observed.	X		
	VERTICAL ALIGNMENT	No unusual movement or misalignment observed.	X		
		This checklist sheet applies to the "right abutment section" (non-overflow gravity section) and to the "left abutment section" (concrete-filled cellular sheetpile between spillway and raceway closure structure).			
ADDITIONAL COMMENTS: <u>(1) growth between. See "Primary Spillway".</u> <div style="border-bottom: 1px solid black; height: 15px; margin-top: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-top: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-top: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-top: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-top: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-top: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-top: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-top: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-top: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-top: 5px;"></div>					



NAME OF DAM: <u>Woods Pond Dam</u>		STATE ID #: <u>1-2-150-11</u>			
INSPECTION DATE: <u>August 12, 2025</u>		NID ID #: <u>MA00731</u>			
<b>CONCRETE/MASONRY DAMS (DOWNSTREAM FACE)</b>					
AREA INSPECTED	CONDITION	OBSERVATIONS	NO ACTION	MONITOR	REPAIR
D/S FACE	TYPE	Concrete with sheetpiles walls.	X		
	SURFACE CONDITIONS	Good condition.	X		
	CONDITIONS OF JOINTS	Good condition.	X		
	UNUSUAL MOVEMENT	None observed.	X		
	ABUTMENT CONTACT	Good condition. No signs of seepage, movement, etc.	X		
	LEAKAGE	None observed.	X		
		A gap between riprap stones at the downstream toe of the right non-overflow section		X	
		riprap was observed. The gap measured approximately 2.5 feet in diameter, 2 feet deep,		X	
		and was probed upstream (towards the gravity section) to about 1-foot deep. This		X	
		observation is similar to past inspections.		X	
		This checklist sheet applies to the "right abutment section" (non-overflow			
		gravity section) and to the "left abutment section" (concrete-filled cellular sheetpile			
		between spillway and raceway closure structure).			
ADDITIONAL COMMENTS: _____ _____ _____ _____ _____ _____ _____ _____ _____ _____					

NAME OF DAM: <u>Woods Pond Dam</u>		STATE ID #: <u>1-2-150-11</u>			
INSPECTION DATE: <u>August 12, 2025</u>		NID ID #: <u>MA00731</u>			
<b>CONCRETE/MASONRY DAMS (UPSTREAM FACE)</b>					
AREA INSPECTED	CONDITION	OBSERVATIONS	NO ACTION	MONITOR	REPAIR
U/S FACE	TYPE	Sheetpiles surrounded by riprap on the left; riprap on the right.	X		
	SURFACE CONDITIONS	Mostly covered by sheetpiles / riprap. No indications of deterioration.	X		
	CONDITIONS OF JOINTS	Mostly covered by sheetpiles / riprap. No indications of deterioration.	X		
	UNUSUAL MOVEMENT	None observed.	X		
	ABUTMENT CONTACTS	Good condition. No signs of erosion, movement, etc.	X		
		This checklist sheet applies to the "right abutment section" (non-overflow gravity section) and to the "left abutment section" (concrete-filled cellular sheetpile between spillway and raceway closure structure).			
ADDITIONAL COMMENTS: _____ _____ _____ _____ _____ _____ _____ _____ _____ _____					



## **APPENDIX D – PREVIOUS REPORTS & REFERENCES**



## PREVIOUS REPORTS AND REFERENCES

The following is a list of reports that were located during the file review or were referenced in previous reports.

1. Woods Pond Dam Quarterly Inspection/Evaluation Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, May 20, 2025.
2. Woods Pond Dam Quarterly Inspection/Evaluation Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, February 11, 2025.
3. Woods Pond Dam Quarterly Inspection/Evaluation Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, November 19, 2024.
4. Woods Pond Dam Quarterly Inspection/Evaluation Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, September 3, 2024.
5. Woods Pond Dam Dewatered Spillway Inspection prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, July 31, 2024.
6. Woods Pond Dam Quarterly Inspection/Evaluation Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, May 21, 2024.
7. Woods Pond Dam Quarterly Inspection/Evaluation Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, February 24, 2024.
8. Woods Pond Dam Post-Storm Inspection Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, December 21, 2023.
9. Woods Pond Dam Phase I Inspection/Evaluation Report (2023) prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, November 2023.
10. Woods Pond Dam Quarterly Inspection/Evaluation Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, August 17, 2023.
11. Woods Pond Dam Post-Storm Inspection Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, July 17, 2023.
12. Woods Pond Dam Quarterly Inspection/Evaluation Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, May 30, 2023.
13. Woods Pond Dam Quarterly Inspection/Evaluation Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, February 2, 2023.
14. Woods Pond Dam Quarterly Inspection/Evaluation Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, November 21, 2022.
15. Woods Pond Dam Quarterly Inspection/Evaluation Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, September 6, 2022.
16. Woods Pond Dam Dewatered Spillway Inspection prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, August 17, 2022.
17. Woods Pond Dam Quarterly Inspection/Evaluation Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, June 27, 2022.
18. Woods Pond Dam Quarterly Inspection/Evaluation Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, March 4, 2022.
19. Woods Pond Dam Phase I Inspection/Evaluation Report (2021) prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, November 2021.





20. Woods Pond Dam Quarterly Inspection/Evaluation Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, May 19, 2021.
21. Woods Pond Dam Quarterly Inspection/Evaluation Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, March 10, 2021.
22. Woods Pond Dam Quarterly Inspection/Evaluation Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, December 10, 2020.
23. Woods Pond Dam Quarterly Inspection/Evaluation Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, August 7, 2020.
24. Woods Pond Dam Quarterly Inspection/Evaluation Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, May 8, 2020.
25. Woods Pond Dam Quarterly Inspection/Evaluation Report prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, February 12, 2020.
26. Woods Pond Dam Phase I Inspection/Evaluation Report (2019) prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, November 2019.
27. Woods Pond Dam Phase I Inspection/Evaluation Report (2016) prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, December 2016.
28. Woods Pond Dam Phase I Inspection/Evaluation Report (2014), prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, November, 2014.
29. Woods Pond Dam Phase I Inspection/Evaluation Report (2012), prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, December, 2012.
30. Woods Pond Dam Phase I Inspection/Evaluation Report (2009) prepared for General Electric Company, Pittsfield, MA by GZA GeoEnvironmental, Inc., Norwood, MA, July 2010.
31. Woods Pond Dam Structural Integrity Assessment and Inspection/Evaluation Report (2007) prepared for General Electric Company, Pittsfield, MA by MWH, Chicago, IL, November 2007.
32. Emergency Action Plan for Woods Pond Dam, prepared for General Electric Company, Pittsfield, MA by MWH, Chicago, IL, July 2008.
33. Operations & Maintenance Plan for Woods Pond Dam, prepared for General Electric Company, Pittsfield, MA by MWH, Chicago, IL, September 2006.
34. Woods Pond Dam Structural Integrity Assessment Report (2005) prepared for General Electric Company, Pittsfield, MA by MWH, Chicago, IL, April 2006.
35. Woods Pond Dam Structural Integrity Assessment Report (2004) prepared for General Electric Company, Pittsfield, MA by MWH, Chicago, IL, February 2005.
36. Woods Pond Dam Structural Integrity Assessment Report (2002), prepared for General Electric Company, Pittsfield, MA by MWH, Chicago, IL, May 2003.
37. Letter to Andrew Silfer, General Electric Project Coordinator from Dale C. Young, Lead Administrative Trustee of The Trustees of The Commonwealth of Massachusetts Executive Office of Environmental Affairs, July 9, 2001.
38. Woods Pond Dam Structural Integrity Assessment Report (2000), prepared for General Electric Company, Pittsfield, MA by Harza Engineering Company, Chicago, IL, January 2001.
39. Railroad Design and Rehabilitation (2000), Technical Instructions TI 850-02 by U. S. Army Corps of Engineers, March 2000.



40. Downstream Raceway Embankment Slope Stability Analysis, prepared for General Electric Company, Pittsfield, MA by Harza Engineering Company, Chicago, IL, March 2000.
41. Woods Pond Dam Inspection Report (1998), prepared for General Electric Company, Pittsfield, MA by Harza Engineering Company, Chicago, IL, March 1999.
42. Inspection/Evaluation Report for Woods Pond Dam, prepared for Massachusetts Department of Environmental Management, Office of Dam Safety, by Root Engineering, based on inspection conducted on May 27, 1998 (report undated).
43. First Annual Inspection Report of Woods Pond Dam, prepared for General Electric Company, Pittsfield, MA by Harza Engineering Company, Chicago, IL, March 1991.
44. General Design Report for Woods Pond Dam Rehabilitation, prepared for General Electric Company, Pittsfield, MA by Harza Engineering Company, Chicago, IL, April 1989.
45. Phase II Investigation Report at Woods Pond Dam, Lee, Massachusetts, prepared for General Electric Company, Pittsfield, MA by Harza Engineering Company, Chicago, IL, June 1988.
46. Hydraulic Design Criteria, Sheet 712-1, Stone Stability – Velocity vs. Stone Diameter, by U. S. Army Corps of Engineers, revised 9-70.
47. Phase I Inspection Report, National Dam Inspection Program, Woods Pond (Valley Mill) Dam MA00731, Lee-Lenox, Massachusetts, prepared by the United States Army Corps of Engineers, New England Division, Waltham, MA, July 1979.

The following reference was utilized during the preparation of this report and the development of the recommendations presented herein.

1. Commonwealth of Massachusetts Regulations, 302 CMR 10.00 – Dam Safety, Effective 02/10/17.



## **APPENDIX E – DEFINITIONS**



## COMMON DAM SAFETY DEFINITIONS

For a comprehensive list of Dam engineering terminology and definitions refer to 302 CMR10.00 Dam Safety, or other reference published by FERC, Dept. of the Interior Bureau of Reclamation, or FEMA. Please note should discrepancies between definitions exist, those definitions included within 302 CMR 10.00 govern for Dams located within the Commonwealth of Massachusetts.

### Orientation

Upstream – Shall mean the side of the Dam that borders the impoundment.

Downstream – Shall mean the high side of the Dam, the side opposite the upstream side.

Right – Shall mean the area to the right when looking in the downstream direction.

Left – Shall mean the area to the left when looking in the downstream direction.

### Dam Components

Dam – Shall mean any artificial barrier, including appurtenant works, which impounds or diverts water.

Embankment – Shall mean the fill material, usually earth or rock, placed with sloping sides, such that it forms a permanent barrier that impounds water.

Crest – Shall mean the top of the Dam, usually provides a road or path across the Dam.

Abutment – Shall mean that part of a valley side against which a Dam is constructed. An artificial abutment is sometimes constructed as a concrete gravity section, to take the thrust of an arch Dam where there is no suitable natural abutment.

Appurtenant Works – Shall mean structures, either in Dams or separate therefrom, including but not be limited to, spillways; reservoirs and their rims; low-level outlet works; and water conduits including tunnels, pipelines, or penstocks, either through the Dams or their abutments.

Spillway – Shall mean a structure over or through which water flows are discharged. If the flow is controlled by gates or boards, it is a controlled spillway; if the fixed elevation of the spillway crest controls the level of the impoundment, it is an uncontrolled spillway.

### Size Classification

(as listed in Commonwealth of Massachusetts, 302 CMR 10.00 Dam Safety)

Large – structure with a height greater than 40 feet or a storage capacity greater than 1,000 acre-feet.

Intermediate – structure with a height between 15 and 40 feet or a storage capacity of 50 to 1,000 acre-feet.

Small – structure with a height between 6 and 15 feet and a storage capacity of 15 to 50 acre-feet.

Non-Jurisdictional – structure less than 6 feet in height or having a storage capacity of less than 15 acre-feet.





## **Hazard Classification**

(as listed in Commonwealth of Massachusetts, 302 CMR 10.00 *Dam Safety*)

High Hazard (Class I) – Shall mean Dams located where failure will likely cause loss of life and serious Damage to home(s), industrial or commercial facilities, important public utilities, main highway(s) or railroad(s).

Significant Hazard (Class II) – Shall mean Dams located where failure may cause loss of life and Damage to home(s), industrial or commercial facilities, secondary highway(s) or railroad(s), or cause the interruption of the use or service of relatively important facilities.

Low Hazard (Class III) – Dams located where failure may cause minimal property Damage to others. Loss of life is not expected.

## **General**

EAP – Emergency Action Plan – Shall mean a predetermined (and properly documented) plan of action to be taken to reduce the potential for property Damage and/or loss of life in an area affected by an impending Dam failure.

O&M Manual – Operations and Maintenance Manual; Document identifying routine maintenance and operational procedures under normal and storm conditions.

Normal Pool – Shall mean the elevation of the impoundment during normal operating conditions.

Acre-foot – Shall mean a unit of volumetric measure that would cover one acre to a depth of one foot. It is equal to 43,560 cubic feet. One million U.S. gallons = 3.068 acre feet.

Height of Dam (Structural Height) – Shall mean the vertical distance from the lowest portion of the natural ground, including any stream channel, along the downstream toe of the Dam to the lowest point on the crest of the Dam.

Hydraulic Height – means the height to which water rises behind a Dam and the difference between the lowest point in the original streambed at the axis of the Dam and the maximum controllable water surface.

Maximum Water Storage Elevation – means the maximum elevation of water surface which can be contained by the Dam without overtopping the embankment section.

Spillway Design Flood (SDF) – Shall mean the flood used in the design of a Dam and its appurtenant works particularly for sizing the spillway and outlet works, and for determining maximum temporary storage and height of Dam requirements.

Maximum Storage Capacity – The volume of water contained in the impoundment at maximum water storage elevation.

Normal Storage Capacity – The volume of water contained in the impoundment at normal water storage elevation.



## **Condition Rating**

Unsafe – Major structural\*, operational, and maintenance deficiencies exist under normal operating conditions.

Poor – Significant structural\*, operation and maintenance deficiencies are clearly recognized for normal loading conditions.

Fair – Significant operational and maintenance deficiencies, no structural deficiencies. Potential deficiencies exist under unusual loading conditions that may realistically occur. Can be used when uncertainties exist as to critical parameters.

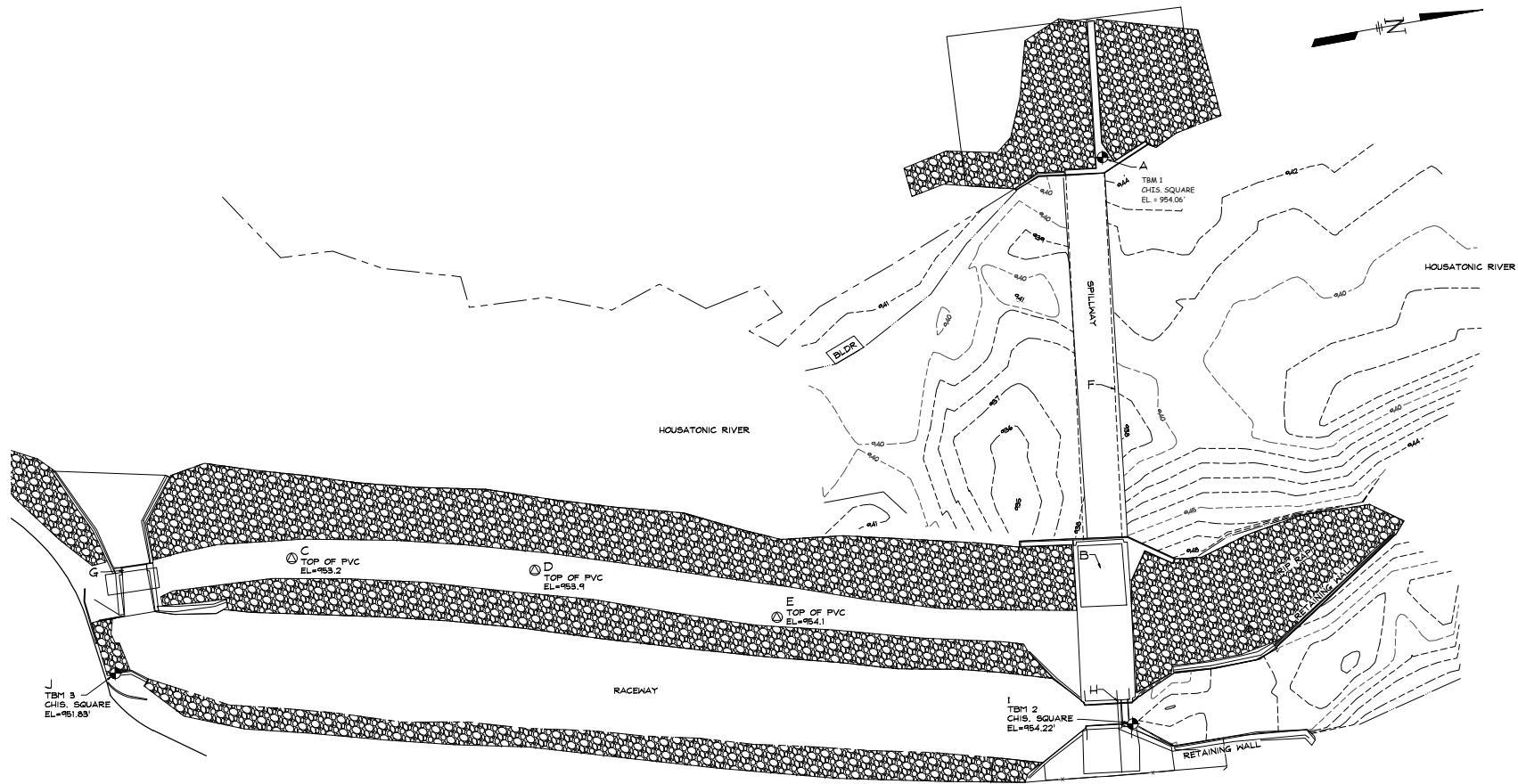
Satisfactory – Minor operational and maintenance issues. Infrequent hydrologic events could result in deficiencies.

Good – No existing or potential deficiencies recognized. Safe performance is expected under all loading including SDF.

\* Structural deficiencies include but are not limited to the following:

- Excessive uncontrolled seepage (e.g., upwelling of water, evidence of fines movement, flowing water, erosion, etc.).
- Missing riprap with resulting erosion of slope.
- Sinkholes, particularly behind retaining walls and above outlet pipes, possibly indicating loss of soil due to piping, rather than animal burrows.
- Excessive vegetation and tree growth, particularly if it obscures features of the Dam and the Dam cannot be fully inspected.
- Deterioration of concrete structures (e.g., exposed rebar, tilted walls, large cracks with or without seepage, excessive spalling, etc.).
- Inoperable outlets (gates and valves that have not been operated for many years or are broken).

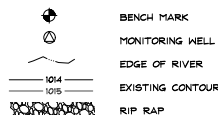
## **APPENDIX F – SUPPORTING DOCUMENTATION**



KEY ELEVATIONS TO BE MONITORED

POINT	LOCATION	2020 FORESIGHT SURVEY	2025 HILL SURVEY
A	RIGHT SIDE SPILLWAY ABUTMENT (CHISELED SQUARE)	954.06	954.07
B	LEFT SIDE SPILLWAY ABUTMENT (CENTER OF CONCRETE)	954.2	954.2
C	BH-1 (ON RACEWAY EMBANKMENT)	952.8	952.8 GRND 953.2 TOP PVC
D	BH-2 (ON RACEWAY EMBANKMENT)	953.7	953.6 GRND 953.9 TOP PVC
E	BH-3 (ON RACEWAY EMBANKMENT)	953.8	953.8 GRND 954.1 TOP PVC
F	SPILLWAY MIDPOINT	948.4	948.4
G	SILL OF RACEWAY STOPLOG SLUISE STRUCTURE	941.6	941.6 CONC BELOW STOPLOG 943.0 BOTTOM SILL 951.9 TOP SILL
H	SILL OF RACEWAY CLOSURE STRUCTURE	944.4	944.2 BOTTOM SILL 954.2 TOP SILL
I	RIGHT SIDE PLATFORM (CHISELED SQUARE TBM 2)	954.22	954.22 (HELD)
J	DOWNSTREAM END OF RACEWAY (CHISELED SQUARE)	951.83	951.82

LEGEND



GENERAL PLAN NOTES:

- THE FIELD SURVEY WAS CONDUCTED IN JULY 2025 BY HILL-ENGINEERS, ARCHITECTS, PLANNERS, INC.
- CONTOURS AND ELEVATIONS SHOWN HEREON ARE BASED ON THE EXISTING BENCHMARKS SHOWN ON A TOPOGRAPHIC SURVEY PLAN, PREPARED FOR GZA GEOENVIRONMENTAL, INC., BY FORESIGHT LAND SERVICES, DATED OCTOBER 6, 2020.
- THE HORIZONTAL DATUM IS BASED ON MASSACHUSETTS STATE PLANE COORDINATE SYSTEM NAD83, WHICH WAS OBTAINED BY GPS OBSERVATION.



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Adams, MA 01220  
(413) 743-0013  
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PRELIMINARY

NOT TO BE  
USED FOR  
CONSTRUCTION

REV	DESCRIPTION	DATE	BY	CHKD
1	ISSUED FOR REVIEW AND COMMENT	8/1/25		

GZA GEOENVIRONMENTAL, INC.  
248 VANDERBILT AVENUE  
NORWOOD, MA 02062

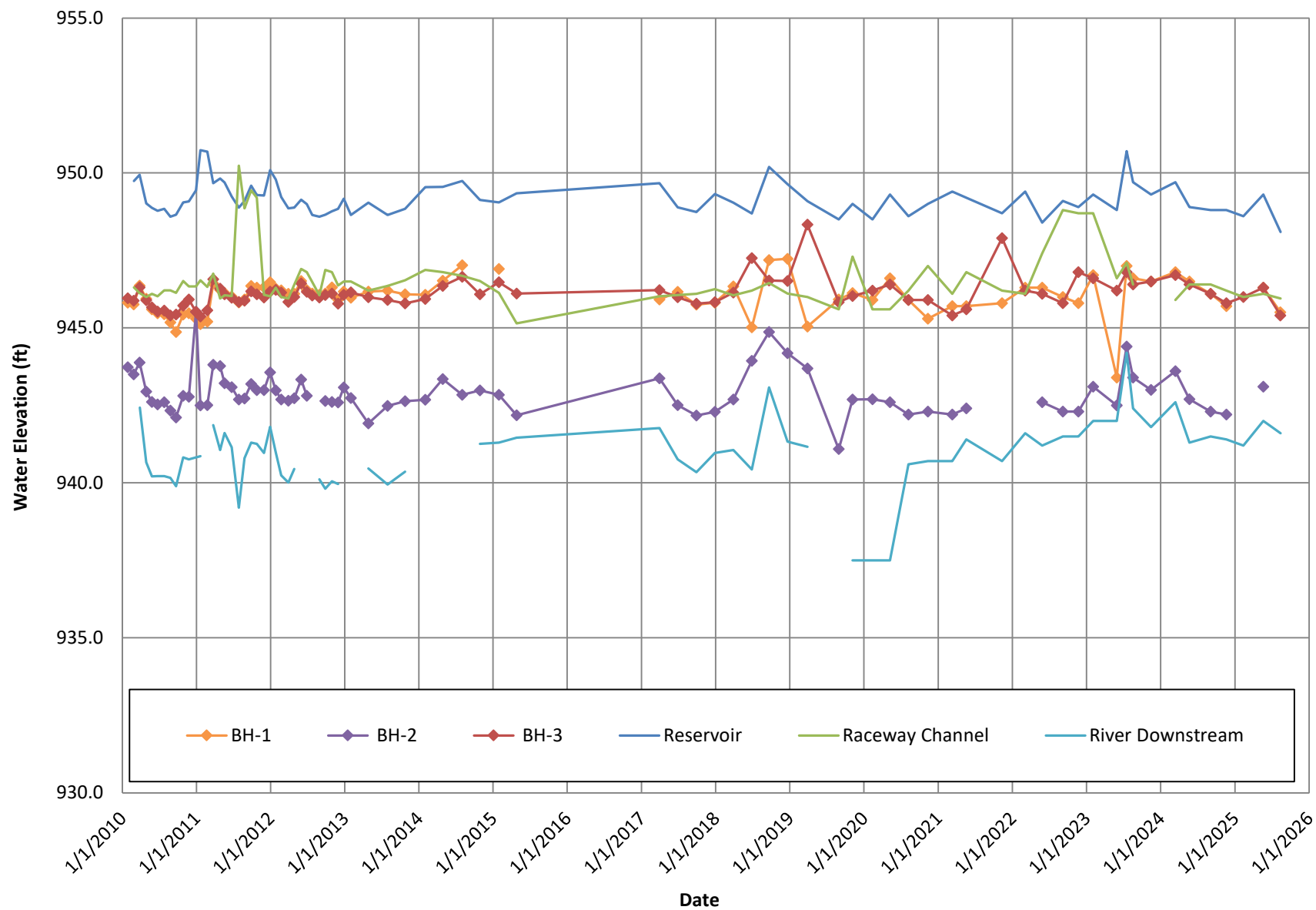
DRAWING TITLE  
SITE PLAN  
PROJECT DESCRIPTION  
WOODS POND  
LENOX, MA

DRAWN BY	JPM
DATE DRAWN	8/1/25
SCALE	1" = 20'
APP'D BY	
CAD CODE	SRV-2625-002-HOODS-CB.DWG
GRAPHIC SCALE	0 20 40
PROJECT NUMBER	SRV-2625-002
DRAWING NUMBER	REV.
CX101	A



## **APPENDIX G – WATER LEVEL RECORDS**

## Woods Pond Dam - Observation Wells Data



## **APPENDIX H – MAINTENANCE TRACKING TABLE**

**Woods Pond Dam – Maintenance Tracking Table – Dated November 10, 2025 (based on the 2025 Phase 1 inspection on August 12, 2025)**

<b>Condition Observed Requiring Monitoring or Maintenance/Repair</b>	<b>When Observed</b>	<b>Proposed Response</b>	<b>Status</b>
1. A gap of approximately 2.5 feet in diameter and two feet deep was observed between riprap stones at the downstream toe of the right embankment (non-overflow gravity section).	Since the 2025 second quarterly inspection.	Monitor the area for visual changes in size and signs of seepage.	The gap will continue to be monitored during quarterly and biennial inspections.
2. Minor efflorescence was observed on the right and left upstream training walls.	Since the first quarterly inspection of 2020.	Monitor efflorescence.	Efflorescence is regularly monitored during quarterly and biennial inspections.
3. Minor exposed concrete aggregate and orange staining were observed around a horizontal joint at the right downstream training wall near the water level, with some accompanying dampness; no sign of soil migration observed.	Minor exposed concrete aggregate has been observed since the 2019 Phase 1 Inspection and orange staining for many years (when spillway flow allows observation).	Monitor the area, including during low-flow conditions.	This area is monitored during quarterly and biennial inspections. It will be specifically monitored during the next dewatered spillway inspection.
4. Missing mortar in the stone masonry joints near the water level was observed at the left raceway channel wall upstream of the raceway closure structure on either side of the “concrete patch.” Significant vegetation growth was also observed above this left upstream wall.	2025 Phase 1 Inspection	Repair the missing mortar and remove the significant vegetation.	Repairs will be made to the left raceway channel wall upstream of the raceway closure structure prior to the next Phase 1 inspection, to be conducted in 2027. In addition, the vegetation will be removed during regularly scheduled maintenance activities in 2026.



**Woods Pond Dam – Maintenance Tracking Table – Dated November 10, 2025 (based on the 2025 Phase 1 inspection on August 12, 2025)**

<b>Condition Observed Requiring Monitoring or Maintenance/Repair</b>	<b>When Observed</b>	<b>Proposed Response</b>	<b>Status</b>
5. On the eastern side slope of the raceway (outside GE property), a utility pole appears to be leaning toward the channel, and vegetation downstream of that pole is unmaintained.	Since the 2019 Phase 1 inspection.	Monitor the pole and vegetation; cut the vegetation if it falls into the raceway channel and impedes flow.	This area is monitored during quarterly and biennial inspections. The vegetation will be cut if it falls into the raceway channel and impedes flow.
6. Deterioration of the left wall of the raceway embankment upstream of the dam appears to have worsened since the last Phase 1 inspection in 2023. Additionally, vegetation at the interface between the left wall and grouted riprap was observed.	2025 Phase 1 Inspection	Repair the deterioration and remove the vegetation.	Repairs will be made to the left wall of the raceway embankment upstream of the Dam prior to the next Phase 1 inspection, to be conducted in 2027. In addition, the vegetation will be removed during regularly scheduled maintenance activities in 2026.
7. The stone masonry wall in the raceway approach area continues to be tilted.	Since the 2019 Phase 1 inspection.	Monitor the tilt of the masonry wall, but change the method of monitoring to improve inspector safety.	This tilt will continue to be monitored during quarterly and biennial inspections. The improved monitoring method will be initiated by the end of the second quarter in 2026.
8. Relatively small gaps were observed in the upstream slush-grouted riprap of the raceway embankment.	Since the first quarterly inspection of 2024.	Repair / fill-in the gaps in the slush-grouted riprap.	Repairs will be made to the slush-grouted riprap on the raceway embankment crest upstream of the dam prior to the next Phase 1 inspection, to be conducted in 2027.
9. There is a vertical crack and horizontal area of eroded concrete in the right upstream training wall of the raceway stoplog sluice structure (downstream control structure).	2025 Phase 1 Inspection	Monitor the cracks and area of eroded concrete.	This area will continue to be monitored during quarterly and biennial inspections, specifically during low-flow conditions.

**Woods Pond Dam – Maintenance Tracking Table – Dated November 10, 2025 (based on the 2025 Phase 1 inspection on August 12, 2025)**

<b>Condition Observed Requiring Monitoring or Maintenance/Repair</b>	<b>When Observed</b>	<b>Proposed Response</b>	<b>Status</b>
10. Minor cracking, efflorescence, and damp areas were observed on the right and left downstream training walls of the raceway stoplog sluice structure (downstream closure).	Since the 2019 Phase 1 inspection for the right wall and since the second quarterly inspection of 2020 for the left wall (except during periods of high-water flows).	Monitor affected areas.	These conditions are monitored during quarterly and biennial inspections.
11. Minor amount of silt was previously measured in observation well BH-2.	First quarterly inspection of 2024.	Monitor the silt accumulation in observation well BH-2.	Observation well BH-2 was not measured during the 2025 Phase 1 inspection due to a wasp nest in the piping preventing safe access. This condition will be monitored during future quarterly and biennial inspections.
12. Some debris was lodged between the stoplogs at upstream stoplog sluice structure.	Debris was periodically observed to be caught in the stoplogs since 2020, but not during the 2025 Phase 1 inspection.	Monitor area and clear additional debris if impeding raceway inflow.	Debris not present during the 2025 Phase 1 inspection due to operation of the stop logs.
13. Some debris was lodged on the top of the stoplogs of the downstream stoplog sluice structure.	Debris was periodically observed to be caught on the top of the stoplogs since 2020, but not during the 2025 Phase 1 inspection.	Monitor area and clear additional debris if impeding raceway inflow.	Debris not present during the 2025 Phase 1 inspection due to operation of the stop logs.

Woods Pond Dam – Maintenance Tracking Table – Dated November 10, 2025 (based on the 2025 Phase 1 inspection on August 12, 2025)			
Condition Observed Requiring Monitoring or Maintenance/Repair	When Observed	Proposed Response	Status
14. Logs were observed lodged on the crest of the spillway (one log) and in the upstream safety buoys (one log).	Logs were periodically observed caught on the spillway crest or on the upstream buoys since 2020, but not during the 2025 Phase 1 inspection.	Monitor and clear if impeding flow.	Logs were not observed on the crest of the spillway during the 2025 Phase 1 inspection. That inspection was conducted under low-flow conditions. The logs either washed downstream or were removed prior to the inspections. Logs will continue to be removed if observed to be impeding flow over the spillway.
15. Graffiti were observed on the uppermost raceway closure stoplog, evidencing trespassing. There was no other evidence of vandalism.	Since the third quarterly inspection of 2024, but not during the 2025 Phase 1 inspection.	Continue to monitor for signs of trespassing.	Not observed during the 2025 Phase 1 inspection; the stop logs were removed during that inspection. This condition will continue to be monitored during subsequent quarterly and biennial inspections.
Note: Gray-shaded cells indicate that a listed condition had been addressed or was not present during the current inspection.			