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February 2, 2012

Commonwealth of Massachusetts
Department of Conservation and Recreation
Office of Dam Safety-Inspections Unit
180 Beaman Street
West Boylston, MA 01583

RE: Follow-up Inspection
Saw Mill Pond Dam MA00098
Brookfield, MA

To: Office of Dam Safety:

Fuss & O'Neill, Inc. has completed the Follow-up Inspection for Saw Mill Pond Dam as required by the Dam Safety Regulations and the Dam Safety Order. The inspection was performed on January 11, 2012. Our Follow-up assessment of the dam indicates the overall condition of the dam to be in Poor Condition.

The Follow-up Inspection Form describing the current condition and deficiencies of the dam is attached. Please contact us, if you have any questions regarding this report.

Sincerely,

Christopher J. Cullen, P.E.
Project Manager

Attachment: Follow-up Inspection Form
Locus Map
Site Sketch
Photographs

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Connecticut
Massachusetts
New York
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South Carolina

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

Dam Name: Saw Mill Pond Dam
Dam Owner: Town of Brookfield
Nat. ID Number: MA00098
Hazard Potential: Significant
Location of Dam (town): Brookfield
Coordinate location (lat, long): 42d 11' 54" N, 72d 06' 07" W
Date of Inspection: 1/11/12
Weather: Overcast, 30 degrees F

I. Previous Inspection date/Overall Condition:

- The dam was found to be in Poor Condition at the time of the previous Phase I Inspection performed on July 20, 2010.

II. Previous Inspection Deficiencies

- The deficiencies identified in that report included the following:

a) Ability of spillway to pass the design (100-year) flood is unknown.
b) No visible low-level outlet control.
c) Debris collecting on spillway.
d) Severe deterioration of the visible portion of the low-level outlet pipe.
e) Dense vegetation, steep slopes, and evidence of sloughing/scour on the downstream face and right abutment of the dam.
f) Deteriorated downstream stone masonry wall, including formation of cracks and undermining of the toe.
g) Vegetation growing from cracks in the upstream stone masonry walls.
h) Sinkhole on the crest of the dam over a deteriorated road drainage CMP (Road drainage Corrugated Metal Pipes (CMPs) are located within the dam embankment).
i) Minor downstream toe seepage; seepage through weep holes in the bridge abutment.

- **Overall Condition of Dam at the Time of the Current Follow-up Inspection:** The current condition of the dam remains Poor. Current conditions that contribute to a Poor condition rating are as follows:

a. Trees, woody vegetation on dam and abutments.
b. Low level outlet pipe severely deteriorated.
c. Downstream masonry wall missing base stones.
d. Sinkhole with soil loss from the dam embankment above CMP pipe in dam.
e. Erosion of downstream right channel.

- **Comparison of Current Conditions to Conditions Listed in Previous Phase I Inspection Report:**
  The dam appears to be the same as previously inspected.

- **Dam Safety Orders:**
  Certificate of Non-Compliance and Dam Safety Order dated December 1, 2011 issued by the Massachusetts DCR Office of Dam Safety.

- **Maintenance:**
  No maintenance has been performed to date. The Town has recently created a maintenance plan for the dam.

- **Recommendations:**
  - Assess the adequacy of the spillway to safely convey the spillway design flood.
  - A detailed structural stability analysis should be performed for the embankment and non-embankment portions of this Dam.
  - Remove road drainage CMPs from the dam embankment and repair sinkhole.
  - Replace the low-level outlet.
  - Remove woody vegetation from dam embankment and the downstream area within 20 feet of the dam toe.
  - Remove trees and vegetation from upstream stone masonry walls.
  - Re-grade portions of the embankment crest where undulations are present.
  - Establish vegetative cover in bare areas.

- **Other Comments or Observations:**
  On site conversation with Town officials indicates they will be selecting a consultant to perform a Phase II investigation in the near future.

- **Updated Site Sketch with Photo Locations:**
  An updated site sketch with photo locations is attached.

- **Updated Photos:**
  Updated photographs of the dam are attached.

- **Copy of Locus Map from Phase I Report:**
  A Locus Map is attached

- Other applicable attachment: None.

FIGURES

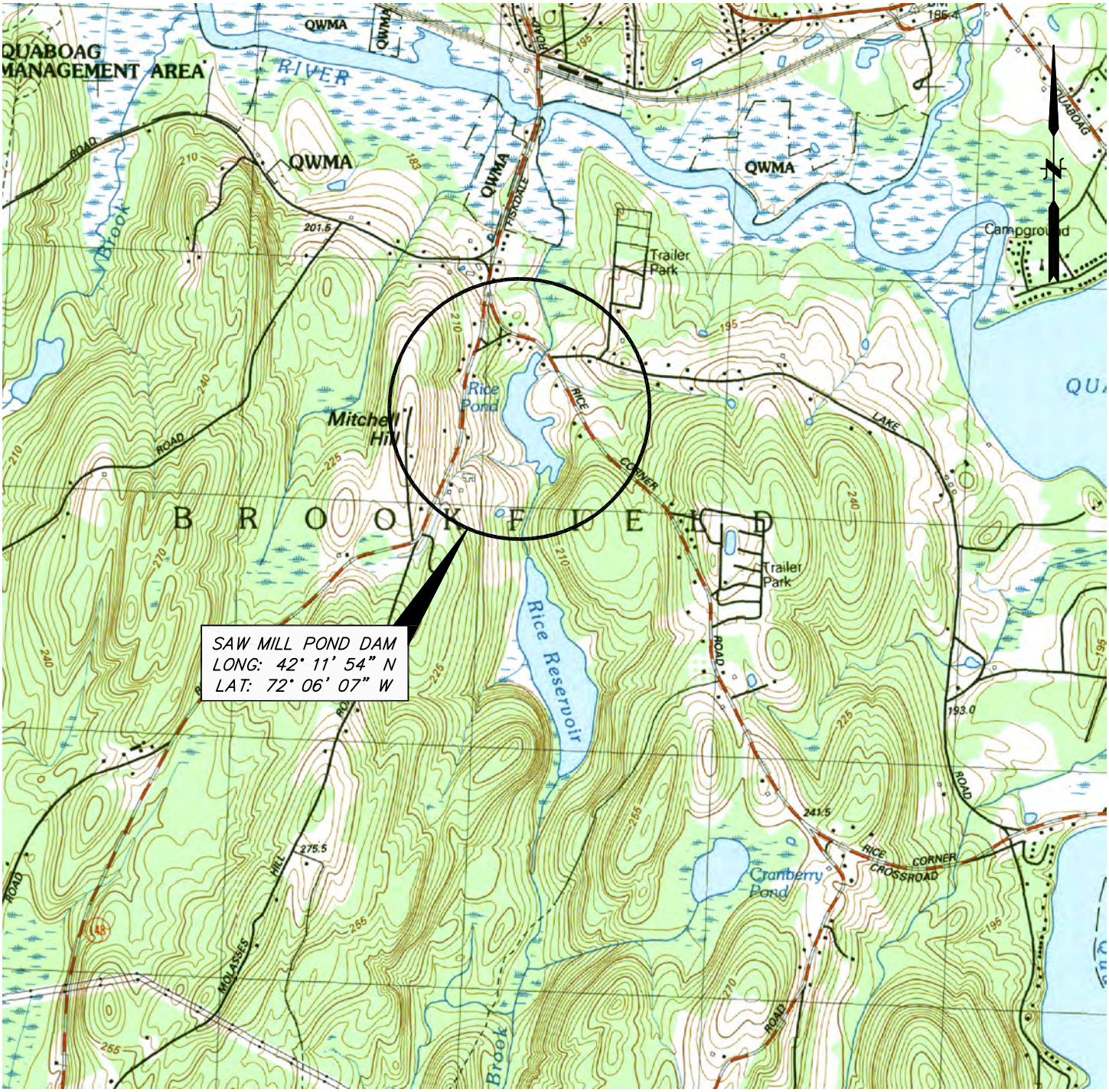
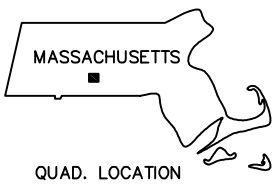


IMAGE REFERENCE:

THIS MAP WAS PREPARED FROM USGS TOPOGRAPHIC MAPPING OBTAINED FROM THE OFFICE OF GEOGRAPHIC AND ENVIRONMENTAL INFORMATION (MASSGIS), COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS.

TOPOGRAPHIC 7.5 X 15 MIN. SERIES, EAST BROOKFIELD, MA QUADRANGLE, 1979

CONTOUR INTERVAL: 3 METERS



SCALE: HORZ.: 1" = 2000' VERT.: DATUM: HORZ.: VERT.: NGVD 0 1000 2000 GRAPHIC SCALE	WWW.FandO.COM FUSS & O'NEILL *Disciplines to Deliver* 78 INTERSTATE DR WEST SPRINGFIELD, MA 01089 413.452.0445	TOWN OF BROOKFIELD LOCUS PLAN SAW MILL POND DAM (NAT. ID # MA00098) BROOKFIELD MASSACHUSETTS	PROJ. No.: 20100674.A10 DATE: JULY 2010 FIG 1

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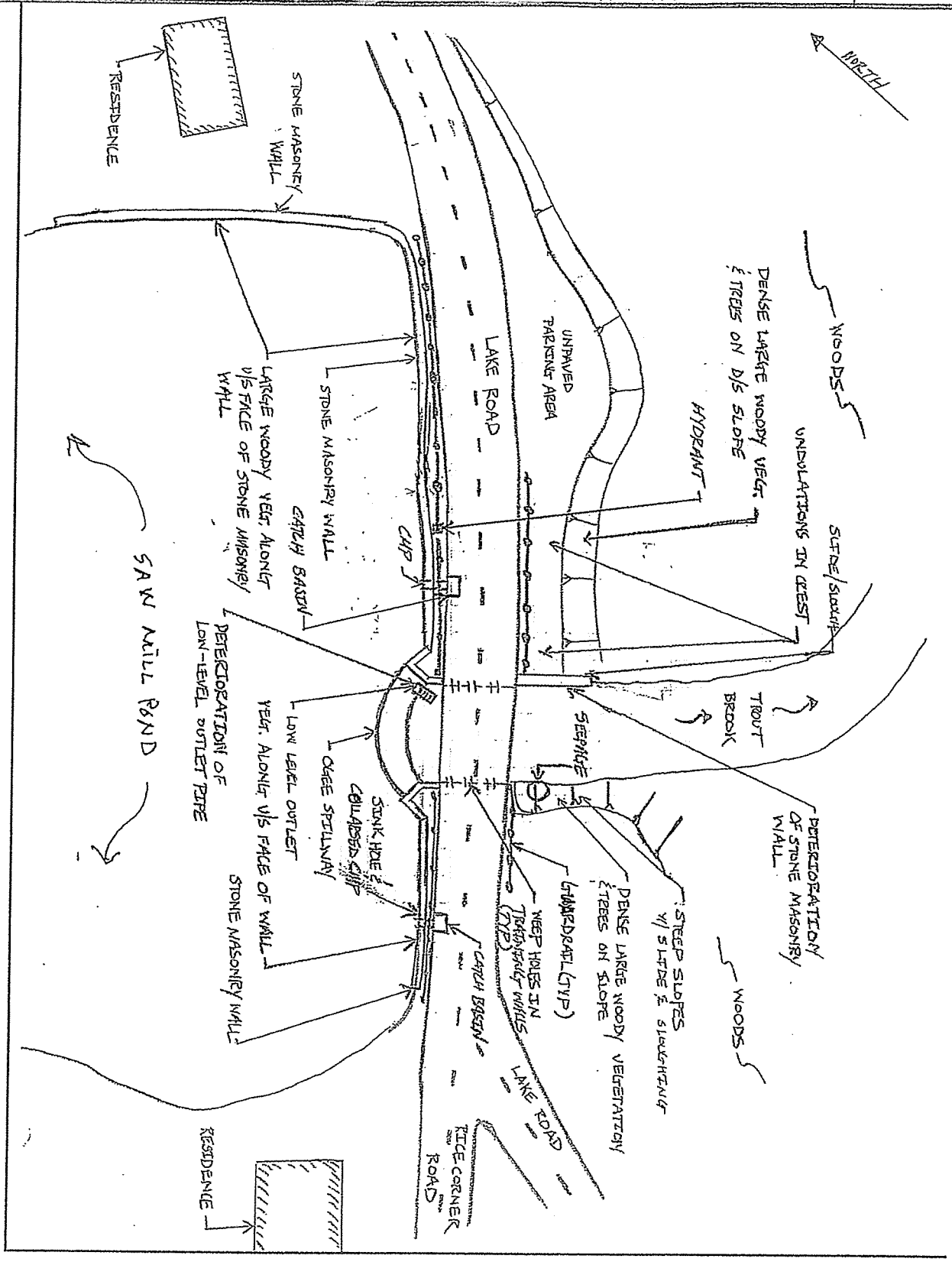
PREPARED BY	DATE	CHECKED BY	DATE	PROJECT NO.
CJC	1/11/12			20100674.A20

SHEET NO. 1 of 1

SAW MILL POND DAM - SITE SKETCH



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PREPARED BY	DATE	CHECKED BY	DATE	PROJECT NO.
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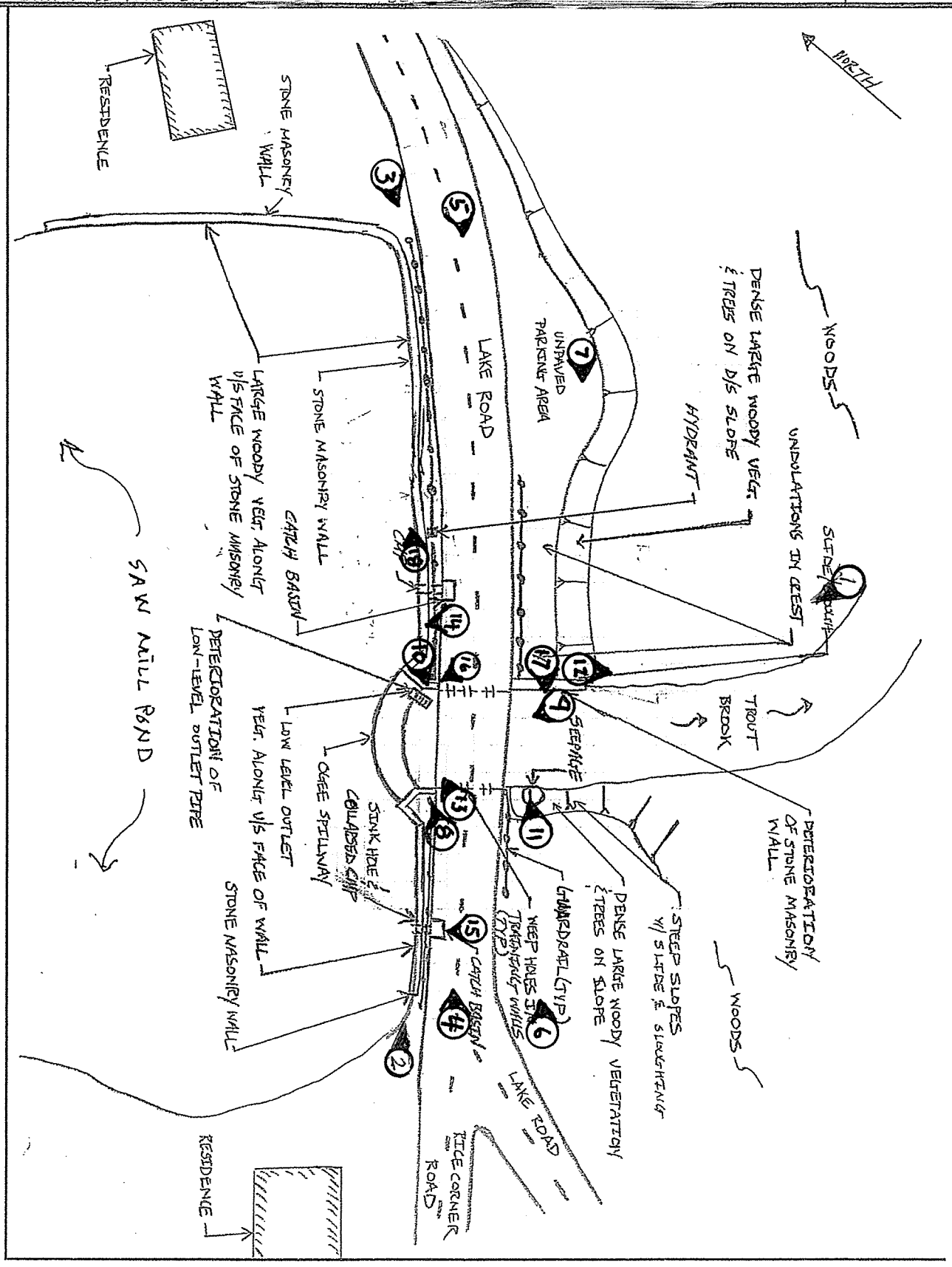
PHOTO LOCATIONS

SHEET NO. 1 of 1

SAW MILL POND DAM -



PHOTOGRAPHS

Photo 1: Overview of dam from downstream

Photo 2: Overview of upstream face from right abutment

Photo 3: Overview of upstream face from left abutment

Photo 4: Overview of dam crest from right abutment

Photo 5: Overview of dam crest from left abutment

Photo 6: Overview of downstream face from right abutment

Photo 7: Overview of downstream face from left abutment

Photo 8: Overview of spillway from upstream

Photo 9: Overview of spillway from downstream (tailrace or channel area)

Photo 10: Overview of right training wall

Photo 11: Overview of left training wall-voids at base, trees on abutment

Photo 12: Overview of downstream channel

Photo 13: Outlet inlets and discharge points

Photo 14: Overview of reservoir

Photo 15: Areas of specific deficiencies-Sinkhole over CMP

Photo 16: Areas of specific deficiencies-Low level outlet pipe rusted through

Photo 17: Areas of specific deficiencies-Trees, erosion on right embankment

Photo 18: Areas of specific deficiencies-Trees growing from wall