To: DCR, Office of Dam Safety - Permits Section

251 Causeway Street, Suite 600

Boston, MA 02114

#### DAM SAFETY CERTIFICATE OF COMPLETION

Dam Owner/Applicant

Name: Cedar Meadow Lake Watershed District

Representative: Tommy Lee

Address: 61 Fairview Dr Leicester MA 01524

Phone: (508) 892-3750

Fax:

Email Address: tlee@wjgei.com

Project

Project location Town/City: Leicester MA Dam name: Cedar Meadow Lake Dam National Dam ID Number: MA00984 State Dam ID Number: 3-14-151-8

Nature of Dam Safety Improvements: Reduction of Leakage

Chapter 253 Permit date of issue: November 9, 2012 revised March 14, 2013

Chapter 253 Permit expiration date: March 14, 2015 (Revised for addition grouting work)

Permit Recorded at \_\_Worcester \_\_Registry of Deeds
Dam Parcel Registry of Deeds Book Number: 18866
Dam Parcel Registry of Deeds Page Number: 0367
Recorded Permit Registry of Deeds Book Number: 49952
Recorded Permit Registry of Deeds Page Number: 94

Project completion date:

Engineer

Company Name: Lenard Engineering, Inc.
Representative: Roger Hurlbut / Ken Hodgson

Address: 19 Midstate Drive, Suite 200, Auburn, MA 01501

Phone: (860) 379-6669 Fax: (860) 379-1272

Email Address: Hurlbut@lenard-eng.com

Contractor

Company Name: RH White Representative: John Kelley

Address: 41 Central Ave PO Box 404, Auburn. MA 01501

Phone: (508) 832-3295

Fax:

Email Address: JKelly@Rhwhite.com

DAM SAFETY CERTIFICATE OF COMPLETION Revised March 2007



#### Brief description of project and dates of construction:

\_\_Work consisted of excavating down to original low permeability core and adding additional material to increase elevation above normal spillway elevation. Neat cement and chemical grouting was also undertaken around the left spillway training wall and gate house foundation. The annulus between the pvc sliplined outlet conduit and the original stone conduit with neat cement grout was completed.

Statement of project completion in accordance with plans, specifications, dam safety permit conditions and standard construction practices:

\_The initial phases of the seepage reduction as permitted by the 253 permit were completed in substantial accord with the approved plans and specifications.

### By Contractor

Print name and title: John J K

General SuperhtudenT

Signature and date:

1-21-11

### By Engineer

Print name, title and PE stamp here: \_\_Roger Hurlbut Project Engineer CT 0014893

Signature and date: +

1/14/16

By Dam Owner/Applicant

Print name and title:

DISTRICT CHAIN

Signature and date:

1/27/16

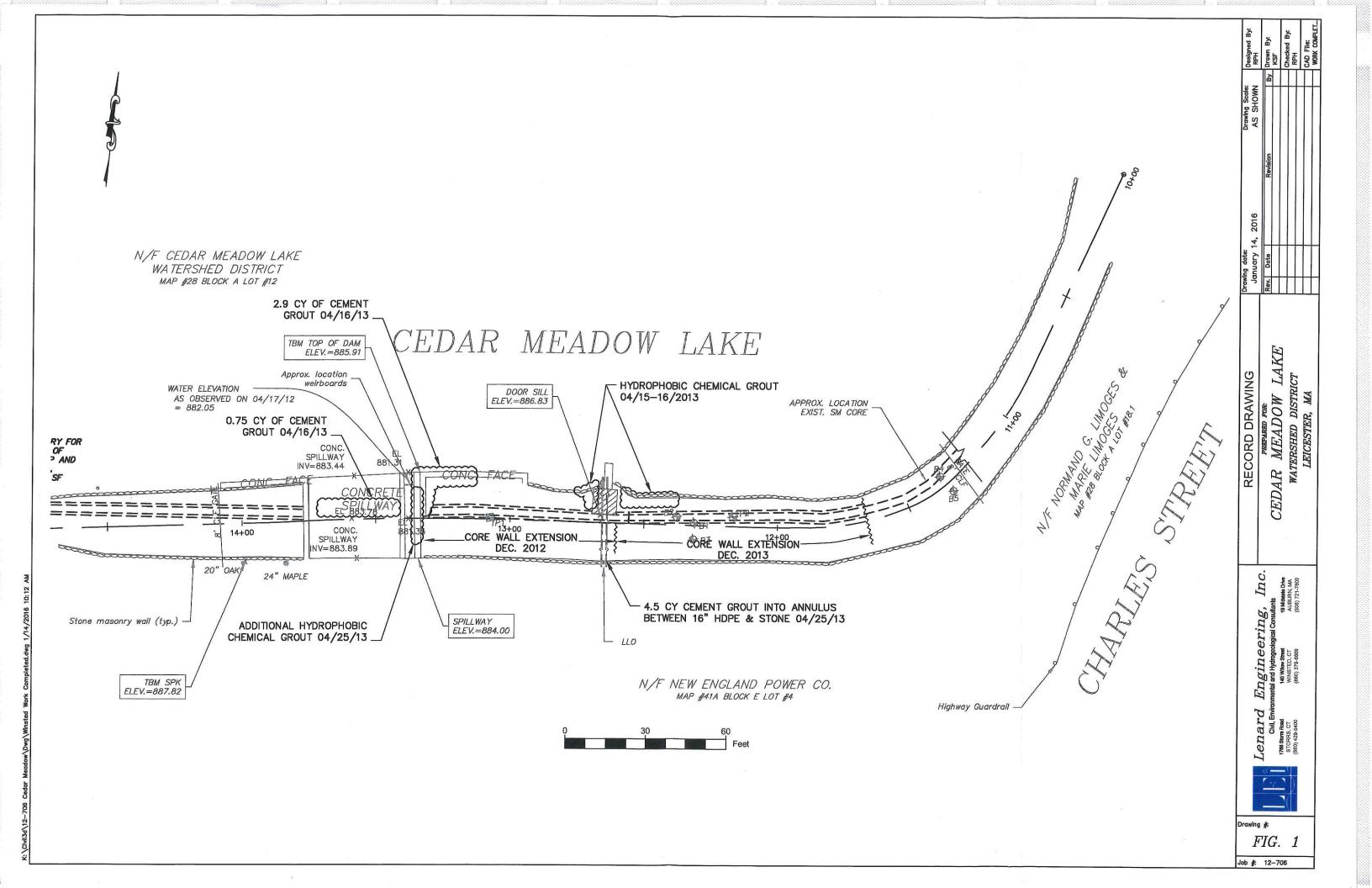




Photo 1 December, 2012

Excavation along crest of dam, looking east from vicinity of spillway sluice wall. Bottom of excavation is original core material. Note overburden on left side of photo (upstream side of dam). Core material was consistently at elevation 882 (1.45+/- feet lower than\_the downstream lip of the spillway). Excavated trench was 7-8 ft wide & 4 ft deep and approximately 35 feet long at the time the photo was taken.



Photo 2 December, 2012

Core cap material being installed in 7+/- ft wide trench. Material had consistency of playdough, but slightly more cohesive. The material had enough cohesion, that after being dumped from the delivery truck it retained the truck body shape with 3.5 to 4 ft high vertical side walls. Geotextile fabric was installed along both upstream and downstream walls of trench to prevent migration or piping of core material. Prior to installation of the core cap, an elevated keyway of original material was formed to prevent a horizontal flow path from forming.



Photo 3 Grouted Annulus between 16-in HDPE & Stone Culvert



Photo 4 December 2013

December 2012 core wall extension as exposed during December 2013 work. Material placed in December 2013 had a reddish color and not grayish as installed in December of 2012.