

The State of New Hampshire

DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

APPROVAL LETTER

March 17, 2016

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Town of Exeter Dept. of Public Works c/o Paul Vlasich 13 Newfields Road Exeter, NH 03833

RE: NH DES Wetlands Bureau File No. 2015-00887, Great Dam, Exeter

Dear Mr. Vlasich:

Attached please find Wetlands Permit 2015-00887 to dredge and fill a total of 34,200 square feet within the bed and banks of the Exeter River to include 23,520 square feet of permanent impact and 10,680 square feet of temporary impact to remove Great Dam and its appurtenances, reshape the river channel to ensure migratory fish passage through the restored reach, install a dry hydrant at Franklin Street, and modify the existing municipal water intake to maintain the existing water supply withdrawal.

The decision to approve this application was based on the following findings:

- 1. The Exeter River Great Dam does not comply with DES Dam Safety regulations as indicated in a Letter of Deficiency issued by DES on July 25, 2000 to the Town of Exeter.
- 2. The Exeter River Great Dam Removal Feasibility and Impact Analysis (VHB, 2013) explored and identified alternatives to resolving the dam deficiencies.
- 3. Following this study, in March 2014, the Town of Exeter voted to approve the Great Dam Removal Project.
- 4. The structure was built in 1914 and has deteriorated with age and poses a safety hazard and liability for the Town of Exeter.
- 5. The Exeter-Squamscott River is a major tributary to Great Bay and has a total of eight tributaries above the Great Dam.
- 6. This is a minimum impact project per Administrative Rule Env-Wt 303.04(t) Restoration of altered or degraded wetlands provided the project:
- (1) Receives financial support and direct supervision of a New Hampshire state agency, the US Environmental Protection Agency, the US Army Corps of Engineers, the US Natural Resources Conservation Service, or the US Fish and Wildlife Service;
- (2) Shall not be used to perform restoration in cases where the applicant is subject to a removal or restoration order;
- (3) Is not located in or adjacent to prime wetlands; and
- (4) Does not meet the criteria of Env-Wt 303.02(k).
- 7. The dam removal and stream restoration has been overseen by NHDES Watershed Management Bureau, NH Fish and Game (NHFG), and The National Oceanic and Atmospheric Administration (NOAA).

- 8. The need for the proposed impacts has been demonstrated by the applicant per Env-Wt 302.01 as this project is being conducted to remove an unsafe dam, however, the focus of the project is also to restore the impaired surface water created by the dam and to improve fish passage within the Exeter-Squamscott River.
- 9. The applicant has provided evidence which demonstrates that this proposal is the alternative with the least adverse impact to areas and environments under the department's jurisdiction per Env-Wt 302.03. There will be limited direct impacts to the river by removal of accumulated sediments, existing concrete, and the creation of the new stream channel and banks. It is expected that any indirect impacts to wetlands from lowering the proposed water levels may change wetland cover types.
- 10. The applicant has demonstrated by plan and example that each factor listed in Env-Wt 302.04(a) Requirements for Application Evaluation, has been considered in the design of the project.
- 11. In accordance with Env-Wt 304.04, the applicant has received written concurrence from seven of eight abutters whose properties are within 20-feet of the proposed impacts.
- 12. The applicant requested a waiver of Env-Wt 304.04(a) as the applicant was unable to obtain written concurrence from the abutter identified as Exeter Tax Map 072 Lot 037.
- 13. DES hereby grants the waiver of Env-Wt 304.04(a) in accordance with Env-Wt 204.04(a) as granting the request will not result in an adverse effect to the environment or natural resources of the state, public health, or public safety; or an impact on abutting properties that is more significant than that which would result from complying with the rule. Furthermore, granting the request is consistent with the intent and purpose of the rule being waived. Strict compliance with the rule will provide no benefit to the public. 14. The applicant has agreed to install a riprap revetment and granite buttress along the length of the abutter's wall at additional expense. Crack gauge monitoring and vibration monitoring will occur throughout the project to ensure the structural integrity of the abutter's wall is not compromised.
- 15. Furthermore, the Town of Exeter has obtained liability insurance and the selected contractor will also be required to provide proof of liability insurance.
- 16. The Exeter River from Great Dam to Pickpocket Dam is listed as an impaired water under Section 303(d) of the Clean Water Act due to dissolved oxygen saturation levels. The removal of the dam is expected to improve dissolved oxygen levels.
- 17. The applicant has conferred with NH Fish and Game and NOAA to implement fish passage monitoring to ensure passage goals are being met.

Any person aggrieved by this decision may appeal to the N.H. Wetlands Council ("Council") by filing an appeal that meets the requirements specified in RSA 482-A:10, RSA 21-O:14, and the rules adopted by the Council, Env-WtC 100-200. The appeal must be filed **directly with the Council within 30 days** of the date of this decision and must set forth fully **every ground** upon which it is claimed that the decision complained of is unlawful or unreasonable. Only those grounds set forth in the notice of appeal can be considered by the Council. Information about the Council, including a link to the Council's rules, is available at http://nhec.nh.gov/ (or more directly at http://nhec.nh.gov/wetlands/index.htm.) Copies of the rules also are available from the DES Public Information Center at (603) 271-2975.

Your permit must be signed, and a copy must be posted in a prominent location on site during construction. If you have any questions, please contact me at (603) 559-1515 or via email at eben.lewis@des.nh.gov.

Sincerely,

Eben M. Lewis Compliance Specialist DES Wetlands Bureau

enclosures

ec: Peter Walker, Principal, VHB

Kristen Murphy, Exeter Conservation Commission

William Meserve, Chair, Exeter-Squamscott River Local Advisory Committee Cheri Patterson, Supervisor of Marine Programs, NH Fish and Game Department

Eric Hutchins, Fisheries Biologist, NOAA

Melinda Bubier, Wetland Mitigation Program Specialist, DES Wetlands Bureau

Lori Sommer, Wetland Mitigation Coordinator, DES Wetlands Bureau

Frank D. Richardson, Ph.D., Senior Wetlands Inspector, DES Wetlands Bureau

Collis G. Adams, Administrator, DES Wetlands Bureau

Ted Diers, Administrator, DES Watershed Management Bureau

Keyin Lucey, NHDES Coastal Program

Sally Soule, NH DES Watershed Assistance Section

Gregg Comstock, P.E., Supervisor, DES Water Quality Planning Section

James R. Weber, P.E., DES Dam Bureau



The State of New Hampshire

DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

NOTICE TO RECIPIENTS OF MINIMUM IMPACT N.H. WETLANDS PERMITS

Your permit was approved by the New Hampshire Wetlands Bureau as a minimum impact project, and your project is automatically approved under the Army Corp's New Hampshire Programmatic General Permit.

For the purpose of the NH PGP, Minimum Impact Projects do not include new construction of:

Dams,

Dikes,

water withdrawal or diversion projects which require fill in wetlands or surface waters, wetlands restoration projects, or any projects which involve work in other than low flow conditions (July 1-September 30),

any projects involving more than 3,000 square feet of a water body or wetland fill and secondary impacts.

Also, not included under Minimum Impact Projects are those projects that include the reconstruction or replacement of currently unserviceable structures/fills. The projects must be reviewed through the screening procedures for minor impact projects. The activities in section 10 waters not regulated by the Wetlands Bureau, formerly authorized under the Nationwide Permit Program and listed in Appendix A of this document are designated non-reporting activities.

These approvals do not relieve you from obtaining any necessary local permits that may be required by your town.

If you have any questions, feel free to give us a call at 603-271-2147

This notice was sent with minimum impact permit



The State of New Hampshire

DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

WETLANDS AND NON-SITE SPECIFIC PERMIT 2015-00887 PAGE 1 OF 4

Permittee:

Town Of Exeter

Dept Of Public Works

c/o Paul Vlasich 13 Newfields Rd

Exeter, NH 03833

Project Location:

Chestnut Street, Exeter

Waterbody:

Exeter River

APPROVAL DATE: 03/17/2016

EXPIRATION DATE: 03/17/2021

CONDIONS

Based upon review of the above referenced application, in accordance with RSA 482-A and RSA 485-A:17, a Wetlands Permit and Non-Site Specific Permit was issued. This permit shall not be considered valid unless signed as specified below.

PERMIT DESCRIPTION: Dredge and fill a total of 34,200 square feet within the bed and banks of the Exeter River to include 23,520 square feet of permanent impact and 10,680 square feet of temporary impact to remove Great Dam and its appurtenances, reshape the river channel to ensure migratory fish passage through the restored reach, install a dry hydrant at Franklin Street, and modify the existing municipal water intake to maintain the existing water supply withdrawal.

THIS APPROVAL IS SUBJECT TO THE FOLLOWING PROJECT SPECIFIC CONDITIONS:

- 1. All work shall be in accordance with plans by VHB dated December 7, 2015, as received by the NH Department of Environmental Services (DES) on December 10, 2015.
- 2. The permittee shall schedule a pre-construction meeting with DES Land Resources Management Program staff, US Army Corps of Engineers (ACOE), Town of Exeter, NOAA Fisheries Service (NOAA), and the NH Fish and Game Department (NHFGD) to occur at least 48 hours prior to the start of any work authorized by this permit to review the conditions of this wetlands permit. The meeting may be held on-site or at the DES offices in Concord or the Pease International Tradeport. The meeting shall be attended by the permittee; the professional engineer(s); wetlands scientist(s), environmental consultant(s), and/or qualified professional(s); and the contractor(s) responsible for performing the work.
- 3. The permittee shall notify the DES Wetlands Program in writing of the qualified professionals, as applicable, that will be responsible for monitoring and ensuring that the restoration/enhancement/construction areas are constructed in accordance with the approved plans. 4. The dam removal/stream restoration project shall be performed and/or supervised by the qualified professional with expertise and demonstrated success in the field of stream restoration. The permittee shall re-notify the DES Wetlands Program if the identity of the qualified professional changes during the project.
- 5. The qualified professional shall monitor the project during construction to verify that all work is done in accordance with the approved plans and narratives, adequate siltation and erosion controls are properly implemented, and no water quality violations occur.
- 6. Any further alteration of areas on this property that are subject to RSA 482-A jurisdiction will require a new application and further permitting.

WETLANDS AND NON-SITE SPECIFIC PERMIT 2015-00887 PAGE 2 OF 4

- 7. All development activities associated with this project shall be conducted in compliance with applicable requirements of RSA 483-B and N.H. Code Admin. Rules Env-Wq 1400 during and after construction.
- 8. No person undertaking any activity shall cause or contribute to, or allow the activity to cause or contribute to, any violations of the surface water quality standards in RSA 485-A and Env-Wq 1700.
- 9. The permittee shall notify the NH Fish and Game Department as required by RSA 211:11 prior to drawing down or dewatering the resource.
- 10. Work shall be carried out in a time and manner to avoid disturbances to migratory waterfowl breeding and nesting areas as well as migratory fish spawning and rearing habitat.
- 11. The time of year the work should be conducted is between July 1 and October 31 (or before freeze occurs). If work is not completed by October 31 then the river must be drawn down to its lowest capacity before freeze occurs then work can continue until March 1st.
- 12. The primary construction work in the first year shall be done during drawdown or in the dry only. Consultation with ACOE, DES, NOAA, and NHFGD shall determine methodology for in-river work for additional fish passage construction thereafter if needed.
- 13. Appropriate siltation and erosion controls shall be in place prior to construction, shall be maintained during construction, and shall remain until the area is stabilized. Temporary erosion controls shall be removed once the area has been stabilized.
- 14. The qualified professional shall inspect the construction areas and submit a monitoring report to DES after a rain event of 1/2" or greater within a 24 hour period during restoration activities. The monitoring reports shall include, but not be limited to, documentation of erosion control deployment, construction sequencing, construction activities and status of construction at time of initial monitoring report. Photographs taken from previously established locations should depict all stages of restoration sequencing.
- 15. Appropriate turbidity controls shall be installed prior to construction, shall be maintained during construction such that no turbidity escapes the immediate dredge area, and shall remain until suspended particles have settled and water at the work site has returned to normal clarity.
- 16. Work shall be conducted in a manner so as to minimize turbidity and sedimentation to surface waters and wetlands.
- 17. All dredged and excavated material and construction-related debris shall be placed outside of the areas subject to RSA 482-A.
- 18. The contractor responsible for completion of the work shall use techniques described in the New Hampshire Stormwater Manual, Volume 3, Erosion and Sediment Controls During Construction (December 2008).
- 19. Construction equipment shall be inspected daily for leaking fuel, oil, and hydraulic fluid prior to entering surface waters or wetlands or operating in an area where such fluids could reach groundwater, surface waters, or wetlands.
- 20. The permittee's contractor shall maintain appropriate oil/diesel fuel spill kits on site that are readily accessible at all times during construction, and shall train each operator in the use of the kits.
- 21. All refueling of equipment shall occur outside of surface waters or wetlands during construction. Machinery shall be staged and refueled in upland areas only, unless approved by NHDES prior to refueling.
- 22. Faulty equipment shall be repaired immediately prior to entering areas that are subject to RSA 482-A jurisdiction.
- 23. Any turbid discharge from dewatering of work areas shall be to sediment basins that are: a) located in uplands; b) lined with hay bales or other acceptable sediment trapping liners; c) set back as far as possible from wetlands and surface waters, with a preferred undisturbed vegetated buffer of at least 50 feet and a minimum undisturbed vegetative buffer of 20 feet, unless an alternative location is approved by NHDES. Non-turbid water may be discharged directly to the river without treatment.

WETLANDS AND NON-SITE SPECIFIC PERMIT 2015-00887 PAGE 3 OF 4

- 24. Prior to commencing work on a substructure located within surface waters, the permittee or permittee's contractors shall construct a cofferdam to isolate the substructure work area from the surface waters. The permittee or permittee's contractor shall provide DES with provisions for avoiding/preventing cofferdam failure. If failure occurs a monitoring report shall be submitted to DES to include, but not limited to, documentation of reason of failure, damage to restoration site and environmental damage throughout range of affected area, construction sequencing, construction activities and status of construction at time of initial monitoring report. Photographs taken from previously established locations should depict all stages of restoration sequencing.

 25. Cofferdams shall not be installed during periods of high flow, whether due to seasonal runoff or precipitation. Once the cofferdam is fully deployed and effective and reviewed by DES, confined work can proceed without restriction.
- 26. The temporary cofferdam shall be entirely removed within two (2) days after work within the cofferdam is completed and water has returned to normal clarity.
- 27. Precautions shall be taken to prevent import or transport of soil or seed stock containing nuisance or invasive species such as Purple Loosestrife, Knotweed, or Phragmites. The contractor responsible for work shall appropriately address invasive species in accordance with the NHDOT Best Management Practices for Roadside Invasive Plants (2008).
- 28. Area of temporary impact shall be regraded to original contours following completion of work.
- 29. Areas from which vegetation has been cleared to gain access to the site shall be regraded to original contours and seeding with similar native species.
- 30. Within three (3) days of final grading or temporary suspension of work in an area that is in or adjacent to wetlands or surface waters, all exposed soil areas shall be stabilized by seeding and mulching during the growing season, or if not within the growing season, by mulching with tackifiers on slopes less than 3:1 or jute matting and pinning on slopes steeper than 3:1.
- 31. Where construction activities occur between November 30 and May 1, all exposed soil areas shall be stabilized within one (1) day of establishing the grade that is final or that otherwise will exist for more than five (5) days. Stabilization shall include placing 3-inches of base course gravels, or loaming and mulching with tack or jute matting and pinning on slopes steeper than 3:1.

MONITORING:

- 32. The qualified professional shall submit a follow-up report including photographs of all stages of construction from designated photo stations and an as-built plan, with water depth within the restoration area, which shall be submitted to the DES Wetlands Program within 60 days of final site stabilization.
- 33. The Town of Exeter shall establish and submit to DES for approval at least five (5) permanent monumented cross-sections throughout the stretch of the Exeter River, two of which shall be in locations within 100 feet of the location of the existing dam.
- 34. The restoration shall be monitored for the first three (3) years following the dam removal/stream channel restoration to ensure the maintenance and success of the stream restoration work and successful fish passage. The annual reports shall include cross section data, fish counts at the Pickpocket Dam (provided by NHFGD) and any other notable changes to the project area. 35. Restoration of temporary impact areas shall have at least 75% successful establishment of vegetation after three (3) growing seasons, or they shall be replanted and reestablished in a manner satisfactory to the DES Wetlands Program.
- 36. The Town shall review the project reach during the first three (3) spring anadromous fish migration seasons following completion of the project (i.e., spring 2017) with staff from the NHFGD and NOAA to perform a visual evaluation of fish passage conditions. This review will determine whether any adjustments to boulder cluster placement or river micro-grades are necessary to allow upstream fish passage. If necessary, such adjustments shall be made during low flow conditions in 2017 in accordance with agreed upon methodology by DES, ACOE, NOAA, and NHFGD.

WETLANDS AND NON-SITE SPECIFIC PERMIT 2015-00887 PAGE 4 OF 4

GENERAL CONDITIONS THAT APPLY TO ALL DES WETLANDS PERMITS:

- 1. A copy of this permit shall be posted on site during construction in a prominent location visible to inspecting personnel;
- 2. This permit does not convey a property right, nor authorize any injury to property of others, nor invasion of rights of others;
- 3. The Wetlands Bureau shall be notified upon completion of work;
- 4. This permit does not relieve the applicant from the obligation to obtain other local, state or federal permits, and/or consult with other agencies as may be required (including US EPA, US Army Corps of Engineers, NH Department of Transportation, NH Division of Historical Resources (NH Department of Cultural Resources), NHDES-Alteration of Terrain, etc.);
- 5. Transfer of this permit to a new owner shall require notification to and approval by DES;
- 6. This project has been screened for potential impacts to **known** occurrences of rare species and exemplary natural communities in the immediate area. Since many areas have never been surveyed, or have received only cursory inventories, unidentified sensitive species or communities may be present. This permit does not absolve the permittee from due diligence in regard to state, local or federal laws regarding such communities or species.

7. Review enclosed sheet for status of the US Army Corps of Engineers' federal wetlands permit.

APPROVED: Eben M. Lewis
DES Wetlands Bureau

BY SIGNING BELOW I HEREBY CERTIFY THAT I HAVE FULLY READ THIS PERMIT AND AGREE TO ABIDE BY ALL PERMIT CONDITIONS.

OWNER'S SIGNATURE (required) CONTRACTOR'S SIGNATURE (required)