



The State of New Hampshire  
**DEPARTMENT OF ENVIRONMENTAL SERVICES**



**Thomas S. Burack, Commissioner**

May 16, 2016

Pamela G. Monroe, Administrator  
New Hampshire Site Evaluation Committee  
21 South Fruit Street, Suite 10  
Concord, NH 03301


Re: Joint Application of Northern Pass Transmission, LLC and Public Service  
Company of New Hampshire d/b/a Eversource Energy  
Site Evaluation Committee Docket No. 2015-06

Dear Ms. Monroe:

Please find enclosed the NH Department of Environmental Services (NHDES) progress report that outlines draft permit conditions and additional data requirements needed to make a final decision for the Wetland permit, Alteration of Terrain permit, Shoreland permits, and the 401 Water Quality Certificate. Final permit decisions and conditions will be issued to the Site Evaluation Committee no later than August 15, 2016.

If you have any questions, please contact me at 271-2951 or email at:  
[Rene.Pelletier@des.nh.gov](mailto:Rene.Pelletier@des.nh.gov)

Sincerely,

  
Rene Pelletier, PG  
Assistant Director  
Water Division

cc: Michael J. Iacopino, Counsel NHSEC  
ec: Robert P. Clark, Eversource, Applicant  
Kevin F. McCune, Eversource, Applicant  
Lee Carbonneau, Normandeau Associates, Inc.  
George Dana Bisbee, Devine Millimet  
Thomas Burack, Commissioner, NHDES  
Clark Freise, Asst. Commissioner, NHDES  
Eugene Forbes, Water Division Director, NHDES  
David Keddell, ACOE  
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**WETLANDS BUREAU**  
**MAY 16, 2016 PROGRESS REPORT**

**ADDITIONAL DATA REQUIREMENTS:**

In order for DES to render a decision on your application, the information below must be addressed in full. DES will make a final determination based upon the information provided in your response.

1. It appears that the transmission line could be buried along the NH Route 3 right-of-way (ROW) from Pittsburg to Northumberland to avoid creating a new 32 mile ROW that runs cross-country in a southeasterly direction, almost to the Androscoggin River, only to eventually return due west to the Connecticut River valley. The Route 3 alternative would avoid most of the significant wetland and wildlife impacts in Coös County; therefore, DES review found that this portion of the project does not avoid and minimize wetland impacts to the greatest extent practicable per RSA 482-A and NH Administrative Rule Env-Wt 302.03 and Env-Wt 302.04. Please provide revised plans that consider and utilize the NH Route 3 alternative from Pittsburg to Northumberland.
2. Per Rule Env-Wt 302.04(a)(2) the applicant is required to demonstrate by plan and example that the proposed alternative is the one with the least impact to wetlands or surface waters. It is not clear how the proposed 32 mile new ROW in Coös County avoids surrounding wetlands on a landscape scale when the wetland impact plans only represent wetlands located within the ROW. DES finds that the proposed 32 mile ROW in Coös County is not an alternative with the least impact to wetlands or surface waters.
3. It appears that the new section of ROW in Coös County comes within close proximity to several areas of the Granite Reliable Wind Farm. Cumulative impacts to wetland complexes and stream systems need to be further addressed and evaluated as required under Rule Env-Wt 302.04(a)(16) and (17).
4. Question 2 of the wetland application states 24 miles of the 32 mile new section of ROW will occur within working forests. What are the other land uses in the remaining 8 mile section?
5. Question 10 of the wetland application states that the project will enhance public access for all-terrain vehicle (ATV) trails. Describe the areas where this project will enhance public ATV access, and address whether these new trails impact additional wetlands and surface waters.
6. Will the ROW's be gated with signage to prevent unauthorized access by ATVs or other off-road vehicles? How will enforcement be achieved to prevent rogue ATV use along ROW's or in environmentally sensitive areas?
7. There appears to be a change in use on some forestry access roads, as well as some ATV and snow machine trails, that will require additional permitting. See Rule Env-Wt 303.04(g)(1), which states "access shall not be used for subdivision, development, or other land conversion to non-forestry uses...". Please include in the wetland application any additional wetland impact areas where this change in use occurs. In addition, existing stream crossings may need to be upgraded to meet the stream crossing standards of Chapter Env-Wt 900.
8. Question 19 of the wetland application states that the existing transmission ROW crosses several conservation lands, and that there will be no expansion of clearing within these areas.

How is this being accomplished? Can this be done in other sensitive areas to further avoid and minimize the project related wetland impacts?

9. DES review of the wetland impact plans found that portions of the project did not appear to fully avoid and minimize wetland impacts within the ROW. Please address each of the following plan specific questions:
  - a) On plan sheet 006, temporary impact within wetland PB27 could be avoided by relocating the access road to the southeast, and wetland PB26 avoided by moving the road northwest.
  - b) Plan sheet 007, wetland PB23 could be avoided by moving the road east.
  - c) Plan sheet 008, it appears that Transfer Station 1 could be relocated further east to minimize impacts.
  - d) Sheet 011, the access road could cross wetland CK30 further south, and wetlands CK29 and CK28 could be completely avoided.
  - e) Sheet 012, tower DC-29 could be relocated outside of wetland CK20 (either east or west).
  - f) Sheet 047, shift access road southwest to avoid wetland S37.
  - g) Sheet 055 and 056, towers DC-138 and DC-139 could be relocated east or west to avoid impacts to wetland S2 and S1.
  - h) Sheet 057, towers DC-142 and DC-143 could be shifted west to avoid wetlands DX261 and DX254, respectively.
  - i) Sheet 058, towers DC-144 and DC-145 could be moved east outside of wetlands DX251 and DX250.
  - j) Sheet 059, tower DC-147 could be shifted east to avoid DX241.
  - k) Sheet 074, tower DC-184 could be moved northwest to avoid wetland DX124, and the access road could be moved southwest to avoid wetland DX123.
  - l) Sheet 078, access road could be moved southwest to avoid wetland DX97.
  - m) Sheet 083, move access road east to avoid wetland DX33 and DX32.
  - n) Sheet 091, move road east to avoid wetland M195.
  - o) Sheet 101, tower DC-258 could be moved northwest to further avoid wetland M147.
  - p) Sheet 121, tower DC-306, could be shifted southwest to further avoid wetland DU167
  - q) Sheet 139, the north portion of the access road may not be needed between towers DC-351 and DC-352, as other access points exist. This will reduce impacts to wetland DU36.
  - r) For long stretches of wetland crossings that occur over several thousand linear feet, (e.g. sheets 169 and 170 for wetland SK37, and sheets 231, 232, 233 and 234 for wetland WF59) could different pole technology be employed to allow for longer spans between towers that would further avoid the overall wetland impact?
  - s) Plan sheet 191, tower DC-485 could be moved north to avoid wetland NU30.
  - t) Sheet 262, it appears that there is an existing access road through wetland WF24 that could be used. Why wasn't this considered over the proposed road location?
  - u) Sheet 537, there is an existing road east of the proposed access road that could be used to avoid new impacts to wetland F37.
  - v) Sheet 689, why wouldn't the existing road be used on the west edge of vernal pool DF94 to minimize impacts?
10. Review of the Deerfield Substation plans finds that most of the proposed wetland impacts are for two stormwater ponds; 9,037 square feet and 19,196 square feet respectively. Impacts to naturally-occurring wetlands for stormwater treatment and attenuation are typically not

allowed. It appears that the substation could be shifted further southwest to avoid these wetland areas. Also, the stormwater ponds could be reconfigured to further reduce impacts.

11. The plans for Transition Station #5 propose filling 16,378 square feet of wetland for the yard and a stormwater pond. Similar to the above comment, impacts to naturally-occurring wetlands for stormwater treatment and attenuation are typically not allowed. Given the amount of wetland impacts and the steep slopes in the area, alternative sites should be considered that further avoid wetland impacts.
12. The plans for Transition Station #1 propose 46,132 square feet of wetland and stream impacts for large cuts and fills, as well as a stormwater pond. These impacts are significant and could be avoided by shifting the station further east to reduce or eliminate many of these impacts. Relocating the station should be considered in the overall design to meet Rule Env-Wt 302.03.
13. Provide detailed restoration/planting plans for temporary wetland, stream and vernal pool impact areas that will be adhered to by the selected contractors. Stream banks and wetland restoration areas shall include live stakes and container plantings as well as seed mixes, where applicable.
14. Describe how future maintenance of the structures will be accomplished once the temporary access roads are removed and wetland areas restored.
15. Provide further detail how equipment will access structures that are located in open water and deep water habitats. The plans show access roads through open water areas in several locations where timber matting would be ineffective. Please address alternative access methods for these locations where applicable.
16. The plans do not appear to show all possible staging, storage and laydown areas, some of which the application described as 5 to 50 acres in size. These areas should be represented on the plans in all areas of the project where they occur.
17. Describe how the compaction of soils in laydown areas will be restored to allow for natural infiltration of precipitation. The plans should include notes that describe these restoration activities.
18. Site photographs were not provided for every wetland resource where permanent impacts are proposed - only marked up aerial photographs were provided in several locations. Provide additional on-site wetland photographs where necessary.
19. Three high-quality vernal pools are proposed to be temporarily impacted by the project. Can these temporary impact areas be avoided by making minor plan changes?
20. All wetland areas along the 192 mile corridor are required to be field delineated and classified in accordance with Env-Wt 301.01 and Env-Wt 301.02. Have these requirements been met or did some of the wetland areas get interpreted and identified from aerial photographs?
21. Given the large scale of the project, construction monitoring plans should be developed and included with the application to clarify these requirements to the selected contractors.
22. DES received written comments from the Pemigewasset River Local Advisory Committee (LAC). Please address their concerns and provide a copy of your response to DES.
23. DES has received numerous written comments and concerns from several local Conservation Commissions, including Bethlehem, Easton, Campton, Ashland, Franklin, Bristol, Canterbury, Pembroke, Deerfield, and Raymond. Address each of their concerns and provide a copy of your response to DES.



24. DES received written comments from the Society for Protection of New Hampshire Forests (SPNHF) on April 25, 2016 and the applicant responded directly to SPNHF on April 27, 2016. Several of the concerns raised by SPNHF are similar to questions that DES is requesting clarification on, so be sure to adequately address each question in this request.
25. The application describes Karner blue butterfly egg surveys in July 2015. How will these survey results be utilized to minimize construction impacts?
26. Please include the following construction timing restrictions on the plans to minimize potential impacts to wildlife species, or as recommended by New Hampshire Fish & Game Department (NHFG):
  - a) Avoid summer clearing from May through August in high elevation areas above 2,700 feet in elevation,
  - b) When working near identified Deer Wintering Areas (DWA) or Moose Concentration Areas (MCA), avoid work when deep or crusted snow exists – typically January and February.
  - c) No work shall be done within ¼ mile any active raptor nests from March 1st to July 31st.
  - d) Avoid significant mast habitat whenever possible.
  - e) If an area is found to be inhabited by denning Canada lynx, then avoid all work from May through mid-July.
  - f) In areas where Northern long-eared bats or small-footed bats are detected, no cutting shall occur from May 1st to September 30th.
  - g) The applicant's consultant shall search for Northern black racer habitat and turtle nesting habitat prior to construction in each area to help avoid accidental crushing.
27. American beech stands were identified as important wildlife mast along both sides of a 3,700 linear foot section of the ROW within the town of New Hampton. Are additional clearing impacts necessary in these areas, or can clearing be avoided as similarly proposed where the ROW crosses conservation lands?
28. Provide additional detail how the project will impact unique wetland areas that were identified in the survey, like the potential exemplary natural community identified as a circumneutral hardwood forest seep (enriched calcareous seepage swamp) in Dixville that has 6 state watch plant species, or uncommon wetland areas like peatlands, floodplain wetlands, and northern white cedar swamps. Do the mitigation parcels conserve similar unique wetland systems?
29. Additional construction timing restrictions may be needed for rare, threatened or endangered (RTE) plant species; therefore, please coordinate with the NH Natural Heritage Bureau (NHB) to identify timing restrictions and please include these notes on the plans.
30. The application states that calcium rich bedrock occurs within the towns of Dummer, Milldfield, Dixville, Stewartstown, Clarksville, and Pittsburg. With the higher possibility of rare plants occurring in these areas, botanists should be retained to re-survey these areas prior to construction to ensure that additional rare plants are avoided.

#### Wetland Mitigation Comments

31. Per Env-Wt 806.05(a) and (b), the DES shall not issue a permit until the applicant has paid the full amount of the mitigation payment. With the New Hampshire Site Evaluation Committee (SEC) application process, the DES recommends that the mitigation payment

shall be provided within 120 days of the date of a favorable decision by the SEC and issuance of a decision by the Army Corps of Engineers.

32. In the application materials, Eversource Land Trust (ELT) is proposed to be the easement holder for the preservation parcels. The DES recommends the applicant continue to pursue efforts to identify other potential grantees such as a state agency or a local land trust. With this in mind, Northern Pass Transmission, LLC (NPT or Northern Pass) and Eversource shall draft a letter of intent between NPT and ELT that sets out the terms of the proposed conservation easements that includes the date of recordation. It is preferred that the recordation of the final conservation easements should occur prior to commencement of work or another agreed upon time frame. The DES acknowledges that if another easement holder is identified, it would be more efficient to draft the deed language with that entity so more time may be needed to finalize the deeds. However, DES needs a date for completion of recordation, so if it is not achieved, a mitigation payment would be required for the impacts in-lieu of the preservation considered.
33. The draft conservation easement deeds will require further review as well as acceptance of the final language by the DES and Army Corps of Engineers. The language as currently written notes ELT as the grantee. If another easement holder is interested in becoming the grantee, DES will need to confirm that the language allows for transfer to another entity or whether an amendment of the conservation deed will need to occur.
34. The reference to RSA 227-M in the conveyancing paragraphs is confusing, please explain or delete.
35. A summary of what is contemplated as reserved rights on each of the preservation parcels needs to be provided. DES understands the deed language may be revised if a subsequent grantee is determined. In addition, clarification on agricultural activities to be conducted or maintained on any of the preservation parcels should be noted as an optional provision or whether this will be handled in the management plan.
36. The information in the baseline reports submitted with the application materials may need to be supplemented with additional information depending on the parcel and final easement holder. The DES can provide an example final baseline documentation report (BDR) to be the template used for the final documents. The BDR is signed upon recordation of the conservation easement and a final signed copy submitted to DES.
37. A status of the Pine Barrens mitigation parcel needs to be provided. A summary of parcels reviewed and a letter of intent to purchase a parcel that is satisfactory to the NHFG and NHB must be provided.
38. Table 3. *ARM Fund Calculation Results for the Northern Pass Project by Town* notes stream and vernal pool buffer impacts together. For calculating the amount of mitigation for these impacts, please provide an additional table that separates these resources. For stream impacts, note linear feet of impact according to perennial, intermittent and ephemeral stream type, and whether it is located in existing ROW or new ROW. Provide a column for vernal pools buffer impacts separately.
39. For the final preservation parcels, final recordable surveys for the parcels will need to be provided for recordation. A Phase 1 site assessment may need to be completed and the parcels may need to be reviewed in the field by DES once the following information is provided:

<b>Preservation Site</b>	<b>Information that needs to be addressed</b>
A	Need to show parking area, existing logging road, and relocate ORV trails out of the floodplain or explain how the trail will be extinguished. These parcel features may need to be noted in the final BDR. Identify who is maintaining fields and whether/how this will be addressed in a management plan.
B	Review the location and condition of the existing roadways, skidder trails and logging roads for inclusion in the BDR and management plan and propose any measures to limit impacts to aquatic resources. Consider excluding the transition station from the easement on parcels 158 and 200. Determine location of dug wells and note them on parcel plans. The continued use of the wells may need to be mentioned in the reserved rights section in the easement deed.
C	Determine whether it is possible to remove or exclude existing buildings from the easement parcel. Locate Corridor 20 and determine extent of unregulated use that may need to be addressed with gates, boulders, etc.
E	Consider excluding transition station from easement and note underground cable corridor in reserved rights relative to future maintenance. Future use of gravel roadways need to be noted in BDR and management plan. Note location of logging/skidder roads in property plan for BDR, and the orchard/tree plantation in photo 3.
K	Marking/Blazing parcel boundaries is a priority if this parcel continues to be a component of the mitigation package. Minimal future harvesting should be noted as well as no future wind tower construction allowed on the parcel.
N	Consider including snowmobile trail use in reserved rights and include provision that no additional trails shall be constructed.
Z1 – Pine Barrens	Provide complete documentation for proposed Pine Barrens parcel to offset impacts to Karner blue butterfly. If site manipulation for habitat restoration is needed, provide details and time frame when this will occur and note the coordination efforts with NHFG and NHB.
Z2 New Hampton	Discuss future access and uses with Pemigewasset River Local Advisory Committee. Consider excluding the round-a-bout area.
Z3 Pembroke	Provide information relative to location of existing conservation lands in vicinity of the parcel and within the town.

DRAFT PERMIT CONDITIONS:

PROJECT DESCRIPTION:

Dredge and fill 108,069 square feet (2.48 acres) of palustrine wetlands, 986 square feet (0.02 acres) of intermittent and perennial streams impacting 272 linear feet, and 1,208 square feet (0.03 acres) within 4 vernal pools to construct an electrical transmission line and associated substations and transition stations, that will deliver 1,090 megawatts of hydroelectric energy 192 miles from the international border between Canada and Pittsburg, New Hampshire to Deerfield, New Hampshire. The project will also temporarily impact 5,972,328 square feet (137.11 acres) of palustrine wetlands, 112,273 square feet (2.58 acres) of intermittent and perennial streams impacting 26,476 linear feet, and 12,056 square feet (0.28 acres) within 42 vernal pools, 3 of which are considered high quality. Compensatory mitigation for wetland impacts includes the preservation of approximately 1,654 acres of land divided among eight sites comprised of 17 parcels located in the towns of Pittsburg, Clarksville, Dixville, Columbia, Stewartstown, New Hampton and Pembroke. High elevation habitat of 220 acres of forest land above elevation 2,500 feet and 77 acres above 2,700 feet will be protected through a conservation easement. A parcel within the Concord Pine Barrens area for increasing Karner blue butterfly habitat will also be provided as a component of the mitigation plan.

Compensation for impacts in the Salmon Falls-Piscataqua, Upper Androscoggin and Middle Connecticut River service areas include a one-time payment into the Aquatic Resource Mitigation (ARM) Fund payment of \$3,070,336.34. The complete mitigation package shall be carried out in accordance with the Northern Pass Transmission Project Natural Resource Compensatory Mitigation Plan prepared by Normandeau Associates, Inc. dated April 2016 and received by DES on April 15, 2016.

Additional compensatory mitigation measures includes a partnership with the National Fish and Wildlife Foundation (NFWF) and Northern Pass and Eversource for providing \$3,000,000 of funding over a three-year period for science-based conservation projects with the goal of restoring and sustaining healthy forests and rivers in the state.

PROJECT SPECIFIC CONDITIONS (*DRAFT*):

1. All work shall be in accordance with revised wetland impact plans by Normandeau Associates dated May 2016, as received by the NH Department of Environmental Services (DES) on May 10, 2016.
2. This permit is not valid unless an Alteration of Terrain permit or other method of compliance with RSA 485-A:17 and Env-Wq 1500 is achieved.
3. This permit is not valid until the applicant/owner obtains construction easements on abutting parcels or written permission from abutting property owners if work is beyond the ROW. The permittee shall submit a copy of each recorded easement to the DES Wetlands Program prior to construction.
4. Any further alteration of areas on this property that are subject to RSA 482-A jurisdiction will require a new application and further permitting.
5. The permittee shall develop and implement a water quality monitoring program in accordance with requirements established by the DES Watershed Management Bureau.



6. DES shall be notified of any additional laydown areas that are needed for construction purposes. Additional laydown areas must be reviewed and approved by DES prior to any such activity.
7. Any additional work pads needed for wire-stringing equipment shall be reviewed and approved by DES prior to any such activities.
8. Prior to any in-stream activities, the permittee or permittee's project manager shall consult with a NHFG Fisheries Biologist to obtain approval on the timing of construction.
9. Authorized stream work shall be carried out such that there are no discharges in or to fish spawning or nursery areas during spawning seasons. Impacts shall be avoided or minimized to the maximum extent practicable during all other times of the year.
10. All in-stream work shall be conducted during low flow conditions and in a manner that will not cause or contribute to any violations of surface water quality standards in RSA 485-A or NH Code Admin. Rules Env-Wq 1700.
11. Extreme precautions shall be taken within riparian areas to prevent unnecessary removal of vegetation during construction. Areas cleared of vegetation must be revegetated with like native species within three days of the completion of the disturbance.
12. The contractor shall restore stream banks to their original grades and to a stable condition with plantings within three days of completion of construction. Angular rock shall not be used unless it is on the approved plans.
13. Riverbank and stream bank stabilization areas shall have at least 75% successful establishment of wetlands vegetation after two (2) growing seasons, or shall be replanted and re-established in a manner satisfactory to DES.
14. Boundaries of wetlands shall be clearly marked prior to equipment mobilization to prevent unauthorized vehicular encroachment into wetland areas.
15. All temporary access roads installed along the 192 mile project shall be removed and areas shall be restored to their pre-construction condition upon completion.
16. Work within emergent marsh areas shall be carried out in a time and manner to avoid disturbances to migratory waterfowl breeding and nesting areas.
17. Tree removal in wetland areas that are inaccessible by forestry equipment staged in upland areas shall be removed by hand.
18. All temporary crushed-stone fords and culverts installed along the ROW shall be removed immediately following completion of the project.
19. The contractor shall re-grade temporary wetland impacts to pre-construction conditions and plant native species similar to those within the wetland prior to impact. The permittee shall implement corrective measures if needed to ensure the plantings survive.
20. The permittee or permittee's contractor shall properly construct, landscape, and monitor the temporary wetland impact areas, and shall take such remedial actions as may be necessary to create functioning wetland areas similar to those of the wetlands impacted by the project. Remedial measures may include replanting, relocating plantings, removal of invasive species, changing soil composition and depth, changing the elevation of the wetland surface, and changing the hydrologic regime.
21. Seed mix within the restoration area shall be a wetland seed mix appropriate to the area and shall be applied in accordance with manufacturers' specifications.
22. The permittee shall notify the DES Wetlands Program in writing of the certified wetlands scientist or qualified professional, as applicable, who will be responsible for monitoring and

ensuring that the restoration areas are constructed in accordance with the approved plans. The permittee shall re-notify the DES Wetlands Program if the identity of the individual changes during the project.

23. A post-construction report prepared by a certified wetland scientist or qualified professional documenting status of the project area and restored jurisdictional areas or buffers, including photographs, shall be submitted to the DES Wetlands Program. Similar inspections, reports and remedial actions shall be undertaken in at least the second and third years following the completion of each restoration site.
24. Restoration of temporary impact areas shall have at least 75% successful establishment of wetlands vegetation after two (2) growing seasons, or they shall be replanted and re-established until a functional wetland is replicated in a manner satisfactory to the DES Wetlands Program.
25. Restoration of temporary impact areas shall not be considered successful if sites are invaded by nuisance species such as common reed or purple loosestrife during the first full growing season following the completion of construction. The permittee shall submit a remediation plan to DES that proposes measures to eradicate nuisance species during this same period.
26. Work shall be done during frozen conditions whenever possible to minimize temporary impacts to wetland areas; otherwise timber matting or specialized low ground pressure equipment shall be used.
27. All weight distribution mats shall be removed from the wetland as soon as practicable, but no more than 7 days from when the equipment that uses the mats is removed.
28. All seed mixes and plantings used for restoration activities shall be reviewed and approved by the NH Natural Heritage Bureau (NHB) prior to their use.
29. Prior to restoration activities in areas that contain sensitive plant species, the applicant shall coordinate with the NH NHB.
30. A certified wetlands scientist or qualified professional, as applicable, 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. A follow-up report including photographs of all stages of construction shall be submitted to the DES Wetlands Program within 60 days of final site stabilization.
31. Appropriate siltation/erosion/turbidity controls shall be in place prior to construction, shall be maintained during construction, and shall remain until the area is stabilized. Temporary controls shall be removed once the area has been stabilized.
32. 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.
33. Work shall be conducted in a manner so as to minimize turbidity and sedimentation to surface waters and wetlands.
34. All dredged and excavated material and construction-related debris shall be placed outside of the areas subject to RSA 482-A. Any spoil material deposited within 250 feet of a surface water shall comply with RSA-483-B.
35. 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).

36. Erosion control products shall be installed per manufacturers recommended specifications.
37. Mulch used within the wetland restoration areas shall be natural straw or equivalent non-toxic, non-seed-bearing organic material.
38. Construction equipment shall have specialized low-ground-pressure tracks that impact less than four (4) pounds per square inch when loaded, or the permittee shall use timber or plywood mats beneath machines when driving over wetland areas.
39. No excavation shall be done in flowing water. No construction equipment shall be operated in flowing water.
40. 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.
41. 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.
42. All refueling of equipment shall occur outside of surface waters or wetlands during construction. Machinery shall be staged and refueled in upland areas only.
43. Faulty equipment shall be repaired immediately prior to entering areas that are subject to RSA 482-A jurisdiction.
44. Filter fabric shall be installed under the temporary wetland fill areas to isolate fill from the natural hydric soils.
45. 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.
46. Dredged materials, whether to be stockpiled or disposed of, shall be dewatered in sedimentation basins lined with siltation and erosion controls, and located outside of areas subject to RSA 482-A jurisdiction.
47. Within three 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 netting and pinning on slopes steeper than 3:1.
48. Where construction activities occur between November 30 and May 1, all exposed soil areas shall be stabilized within 1 day of establishing the grade that is final or that otherwise will exist for more than 5 days. Stabilization shall include placing 3-inches of base course gravels, or loaming and mulching with tack or netting and pinning on slopes steeper than 3:1.
49. 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).
50. To prevent the introduction of invasive plant species to the site, the permittee's contractor(s) shall clean all soils and vegetation from construction equipment and matting before such equipment is moved to the site.
51. The permittee shall control invasive plant species such as Purple loosestrife (*Lythrum salicaria*) and Common reed (*Phragmites*) by measures agreed upon by the DES Wetlands

Program if any such species is found in the stabilization areas during construction or during the early stages of vegetative establishment.

Mitigation:

52. This approval is not valid until DES receives a one-time payment of \$3,070,336.34 to the DES Aquatic Resource Mitigation (ARM) Fund. The applicant shall remit payment to DES within 120 days of the issuance of the SEC certificate.
53. The effective date of the easement recordation shall be before construction, but after approval of the project by the SEC. If the preservation of land cannot be finalized after 1 year of approval of the project by the SEC, an additional ARM Fund payment shall be required.
54. Monuments or blazing of the preservation parcel boundaries will need to be completed within 120 days of acceptance of the easement by the final agreed upon grantee unless specifically noted.
55. Draft management plans for the preservation sites shall be provided to DES that includes trail maintenance and construction, timber harvesting and agricultural goals and public access issues.
56. Following permit issuance and prior to recording of the conservation easement deed, the natural resources existing on the conservation easement parcel shall not be removed, disturbed, or altered without prior written approval of DES and the easement holder.
57. The conservation easements to be placed on the preservation areas shall be written to run with the land, and both existing and all future property owners shall be subject to this easement.
58. The plan noting the conservation easement with a copy of the final easement language shall be recorded with the applicable County Registry of Deeds for each lot that is subject to the easement. The permittee shall submit a copy of the recording from the Registry of Deeds to the DES Wetlands Program.
59. The permittee shall prepare a baseline documentation report that describes current property conditions and includes photographs that have been taken in the absence of snow cover that clearly and accurately show the nature and condition of the conservation area.
60. The conservation easement areas shall be surveyed by a licensed surveyor, and marked by monuments prior to construction. If this survey determines the parcel is less than the size represented in the application, the permittee shall submit the completed survey to DES for review. As a result of this review DES may require additional mitigation adjustments after coordination with the appropriate Conservation Commission(s), and State and Federal Agencies.
61. The permittee/permittee's contractor shall notify the DES Wetlands Program when the easement monuments are placed, and coordinate an on-site review of their location prior to construction.
62. There shall be no placement of fill, construction of structures, or storage of vehicles or hazardous materials on the conservation parcel(s).
63. Stewardship donations to final easement holders for all preservation parcels shall be reviewed by DES and the agreed upon amount provided to the grantee upon recordation of the easement deed(s).
64. Activities in contravention of the conservation easement shall be deemed to be a violation of RSA 482-A, and shall be subject to enforcement under RSA 482-A.



65. Northern Pass and Eversource shall provide yearly reports on the funds allocated through NFWF funding. The report shall include funds provided, organizations or municipalities receiving funds, and five years of monitoring of restoration work included in the funded projects.
66. The applicant shall continue pursuing minimization measures during final design and construction stages in an attempt to further avoid or minimize wetland impacts and sensitive areas.
67. Final impact amounts shall be provided to DES for any adjustments to the compensatory mitigation amounts.
68. Management of ROW and portions of preservation sites A, C and E as grassland and shrubland to benefit migratory songbirds, and potential wood turtles, shall be coordinated with NHFG and NHB. DES shall be provided draft and final management plans for approval.
69. The applicant shall provide additional measures to restrict ATV or off-road vehicle use that may negatively impact the preservation parcels and provide plans to reroute existing trails in aquatic resource areas or other sensitive habitats. These measures may include signage, contact with recreational users of impacts associated with use, and/or barriers to restrict use.
70. Low-canopy connections across the ROW to enhance travel corridors for wildlife species shall be provided as part of the management plans for the preservation parcels.
71. Failure to complete the restoration of temporarily impacted wetlands/stream and bank/vernal pool areas in accordance with plans constitutes a violation of RSA 482-A.

**SHORELAND PROTECTION PROGRAM**  
**MAY 16, 2016 PROGRESS REPORT**

**ADDITIONAL DATA REQUIREMENTS**

No additional data is required.

**DRAFT PERMIT CONDITIONS APPLICABLE TO ALL SHORELAND PROJECTS**

1. There shall be no unnecessary removal of vegetation from the waterfront buffer.
2. Ground cover as defined per RSA 483-B:4, VII within at least 25% of the area of the Natural Woodland Buffer beyond the primary building setback must remain in an unaltered state in order to comply with RSA 483-B:9, V, (b), (2).
3. All activities conducted in association with the completion of this project shall be conducted in a manner that complies with applicable criteria of Administrative Rules Chapter Env-Wq 1400 and RSA 483-B during and after construction.
4. Erosion and siltation control measures shall be installed prior to the start of work, be maintained throughout the project, and remain in place until all disturbed surfaces are stabilized.
5. Erosion and siltation controls shall be appropriate to the size and nature of the project and to the physical characteristics of the site, including slope, soil type, vegetative cover, and proximity to wetlands or surface waters.
6. No person undertaking any activity in the protected shoreland shall cause or contribute to, or allow the activity to cause or contribute to, any violations of the surface water quality standards established in Env-Ws 1700 or successor rules in Env-Wq 1700.
7. Any fill used shall be clean sand, gravel, rock, or other suitable material.
8. The individual responsible for completion of the work shall utilize techniques described in the New Hampshire Stormwater Manual, Volume 3, Erosion and Sediment Controls During Construction (December 2008).
9. Within three 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 tack or netting and pinning on slopes steeper than 3:1.

**DRAFT PROJECT SPECIFIC PERMIT CONDITIONS**

**2015-02828    Pemigewasset River**

**Ashland**

**PROJECT DESCRIPTION**

Impact 95,552 sq. ft. of protected shorelands to install four new lattice structures, two footings of another lattice structure, and temporary access for construction resulting in 226 sq. ft. of new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated October 8, 2015 and September 14, 2015, as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 0.04% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02829 Ammonoosuc River**

**Bethlehem**

PROJECT DESCRIPTION

Impact 33,254 sq. ft. of protected shorelands to install two monopole structures and provide temporary access for construction resulting in 127 sq. ft. of new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated October 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 6% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02830 Miller Pond**

**Bethlehem**

PROJECT DESCRIPTION

Impact 45,226 sq. ft. of protected shorelands to install buried cable, construct a transition station, and provide temporary access for construction resulting in 19,892 sq. ft. of new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 14, 2015 and September 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 22.6% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.
3. The proposed stormwater management plan shall be designed, installed and maintained to effectively absorb and infiltrate stormwater.

**2015-02831 Pemigewasset River**

**Bridgewater**

PROJECT DESCRIPTION

Impact 43,043 sq. ft. of protected shorelands to install two new monopole structures, relocate another monopole structure, and provide temporary access for construction resulting in 147 sq. ft. of new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated October 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.

2. No more than 0.15% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02832 Pemigewasset River**

**Bristol**

PROJECT DESCRIPTION

Impact 23,944 sq. ft. of protected shorelands to install one new monopole structure, relocate a monopole structure, and provide temporary access for construction resulting in 83 sq. ft. of new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated October 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 0.09% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02833 Pemigewasset River**

**Campton**

PROJECT DESCRIPTION

Impact 88,709 sq. ft. of protected shorelands to install buried cable resulting in no additional impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 24.7% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02834 Connecticut River**

**Clarksville**

PROJECT DESCRIPTION

Impact 20,827 sq. ft. of protected shorelands to install buried cable and improve access for construction resulting in no additional impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 8.7% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02835 Soucook River**

**Concord**



**PROJECT DESCRIPTION**

Impact 10,876 sq. ft. of protected shorelands to install one monopole, relocate one monopole, remove one monopole, install two footings for a three pole structure, and provide temporary access for construction resulting in 47 sq. ft. of new impervious surface.

**PROJECT SPECIFIC CONDITIONS (DRAFT)**

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 14, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 0.05% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02836 Turtle Pond**

**Concord**

**PROJECT DESCRIPTION**

Impact 53,744 sq. ft. of protected shorelands for installation, relocation, and removal of multiple structures, and temporary access for construction resulting in 72 sq. ft. of new impervious surface.

**PROJECT SPECIFIC CONDITIONS (DRAFT)**

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 14, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 1.08% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02837 John's River**

**Dalton**

**PROJECT DESCRIPTION**

Impact 7,710 sq. ft. of protected shorelands to install one new lattice structure and provide temporary access for construction resulting in 13 sq. ft. of new impervious surface.

**PROJECT SPECIFIC CONDITIONS (DRAFT)**

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 14, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 0.01% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02838 Lamprey River**

**Deerfield**

**PROJECT DESCRIPTION**

Impact 5,154 sq. ft. of protected shorelands to install one new monopole structure, relocate one monopole structure, and provide temporary access for construction resulting in 68 sq. ft. of new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated October 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 4.87% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02839 Nathan Pond**

**Dixville**

PROJECT DESCRIPTION

Impact 21,985 sq. ft. of protected shorelands to improve access for construction resulting in no new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No portion of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02840 Gale River**

**Franconia**

PROJECT DESCRIPTION

Impact 27,348 sq. ft. of protected shorelands to install buried cable resulting in no new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 63.23% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02841 Merrimack River**

**Franklin**

PROJECT DESCRIPTION

Impact 12,783 sq. ft. of protected shorelands to relocate one monopole and provide temporary access for construction resulting in 20 sq. ft. of new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 14, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.

2. No more than 0.05% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02842 Pemigewasset River**

**Hill**

PROJECT DESCRIPTION

Impact 11,946 sq. ft. of protected shorelands to install one new H-frame structure and provide temporary access for construction resulting in 14 sq. ft. of new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated October 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.

2. No more than 0.02% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02843 Israel River**

**Lancaster**

PROJECT DESCRIPTION

Impact 39,379 sq. ft. of protected shorelands to install two new monopole structures, remove and relocate two existing transmission structures, and provide temporary access for construction resulting in 134 sq. ft. of new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.

2. No more than 0.07% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02844 Otter Brook**

**Lancaster**

PROJECT DESCRIPTION

Impact 23,042 sq. ft. of protected shorelands to install one new monopole structure, relocate one transmission structure, and provide temporary access for construction resulting in 71 sq. ft. of new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.

2. No more than 0.09% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02845 Squam River**

**New Hampton**

PROJECT DESCRIPTION

Impact 7,263 sq. ft. of protected shorelands to install two footings for a lattice structure and provide temporary access for construction resulting in 25 sq. ft. of new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 14, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 0.3% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02846 Pemigewasset River**

**New Hampton**

PROJECT DESCRIPTION

Impact 109,134 sq. ft. of protected shorelands to install three new monopole structures, relocate two monopole structures, remove two monopole structures, and provide temporary access for construction resulting in 230 sq. ft. of new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 8, 2015, October 8, 2015, and October 12, 2015, as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 0.03% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02847 Merrimack River**

**Northfield**

PROJECT DESCRIPTION

Impact 13,187 sq. ft. of protected shorelands to install one new H-frame structure, relocate one monopole structure, and provide temporary access for construction resulting in 21 sq. ft. of new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 14, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 0.04% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02848 Soucook River**

**Pembroke**



**PROJECT DESCRIPTION**

Impact 29,984 sq. ft. of protected shorelands to install one new 3-pole structure, replace a single pole structure, and provide temporary access for construction resulting in 79 sq. ft. of new impervious surface.

**PROJECT SPECIFIC CONDITIONS (DRAFT)**

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 0.05% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02849 Suncook River**

**Pembroke**

**PROJECT DESCRIPTION**

Impact 18,336 sq. ft. of protected shorelands to install one new monopole structure and provide temporary access for construction resulting in 64 sq. ft. of new impervious surface.

**PROJECT SPECIFIC CONDITIONS (DRAFT)**

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated October 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 10.37% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02850 Connecticut River**

**Pittsburg**

**PROJECT DESCRIPTION**

Impact 20,827 sq. ft. of protected shorelands to install buried cable, improve access, and provide temporary access for construction resulting in no new impervious surface.

**PROJECT SPECIFIC CONDITIONS (DRAFT)**

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 12.24% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02851 Pemigewasset River**

**Plymouth**

**PROJECT DESCRIPTION**

Impact 37,338 sq. ft. of protected shorelands to install underground transmission cable and provide temporary access for construction resulting in no new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 30.1% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02852 Upper Ammonoosuc River**

**Stark**

PROJECT DESCRIPTION

Impact 30,070 sq. ft. of protected shorelands to install two new monopole structures, relocate two transmission structures, and provide temporary access for construction resulting in 141 sq. ft. of new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 0.08% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02853 Coffin Pond**

**Sugar Hill**

PROJECT DESCRIPTION

Impact 9,107 sq. ft. of protected shorelands to install underground transmission cable.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 34.09% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02854 Gale River**

**Sugar Hill**

PROJECT DESCRIPTION

Impact 26,176 sq. ft. of protected shorelands to install underground transmission cable resulting in no new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 21.86% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02855 Beaver Pond**

**Woodstock**

PROJECT DESCRIPTION

Impact 16,871 sq. ft. of protected shorelands to install underground transmission cable resulting in 390 sq. ft. of new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 22.79% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02856 Moosilauke Brook**

**Woodstock**

PROJECT DESCRIPTION

Impact 76,858 sq. ft. of protected shorelands to install underground transmission cable resulting in 1,065 sq. ft. of new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 19.83% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02857 Pemigewasset River**

**Woodstock**

PROJECT DESCRIPTION

Impact 38,789 sq. ft. of protected shorelands to install underground transmission cable resulting in no new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 25.1% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02858 Walker Brook**

**Woodstock**

PROJECT DESCRIPTION

Impact 10,132 sq. ft. of protected shorelands to install underground transmission cable resulting in no new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 8, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 25.62% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

**2015-02859 Squam River**

**Ashland**

PROJECT DESCRIPTION

Impact 22,892 sq. ft. of protected shorelands to install two footings for a lattice structure and provide temporary access for construction resulting in 25 sq. ft. of new impervious surface.

PROJECT SPECIFIC CONDITIONS (DRAFT)

1. All work shall be in accordance with plans by Normandeau Associates, Inc. dated September 14, 2015 as received by the NH Department of Environmental Services (DES) on October 20, 2015.
2. No more than 0.03% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.

## **WATERSHED MANAGEMENT BUREAU**

### **MAY 16, 2016 PROGRESS REPORT**

(RE: DRAFT § 401 WATER QUALITY CERTIFICATION CONDITIONS)

#### **ADDITIONAL DATA REQUIREMENTS:**

1. On page 7-8 of the § 401 WQC application it is stated that emergency inspections will occur during storm events if turbidity plumes are visible; please describe what action will be taken to mitigate high turbidity if plumes are observed?
2. Please provide a plan that shows the proposed route of the Activity with the potentially impacted surface waters that are Class A surface waters or Outstanding Resource Waters [per Env-Wq 1708.05(a)] clearly identified.
3. With regards to the Pollutant Loading Analyses (PLAs):
  - a. Please provide working copies of the Excel spreadsheets used for each of the Pollutant Loading Analyses.
  - b. The PLAs for Transition Stations 2, 3 and 6, the Franklin Converter Station and the Scobie Pond Substation Expansion, appear acceptable provided the design of the proposed permanent stormwater best management practices (BMPs) comply with NHDES Alteration of Terrain Bureau regulations (Env-Wq 1500).
  - c. Please confirm that all permanent BMPs used in the PLAs are designed in accordance with NHDES Alteration of Terrain regulations.
  - d. Disconnection credits are assumed for many of the post development subareas used in the PLAs for Transfer Stations 1, 4, and 5 and the Deerfield Substation Expansion. Please explain how each of the criteria for disconnection of non-rooftop runoff, in Chapter 6 of the NH Stormwater Manual (Vol. 1) are satisfied. Unless a subarea drains to an infiltration basin (without underdrains) that is designed in accordance with the NHDES Alteration of Terrain regulations (Env-Wq 1500), all of the disconnection criteria in Chapter 6 must be met before the disconnection credit can be used in the PLAs.
  - e. For Transition Stations 1, 4 and 5, please clarify if the detention basin(s) are dry basins, wet ponds, or wet extended detention ponds.
  - f. The sand filters proposed for Transition Stations 4 and 5 and the Deerfield Substation Expansion have underdrains. Therefore, in accordance with the NH Stormwater Manual (Vol 1), the BMP removal efficiencies in the PLAs should be 51% for TSS, 33% for TP and 10% for TN . Please revise and resubmit.
  - g. Please revise the PLAs in response to the comments above and resubmit for approval.
4. Please provide a copy of the Stream Segment Temperature Model (SSTEMP) , as well as the input and output files, that were used to predict the likelihood of impacts to cold-water fisheries from proposed vegetation clearing.
5. Please provide the maximum height that vegetation is allowed to grow in the transmission R.O.W.

## INSTRUCTIONS for SUBMITTING COMMENTS ON DRAFT 401 WQC CONDITIONS

The New Hampshire Department of Environmental Services (NHDES) will accept written comments regarding the following draft § 401 Water Quality Certification (WQC or Certification) conditions until 4 pm, June 24, 2016. A copy of all comments submitted to NHDES shall also be sent to the New Hampshire Site Evaluation Committee (SEC). Comments may be submitted by postal mail, email or fax. Please include your name, organization, mailing address, email address and telephone number with your submittal and the following in the subject line of your comments:

“SEC Docket 2015-06 Northern Pass Transmission – Eversource;  
Comments regarding Draft Section 401 Water Quality Certification”.

Contact information for submitting comments is provided below:

NHDES, Watershed Management Bureau  
P.O. Box 95  
Concord, NH 03301-0095  
Attention: Owen David, 401 Certification  
Program

Tel. (603) 271-0699  
Fax. (603) 271-7894  
E-mail: [Owen.David@des.nh.gov](mailto:Owen.David@des.nh.gov)

New Hampshire Site Evaluation Committee  
21 South Fruit Street, Suite 10  
Concord, NH 03301  
Attention: Pamela G. Monroe, Administrator

Tel. (603) 271-2435  
Fax. (603) 271-3878  
E-mail: [Pamela.Monroe@sec.nh.gov](mailto:Pamela.Monroe@sec.nh.gov)

### DRAFT § 401 WATER QUALITY CERTIFICATION CONDITIONS:

Unless otherwise authorized by the New Hampshire Department of Environmental Services (NHDES or Department), conditions for § 401 Water Quality Certification (WQC or Certification) approval are provided below where the terms “Applicant” and “Activity” are defined as follow:

**Applicant:** The “Applicant” for this 401 Water Quality Certification (WQC or Certification) is Northern Pass Transmission, LLC and Public Service Company of New Hampshire d/b/a Eversource Energy.

**Activity:** The “Activity” for this 401 WQC is the construction and operation of the Northern Pass Transmission Project (SEC Docket No. 2015-06) as described in the application filed by the Applicant with the New Hampshire Site Evaluation Committee (SEC) on October 19, 2015 and accepted by the SEC on December 18, 2015. The application filed with the SEC includes, but is not limited to, applications for § 401 WQC, NHDES Alteration of Terrain and NHDES Wetlands permits, and includes a detailed description of the Activity. In general, the Activity includes the construction and operation of a new 192+/- mile transmission line that will carry 1,090 MW of renewable hydroelectric power from Canada to the State of New Hampshire and the New England



region. The Activity includes 158 miles of direct current ("DC") transmission line from the Canadian border to a new converter terminal in Franklin, and 34 miles of alternating current ("AC") transmission line from the converter terminal to the Deerfield Substation. The 192 miles of transmission lines, includes 102 miles of existing transmission right-of-way ("ROW"), 58± miles of underground ("UG") cable in existing road ROW and 32 miles of new overhead ("OH") transmission line ROW between the Canadian border and Dummer, NH. In addition to the new converter terminal in Franklin, the Activity includes six new transition stations, and expansion of the Deerfield Substation in the Deerfield and the Scobie Pond Substation in Londonderry. Upgrades (the modification of ten existing structures) are also required to two existing 345-kV transmission lines extending 18 miles along existing PSNH ROW, between the two substations.

The proposed route follows existing PSNH transmission line ROW or public road ROW for over 80% of its length. Total permanent alteration of terrain associated with the proposed Activity components will be 35.3 acres, the majority (33.7 acres or 95% of the total permanent alteration of terrain) of which will be associated with the proposed converter station, transition stations, and substation expansions (development sites). The construction of the transmission line portions of the Project will involve 1.5 acres (or 5% of the total permanent alteration of terrain) of permanent impacts (with temporary access roads and work pads restored following construction). There are 313 perennial streams, 350 intermittent streams, 483 ephemeral streams and two ponds within the proposed limits of the Activity.

1. **Change in Ownership:** Should there be a change in ownership, contact information for the new owner (including name, address, phone number and email) shall be provided to the NHDES Watershed Management Bureau within 30 days of the transfer.
2. **Prior Approval of Modifications:** This Certification is based on the plans and information filed by the Applicant with the SEC on October 19, 2015 and accepted by the SEC on December 18, 2015 in support of NHDES 401 Certification, and NHDES Alteration of Terrain and Wetlands permits, as well as subsequent documentation submitted in response to NHDES requests for additional information. The Applicant shall receive NHDES approval prior to implementing any proposed modifications to the Activity, including construction or operation, that may influence the quality or quantity of surface waters.
3. **Compliance with Surface Water Quality Standards:** The Activity shall not cause or contribute to a violation of New Hampshire surface water quality standards as provided in RSA 485-A:8 and Env-Wq 1700. The terms and conditions of this 401 Certification may be modified and additional terms and conditions added as necessary to ensure compliance with New Hampshire surface water quality standards.
4. **Outstanding Resource Waters (ORWs):** Surface waters of the national forests and surface waters designated as natural under RSA 483-A:7-a, I are considered Outstanding Resource Waters [Env-Wq 1708.05(a)]. In accordance with Env-Wq 1708.05(b), the Activity shall only result in temporary or short term changes in water quality in ORWs that are limited to the shortest possible time after all practicable means of minimizing degradation are

implemented. The Activity shall not permanently degrade water quality or cause a violation of water quality standards in ORWs.

5. **Inspection:** The Applicant shall allow NHDES to inspect the Activity and its effects on affected surface waters at any time to monitor compliance with the conditions of this 401 Certification.
6. **Compliance with Alteration of Terrain And Wetland Bureau Permit Conditions:** The Applicant shall comply with the permit conditions submitted to the New Hampshire Site Evaluation Committee (SEC) by the NHDES Alteration of Terrain Bureau and the NHDES Wetlands Bureau, including any amendments.
7. **Plan to Minimize Temperature Increases in Cold-Water Fisheries:** At least 90 days prior to construction (or within another time period acceptable to NHDES), the Applicant shall develop and submit a plan to the New Hampshire Fish and Game Department and NHDES for approval, to minimize the potential for increases in stream temperature in cold-water fisheries due to clearing of vegetation associated with the Activity. Vegetated buffers adjacent to surface waters shall be maintained to the maximum extent practicable. The Applicant shall then implement the approved plan.
8. **Permanent Stormwater Treatment Practices:** Should there be any proposed changes to the permanent stormwater treatment practices proposed at the six transition stations, the Franklin Converter Station or the two substations (Deerfield and Scobie Pond), the Applicant shall consult with NHDES to determine if revisions to the pollutant loading analyses are necessary. If so, the Applicant shall submit revised pollutant loading analyses to NHDES for approval prior to construction and, if necessary, make appropriate revisions to the proposed permanent stormwater treatment practices.
9. **Construction General Permit (CGP).** The Applicant shall comply with the requirements of the U.S. Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP). If requested, the Applicant shall submit a copy of the Stormwater Pollution Prevention Plan (SWPPP) prepared for the CGP to NHDES within seven days of receiving request.
10. **Monitoring and Operations Plan for Installation of Underground Cable at Surface Water Crossings:** At least 90 days prior to construction of the underground segment (or within another time period acceptable to NHDES), the Applicant shall submit a Monitoring and Operations Plan (MOP) to NHDES for approval that identifies the method that will be used to cross each surface water, measures that will be taken to ensure compliance with surface water quality standards (Env-Wq 1700) and the process for notifying the appropriate state agencies if situations occur that are adversely impacting surface water quality. For crossings employing Horizontal Directional Drilling (HDD), the MOP shall describe actions taken when operating under normal drilling conditions, when there is loss of circulation during drilling, and when there is a release of drilling fluids. If the circulation loss is a "fracout", the MOP shall describe the actions that will be taken to stop, contain and or control the size of the drilling mud loss to the environment.

11. **Construction BMP Inspection and Maintenance Plan** The Applicant shall submit a Construction BMP Inspection and Maintenance Plan to NHDES for approval at least 90 days prior to construction (or within another time period acceptable to NHDES). As a minimum, the plan shall include the construction BMP inspection and maintenance requirements specified in the NHDES Alteration of Terrain project documents and in the NPDES CGP (see condition 9). If considered necessary by NHDES to assure compliance with surface water quality standards, NHDES may include additional requirements in the plan, including, but not limited to, some or all of the elements described in Appendix A of this 401 Certification (items A through I). The Applicant shall then implement the approved plan.
12. **Turbidity Sampling and Sediment Deposition Inspection Plan:** The Applicant shall prepare a turbidity sampling and sediment deposition inspection plan to confirm that measures to control erosion during construction are not causing or contributing to surface water quality violations. Unless otherwise authorized by NHDES, the turbidity sampling and sediment deposition inspection plan shall include the elements specified in the August 14, 2013 NHDES Inter-Department Communication entitled "Guidance for SWPPPs, BMP Inspection and Maintenance, Turbidity, and Sediment Monitoring for NHDOT Projects with 401 Water Quality Certification" for sampling, inspecting and reporting results to NHDES. The plan shall be submitted to NHDES for approval at least 90 days prior to construction (or within another time period acceptable to NHDES). The Applicant shall then implement the approved plan.
13. **Water Quality Monitoring Plan to Assess Operation:** Unless otherwise authorized by NHDES, the Applicant shall develop and submit a Water Quality Monitoring Plan to NHDES for approval at least 90 days prior to construction (or within another time period acceptable to NHDES). The purpose of the plan is to confirm that operation of the Activity is not causing or contributing to violations of state surface water quality standards and , if determined necessary by NHDES, shall include pre- as well as post-construction monitoring. The plan shall include the parameters to be sampled, the location, timing and frequency of sampling, sampling and laboratory protocols, quality assurance / quality control provisions as well as when data will be submitted to NHDES. The applicant shall consult with NHDES and submit the monitoring data in a format that can be automatically uploaded into the NHDES Environmental Database. Once approved by NHDES, the Applicant shall implement the sampling plan.
14. **Operation Spill Prevention, Control and Countermeasures Plan:** The Applicant shall prepare and submit a Spill Prevention, Control, and Countermeasures plan (SPCC) for the Activity in accordance with federal regulations (40 CFR part 112). The plan shall include a certification by a Professional Engineer licensed in the State of New Hampshire. The Applicant shall submit the plan to NHDES Watershed Management Bureau for review and approval at least 90 days prior to the construction (or within another time period acceptable to NHDES). The SPCC Plan shall include, but not be limited to, operating procedures to prevent oil spills, control measures installed to prevent oil from entering surface waters, countermeasures to contain, clean up and mitigate the effects of an oil spill, and facility inspections. The Applicant shall then implement the approved plan and maintain records

demonstrating compliance with the plan. Such records shall be made available to NHDES within 30 days of receiving a written request by NHDES.

15. **Concrete Wash Water Plan:** The Applicant shall submit a plan to prevent water quality violations due to discharges of concrete wash water during construction. The Applicant shall submit the plan to the NHDES Watershed Management Bureau for review and approval at least 90 days prior to placement of any concrete within the Activity area (or within another time period acceptable to NHDES). The Applicant shall then implement the approved plan.
16. **Surface Water Withdrawals:** The Activity shall not result in any permanent withdrawals from surface waters. Prior to any temporary withdrawals from surface waters, the Applicant shall receive NHDES approval and shall submit the purpose, location, timing, rate and total volume of each withdrawal as well as the estimated impact on source water quantity. The Applicant shall also consult with the NHDES Water Use Registration and Reporting Program staff to determine if the withdrawals require registration in accordance with Env-Wq 2102. If determined by NHDES to be necessary, the Applicant shall register the withdrawals with the NHDES Water Use Registration Program.
17. **Pesticides (Herbicides and Insecticides):** Pesticides (including herbicides and insecticides) shall not be used during construction or operation of the Activity unless otherwise authorized by NHDES. If authorized by NHDES, use of pesticides shall be minimized to the maximum extent possible and shall only be allowed on a limited, as-needed basis, and shall be applied in accordance with the manufacturer's recommendations and all applicable laws and regulations.
18. **Road Salt (Chloride):** Unless otherwise authorized by NHDES, de-icing materials containing chloride (such as road salt) shall not be used during construction or operation of any portion of the Activity. If application of road salt containing chloride is authorized by NHDES, all applicators shall, as minimum, be certified in accordance with RSA 489-c and shall, for each impacted surface water, annually track and record the amount of salt used and the area (in square feet or acres) on which it was applied within the limits of the Activity (see <http://des.nh.gov/organization/divisions/water/wmb/was/salt-reduction-initiative/salt-applicator-certification.htm>). Evidence of certification and tracking reports shall be provided to NHDES within 15 days of receiving a request from NHDES.
19. **Fertilizer:** Unless otherwise authorized by NHDES, fertilizers shall only be applied on soils disturbed during construction to support the initial establishment of vegetation. Prior to fertilizer application, soils shall be tested to determine the minimum amounts of lime, nitrogen (N), phosphorus (P) and potassium (K) needed to support vegetation. Lime application rates, fertilizer selection (in terms of N, P and K content) and fertilizer application rates shall be consistent with the soil test results. Fertilizers shall not contain any pesticides. Where possible, fertilizer with slow release nitrogen shall be used. Soil test results, the name, brand and nutrient content (N, P and K) of fertilizer and application rates for lime and fertilizer shall be provided to NHDES within 15 days of receiving a request from NHDES.

## **Appendix A**

### **Enhanced Construction BMP Inspection and Reporting Requirements**

- A. Weekly Erosion Control Meeting: The Applicant's prime Contractor for the Activity (prime Contractor) shall hold weekly erosion control meetings with the Monitor. Minutes of the meeting shall be kept on file and made available to NHDES upon request.
- B. Inspection Frequency
1. Daily Inspections: The prime Contractor shall inspect all erosion control measures every day that work is conducted from the time construction commences and earth is disturbed until construction is complete.
  2. Weekly Inspections: After construction has commenced and earth has been disturbed, the Monitor shall conduct weekly erosion control site inspections to verify all erosion control measures are maintained properly to protect surface waters and wetlands. The Monitor shall document and report its findings, including recommendations for maintenance of BMPs or the addition of new control measures to the prime Contractor.
  3. Pre-storm inspections: The Monitor shall print the 5-day forecast once daily (7-9 am) for the duration of the project. All forecasts shall be clearly marked with the date and time, kept on file, provided to the prime Contractor. In addition, the 5-day forecast on the day of the weekly meeting shall be attached to the weekly meeting minutes distributed by the Monitor. Inspection shall occur within 24 hours prior to the start of any rain event of 0.5 inches or more in a 24-hour period that is predicted to occur during the workweek. A normal workweek is Monday through Friday. Holidays and weekends are included as part of the normal workweek when work is anticipated to occur on those days. If the predicted event occurs outside of the normal workweek, the inspection shall occur on the normal workday just before any scheduled days off, such as holidays and weekends. Unless otherwise approved by DES, the Accuweather website (<http://home.accuweather.com/index.asp?partner=accuweather>) shall be used for the purpose of predicting future precipitation amounts. Future precipitation amounts on the Accuweather web site may be determined by typing in the location of the project (city, state and/or zip code), clicking on the link for Days 1-5 forecasts and then clicking on the day(s) of interest.
- C. Emergency Inspections During Storm Events: Inspections shall occur during the daylight hours (Monday through Sunday, including holidays) during storm events whenever plumes are visible or if turbidity sampling indicates water quality standards are exceeded due to turbid stormwater from the construction site. Inspections and corrective action shall be implemented during the daylight hours (Monday through Sunday, including holidays) until turbidity water quality standards are met.



- D. Post Storm Inspections: Inspections shall occur on the first workday following storms of greater than 0.5 inches in a 24-hour period. Precipitation amounts shall be based on precipitation recorded at a rain gauge installed at the construction site or other approved method. Inspections and corrective action shall be implemented during the daylight hours (Monday through Sunday, including holidays) until turbidity water quality standards are met.
- E. Winter Shutdown Inspections: Inspections during winter shut down shall occur as specified in the NPDES General Permit for Stormwater Discharges from Construction Activities (commonly known as the Construction General Permit)
- F. Provisions for Handling Emergencies: Contact information shall be provided to DES for at least two people that DES can contact at any time regarding construction related stormwater concerns. The Applicant shall prepare an Emergency Procedures Plan describing procedures to address and correct emergency, construction related stormwater issues in an expeditious manner. The plan shall include the responsibilities of key individuals, the availability of equipment, and the availability of erosion control and BMP supplies. All emergency erosion control and BMP supplies must be kept on-site.
- G. Inspection and Maintenance Plans and Reports: Written inspection and maintenance reports shall include the items stipulated in the EPA NPDES General Permit for Stormwater Discharges from Construction Activities, as well as the predicted 24-hour rainfall for pre-storm inspection reports, measured rainfall amounts for post-inspection reports. The reports shall also indicate if erosion control measures "pass" or "fail". Unless otherwise authorized by DES, the reports shall be submitted to DES by electronic mail (email) within 24 hours of each inspection.
- H. Weather Station Specifications: Unless otherwise authorized by DES, the Applicant shall be responsible for maintaining a weather station that can measure rainfall to an accuracy of 0.01 inches, monitor temperature to an accuracy of 1 degree Fahrenheit or Celsius, and has hourly data storage and download capabilities.
- I. Precipitation Notification Plan: The Applicant shall specify how the Monitor, and others, will be notified when precipitation has occurred that will trigger the need for inspections and/or turbidity sampling. Automatic notification is preferred. If considered necessary and feasible by NHDES, the weather station shall be equipped to send automatic email notifications to notify the Monitor when construction BMP inspections and/or turbidity sampling is necessary. Should automated email notification be considered necessary, it shall be capable of the following: Start of rain event: Once 0.25 inches of rain or rain-mix precipitation has been measured an automated email notification will be sent to the prime Contractor, the Monitor, and any other interested parties. The email shall provide hourly rainfall, and time of rainfall for the previous 24 hours. End of rain event: Once six hours without rain or rain-mix precipitation has passed an automated email notification will be sent to the prime Contractor, the Monitor and NHDES. The email shall provide hourly rainfall and time of rainfall from the start of the rain event to the end of the rain event, including the six hour "dry" period.



**ALTERATION OF TERRAIN BUREAU**  
**MAY 16, 2016 PROGRESS REPORT**

**ADDITIONAL DATA REQUIREMENTS:**

In order for NHDES to render a decision on this application, the information below must be addressed in full. NHDES will make a final determination based upon the information provided in response to this request.

1. For each of the Stormwater Management Study areas (Franklin Converter Station, Substations, Transmission Stations) provide the following:
  - a) Post-development watershed maps at a scale of 1-inch = 50-ft for the areas of proposed disturbance/development.
  - b) Existing conditions plans that delineate the location and type of vegetative cover. Such plans should also be used as the basis for the applicable pre- and post-development plans.
  - c) Sufficient labeling of topographic contours on the pre- and post-development watershed plans.
  - d) Delineation of pre- and post-development subcatchments on color-coded hydrologic soil group (HSG) plans.
  - e) Computations of the total area of each hydrologic soil group used in the pre- and post-development hydrologic models.
  - f) Infiltration Feasibility Reports for each site where infiltration is a component of the stormwater management.
  - g) Where blasting of bedrock is anticipated, the estimated quantity of blasting in cubic yards. If greater than 5,000 cubic yards are anticipated at any location, a groundwater monitoring plan may be required.
  - h) The estimated seasonal high water table in areas where significant earth cuts or stormwater ponds are proposed.
  - i) Sediment forebays used to satisfy requirements for pretreatment of stormwater runoff must have a minimum depth of 2 feet. In addition, on sites where multiple forebays are proposed it must be demonstrated that each forebay meets the sizing requirement based upon the specific contributing area.
  - j) Trash racks for outlet control structures with openings of 6- inch or less in diameter or width.
  - k) For the BMP worksheets, provide documentation as to how the impervious area draining to each specific practice was determined.
  - l) Where sand filters are proposed for stormwater treatment, the filter media must meet the criteria of Env-Wq 1508.06(1)(4).
  - m) The results of coordination with New Hampshire Natural Heritage Bureau.
2. For the Scobie Pond Substation Expansion provide the *Level Pool Pond Routing Summary* report from the hydrologic model.
3. For the Franklin Converter Station:
  - a) The gravel pad (Station Yard) portion of post-development subcatchment 2A should be modeled as a separate subcatchment.

- b) It appears the basin surface areas of basins 1 and 2, as modeled in the hydrologic analysis, may be overestimated. Please review and comment.
- 4. For the Deerfield Substation:
  - a) The outlet pipe to outlet control structure (OSC) OSC-2 the analysis assumes an 18-inch diameter pipe, while the drainage schedule specifies a 24-inch diameter pipe.
  - b) The analysis includes an outlet structure labeled OCS-3. It is not clear which outlet structure this represents. If this is to represent the outlet to the proposed sand filter, the analysis assumes a crest elevation of 378.0, while the plan specifies a crest elevation of 379.0
  - c) Design drawing C505 references drawing C504 for OCS pipe size. The correct reference is C104.
  - d) The proposed timber check dam is specified at elevation 377.67 on sheet C104, while it appears to be specified at elevation 378.67 (WQV WSE) on sheet C507. Please clarify.
  - e) The stone fill specified around the perimeter of the sand filter (see detail 3, sheet C509) will cause "short-circuiting" of the filter system. Modify the design as appropriate.
- 5. For Transition Station #1:
  - a) Provide justification for the differing initial flow paths between pre- and post-development subcatchments Area-A for the estimation of the subcatchment time of concentration.
  - b) For the proposed detention pond, the input for the analysis' *Elevation-Area Volume Curve* does not appear in agreement with the Stage/Storage Table provided. Please clarify.
  - c) Provide subsurface information and/or a hydrologic budget to demonstrate that a permanent pool elevation of 1158.61 will be maintained in the proposed wet pond.
  - d) The proposed treatment swale needs to be designed with a maximum channel width of 8 feet, and be bermed or otherwise separated from the adjacent roadside.
- 6. For Transition Station #2:
  - a) It appears the composite Curve Number may be slightly lower in the post-development analysis than that of the pre-development analysis. Please review and adjust as appropriate
- 7. For Transition Station #4:
  - a) It is not clear why the estimated time of concentration differs between pre-development Area 4 and post-development Area-4.
  - b) It is not evident that post-development Area-A will discharge to the detention basin, as assumed in the analysis, nor follow the flow path assumed in estimation of the time of concentration of the subcatchment.
  - c) The *Stormwater System Detail Reference List* shown on sheet C104 does not identify the locations of the referenced structures.
- 8. For Transition Station #5:

- a) The descriptions of the subcatchments in the hydrologic analysis subsection *Runoff CN-Area* is inconsistent in the classification of the hydrologic soil groups (Soil/Surface Description).

PROJECT SPECIFIC CONDITIONS (*DRAFT*):

1. Activities shall not cause or contribute to any violations of the surface water quality standards established in Administrative Rule Env-Wq 1700.
2. Revised plans shall be submitted for an amendment approval prior to any changes in construction details or sequences. The NHDES must be notified in writing within ten days of a change in ownership.
3. The NHDES must be notified in writing prior to the start of construction and upon completion of construction. Forms are available at:  
<http://des.nh.gov/organization/divisions/water/aot/categories/forms.htm>.
4. All activities shall comply with the plans and information provided with the Alteration of Terrain application submitted as part of the application to the New Hampshire Site Evaluation Committee on October 19, 2015, and the conditions provided herein. Any proposed modifications which may affect surface water quality or quantity, shall receive NHDES approval prior to implementation.
5. All activities shall comply with Best Management Practices (BMP) identified in the application.
6. No construction activities shall occur on the project after expiration of the approval unless the approval has been extended by the New Hampshire Energy Facility Site Evaluation Committee (SEC).
7. The Applicant shall identify to NHDES all laydown areas, and off-right-of-way access roads not currently identified for review prior to their construction.
8. The Applicant shall comply with requirements of the EPA NPDES Construction General Permit (CGP) including, but not limited to, preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) and inspection, maintenance and reporting of construction activity. A copy of the SWPPP and/or construction inspection and maintenance logs shall be provided to NHDES within seven days (or other timeframe acceptable to NHDES) of receiving a request from NHDES.
9. Removal of vegetation within 50 feet of all surface waters (including wetlands) shall be minimized to the maximum extent practicable to reduce the potential for erosion and deposition of material into the surface waters, to protect rare, threatened and endangered species and habitats and to minimize the potential for increases in water temperature increases that could be harmful to aquatic life. Limits of clearing will be clearly marked in the field prior to construction to prevent inadvertent excursion of clearing beyond what is necessary.
10. This permit does not relieve the Applicant from the obligation to obtain other local, state or federal permits that may be required (e.g., from US EPA, US Army Corps of Engineers, etc.). Projects disturbing over 1 acre may require a federal stormwater permit from

EPA. Information regarding this permitting process can be obtained at:

<http://des.nh.gov/organization/divisions/water/stormwater/construction.htm>.

11. The smallest practical area shall be disturbed during construction activities.
12. Unless otherwise authorized by NHDES, the Applicant shall keep a sufficient quantity of erosion control supplies on the site at all times during construction to facilitate an immediate response to any construction related erosion issues on the site.