*Readopt with amendment Env-Wq 1503.08, eff. 8-15-17 (Document #12342), to read as follows:*

Env-Wq 1503.08 Additional Information Required for AOT Permit Applications. The applicant shall submit the following with the completed application form:

(a) A copy of:

(1) The appropriate USGS map at a 1:24,000 scale, equivalent to 1 inch equals 2,000 feet, with the property boundaries delineated;

(2) The appropriate NRCS county-wide web soil survey from http://websoilsurvey.nrcs.usda.gov; and

(3) The appropriate aerial photograph at a 1:24,000 scale, equivalent to 1 inch equals 2,000 feet, dated no earlier than 2013, with the property boundaries clearly delineated;

(b) A ***DataCheck request results*** letter from the New Hampshire department of natural and cultural resources, natural heritage bureau (NHB), ***dated within one year of application submission,*** ~~which may be obtained using the NHB DataCheck Tool located at https://www2.des.state.nh.us/nhb_datacheck/ ,~~ that either:

(1) States that no NH***B database*** ~~Heritage~~ records ***of threatened or endangered species*** were found in the vicinity of the project and the corresponding map with the property boundaries delineated; or

(2) ***Identifies NHB database records or threatened or endangered species in the vicinity of the project and A~~a~~ssesses*** the potential impacts the project will have ***on the identified species***~~, if NH Heritage records were found~~;

(c) Photographs representative of existing site conditions with a description of what each photograph is showing, referenced to the project plans;

(d) One copy of plans as specified in Env-Wq 1503.11, as applicable for the proposed project, printed on white paper that is 34 to 36 inches wide by 22 to 24 inches high;

(e) The proposed construction sequence for the project showing compliance with Env-Wq 1505.03 relative to maximum open area allowed;

(f) For any project that would have an increase in post-development off-site runoff if stormwater control methods were not implemented, the following:

(1) Supporting information to demonstrate that the criteria for protecting water quality stated in Env-Wq 1507.02 will be met;

(2) One copy of the drainage report, drainage area plans, and hydrologic soil group plans prepared in accordance with Env-Wq 1504.09; and

(3) An infiltration feasibility report as specified in Env-Wq 1504.13 for each infiltration or filtration practice proposed as part of the stormwater management system;

(g) For projects requiring a detailed development plan as described in Env-Wq 1504.05, one copy of the inspection and maintenance manual prepared in accordance with Env-Wq 1507.07;

(h) For projects requiring a detailed development plan as described in Env-Wq 1504.05, the submission requirements for determining percent effective impervious cover and percent undisturbed cover in accordance with Env-Wq 1504.15;

(i) For projects within the protected shoreland as defined in RSA 483-B:4, XV, the information required by Env-Wq 1411.01 and a report on the status of the application for a permit under RSA 483-B:5-b or, if the project is exempt, a statement of the statute or rule that exempts the project from needing a permit under RSA 483-B:5-b;

(j) For projects that involve infiltration of stormwater via subsurface leaching or distribution structures, a completed groundwater discharge registration application if required under Env-Wq 402.33(a)(1) or (c) or under Env-Wq 404 relative to underground injection control;

(k) If the project is within the 100-year floodplain, a supplementary report as specified in Env-Wq 1503.09;

(*l*) If the project is for infrastructure having a projected life that extends beyond 2050 and is within the coastal or great bay region, such additional information as is necessary to address projected storm surge, sea-level rise, and precipitation events identified in the 2014 Science and Technical Advisory Panel Report, Sea-Level Rise, Storm Surges, and Extreme Precipitation in Coastal New Hampshire: Analysis of Past and Projected Future Trends, prepared by the Coastal Risks and Hazards Commission and available at http://www.nhcrhc.org/stap-report/; ~~and~~

(m) If the applicant is not the property owner, proof that the applicant will have a legal right to undertake the project on the property if a permit is issued to the applicant~~.~~***; and***

***(n) For projects requiring consultation with the New Hampshire fish and game department (NHF&G) in accordance with Env-Wq 1503.33(a), a copy of all relevant correspondence with and submissions to NHF&G.***

*Readopt with amendment Env-Wq 1503.19, eff. 8-15-17 (Document #12342), as amended eff. 12-20-19 (Document. #12949, Emergency), and as amended eff. 6-2-20 (Document #13045), to read as follows:*

Env-Wq 1503.19 Criteria for Issuance of AOT Permits. The department shall not issue an AOT permit unless the applicant demonstrates that all of the following criteria are met:

(a) Temporary water quality protection measures in accordance with Env-Wq 1505.05 that are adequate to prevent violations of the surface water quality (SWQ) standards will be used during the construction phase of the proposed activity and maintained until all areas are stabilized;

(b) The permanent methods for protecting water quality proposed in the application meet the requirements of Env-Wq 1507.02 and are adequate to prevent violations of the SWQ standards;

(c) Changes in runoff hydrology, determined in accordance with Env-Wq 1504.09, will be within the limits allowed by Env-Wq 1507.05 and Env-Wq 1507.06;

(d) Cold weather site stabilization measures, as specified in Env-Wq 1505.06, will be implemented as part of the project if applicable;

(e) The project does not use naturally-occurring wetlands to treat or detain stormwater runoff from the proposed development, unless a permit that specifically allows the impacts has been issued pursuant to RSA 482-A;

(f) There are no violations of RSA 482-A, RSA 483-B, or RSA 485-A on the property for which the project is proposed, or, if violations exist, the applicant agrees to a legally-binding schedule on which the violations will be eliminated and any required restoration will be completed;

(g) The project meets the requirements and intent of RSA 430:51-57 and Agr 3800 relative to invasive species;

~~(h) As required by RSA 212-A:9, III, the project has been designed in a manner that will not "jeopardize the continued existence of [state- or federally-listed threatened or endangered] species or result in the destruction or modification of habitat of such species which is determined by the executive director [of the New Hampshire fish and game department (NHF&G)] to be critical", as demonstrated by the report of a study of the proposed project site that is performed by a wildlife biologist who has education and experience in performing property surveys for threatened or endangered species, using an accepted process such as that established in EPA's ecological risk assessment methodologies (https://www.epa.gov/ecobox), that is:~~

~~(1) Submitted to the department with the application and which demonstrates that:~~

~~a. No threatened or endangered species, designated critical habitat for threatened or endangered species, or travel corridors for threatened or endangered species is present on the site or potentially impacted by the project; or~~

~~b. If any threatened or endangered species, designated critical habitat for threatened or endangered species, or travel corridors for threatened or endangered species is present on the site or potentially impacted by the project, the applicant has coordinated with NHF&G on potential impacts of the proposed project thereon, such that the proposed project, including any conservation measures recommended by NHF&G to the benefit of the affected species, cannot reasonably be expected to jeopardize the continued existence of such species or result in the destruction or modification of designated critical habitat; and~~

~~(2) Reviewed by the department in consultation with NHF&G.~~

***(h) For any project that requires consultation with NHF&G pursuant to Env-Wq 1503.33, the applicant has incorporated into the project design all conservation measures recommended by NHF&G to assure the project does not jeopardize the continued existence of threatened and endangered species;***

(i) The applicant has the legal right to undertake the project on the property; and

(j) No reason specified in Env-C 209 exists for denying the permit.

*Readopt with amendment Env-Wq 1503.22, eff. 8-15-17 (Document #12342), to read as follows:*

Env-Wq 1503.22 Amended Permits for Modifications to Approved Projects.

(a) If the permit holder wishes to modify the project as approved in a way that exceeds any of the criteria specified in Env-Wq 1503.21(d)(1)-(8) but is within all of the criteria specified in (c), below, then prior to making any of the changes the permit holder shall apply for an amended permit.

(b) To apply for an amended permit, the permit holder shall:

(1) Submit a complete application for amended permit, as described in (d), below, to the department;

(2) If any portion of a project is located within 0.25 mile of a river or river segment designated under RSA 483, send a copy of the complete application for amended permit to the rivers coordinator and the appropriate local river advisory committee at the time of filing with the department; and

(3) If a copy of the complete application for amended permit has not already been submitted to each municipality in which the project is proposed, send a copy of the complete application to the governing body of the municipality at the time of filing with the department.

(c) A deviation from the approved plans and specifications shall be made under an amended permit only if all of the following criteria are met:

(1) The project as modified will comply with Env-Wq 1507.02 relative to permanent methods of protecting water quality;

(2) The modifications have not and will not result in any changes to wetlands or protected shoreland impacts and will not decrease any buffers required by law or established by a permit or other approval, unless a permit that specifically allows the impacts has been obtained pursuant to RSA 482-A or RSA 483-B, respectively;

(3) The proposed disturbance, exclusive of any disturbance associated with (6) through (9), below, is not more than 40,000 square feet outside the area of disturbance originally approved;

(4) The total impervious area has not increased from the project as originally approved by more than the smaller of 10% or 10,000 square feet;

(5) A change is made to a stormwater management system but:

a. The change does not add more than one stormwater treatment practice, stormwater conveyance, or groundwater recharge practice; and

b. The peak inflow rate to any component of the existing stormwater management system has not increased from that as originally approved by more than 1 cfs during the 2-year 24-hour storm;

(6) If the roadway centerline has been relocated, it is no more than 100 feet from the center line of the roadway as originally approved;

(7) If the center point of a parking area has been relocated, it is no more than 100 feet from the center point of the parking area as originally approved;

(8) If the center point of a structure has been relocated, it is no more than 100 feet from the center point of the structure location as originally approved; and

(9) For excavation, grading, and reclamation plans, the footprint originally approved is not expanded more than 50 feet in any direction.

(d) A complete application for amended permit shall include the following:

(1) An "Amendment Request Form", NHDES-W-01-001, dated 2017, available at http://des.nh.gov/organization/divisions/water/aot/categories/forms.htm, completed as described in Env-Wq 1503.27 and signed as specified in Env-Wq 1503.10;

(2) The fee required by Env-Wq 1503.32(b); ~~and~~

(3) Proof that a copy of the complete application for amended permit has been delivered to the governing body of each municipality in which the project is proposed and, if required by (b)(2), above, to the rivers coordinator and the appropriate local river advisory committee, which proof shall consist of:

a. A copy of the certified mail receipt, for each copy that was sent certified mail;

b. A copy of the delivery confirmation, for each copy that was sent via a private delivery service; or

c. A statement signed by the applicant that the copy was delivered in hand, for each copy that was hand-delivered~~.~~***; and***

***(4) For projects requiring consultation with NHF&G in accordance with Env-Wq 1503.33(a), a copy of all relevant correspondence with NHF&G.***

(e) The department shall review a request for permit amendment and amend the permit if the department determines that the permit holder has demonstrated that the criteria specified in (c), above, are met and the project as modified would have been approved originally.

(f) If conditions are necessary to ensure that the project as modified will conform to the requirements of this chapter, the department shall include such conditions in the permit amendment.

(g) If the deviations exceed the scope of (c), above, the permit holder shall submit a new application if the permit holder wants to proceed with the project as modified.

(h) The amendment of a permit pursuant to this section shall not:

(1) Modify the expiration date of the original permit; or

(2) Subject any provision of the original permit that was not amended to a new appeal period.

*Adopt Env-Wq 1503.33 to read as follows:*

Env-Wq 1503.33 New Hampshire Fish and Game Department Consultation.

(a) Whenever a NHB DataCheck letter indicates documented occurrences of any state- or federally-listed threatened or endangered wildlife species in the vicinity of the project, the applicant shall request consultation with NHF&G to assure that the project does not jeopardize the continued existence of threatened and endangered species; and

(b) If the department receives evidence of an occurrence, verified by NHF&G, of any state- or federally-listed threatened or endangered wildlife species in the vicinity of the project, the department shall refer the project to NHF&G for required consultation.

*Readopt with amendment Env-Wq 1504.09, eff. 8-15-17 Document #12342), to read as follows:*

Env-Wq 1504.09 Stormwater Drainage Report; Drainage Area Plans; Hydrologic Soil Group Plans. A stormwater drainage report, associated drainage area plans, and associated hydrologic soil group plans shall include the following:

(a) A narrative with the following information:

(1) A description of the pre-development and post-development conditions affecting drainage;

(2) The total impervious area assumed per lot, as applicable;

(3) A discussion of how the proposed development is likely to impact downstream surface waters and properties;

(4) A comparison between the pre-development peak discharge rates and the post-development peak discharge rates, for the one-year, 2-year, 10-year, and 50-year, 24-hour storms;

(5) A discussion of how treatment criteria will be met in accordance with Env-Wq 1507.03; and

(6) A discussion of how groundwater recharge is met in accordance with Env-Wq 1507.04;

(b) Calculations for pre- and post-construction stormwater drainage, for 24-hour duration storms with minimum return frequencies of once in one year, 2 years, 10 years, and 50 years using the NRCS "National Engineering Handbook", part 630, hydrology, dated November 2015 or Win TR-20, version 3.10, as developed by the NRCS for determining the rate of runoff, both available as noted in Appendix B, subject to the following:

(1) Depth of precipitation shall be determined using either of the following, both available as noted in Appendix B:

a. "Extreme Precipitation in a Changing Climate for New York and the New England States", version 1.12, published by the USDA, NRCS and Cornell University's Northeast Regional Climate Center; or

b. "NOAA Atlas 14, Precipitation-Frequency Atlas of the United States", Volume 10, Version 2.0, 2015, published by the National Oceanic and Atmospheric Administration, National Weather Service;

(2) The time of concentration shall be determined as follows:

a. If using the Lag method for determining the time of concentration, identify the hydraulic length in feet and provide calculations for determining the average land slope in percent for each sub-basin;

b. If using the velocity method for determining the time of concentration, identify the sheet flow path(s), the shallow concentrated flow path(s), and the channel flow path(s) for each sub-basin; and

c. Sheet flow shall be limited to 100 feet;

(3) The curve number for each sub-basin shall be calculated as follows:

a. For proposed areas of disturbance, including lot development, the hydrologic condition for woods, meadows, or pastures shall be assumed to be "good";

b. For proposed areas of disturbance, including lot development, soil types shall be identified in accordance with the Society of Soil Scientists of Northern New England (SSSNNE) Special Publication No. 3, ***Version 7.0,*** Site-Specific Soil Mapping Standards for New Hampshire and Vermont, ~~February 2011~~ ***July 2021***, available as noted in Appendix B; and

c. For all other areas that contribute runoff to the project site, soil types shall be:

1. Taken from the NRCS county-wide web soil survey at http://websoilsurvey.nrcs.usda.gov; or

2. Identified in accordance with SSSNNE Special Publication No. 3, ***Version 7.0***, Site-Specific Soil Mapping Standards for New Hampshire and Vermont, ~~February 2011~~ ***July 2021***, available as noted in Appendix B; and

(4) If the calculations are done using software that provides error messages, warnings, or other such indicators, such as HydroCAD®, a copy of the calculations shall be submitted that shows all error messages, warnings, and other such indicators;

(c) WQV, WQF, and GRV calculations;

(d) Calculations for designing outlet protection;

(e) Drainage area plans for pre- and post-construction that delineate each sub-basin, including off-site areas which flow onto the project area, at a scale for off-site areas of one inch equals 100 feet, or at a scale of one inch equals 2,000 feet if delineated from a USGS map, and at a scale of one inch equals 50 feet for on-site areas, identifying the following:

(1) The location of sub-basins, reaches, ponds, and all points of interest, as modeled in the stormwater drainage report;

(2) The hydraulic length or time of concentration flow path;

(3) Contours for on-site areas at the same intervals as the plans prepared pursuant to Env-Wq 1504.02 through Env-Wq 1504.05, as applicable, and contours for off-site areas at the same interval or at the intervals on the applicable USGS map;

(4) Roadway station numbering, if applicable; and

(5) Drainage structures such as detention basins, culverts, and treatment practices;

(f) If the plans prepared pursuant to (e), above, for the on-site areas comprise more than 3 sheets at the specified scale, an overview sheet which shows the location of each 50-foot scale sheet and an outline of the area to be impacted by the proposed project; and

(g) Hydrologic soil group plans for pre- and post-construction that delineate each sub-basin, including off-site areas which flow onto the project area, identifying the following:

(1) The location of sub-basins, as modeled in the stormwater drainage report;

(2) If hydrologic soil groups are determined in accordance with (b)(3)b. or (b)(3)c.2., above, the locations of the different soil groups using the following color-coding:

a. Hydrologic soil group A soils shall be shaded green;

b. Hydrologic soil group B soils shall be shaded yellow;

c. Hydrologic soil group C soils shall be shaded orange;

d. Hydrologic soil group D soils shall be shaded red;

e. Open water features shall be shaded blue; and

f. Impervious cover shall be shaded gray;

(3) If hydrologic soil groups are determined in accordance with (b)(3)c.1., the locations of the different soil groups using the color-coding assigned by the NRCS;

(4) The map symbol identifying the soil mapped; and

(5) A map legend.

*Readopt with amendment Env-Wq 1504.13, eff. 8-15-17 (Document #12342), to read as follows:*

Env-Wq 1504.13 Infiltration Feasibility Report. The infiltration feasibility report required by Env-Wq 1503.08(f)(3) shall contain the following:

(a) The location of the practice;

(b) A description of the existing topography at the location of the practice;

(c) The locations of the test pits or borings which constitute the following required number of test pits or borings:

(1) At least one test pit in each infiltration basin area of less than 2,500 square feet;

(2) At least 2 test pits in each infiltration basin area of 2,500 square feet or greater, with an additional one test pit or boring in every 10,000 square feet of infiltration basin area; or

(3) At least one test pit in each infiltration trench with an additional one test pit or boring in every 100 linear feet of trench;

(d) The elevation of the location of the seasonal high water table (SHWT) and bedrock, if within 5 feet below the base of the practice;

(e) Profile descriptions written in accordance with the descriptive procedures, terminology and interpretations found in the Field Book for Describing and Sampling Soils, Version 3.0, NRCS, 2012, available as noted in Appendix B;

(f) A plan showing the soil series for the soils at the location of the proposed practice and within 100 feet of the area's perimeter, in accordance with the Society of Soil Scientists of Northern New England (SSSNNE) Special Publication No. 3, ***Version 7.0***, Site-Specific Soil Mapping Standards for New Hampshire and Vermont, ~~February 2011~~ ***July 2021***, available as noted in Appendix B;

(g) The number and location of test locations, as specified in Env-1504.14(f), and the number of repetitions at each testing location;

(h) The date(s) on which data was collected;

(i) A summary of the design infiltration rate results as determined from Env-Wq 1504.14;

(j) Data sheets for measurements obtained in accordance with the method described in Env-Wq 1504.14(e) that is implemented; and

(k) If the design infiltration rate is for proposed fill soils, the data obtained using the method described in Env-Wq 1504.14(g).

*Adopt Env-Wq 1504.18 to read as follows*

Env-Wq 1504.18 Wildlife Protection Notes

(a) In addition to the requirements of Env-Wq 1504.06, the plans shall also contain the following wildlife protection notes:

(1) All observations of threatened or endangered species on the project site shall be reported immediately to the NHF&G Nongame and Endangered Wildlife Environmental Review Program by phone at 603-271-2461 and by email at NHFGreview@wildlife.nh.gov. Email subject line: NHBXX-XXXX, PROJECT NAME, Wildlife Species Observation;

(2) Photographs of the observed species and nearby elements of habitat or areas of land disturbance shall be provided to NHF&G in digital format at the above email address for verification, as feasible;

(3) In the event a threatened or endangered species is observed on the project site during the term of the permit, the species shall not be disturbed, handled, or harmed in any way prior to consultation with NHF&G and implementation of corrective actions recommended by NHF&G, if any, to assure the project does not jeopardize the continued existence of threatened and endangered species: and

(4) The NHF&G, including its employees and authorized agents, shall have access to the property during the term of the permit.

(b) For projects requiring consultation with NHF&G in accordance with Env-Wq 1503.33, the plans shall contain a list of all conservation measures recommended by NHF&G to assure the project does not jeopardize the continued existence of threatened and endangered species.

*Adopt Env-Wq 1506.15 to read as follows*

Env-Wq 1506.15 Manufactured Erosion and Sediment Control Products.

(a) All manufactured erosion and sediment control products, with the exception turf reinforcement mats, utilized for, but not limited to, slope protection, runoff diversion, slope interruption, perimeter control, inlet protection, check dams, and sediment traps shall not contain welded plastic, plastic, or multi-filament or monofilament polypropylene netting or mesh with an opening size of greater than 1/8 inches.

(b) Turf reinforcement mats shall be covered with soil to prevent exposure of the mats to the surface.

## APPENDIX A: STATE STATUTES IMPLEMENTED

| Rule Section(s) | State Statute(s) Implemented |
|---|---|
| Env-Wq 1503.08 intro, (a), & (c)-(m); Env-Wq 1503.19 intro, (a)-(g), & (j); Env-Wq 1503.22(a)-(c) & (e)-(h). | RSA 485-A:1; RSA 485-A:17 |
| Env-Wq 1503.08(b) and (n), 1503.19(h), 1503.22(d) and 1503.33 | RSA 485-A:1; RSA 485-A:17; RSA 212-A:9, III |
| Env-Wq 1504.09 and 1504.13 | RSA 485-A:1; RSA 485-A:17 |
| Env-Wq 1504.18 | RSA 485-A:1; RSA 485-A:17; RSA 212-A:9, III |
| Env-Wq 1506.15 | RSA 485-A:1; RSA 485-A:17 |

## APPENDIX B: INCORPORATED REFERENCES

| Rule (Env-Wq) | Reference [Date/Edition] | How to Obtain |
|---|---|---|
| 1503.08(l) | 2014 Science and Technical Advisory Panel Report, Sea-Level Rise, Storm Surges, and Extreme Precipitation in Coastal New Hampshire: Analysis of Past and Projected Future Trends | NH Coastal Risks and Hazards Commission<br><br>Available at no cost at http://www.nhcrhc.org/stap-report/ |
| 1504.09(b) intro | WinTR-20 [version 3.10] | No cost to download from https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/null/?cid=stelprdb1042793 |
| 1504.09(b) intro | National Engineering Handbook, Part 630, Hydrology Chapters [November 2015] | No cost to download from https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/?cid=stelprdb1043063 |
| 1504.13(e) | Field Book for Describing and Sampling Soils [Version 3.0, September 2012] | No cost to download from https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052523.pdf<br>Can be ordered from https://nrcspad.sc.egov.usda.gov/DistributionCenter/product.aspx?ProductID=991 |

| Rule (Env-Wq) | Reference [Date/Edition] | How to Obtain |
|---|---|---|
| 1504.09(b)(1)a. | Extreme Precipitation in a Changing Climate for New York and the New England States [version 1.12] | NRCS and Cornell University Northeast Regional Climate Center<br>Available at no cost at<br>http://precip.eas.cornell.edu |
| 1504.09(b)(1)b. | NOAA Atlas 14, Precipitation-Frequency Atlas of the United States; Volume 10, Version 2.0 [2015] | National Oceanic and Atmospheric Administration, National Weather Service<br>Available at no cost at<br>http://www.nws.noaa.gov/oh/hdsc/PF_documents/Atlas14_Volume10.pdf<br>or directly at<br>http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=nh |
| 1504.09(b)(3) b. & c.2.<br>1504.13(f) | Special Publication No. 3,Version 7.0, Site-Specific Soil Mapping Standards for New Hampshire and Vermont July 2021. | No cost to download from https://sssnne.wordpress.com **OR**<br>Can be ordered for $8.00 from SSSNNE at above address |