AMENDMENT #1 TO THE
PROTOTYPE PROGRAMMATIC AGREEMENT
BETWEEN THE
US DEPARTMENT OF AGRICULTURE,
NATURAL RESOURCES CONSERVATION SERVICE VERMONT STATE OFFICE,
AND THE
VERMONT STATE HISTORIC PRESERVATION OFFICER,
REGARDING CONSERVATION ASSISTANCE
(AGREEMENT)

WHEREAS, the Agreement was executed on April of 2015; and

WHEREAS, the Natural Resources Conservation Service (NRCS) Vermont has requested that its Agreement be amended to primarily update the April 28, 2015 PA, which sunsets on April 28, 2025 and to update the list of conservation practices listed in Appendices A-C, update the data sharing agreement language, remove unnecessary language, add additional clarification on the review and consultation process around routine soil studies in Vermont. These changes throughout the agreement warrant a fully amended agreement; and

WHEREAS, NRCS Vermont will send a copy of this executed amendment to the NRCS FPO, SHPO, and the Advisory Council on Historic Preservation; and

NOW, THEREFORE, in accordance with Stipulation XXI of the Agreement, NRCS Vermont and SHPO agree that the Agreement is hereby amended to read as follows:

1. Amend the Agreement so it reads as follows:

PROTOTYPE PROGRAMMATIC AGREEMENT
BETWEEN
THE U.S. DEPARTMENT OF AGRICULTURE,
VERMONT NATIONAL RESOURCES CONSERVATION SERVICE STATE OFFICE
AND
THE VERMONT STATE HISTORIC PRESERVATION OFFICER
REGARDING CONSERVATION ASSISTANCE

WHEREAS, the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) administers numerous voluntary assistance programs, special initiatives, and grant and emergency response programs for soil, water, and related resource conservation activities available to eligible private producers, States, commonwealths, Federally Recognized Tribal governments, other government entities, and-other applicants for conservation assistance, pursuant to the Agricultural Act of 2014 (2014 Farm Bill, Public Law 113-79); Soil Conservation and Domestic Allotment Act of 1935 (Public Law 74-46; 16 U.S.C. 590 a-f, as amended); the Flood Control Act of 1944 (Public Law 78-534, as amended); the Watershed Protection and Flood Prevention Act (Public Law 83-566, as amended, 16 U.S.C. 1001-1012); the Agricultural and Food Act of 1981 (Public Law 97-98, 95 Stat. 1213); the Agricultural Credit Act (Public Law 95-3341, Title IV, Section 403); Food, Agriculture, Conservation and Trade Act of 1990 (Public Law 101-624); the Flood Control Act of 1936 (Public Law 74-738); the Food Security Act of 1 985 (Public Law 99-198, as amended); the Federal Agricultural Improvement and Reform Act of 1996 (Public Law 104-127); and executive and secretarial orders, implementing regulations and related authorities; and

WHEREAS, NRCS, through its conservation assistance programs and initiatives, provides assistance for activities with the potential to affect historic properties eligible for or listed in the National Register of Historic Places (NRHP), including National Historic Landmarks (NHL) and therefore constitute undertakings subject to review under Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. 470f, and its implementing regulations, 36 CFR Part 800, including the provisions of these regulations addressing NHLs at 36 CFR Part 800.10; and

WHEREAS, NRCS has determined that the requirement to take into account the effects to historic properties of its undertakings may be more effectively and efficiently fulfilled through the use of a Prototype Programmatic Agreement (Prototype Agreement); and

WHEREAS, the Vermont NRCS (VT NRCS) has consulted with the Vermont State Historic Preservation Officer (SHPO) and followed the instructions in the Advisory Council on Historic Preservation (ACHP) letter that accompanied the Prototype Agreement, dated November 21, 2014; and

WHEREAS, NRCS also is responsible for fulfilling the requirements of the National Environmental Policy Act (NEPA), including the use of categorical exclusions, and coordinating NEPA and Section 106 reviews, as appropriate; and

WHEREAS, NRCS developed this Prototype Agreement in consultation with the National Conference of State Historic Preservation Officers (NCSHPO) and its members, interested Indian tribes, Native Hawaiian organizations, interested historic preservation organizations (such as the National Trust for Historic Preservation), and the ACHP; and

WHEREAS, in accordance with 36 CFR Part 800.14(b)(4), the ACHP has designated this agreement as a Prototype Agreement, which allows for the development and execution of subsequent prototype

agreements by individual NRCS State office(s) (State-based Prototype Agreements) to evidence compliance with Section 106; and

WHEREAS, this State-based Prototype Agreement conforms to the NRCS Prototype Agreement as designated by the ACHP on November 21, 2014, and therefore, does not require the participation or signature of the ACHP when the NRCS State Office and the SHPO/THPO/Indian tribe/NHO agree to the terms of the State-based Prototype Agreement; and

WHEREAS, this Prototype Agreement replaces the 2002 nationwide "Programmatic Agreement among the United States Department of Agriculture Natural Resources Conservation Service, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers relative to Conservation Assistance," as amended in 2011 and 2012, which expired on November 20, 2014; and

WHEREAS, the NRCS State Conservationist is the responsible federal agency official within the state for all provisions of Section 106, including consultation with the SHPO, NHOs, and government-to government consultation with Indian tribes to negotiate the State-based Prototype Agreement; and

WHEREAS, the State-based Prototype Agreement does not apply to undertakings occurring on or affecting historic properties on Tribal lands, as defined by Section 301(14) of the NHPA, without prior agreement and execution of a State-based Prototype Agreement with the concerned Indian tribe; and

WHEREAS, the NRCS has consulted with Indian tribes and has created a separate PPA with the Stockbridge-Munsee; and

WHEREAS, this Prototype Agreement does not modify the NRCS' responsibilities to consult with Indian tribes and NHOs on all undertakings that might affect historic properties and properties of religious and cultural significance to them, regardless of where the undertaking is located, without prior agreement by the concerned Indian tribe or NHO, and recognizes that historic properties of religious and cultural significance to an Indian tribe or NHO may be located on ancestral homelands or on officially ceded lands near or far from current settlements; and

WHEREAS, when NRCS conducts individual Section 106 reviews for undertakings under this State-based Prototype Agreement, it shall identify and invite other agencies, organizations, and individuals to participate as consulting parties; and

NOW, THEREFORE, the NRCS Vermont State Office (VT NRCS) and the Vermont SHPO agree that undertakings in Vermont shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

VT NRCS shall ensure that the following stipulations are met and carried out:

I. Applicability

A. Once executed by the VT NRCS and the Vermont SHPO, also referred to as the Vermont Division for Historic Preservation (VDHP), this State-based Prototype Agreement sets forth the review process for all NRCS undertakings subject to Section 106 in the State of Vermont.

B. Execution of this State-based Prototype Agreement supersedes any existing State Level Agreement with VDHP executed under the previous NRCS nationwide Programmatic Agreement but does not replace any existing project-specific Section 106 agreements (Memoranda of Agreement or Programmatic Agreements).

C. This State-based Prototype Agreement applies only when there is a Federal Preservation Officer (FPO) in the NRCS National Headquarters (NHQ) who meets the Secretary of the Interior's Professional Qualification Standards (48 FR 44716).

D. This State-based Prototype Agreement applies only where there is staffing or access to staffing (through contracted services or agreements with other agencies or Indian tribes) who meet the Secretary of Interior's Professional Qualification Standards in the VT NRCS.

II. Roles, Personnel and Professional Qualifications

A. NRCS

1. VT NRCS shall ensure all NRCS staff or individuals carrying out Section 106 historic preservation compliance work on its behalf, including the VT NRCS senior historic preservation professional staff member (the Cultural Resources Specialist (CRS), or Archaeologist, or Historian), are appropriately qualified to coordinate the reviews of resources and historic properties as applicable to the resources and historic properties being addressed (site, building, structure, landscape, resources of significance to Indian tribes, NHOs, and other concerned communities). Thus, these staff and consultants must meet the Secretary of the Interior's Professional Qualification Standards and have the knowledge to assess the resources within an undertaking's area of potential effects (APE).
2. NRCS remains responsible for all consultation with VDHP, Indian tribes, THPOs and NHOs, and all determinations of NRHP eligibility and effect. NRCS may not delegate consultation for findings and determinations to professional services consultants or producers/applicants for conservation assistance.
3. The VT NRCS State Conservationist is responsible for oversight of VT NRCS's performance under this State-based Prototype Agreement.
4. The VT NRCS State Conservationist is responsible for consultation with the SHPO to develop consultation protocols. These responsibilities may not be delegated to any other staff, nor carried out on behalf of NRCS by another federal agency.
5. Under the direction of the State Conservationist, VT NRCS agrees to employ a full-time, permanent CRS. This person or persons shall meet the qualifications contained in "Archeology and Historic Preservation: Secretary of the Interiors Standards and Guidelines [As Amended and Annotated] - Professional Qualifications Standards" as set forth in 36 CFR 61.
6. All mitigation measures and evaluations of cultural resources for significance will be performed by the VT NRCS CRS/Archeologist/Historian.
7. The VT NRCS CRS/Archaeologist/Historian and/or professional consultants shall provide technical historic property and resource information to the State Conservationist for use in Section 106 findings and determinations, after appropriate consultations with VDHP, Indian

tribes, NHOs, and discussions with the landowner. The CRS/Archaeologist/Historian shall monitor and oversee the work and reporting of all VT NRCS field office personnel and professional service consultants. The CRS/Archaeologist/Historian shall also assist the State Conservationist in determining whether an undertaking has the potential to affect historic properties, triggering Section 106 review, pursuant to 36 CFR Part 800.3(a).

8. The VT NRCS CRS/Archaeologist/Historian shall oversee development of the scopes of work for investigation of the APEs for identified undertakings (see 36 CFR Part 800.4). The VT NRCS may use professional service contractors or consultants or partners to assist with cultural resources compliance studies. VT NRCS shall ensure these contractors meet the Secretary of Interior's Professional Qualifications Standards.
9. VT NRCS Field Office Personnel involved in implementing this State-based Prototype Agreement, after completion of NRCS' web, classroom, and field awareness training acquired through USDA's AgLearn training site, shall work with the CRS/Archaeologist/Historian, as feasible, in completing historic preservation compliance (Section 106) field records for the agricultural producer's (NRCS' client or voluntary applicant for assistance) files and for use in producing initial historic property identification records (as set forth and outlined in NRCS' operational guidance, the National Cultural Resources Procedures Handbook, Title 190, Part 601).
10. All VT NRCS Field Office Personnel reviews and inspections will be conducted under the supervision of the CRS. All mitigation measures and evaluations of cultural resources for significance will be performed by the CRS.
11. NRCS Field Office Personnel shall use the Practice Description Form for Cultural Resource Review (Appendix G) to describe any planned undertaking listed in Appendices B-C that has the potential to affect cultural resources. The Practice Description Form is submitted to the CRS/Archeologist/Historian for a determination of effect.
12. VT NRCS may, as appropriate, contract needed investigations and surveys for actions beyond the scope of VT NRCS staff time and available resources, employee qualifications, certifications, or responsibility. Any contractor shall meet the qualifications contained in "Archeology and Historic Preservation: Secretary of the Interiors Standards and Guidelines - Professional Qualifications Standards" as set forth in 36 CFR 61.

B. SHPO

1. The Environmental Review Team will be the primary Vermont Division for Historic Preservation (VDHP) staff responsible for working with NRCS in Vermont.
2. VDHP, if provided sufficient data on a proposed undertaking and APE for the proposed undertaking by VT NRCS, shall consult and provide a response to VT NRCS within 30 calendar days. The definition of sufficient is provided in 36 CFR Part 800.11.

C. ACHP

1. The ACHP shall provide technical guidance, participate in dispute resolution, and monitor the effectiveness of this agreement, as appropriate.

D. Training

1. NRCS shall require all personnel conducting cultural resources identification and evaluation work to complete, at a minimum, the NRCS Web based (in USDA AgLearn) and field Cultural Resources Training modules and the ACHP's Section 106 Essentials course.
2. VT NRCS shall require CRS/Archaeologist/Historian and/or other NRCS personnel overseeing cultural resource work to take the NRCS Cultural Resources Training Modules (awareness training) and the ACHP's Section 106 Essentials course, or a course with similar content, if approved by the NRCS FPO. Training must be completed within the first calendar year after execution of this State-based Prototype Agreement. NRCS personnel shall review and update training completion with their supervisors and include their training in their Individual Development Plans.

3. VT NRCS may invite the SHPO/THPO/Indian tribe/NHO or staff to participate in presentations at agency classroom or field trainings.
4. VT NRCS shall encourage all personnel conducting or overseeing cultural resources work to take additional appropriate specialized training as provided by VDHP, Indian tribes, NHOs, the ACHP, National Park Service, General Services Agency or other agencies, as feasible.
5. VT NRCS Field Staff new to the state and /or the agency will also be trained on the job with the CRS as practices are reviewed in the field. The responsible supervisor in each field office shall ensure new employees are provided the opportunity for training when archaeology fieldwork is performed in their county.
6. VT NRCS State Office Staff will update and inform its staff about new developments in cultural resources and available training opportunities at staff meetings at regular intervals not to exceed one year.
7. VDHP and VT NRCS agree that all VT NRCS Field Staff responsible for field assessment of cultural resources will complete any supplemental State Training reasonably deemed necessary by either VT NRCS or VDHP.

III. Standards of Performance

VT NRCS shall ensure that the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (Appendix D) and the Vermont Division for Historic Preservation's Guidelines for Conducting Archeology in Vermont (Appendix E) are followed when assessing a conservation practice's effect on historic properties.

IV. Review Procedures

VT NRCS and VDHP agree to use the classification system established in Appendices A-C to determine the potential of an undertaking being planned under any VT NRCS program to affect cultural resources. Trained VT NRCS personnel will use the cultural resources procedures contained in Appendix F.

A. In consultation with VDHP, VT NRCS has identified those undertakings with little to no potential to affect historic properties and listed those undertakings in Appendix A. Upon the determination by the CRS/Archaeologist/Historian that a proposed undertaking is included in Appendix A, the NRCS is not required to consult further with VDHP for that undertaking.
B. The list of undertakings provided in Appendix A may be modified through consultation and written agreement between the VT NRCS State Conservationist and VDHP without requiring an amendment to this State-based Prototype Agreement. The VT NRCS will maintain the master list and will provide an updated list to all consulting parties with an explanation of the rationale (metadata) for classifying the practices accordingly.
C. Practices listed under Appendix B are considered undertakings with the potential to affect cultural resources except when nonintrusive or when installation will not exceed the depth and extent of previous cultivation.
D. Practices listed under Appendix C are considered undertakings with the potential to affect cultural resources.
E. Undertakings not identified in Appendix A shall require further review as follows: The VT NRCS shall consult with VDHP and THPOs to define the undertaking's APE, identify and evaluate historic properties that may be affected by the undertaking, assess potential effects, and identify strategies for resolving adverse effects prior to approving the financial assistance for the undertaking.
F. The VT NRCS shall attempt to avoid adverse effects to historic properties whenever possible; where historic properties are located in the APE, VT NRCS shall describe how it proposes to modify, buffer, or move the undertaking to avoid adverse effects to historic properties.

G. Where the VT NRCS proposes a finding of "no historic properties affected" or "no adverse effect" to historic properties, VDHP and THPOs shall have 30 calendar days from receipt of this documented description and information to review it and provide comments. The VT NRCS shall take into account all timely comments.
H. If VDHP, or another consulting party, disagrees with VT NRCS' findings and/or determination, it shall notify the VT NRCS within the 30 calendar day time period. The VT NRCS shall consult with VDHP and THPOs or other consulting party to attempt to resolve the disagreement. If the disagreement cannot be resolved through this consultation, VT NRCS shall follow the dispute resolution process in Stipulation XVIII below.
I. If VDHP or THPOs does not respond to the VT NRCS within the 30 calendar day period and/or the NRCS receives no objections from other consulting parties, or if VDHP and THPOs concurs with the VT NRCS' determination and proposed actions to avoid adverse effects, the VT NRCS shall document the concurrence/lack of response within the review time noted above, and may move forward with the undertaking.
J. Where a proposed undertaking may adversely affect historic properties, VT NRCS shall describe proposed measures to minimize or mitigate the adverse effects, and follow the process in 36 CFR Part 800.6, including consultation with other consulting parties and notification to the ACHP, to develop a Memorandum of Agreement to resolve the adverse effects.

V. Vermont Exclusions

A. Before implementation of any activities described in this Stipulation V, the VT NRCS State Cultural Resources Specialist will review the foreseeable effects of the activity to ensure that there are no special circumstances that might result in adverse effects to NRHP eligible resources.
B. The VT NRCS need not identify historic properties, nor consult with VDHP about effects on historic properties, with respect to the following types of undertaking:
    1. Conservation practices planned entirely within long-used farm complexes and barnyards where the subsurface has been severely disturbed by initial barn and outbuilding construction, the installation, improvements and maintenance of infrastructure and access roads, and/or the mechanical removal of manure will be exempted from review. These recurring farm activities destroy the upper soil layers where intact archeological deposits are typically located. This exclusion does not apply to recently built farm complexes (<15 years old) where minimal ground disturbance has occurred, farms located in floodplains where deep buried archeological deposits are expected, or if the remnants of barn foundations or other historic archeological remains are located within or near the farm complex.
    2. Tree/shrub/hedge planting practices where bare-root stock is placed in shovel or planting bar slits and disturbance is confined within slumped material along an eroded streambank or within plowzone soils that have been disturbed by many years of cultivation.
    3. Soil Survey: The NRCS conducts soil survey activities that involve no ground disturbance or are limited to small-scale field investigations, such as small shovel holes less than 25cm in diameter, auger holes, probe holes, and core holes; the potential for these activities to affect historic properties is minimal. (Upon the discovery of archaeological resources, soil scientists shall close these test pits, leaving the materials in place and reporting the finds to the CRS.) Larger scale field investigations, such as soil investigation pits larger than 25cm in diameter, do have a potential to affect historic properties and require review as an undertaking. Additionally, the discovery provisions outlined in Stipulation VII below apply to any cultural resources or historic properties identified during soil survey of any scale.

VI. Lead Federal Agency

A. For any undertaking for which the NRCS is the lead federal agency for Section 106 purposes per 36 CFR Part 800.2(a) (2), VT NRCS staff shall follow the terms of this State- based Prototype

Agreement. VT NRCS shall notify VDHP of its involvement in the undertaking and the involvement of the other federal agencies.

B. For any undertaking for which the NRCS is not the lead federal agency for Section 106 purposes, including those undertakings for which the NRCS provides technical assistance to other USDA or other federal agencies, the terms of this State-based Prototype Agreement shall not apply to that undertaking. If the lead federal agency agrees, NRCS may follow the approved alternative procedures in place for that agency.

VII. Treatment of Resources

A. If a site is encountered during normal planning activities, the site boundaries and measures used to avoid the cultural resource will be determined by the CRS in consultation with VT NRCS field personnel, landowner(s) and described in the Cultural Resources Trip Report (Appendix H). An appropriate buffer shall be established around the site based on site conditions and the type of practice(s) being installed.

B. All evaluations of cultural resources for eligibility to the National Register of Historic Places (NRHP) will be conducted by the CRS. The methods used to determine eligibility will be based on the NRHP criteria and the Secretary of the Interior's Standards for Archeology.

C. Any building or structure 50 years or older will be assumed to have the potential to be eligible for the National Register of Historic Places. Demolition of all or any part of such property is considered an adverse effect and may not proceed until consultation with VDHP has been completed. Consultation includes evaluation of significance and eligibility. Based on eligibility, treatment can include such things as avoidance and the development of an MOA. Treatment of buildings and structures shall be undertaken in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties (1992).

VIII. Post-review Discoveries of Cultural Resources or Historic Properties and Unanticipated Effects to Historic Properties

A. Where construction has not yet begun and a cultural resource is discovered after Section 106 review is complete, the VT NRCS shall consult to seek avoidance or minimization strategies in consultation with VDHP and THPOs, and/or to resolve adverse effects in accordance with 36 CFR Part 800.6.

B. The VT NRCS shall ensure that every contract for assistance includes provisions for halting work/construction in the area when potential historic properties are discovered or unanticipated effects to historic properties are found after implementation, installation, or c43onstruction has begun. When such a discovery occurs, the producer who is receiving financial assistance or their contractor shall immediately notify the VT NRCS State Conservationist's Office, CRS, supervisory VT NRCS personnel for the area, and the landowner/applicant.

1. VT NRCS CRS shall inspect the discovery within 24 hours, if weather permits, and in consultation with the local VT NRCS official (field office supervisor or District or Area Conservationist), concerned Indian tribes, VDHP, the VT NRCS State engineering or program supervisor, as appropriate), the landowner/producer (whomever NRCS is assisting), the CRS shall establish a protective buffer zone surrounding the discovery. This action may require inspection by tribal cultural resources experts in addition to the CRS.
2. All VT NRCS contact with media shall occur only under the direction of the VT NRCS Public Affairs Officer, as appropriate, and the State Conservationist, and in consultation with our Tribal partners.
3. Security shall be established to protect the resources/historic properties, workers, and private property. Local law enforcement authorities will be notified in accordance with applicable State law and NRCS policy in order to protect the resources. Construction and/or work may resume outside the buffer only when the State Conservationist determines it is appropriate and safe for the resources and workers.

4. VT NRCS CRS shall notify VDHP, Tribes, and the ACHP no later than 48 hours after the discovery and describe VT NRCS' assessment of the National Register eligibility of the property, as feasible and proposed actions to resolve any adverse effects to historic properties. The eligibility determination may require the assessment and advice of concerned Indian tribes or NHOs, VDHP, and technical experts (such as historic landscape architects) not employed by VT NRCS.
5. VDHP, Tribes, and the ACHP shall respond within 48 hours from receipt of the notification with any comments on the discovery and proposed actions.
6. VT NRCS shall take any comments provided into account and carry out appropriate actions to resolve any adverse effects.
7. VT NRCS shall provide a report to VDHP, Tribes, and the ACHP of the actions when they are completed.

C. When human remains are discovered, VT NRCS shall also follow all applicable federal, tribal, and state burial laws and ordinances, including the Native American Graves Protection and Repatriation Act, and implementing regulations, when on tribal or federal lands, and related human rights and health statutes, where appropriate. VT NRCS shall also refer to the ACHP's Policy Statement regarding Treatment of Burial Sites, Human Remains and Funerary Objects and the ACHP's Section 106 Archaeology Guidance. VT NRCS shall also follow USDA and NRCS policy on treatment of human remains and consultation. The provisions of Title 13 V.S.A. Sections 3761 and 3764, (Appendix I) shall be observed in conjunction with the following steps:
   1. The Vermont State Police will be contacted by VT NRCS personnel to determine whether the remains are part of an on-going investigation;
   2. VDHP will be notified of the discovery;
   3. If possible, the CRS will determine the ethnicity of the remains and their approximate age;
   4. If the remains are not part of an ongoing police investigation and are not of Native American extraction, the VT NRCS will consult with VDHP in the development of an appropriate plan for treating the discovery;
   5. VT NRCS field personnel and the contractor will take appropriate measures, such as erecting protective fence or barriers, to protect the remains until the plan for treating the remains is completed;
   6. Planning and construction activities at the site can proceed only after VT NRCS staff and VDHP and Tribes agree that the plan for treating the remains has been properly implemented.

IX. Quality Assurance

VDHP may request to monitor activities carried out pursuant to this state level agreement, and the ACHP may be asked to review such activities by either party. The VT NRCS will fully cooperate with VDHP and the ACHP in carrying out their monitoring and review responsibilities.

X. Reporting

A. VT NRCS shall on an annual basis provide SHPO with documentation on each undertaking planned by May 1 of the following calendar year. The VT NRCS will provide its proposed APE, identification of historic properties and/or scope of identification efforts, and assessment of effects in a single transmittal to the SHPO provided this documentation meets the substantive standards in 36 CFR Part 800.4-5 and 800.11. SHPO may request such documentation more frequently. This information shall include:
   1. Location and area of potential effect for each proposed practice.
   2. Results of the archival research.
   3. Acres covered by the field investigation.
   4. Methodological approach used.
   5. The number and types of resources located.
   6. Number of resources avoided.

7. Method of avoidance
8. National Register of Historic Places eligibility information and mitigation information.

B. In addition, the person(s) conducting any cultural resources fieldwork shall be identified. Field personnel will use the Practice Description Form for Cultural Resources Review (Appendix G) to describe planned undertakings. When the CRS visits projects a Cultural Resources Trip Report (Appendix H) will be prepared and submitted to VDHP. Hard and/or digital copies of compliance documentation for individual practices will be filed at the respective NRCS field office and the Cultural Resources Specialist's office. When a new archeological site is identified a Vermont Archaeological Inventory (VAI) site form will be completed through the Vermont Online Resource Center Map Tool. Completed site forms will be submitted digitally to VDHP no later than May 1 of the following calendar year.

C. The VT NRCS shall provide VDHP with an annual report containing a summary of all the undertaking-related information described in Stipulation X.A above. When reporting summary information on sites avoided, the VT NRCS will list the location and number of practices moved, number of practices changed, number of VT NRCS withdrawals of assistance and the number of landowner withdrawals. The VT NRCS will list the number of cultural resources reported, the number of resources impacted, the number of resources found significant, and the number of historic properties suffering adverse effects. Recommendations, if any, for revising and improving the summary documentation will be provided as part of the Annual Report.

D. Every year following the execution of this agreement, commencing December 1, 2015, until it expires or is terminated, the VT NRCS State Conservationist shall provide all consulting parties (including those parties who participate in the consultation but do not sign the agreement) and the FPO a summary report detailing work undertaken pursuant to its terms, including a list of undertakings falling under Appendix A as well as undertakings that required further review; a summary of the nature and content of meetings held with SHPO/Indian tribes/NHOs; and an assessment of the overall effectiveness of the State-based Prototype Agreement. Such report shall include any scheduling changes proposed, any problems encountered, and any disputes and objections received in VT NRCS' efforts to carry out the terms of this agreement.
    1. The NRCS FPO shall use the state reports to provide, through the NRCS SPO, an annual report to the ACHP.
    2. The State Conservationist shall use the state report to assess the need for annual meetings with the SHPO/Indian tribes/NHO each fiscal year.

E. The State Conservationist will participate in an annual review with the NRCS Regional Conservationist regarding the effectiveness of the prototype agreement and submit a written (email) report following this review to the SPO (Deputy Chief for Science and Technology). The NRCS State Conservationist, SHPO, Indian tribes, or NHO may request that the ACHP participate in any annual meeting or agreement review.

XI. Curation Arrangements

The NRCS shall ensure that copies of all records resulting from cultural resources surveys, evaluation studies or data recovery projects are sent to VDHP. Temporary artifact storage is located at the CRS office. Artifacts and other archeological materials remain the property of the respective landowners(s) and shall be offered to the landowner(s) upon completion of the analysis (GM 402 Part 401.35(a)). If the landowner does not want the archaeological materials, they shall be offered to the respective Native American community based on ancestral homelands and site type. If landowner(s) or tribe(s) does not want the archeological materials then the archeological materials shall be offered to the State of Vermont for curation at the Vermont Archaeology Heritage Center in Barre, VT.

XII. Access to Cultural Resources Information

VDHP shall provide the NRCS CRS with access to the Vermont Online Resource Center (ORC) and other relevant historic records when requested. The CRS shall use this information to determine potential impacts on recorded cultural resources for all undertakings implemented through programs administered by NRCS. The VT NRCS agrees that all VAI maps and digitized site location data and other sensitive archeological information will be securely maintained at the Cultural Resource Specialist's office, in locked files or map drawers, and that access to specific site location data will be restricted to the Cultural Resources Specialist, Cultural Resources Coordinator or VT NRCS staff designated by the CRS. Under Vermont Law all sensitive archeological information is excluded from the 'Right to Know' law (Appendix E, Section 5.7; Vermont Statutes Annotated, Chapter 5, Section 317). Access to this information will be restricted and controlled by the CRS and the CRS Staff. Approximate site location data and archeological sensitivity maps will be provided to VT NRCS field offices upon request and availability. NRCS producers that have archeological sites on their property will have access to all cultural resources data, sensitive or non-sensitive, that is maintained by NRCS.

XIII. Sharing Technology and Information

A. VDHP will provide the NRCS with assistance in conducting cultural resources reviews by providing access to site locational data, archeological reports, the Vermont State Historic Preservation Plan, historic context, and any other information pertaining to cultural resources sensitivity analysis.

B. The NRCS agrees to provide cultural resources review data to VDHP as established in Stipulation X as well as technical assistance in erosion control and protection of cultural resources when requested by VDHP, as time and staff resources permit. Requests will be coordinated through CRS.

XIV. Compliance with Applicable State Law and Tribal Law (when on Tribal lands)

NRCS shall comply with relevant and applicable state law, including permit requirements on state land, and with relevant and applicable tribal law, when on tribal lands.

XV. Consultation with Native American Tribal Nations

NRCS will consult with THPOs and Federally Recognized Tribes that do not have a designated THPO in order to establish consultation protocols on tribal or ancestral lands. Until such consultation protocols are established, NRCS will follow the Advisory Council's regulations for implementation of Section 106 of the National Historic Preservation Act and consult with Federally Recognized Tribes in accordance with 36 CFR Part 800.

To date there are no federally recognized tribes with tribal lands within Vermont, but the Stockbridge-Munsee Band of Mohican Indians, a federally recognized tribe, does have ancestral homelands from south of the confluence of the Dead Creek and Otter Creek and west of the foothills of the Green Mountains. NRCS established consultation protocol with the Stockbridge- Munsee Band of Mohican Indians in January of 2002. All conservation practices planned south of the confluence of the Dead Creek and Otter Creek and west of the foothills of the Green Mountains in Addison, Bennington and Rutland County, Vermont are submitted to the Tribal Historic Preservation Officer and/or the Tribal Historic Preservation Assistant, for their review and comments.

XVI. Public Consultation

A. Section 106 of the National Historic Preservation Act, 36 CFR 800, requires enhanced public participation as early as possible in project planning. Section 800.2 (d) of the regulations requires that the federal agency or its delegate seek and consider the views of the public. A list of some of the individuals, organizations, and groups who may be interested in the proposed undertaking and

in potentially affected historic and archeological resources is provided in Appendix E Section 6.0. Other individuals, groups or organizations may also express interest in a particular project.

B. In accordance with 800.2 (d) (1), the extent and nature of "public involvement" should reflect the scale and complexity of the project and its effects; the role of the federal government and likely public interest or controversy. NRCS shall consult with the public during the planning of intensive archeological investigations (Phase III Data Recovery). NRCS will ensure that public consultation is conducted with the appropriate individuals and groups, depending on the size and nature of the undertaking. For individual farm, and similar small practices, this will include, the landowner, any partners involved (such as the Conservation District), and other individuals or groups who express interest in consulting in that undertaking.

XVII. Public Involvement

The NRCS State Conservationist will ensure the public is involved in the development of this State-based Prototype Agreement and participates in Section 106 review as set forth above in Stipulation IV (reference to other parties).

XVIII. Dispute Resolution

A. Should any consulting or signatory party to this State-based Prototype Agreement object to any actions proposed or the way the terms of the agreement are implemented, the NRCS State Conservationist and CRS shall consult with such party to resolve the objection. If the State Conservationist determines that such objection cannot be resolved, they will:

1. Forward all documentation relevant to the dispute, including the State Conservationist's proposed resolution, to the NRCS FPO and Senior Policy Official (SPO Deputy Chief for Science and Technology) and the ACHP. The ACHP shall provide the FPO, SPO, and State Conservationist with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, NRCS shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP and any signatory or consulting parties and provide them with a copy of this written response. NRCS will then proceed according to its final decision.
2. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day period, NRCS may make a final decision on the dispute and proceed. Prior to reaching such a final decision, NRCS shall prepare a written response that considers any timely comments regarding the dispute from the signatories and consulting parties and provide them and the ACHP with a copy of the written response.

B. The VT NRCS responsibility to carry out all other actions subject to the terms of this agreement that are not the subject of the dispute remains unchanged.

C. Any consulting party to state-based Prototype Agreement may request the ACHP provide its advisory opinion regarding the substance of any finding, determination, or decision regarding compliance with its terms.

D. At any time during the implementation of the State-base Prototype Agreement, a member of the public may submit an objection pertaining to this agreement to the NRCS State Conservationist, in writing. Upon receiving such an objection, the State Conservationist shall notify the NRCS SPO and FPO, VDHP/Indian tribe/NHO, take the objection into account, and consult with other consulting parties as appropriate to resolve the objection. The NRCS State Conservationist shall notify the SPO, FPO, SHPO/Indian tribe/NHO of the outcome of this process.

XIX. Emergency and Disaster Management Procedures (Response to Emergencies)

A. VT NRCS shall notify VDHP immediately or within 48 hours of the emergency determination, following the NRCS' Emergency Watershed Program (EWP) final rule (see Section 216, P.L. 81-516 Final Rule, 7 CFR Part 624 (April 2005).
B. VT NRCS shall prepare procedures for exigency (following the rules for NRCS' (EWP) regarding immediate threat to life and property requiring, response within 5 days) in consultation with VDHP. These procedures are appended to this document (Appendix L).
C. If the VT NRCS has not developed specific procedures for responding to exigencies, the VT NRCS shall follow the recently approved guidelines for Unified Federal Review issued by the Department of Homeland Security, Federal Emergency Management Service (DHS, FEMA), the Council on Environmental Quality (CEQ), and the ACHP in July 2014, or the procedures in 36 CFR Part 800.12(b).

XX. Duration of Prototype Agreement

This State-based Prototype Agreement will be in effect for ten (10) years from the date of execution unless amended or terminated pursuant to Stipulation XXI below.

XXI. Amendment and Termination

A. This State-based Prototype Agreement may be amended if agreed to in writing by all signatories. The amendment will be effective on the date a copy, signed by all the signatories, is filed with the NRCS FPO, SHPO, and the ACHP.
B. If any signatory to this State-based Prototype Agreement, or the ACHP, determines that its provisions will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulation XXI.A. If within 30 calendar days, or other time period agreed upon by the signatories, an amendment cannot be agreed upon, any signatory or the ACHP may terminate the agreement upon written notification to the other signatories.
C. If this state-based Prototype Agreement is terminated, or expires without being extended via the amendment process described above, and prior to continuing work on any undertaking, NRCS shall comply with 36 CFR Part 800 for all individual undertakings in Vermont State.
D. NRCS will consider requests from other USDA agencies to become a signatory to the State-based Prototype Agreement following formal written requests and appropriate discussion with and approval by the NRCS FPO and SHPO, and joint USDA Agency-NRCS State Office consultation with the ACHP, NCSHPO, and Indian tribes/THPOs or NHOs, and other consulting parties, as appropriate. Such inclusion of the USDA agency may require amendment to this state-based Prototype Agreement.

Signatory Parties

State Conservationist, Vermont Natural Resources Conservation Service — Date: 03 MAR 2025

State Historic Preservation Officer — Date: March 5, 2025

APPENDIX A

LIST OF UNDERTAKINGS REQUIRING NO FURTHER SECTION 106 REVIEW IN NRCS VERMONT STATE OFFICE

Pursuant to Stipulation V.l. above, in consultation with the Vermont SHPO/ the NRCS, through the qualified Cultural Resources Specialist as described in Stipulation II.A.I, has determined that the following undertakings have little or no potential to affect historic properties. The NRCS is not required to consult further with the SHPO under Section 106 for any undertaking that is included in this appendix.

Practice Standard #	**Practice Name**	**Excluded Only Under the Following Conditions**	**Practice Description**
CEMA 228	Agricultural Energy Assessment	All conditions	An assessment of the energy consuming activities and components of an agricultural operation
450	Anionic Polyacrylamide (PAM) Application	All conditions	Application of water-soluble anionic polyacrylamide (PAM) to the soil.
810	Annual Forages for Grazing Systems	All conditions	Establish adapted and compatible species, varieties, or cultivars of annual forage species suitable for pasture or fodder.
CEMA 218	Carbon Sequestration and Greenhouse Gas Mitigation Assessment	All conditions	This Conservation Evaluation and Monitoring Activity (CEMA) is in reference to the quantitative assessment of the carbon sequestration and greenhouse gas (GHG) mitigation scenarios for an operation with a conservation plan using COMET-Farm.
327	Conservation Cover	All conditions	Establishing and maintaining perennial vegetative cover to protect soil and water resources on land retired from agricultural production.
328	Conservation Crop Rotation	All conditions	Growing crops in a recurring sequence on the same field.
CPA 199	Conservation Plan	All conditions	A Conservation Plan addresses a limited number of resource concerns - or even a single resource concern – and consequently does not achieve a resource management system (RMS) level of treatment.
CPA 138	Conservation Plan Supporting Organic Transition	All conditions	A site specific conservation plan that contains planned conservation treatment activities for resource concerns resulting from the transition of conventional to organic production systems.

332	Contour Buffer Strips	All conditions	Narrow strips of permanent, herbaceous cover established across the slope and alternated down the slope with parallel, wider cropped strips.
334	Controlled Traffic Farming	All conditions	Controlled traffic farming (CTF) is confining all high load wheel/track traffic from farm equipment to specific lanes or tramlines (traffic pattern) in crop fields year after year.
340	Cover Crop	All conditions	A crop of close growing grasses, legumes, or small grain grown primarily for seasonal protection and soil improvement.
554	Drainage Water Management	All conditions	The process of managing the drainage volume and water table elevation by regulating the flow from a surface or subsurface agricultural drainage system.
373	Dusty Control on Unpaved roads and surfaces	All conditions	The treatment of unpaved roads and surfaces to reduce dust (airborne particulate matter) produced by vehicle and machinery traffic or wind action.
375	Dust Management for Pen Surfaces	All conditions	Reducing or preventing the emissions of particulate matter (i.e., dust) arising from animal activity on pen surfaces at animal feeding operations.
376	Field Operations Emissions Reduction	All conditions	Adjusting field operations and technologies to reduce emissions of particulate matter (PM) and oxides of nitrogen from field operations.
CEMA 206	Feed and Forage Analysis	All conditions	Quantitative testing for nutrient composition of feed and forage using approved laboratory methods implemented by certified laboratories. The purpose of feed and forage analyses is to provide information to producers and animal nutritionists for use in developing a feed management plan or grazing plan. Intent is to address nutrient management concerns, avoid overfeeding nutrients, and ensure animals are fed properly according to recommendations of the National Academies of Science, Engineering, and Medicine nutrient requirements of domestic animals series.
592	Feed Management	All conditions	Manipulating and controlling the quantity and quality of available nutrients, feedstuffs, ingredients, or additives fed to livestock and poultry.
511	Forage Harvest Management	All conditions	The timely cutting and removal of forages as hay, green-chop, or ensilage.
CEMA 223	Forest Management Assessment	All conditions	An in-depth forest stand level resource inventory.

CPA 106	Forest Management Plan	All conditions	A site-specific conservation plan that contains planned forest related conservation treatment activities for one or more resource concerns.
DIA 159	Grazing Management Design	All conditions	A feed management plan is a farm-specific plan developed for a client, to document control of the quantity and quality of available nutrients, feedstuffs, and/or additives fed to livestock and poultry.
CPA 110	Grazing Management Plan	All conditions	A site specific conservation plan that contains planned grazing related conservation treatment activities for one or more resource concerns.
449	Irrigation Water Management	All conditions	Determining and controlling the rate, amount, and timing of irrigation water in a planned efficient manner.
DIA 163	Irrigation Water Management Design	All conditions	Design the volume, frequency, and application rate of irrigation water. Implementation requirements for CPS 449 Irrigation Water Management along with other supporting conservation practices are developed.
821	Low Tunnel Systems	All conditions	An enclosed polyethylene, polycarbonate, plastic, or fabric covered structure that is used to cover and protect crops from sun, wind, excessive rainfall, or cold, and to extend the growing season or to reduce pest pressure.
484	Mulching	All conditions	Applying plant residues or other suitable materials not produced on the site to the soil surface.
590	Nutrient Management	All conditions	Managing the amount, form, placement, and timing of applications of plant nutrients.
DIA 157	Nutrient Management Design and Implementation Activity	All conditions	Design the rate, source, placement, and timing of plant nutrients and soil amendments while reducing environmental impacts. Implementation requirements for Conservation Practice Standard (CPS) 590 Nutrient Management along with other supporting conservation practices are developed.
595	Pest Management Conservation System	All conditions	Managing weeds, insects and diseases by hand weeding, spot treatment, biological controls and use of chemicals on cropland to reduce adverse effects on plant growth, production, and natural resources.
DIA 161	Pest Management Conservation System Design	All conditions	Pest Management Conservation System manages pests using a combination of conservation practices and Prevention, Avoidance, Monitoring, and Suppression (PAMS) techniques. It addresses beneficial organism, plant pressure, surface, and groundwater impacts.

			Pest management plans are documents of record establishing how pests will be managed while addressing identified resource concerns including plant pest pressure, beneficial organisms, and the movement of pesticides. These plans are prepared in collaboration with producer and/or landowner and designed to help the producer implement and maintain an effective plan for the management of pests from available sources.
528	Prescribed Grazing	All conditions	The controlled harvest of vegetation with grazing or browsing animals.
CEMA 219	Prescribed Grazing Conservation Evaluation and Monitoring Activity	All conditions	Monitor and evaluate the selected area in order to determine the effects of prescribed grazing management on natural resource conditions and inform conservation planning decisions.
345	Residue and Tillage Management, No –Till	All conditions	Any tillage and planting system in which at least 30 percent of the soil surface is covered by plant residue after planting to reduce soil erosion by water or wind.
557	Residue and Tillage Management, Reduced Till	All conditions	Any tillage and planting system in which at least 30 percent of the soil surface is covered by plant residue after planting to reduce soil erosion by water or wind.
CPA 106	Row Arrangement	All conditions	A system of crop rows on planned directions, grades, and lengths.
CPA 116	Soil Health Management Plan	All conditions	Component of a conservation plan that identifies soil health concerns related to the physical, biological and chemical properties of the soil and identifies conservation practices for use in an adaptive soil health management plan.
DIA 162	Soil Health Management System Design	All conditions	Develop site specific recommendations and designs for soil health related practices that address the 4 principles of soil health as identified in CPA 116 or a conservation plan.
585	Strip Cropping	All conditions	Growing crops in a systematic arrangement of strips on the contour to reduce water erosion.
660	Tree/Shrub Pruning	All conditions	Removing all or selected branches from trees and shrubs.
633	Waste Recycling	All conditions	The on-farm agricultural use of nonagricultural waste by-products, or the off-farm nonagricultural use of agricultural waste by-products.

* Indicates commonly utilized practices in Vermont

APPENDIX B

LIST OF UNDERTAKINGS REQUIRING FURTHER SECTION 106 REVIEW EXCEPT WHEN DETERMINED NON-INTRUSIVE BY NRCS VERMONT STATE OFFICE

Some undertakings may or may not affect cultural resources, depending on how they are installed. These activities should be considered to have no potential to disturb cultural resources if either of the following two conditions apply:

1. If the installation of the practice will not exceed the depth, extent, or kind of previous cultivation; or
2. If the land has not been previously cultivated and the installation of the practice will result in no ground disturbance.

If either of these situations apply, no further cultural resources considerations are required.

Practice Standard #	**Practice Name**	**Excluded <u>Only</u> Under the Following Conditions**	**Practice Description**
472	Access Control	With no new construction	The temporary or permanent exclusion of animals, people, vehicles, and equipment from an area.
DIA 120	Agricultural Energy Design	For planning only. Potential Effect for implementation of conservation practices.	Plan, design, and document one or more conservation practices that address inefficient energy use.
371	Air Filtration and Scrubbing	With no new construction	A device or system for reducing emissions of air contaminants from an agricultural structure.
311	Alley Cropping	When installed entirely within existing plowzone soils	Trees or shrubs are planted in sets of single or multiple rows with agronomic, horticultural crops or forages produced in the alleys between the sets of woody plants that produce additional products.
591	Amendment for the Treatment of Agricultural Waste	With no ground disturbance	The addition of chemical or biological additives to manure, process wastewater, contaminated storm water runoff, or other wastes to reduce adverse effects on air and/or water.
333	Amending Soil Properties with Gypsum Products	When installed entirely within existing plowzone soils	Using gypsum- (calcium sulfate dihydrate) derived products to change the physical and/or chemical properties of soil.
805	Amending Soil Properties with Lime	When installed entirely within existing plowzone soils	Adjust the soil pH with lime to change physical and chemical properties of the soil to achieve a conservation objective.
CEMA 224	Aquifer Flow Test	With no ground disturbance	Quantitative measurements to determine water well performance.

400	Bivalve Aquaculture Gear and Biofouling Control	With no ground disturbance	Actions that reduce, clean, or remove biofouling organisms and other waste from bivalve production areas while minimizing environmental risk and risk to species of concern.
314	Brush Management	With no stump removal and no control methods that disturb the soil surface layer	The management or removal of woody (nonherbaceous or succulent) plants including those that are invasive and noxious.
326	Clearing and Snagging	With no ground disturbance	Removal of specified vegetation along the bank (clearing) and selective removal of snags, drifts, or other obstructions (snagging) from natural or improved streams (includes channels).
DIA 101	CNMP Design and Implementation Activity	For planning only. Potential Effect for implementation of conservation practices.	A site-specific design and implementation activity plan developed for an Animal Feeding Operation (AFO) or user of the by-products of an AFO that includes components for both structural and non-structural conservation practices that address the planned practices for land application of manure and nutrients, and the handling, transfer, storage and treatment of animal wastes.
CPA 102	Comprehensive Nutrient Management Plan	For planning only. Potential Effect for implementation of conservation practices.	A site specific conservation plan developed for an Animal Feeding Operation (AFO) or user of the by-products of an AFO that includes the following two components: (a) The production area including the animal confinement, feed and other raw materials storage areas, and the waste handling containment or storage areas, and (b) the land treatment area, including any land under control of the AFO owner or operator, whether it is owned, rented, or leased, and to which manure or process wastewater from the production area is, or might be, applied for crop and/or pasture production.
342	Critical Area Planting	When practice is contained entirely within existing plowzone soils.	Establishing permanent vegetation on sites that have, or are expected to have, high erosion rates, and on sites that have physical, chemical, or biological conditions that prevent the establishment of vegetation with normal seeding/planting methods.
589	Cross Wind Trap Strips	When practice is contained entirely within existing plowzone soils	Herbaceous cover established in one or more strips typically perpendicular to the most erosive wind events.
326	Clearing and Snagging	With no ground disturbance	Removal of specified vegetation along the bank (clearing) and selective removal of snags, drifts, or other obstructions (snagging) from natural or improved streams (includes channels).
372	Combustion System Improvement	With all components above ground, if this structure is not more than 50 years old, and if it is not listed in or considered eligible for listing in the National Register of	Replace, repower, or retrofit an agricultural combustion system and related components or devices.

		Historic Places.	
330	Contour Farming	When practice is contained entirely within existing plowzone soils.	Aligning ridges, furrows, and roughness formed by tillage, planting and other operations at a grade near the contour to alter the velocity or the direction of water flow
331	Contour Orchard and Other Perennial Crops	When practice is contained entirely within existing plowzone soils.	Planting orchards, vineyards, or other perennial crops so that all cultural operations are done on or near the contour.
342	Critical Area Planting	When practice is contained entirely within existing plowzone soils.	Establishing permanent vegetation on sites that have, or are expected to have, high erosion rates, and on sites that have physical, chemical, or biological conditions that prevent the establishment of vegetation with normal seeding/planting methods
588	Crosswind Ridges	When practice is contained entirely within existing plowzone soils.	Ridges formed by tillage, planting, or other operations and aligned perpendicular to prevailing wind direction during critical wind erosion periods.
647	Early Successional Habitat Development/Management	When planting depth does not exceed depth of existing plowzone soils, and when prescribed burning is not part of the practice.	Manage plant succession to develop and maintain early successional habitat to benefit desired wildlife and/or natural communities. Can include timing hay cutting, harvest, and grazing as well as new plantings.
CEMA 201	Edge-of-Field Water Quality Monitoring - Data Collection and Evaluation	With no ground disturbance	Water quality monitoring and evaluation under this conservation evaluation and monitoring activity (CEMA) are the actions and activities, using acceptable tools and protocols, by which a Qualified Individual will measure the effectiveness of conservation practices and systems.
374	Energy Efficient Agricultural Operation	When retrofitting existing systems with no new construction, no ground disturbance, or no modifications to or removal of farm buildings (e.g. farmhouse, barn, outbuildings) more than 50 years old.	On farm facilities, equipment, and management strategies that provide increased energy efficiency.
672	Energy Efficient Building Envelope	When retrofitting existing systems with no new construction, no ground disturbance, or no modifications to or removal of farm buildings (e.g. farmhouse, barn, outbuildings) more than 50 years old.	A boundary between a conditioned space and an unconditioned space that meets or exceeds best practices for energy efficiency.

670	Energy Efficient Lighting System	When retrofitting existing systems with no new construction, no ground disturbance, or no modifications to or removal of farm buildings (e.g. farmhouse, barn, outbuildings) more than 50 years old.	An agricultural lighting system with increased energy efficiency.
CEMA 227	Evaluation of Existing Waste Storage Facility Components	With no ground disturbance.	An on-site investigation shall be made to determine whether or not an existing component of a waste storage facility is in good operating condition. Existing components are the manure and wastewater handling and storage structures and equipment at the facilities where the livestock are housed.
382	Fence	When fence posts are pounded or driven into the ground within plowzone soils (temporary fence).	A constructed barrier to animals or people.
386	Field Border	When practice is contained entirely within existing plowzone soils.	A strip of permanent vegetation established at the edge or around the perimeter of a field.
393	Filter Strip	When practice is contained entirely within existing plowzone soils.	A strip or area of herbaceous vegetation that removes contaminants from overland flow.
394	Firebreak	With no ground disturbance	A permanent or temporary strip of ground cleared to bare soil or planted with fire-resistant vegetation meant to stop the spread of fire.
DIA 144	Fish and Wildlife Habitat Design	For planning only. Potential Effect for implementation of conservation practices.	Design the conservation practices needed to address a fish or wildlife habitat resource concern. A fish and wildlife habitat Design and implementation Activity (DIA) provides site-specific instructions to implement fish and wildlife habitat conservation practices included in a conservation plan.
399	Fishpond Management	With no ground disturbance	Managing impounded aquatic habitat and water quality for the production of fish.
512	Forage and biomass planting that produces feedstock for biofuels or energy production	When practice is contained entirely within existing plowzone soils	Conversion of cropped land to grass-based agriculture. Mixtures of perennial grasses, forbs, and/or legume species are established on cropland where annually-seeded cash crops have been grown.
379	Forest Farming	When bare root stock will be placed within shovel slits or wider holes dug entirely within the plowzone or with no new plantings.	Managing or establishing stands of trees or shrubs in coordination with the management and/or cultivation of understory plants or nontimber forest products.

DIA 165	Forest Management Practices Design	For planning only. Potential Effect for implementation of conservation practices.	Design a single or combination of forest related conservation practices to treat one or more resource concerns. Forest management activities are site-specific forestry and/or agroforestry conservation practices as prescribed in a forest management plan.
666	Forest Stand Improvement	With no ground disturbance	The manipulation of tree and shrub species composition, structure, or density to achieve desired forest conditions.
383	Fuel Break	With no ground disturbance	A strip or appropriately sized block of land on which the vegetation, debris, and litter have been reduced and/or modified to control or diminish the spread of fire.
355	Groundwater Testing	When no monitoring well will be installed.	Professional testing of well water for nitrates, nitrites, and coliform to confirm that well water meets basic water quality standards for consumption by livestock or use in irrigation.
422	Hedgerow Planting	When installed entirely within existing plowzone soils	Establishment of dense vegetation in a linear design to achieve a natural resource conservation purpose.
315	Herbaceous Weed Treatment	With no ground disturbance	The removal or control of herbaceous weeds including invasive, noxious, prohibited, or undesirable plants.
603	Herbaceous Wind Barriers	When installed entirely within existing plowzone soils	Herbaceous vegetation established in narrow strips within the field to reduce wind speed and wind erosion.
325	High Tunnel System	When ground posts will be pounded or driven into the ground and no land leveling is required to prepare the project area for installation of the high tunnel, and when no irrigation and/or utility lines will be dug to the practice.	A High tunnel system is an enclosed polyethylene, polycarbonate, plastic, or fabric covered structure that is used to cover and protect crops from sun, wind, excessive rainfall, or cold, to extend the growing season in an environmentally safe manner.
E528P	Implementing Bale or Swath Grazing to Increase Organic Matter and reduce Nutrients in Surface Water	For planning only. Potential Effect for implementation of conservation practices.	Improve organic matter, aggregate stability and soil organism habitat in the soil by leaving the biomass harvested from the field on site for animal use, or supplementing organic matter needs with off-field forages. Grazing harvested forages in this manner, will help to incorporate organic matter, feed and diversify the soil microbiome, build better aggregation and increase soil health and critical functions such as infiltration, nutrient cycling, and weather resilience. Forages should be placed evenly throughout the field, but can be concentrated in areas where particular concerns, such as bare ground, need to be remedied. Decisions of forage placement must take into account areas that would be sensitive to such activity such as

			protecting surface waters from nutrients or steep slopes from erosion.
DIA 164	Improved Management of Drainage Water Design	For planning only. Potential Effect for implementation of conservation practices.	Design the drainage volume and water table elevation by regulating the flow from a surface or subsurface agricultural drainage system. This activity includes one or more conservation practices that manage the drainage volume and water table elevation by regulating the flow from a surface or subsurface agricultural drainage system. Implementation requirements for CPS 554 Drainage Water Management along with other supporting conservation practices are developed.
CEMA 222	Indigenous Stewardship Methods Evaluation	For planning only. Potential Effect for implementation of conservation practices.	An evaluation of land uses, capabilities, and limitations with respect to Indigenous Stewardship Methods (ISM) that informs the conservation planning process.
428	Irrigation Ditch Lining	With no new construction/ground disturbance	An irrigation ditch, canal, or lateral lined with an impervious material or a chemical treatment.
430	Irrigation Pipeline	When all components are installed above ground.	A pipeline and appurtenances installed to convey water for storage or application as part of an irrigation water system
441	Irrigation System, Microirrigation	When all components are installed above ground.	An irrigation system for frequent application of small quantities of water on or below the soil surface as drops, tiny streams, or miniature spray through emitters or applicators placed along a water delivery line.
822	Nonruminant Livestock Outdoor Management of Vegetative Cover ICPS	For planning only. Potential Effect for implementation of conservation practices.	Managing the disturbance of soil and vegetation with nonruminant livestock to achieve specific ecological, economic, and management objectives.
DIA 148	Pollinator Habitat Design	For planning only. Potential Effect for implementation of conservation practices.	Plan, design and document the conservation practices needed to address a pollinator habitat resource concern.
DIA 160	Prescribed Burning Design	For planning only. Potential Effect for implementation of conservation practices.	This Design and Implementation Activity (DIA) provides site-specific instructions for prescribed burning and related conservation practices.
CEMA 207	Site Assessment and Soil Testing for Contaminants Activity	When practice is contained entirely within existing plowzone soils. Or small hand dug holes or augers.	An environmental assessment of the site and soil suitability for use in the cultivation of crops in urban and suburban areas.
636	Water Harvesting Catchment	With no ground disturbance or construction.	A facility for collecting and storing water from an area that has been treated to increase precipitation runoff.

657	Wetland Restoration	When no ground disturbance is part of the practice	The return of a wetland and its functions to a close approximation of its original condition as it existed prior to disturbance on a former or degraded wetland site.
644	Wetland Wildlife Management	When no ground disturbance is part of the practice	Retaining, developing or managing wetland habitat for wetland wildlife.
516	Livestock Pipeline	When all components are installed above ground	A pipeline and appurtenances installed to convey water for livestock or wildlife.
823	Organic Management	For planning only. Potential Effect for implementation of conservation practices.	Managing and improving natural resources on land in and adjacent to organic production using methods which integrate cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity.
512	Pasture and Hay Planting	When practice is contained entirely within existing plowzone soils	Establishing adapted and compatible species, varieties, or cultivars of perennial herbaceous plants suitable for pasture or hay production.
CEMA 209	PFAS Testing in Water or Soil	When practice is contained entirely within existing plowzone soils. Or small hand dug holes or augers.	This CEMA provides testing (sample collection and laboratory analysis) to detect and quantify per-and polyfluoroalkyl substances (PFAS) in water or soil using EPA- or State-approved field sampling techniques and laboratory methods. The purpose of this CEMA is to provide prescreening information to producers to determine if PFAS may be present in soils or water at their agricultural operation. This CEMA is not intended to determine the nature and extent of contamination applicable to a Federal or State cleanup action or provide a risk-based comparison to soil or water screening level values. As this is intended only as a prescreening step, this CEMA is intended to complement, not replace, PFAS testing offered by State agencies or EPA. The CEMA includes the performance of work and documentation of the tasks, results, interpretations, and other activities described herein.
520	Pond Sealing or Lining-Compacted Soil	When within footprint of existing pond only, and if the material used to seal or line the pond will be purchased from a licensed commercial source.	A liner for a water, wastewater, salt, manure, or similar agricultural by-product impoundment constructed using a flexible membrane (A), soil dispersant treatment (B), Bentonite treatment geomembrane (C), geomembrane or geosynthetic clay liner (D).
522	Pond Sealing or Lining-Concrete	When within footprint of existing pond only, and if the material used to seal or line the pond will be purchased from a licensed commercial source.	A liner for an impoundment constructed using reinforced or nonreinforced concrete.
521	Pond Sealing or Lining-Geomembrane or Geosynthetic Clay Liner	When within footprint of existing pond only, and if the material used to seal or line the pond will be	A liner for a water, wastewater, salt, manure, or similar agricultural by-product impoundment constructed using a geomembrane or a geosynthetic clay material.

		purchased from a licensed commercial source.	
812	Raised Beds	With no ground disturbance.	Create an above ground growing environment.
550	Range Planting	When installed entirely within existing plowzone soils	The seeding and establishment of herbaceous and woody species for the improvement of vegetation composition and productivity of the plant community to meet management goals.
643	Restoration of Rare or Declining Natural Communities	When no ground disturbance is part of the practice	Reestablishment of abiotic (physical and chemical) and biotic (biological) conditions necessary to support rare or declining natural assemblages of native plants and animals
391	Riparian Forest Buffer	When bare root stock will be placed within shovel slits or wider holes dug entirely within the plowzone or with no new plantings.	An area predominantly covered by trees and/or shrubs located adjacent to and up-gradient from a watercourse or water body.
390	Riparian Herbaceous Cover	When practice is contained entirely within existing plowzone soils.	Grasses, sedges, rushes, ferns, legumes, and forbs tolerant of intermittent flooding or saturated soils, established or managed as the dominant vegetation in the transitional zone between upland and aquatic habitats.
654	Road/Trail/Landing Closure and Treatment	When no ground disturbance is part of the practice	The closure, decommissioning, or abandonment of roads, trails, and/or landings and associated treatment to achieve conservation objectives.
555	Rock Wall Terrace	When no ground disturbance is part of the practice	A fitted rock wall constructed across the slope to create a farmable area.
318	Short Term Storage of Animal Waste Byproducts	When no ground disturbance is part of the practice	Temporary, nonstructural measures used to store solid or semisolid organic agricultural waste or manure (stackable livestock and poultry manure, bedding, litter, spilled feed, or soil mixed with manure) on a short-term basis between collection and utilization.
381	Silvopasture	When practice is contained entirely within existing plowzone soils.	Establishment and/or management of desired trees and forages on the same land unit
336	Soil Carbon Amendment	When practice is contained entirely within existing plowzone soils.	Application of carbon-based amendments derived from plant materials or treated animal byproducts.
CEMA 221	Soil Organic Stock Monitoring	When practice is contained entirely within existing plowzone soils. Or if sampling is limited to small hand dug holes or auger cores.	Quantitative measurement of soil organic carbon stocks. Used to quantify the levels of organic carbon stored in the soil and monitor the change in soil carbon stocks before and after the implementation of a conservation practice or conservation plan.

442	Sprinkler System	When no ground disturbance is part of the practice	A distribution system that applies water by means of nozzles operated under pressure.
CEMA 217	Soil and Source Testing for Nutrient Management	When practice is contained entirely within existing plowzone soils. Or if sampling is limited to small shovel width hand dug holes or auger cores.	A sampling strategy for nutrient management measuring nutrient levels in soil and or nutrient source.
CEMA 216	Soil Health Testing	When practice is contained entirely within existing plowzone soils. Or if sampling is limited to small shovel width hand dug holes or auger cores.	Quantitative testing for physical, biological, or chemical characteristics of soil and constraints of soil using approved laboratory methods.
649	Structures for Wildlife	Excluded if nesting box will be installed on a pole or post that will be driven into the ground. Potential effect if the depth of ground disturbance exceeds the depth of the existing plowzone excluding pounded posts.	A structure installed to replace or modify a missing or deficient wildlife habitat component.
609	Surface Roughening	When practice is contained entirely within existing plowzone soils.	Performing tillage operations that create random roughness of the soil surface
DIA 140	Transition to Organic Design	For planning only. Potential Effect for implementation of conservation practices.	Conservation Plan Supporting Transition to Organic is a component plan that includes a combination of structural and management practices for an agricultural operation transitioning to become certified organic by USDA. A site-specific component of a conservation plan. The DIA-140 is developed for a client to address one or more resource concerns on farms transitioning to certified organic production where related conservation activities and/or practices will be planned and implemented. The plan describes how to implement long-term goals through practices that direct farm development to provide for intended future uses.
612	Tree/Shrub Establishment	Potential effect if planting depth exceeds the depth of the existing plowzone soils.	Establishing woody plants by planting, direct seeding, or through natural regeneration.
490	Tree/Shrub Site Preparation	When no ground disturbance is part of the practice	Treatment of sites to enhance the success of natural or artificial regeneration of desired trees and/or shrubs.

645	Upland Wildlife Management	With no new construction or ground disturbance	Creating, maintaining, or enhancing areas for food and cover for upland wildlife.
601	Vegetative Barrier	When practice is contained entirely within existing plowzone soils	Permanent strips of stiff, dense vegetation established along the general contour of slopes or across concentrated flow areas.
635	Vegetated Treatment Area	Potential effect if depth of ground disturbance exceeds the depth of the existing plowzone	An area of permanent vegetation used for agricultural wastewater treatment.
629	Waste Treatment	When no ground disturbance is part of the practice	Use of mechanical, chemical, or biological technologies to change the characteristics of manure and agricultural waste.
627	Waste Water Treatment, Milk House	When no ground disturbance or construction is part of the practice	The physical, mechanical, and biological treatment of dairy milk house wastewater.
614	Watering Facility	When no ground disturbance is part of the practice	A watering facility stores or provides drinking water to livestock or wildlife.
351	Well Decommissioning	With no new ground disturbance.	The sealing and permanent closure of an inactive, abandoned, or unusable water or monitoring well.
420	Wildlife Habitat Planting	Potential effect if planting depth exceeds the depth of the existing plowzone soils.	Establishing wildlife habitat by planting herbaceous vegetation or shrubs.
828	Wildlife Habitat Site Preparation	With no new ground disturbance.	Implementing land-treatment measures to create conditions suitable for planting herbaceous vegetation alone or in combination with woody vegetation for wildlife.
380	Windbreak/Shelter Belt Establishment and Renovation	Potential effect if depth of ground disturbance exceeds the depth of the existing plowzone	Establishing, enhancing, or renovating windbreaks, also known as shelterbelts, which are single or multiple rows of trees and/or shrubs in linear or curvilinear configurations.

APPENDIX C

LIST OF UNDERTAKINGS REQUIRING FURTHER SECTION 106 REVIEW

Practice Standard #	Practice Name	Excluded Only Under the Following Conditions	Practice Description
560	Access Road	Potential Effect	An access road is an established route for equipment and vehicles.
309	Agrichemical Handling Facility	Potential Effect	A facility with an impervious surface to provide an environmentally safe area for the handling of onfarm agrichemicals.
366	Anaerobic Digester	Potential Effect	A component of a waste management system in which biological treatment breaks down animal manure and other organic materials in the absence of oxygen.
316	Animal Mortality Facility	Potential Effect	An on-farm facility for the treatment or disposal of animal carcasses due to routine mortality.
397	Aquaculture Pond	Potential Effect	A water impoundment for farming of freshwater and saltwater organisms including fish, mollusks, crustaceans, and aquatic plants.
396	Aquatic Organism Passage	Potential Effect	Modification or removal of barriers that restrict or impede movement of aquatic organisms.
584	Channel Bed Stabilization	Potential Effect	Measure(s) used to stabilize the bed or bottom of a channel.
317	Composting Facility	Potential Effect	A structure or device to contain and facilitate an aerobic microbial ecosystem for the decomposition of manure, other organic material, or both, into a final product sufficiently stable for storage, onfarm use, and application to land as a soil amendment.
656	Constructed Wetland	Potential Effect	An artificial wetland ecosystem with hydrophytic vegetation for biological treatment of water.
402	Dam	Potential Effect	An artificial barrier that can impound water for one or more beneficial purposes.

348	Dam, Diversion	Potential Effect	A structure built to divert all or part of the water from a waterway or a stream.
324	Deep Tillage	Potential Effect	Performing tillage operations below the normal tillage depth to modify adverse physical or chemical properties of a soil.
605	Denitrifying Bioreactor	Potential Effect	A structure that uses a carbon source to reduce the concentration of nitrate nitrogen in subsurface agricultural drainage flow through enhanced denitrification.
356	Dike and Levee	Potential Effect	A barrier used to retain water on the landscape using a wetland dike; or, a barrier used to exclude water from the landscape and protect property and infrastructure from flooding using a flood control levee.
362	Diversion	Potential Effect	A channel usually constructed across the slope with a supporting ridge on the lower side.
432	Dry Hydrant	Potential Effect	A nonpressurized permanent pipe assembly installed to permit withdrawal of water by suction from a water source.
CEMA 202	Edge of Field Water Quality System	Potential Effect	Installation of a structure used to accurately measure pollutant runoff from edge of field.
368	Emergency Animal Mortality Management	Potential Effect	A means or method for the management of animal carcasses from catastrophic mortality events.
398	Fish Raceway or Tank	Potential Effect	A channel or tank with a continuous flow of water constructed or used for high-density fish production.
655	Forest Trails and Landings	Potential Effect	A temporary or infrequently used route, path, or cleared area.
410	Grade Stabilization Structure	Potential Effect	A structure used to control the grade in natural or constructed channels.
412	Grassed Waterway	Potential Effect	A shaped or graded channel that is established with suitable vegetation to convey surface water at a nonerosive velocity using a broad and shallow cross section to a stable outlet.
548	Grazing Land Mechanical Treatment	Potential Effect	Modifying physical soil and/or plant conditions with mechanical treatments.

561	Heavy Use Area Protection	Potential Effect	Stabilization or protection of an intensively used area.
423	Hillside Ditch	Potential Effect	A narrow channel with a supporting ridge on the lower side, constructed across the slope on steeply sloping land.
320	Irrigation Canal or Lateral	Potential Effect	A permanent channel constructed to convey irrigation water from the source of supply to one or more irrigated areas.
447	Irrigation and Drainage System, Tailwater Recovery	Potential Effect	A system designed to collect, store, and convey irrigation tailwater, rainfall runoff, field drain water, or combination thereof for reuse in water distribution to the crop.
388	Irrigation Field Ditch	Potential Effect	A permanent irrigation ditch, constructed in or with earth materials, to convey water from the source of supply to a field or fields in an irrigation system.
464	Irrigation Land Leveling	Potential Effect	Reshape a land surface according to the planned lines and grades for irrigation.
436	Irrigation Reservoir	Potential Effect	A constructed dam, pit, or tank used to store water for irrigation.
443	Irrigation System, Surface and Subsurface	Potential Effect	A system that delivers irrigation water by surface means, such as furrows, borders, and contour levees, or by subsurface means through water table control.
460	Land Clearing	Potential Effect	Removal of trees, stumps, and other vegetation from wooded areas.
543	Land Reclamation, Abandoned Mined Land	Potential Effect	Reclamation of land and water areas adversely affected by past mining activities.
453	Land Reclamation, Landslide Treatment	Potential Effect	Stabilize in-place natural materials, mine spoil, waste, or overburden to prevent downslope movement
576	Livestock Shelter Structure	Potential Effect	A permanent or portable structure to protect animals from negative environmental factors. Structure will have fewer than four walls; this structure is not to be construed to be a building.
468	Lined Waterway or Outlet	Potential Effect	A waterway or conveyance channel having an erosion-resistant lining of concrete, stone, synthetic turf reinforcement fabrics, or other flexible permanent material.

457	Mine Shaft and Adit Closing	Potential Effect	Closure of underground mine openings by filling, plugging, capping, and installing barriers, gates, or fencing.
353	Monitoring Well	Potential Effect	A well designed and installed to obtain representative ground water samples and hydrogeologic information.
500	Obstruction Removal	Potential Effect	Removal and disposal of buildings, structures, vegetation, debris, or other materials.
319	On Farm Secondary Containment Facility	Potential Effect	A permanent facility designed to provide secondary containment of oil and oil products used onfarm.
582	Open Channel	Potential Effect	An open channel is a natural or artificial channel in which water flows with a free surface.
782	Phosphorus Removal System	Potential Effect	A system designed to remove dissolved phosphorus (P) from surface runoff, subsurface flow, or groundwater usually consisting of a sorption media with a high affinity for dissolved P, a containment structure that allows flow through the media and retains the media so that it does not move downstream, and a means to remove and replace the media.
378	Pond	Potential Effect	A water impoundment made by constructing an embankment, excavating a dugout, or a combination of both.
462	Precision Land Forming and Smoothing	Potential Effect	Regrading of a field to remove surface irregularities.
338	Prescribed Burning	Potential Effect	Planned fire applied to a predetermined area.
533	Pumping Plant	Potential Effect	A facility that delivers water or wastewater at a designed pressure and flow rate.
566	Recreation Land Improvement and Protection	Potential Effect	Recreation land grading and shaping is reshaping the surface of the land to support recreational land use.
558	Roof Runoff Structure	Potential Effect	A structure or system of structures to collect, control, and convey precipitation runoff from a roof.

367	Roofs and Covers	Potential Effect	A rigid, semirigid, or flexible manufactured membrane, composite material, or roof structure placed over a waste management facility, agrichemical handling facility, or an on-farm secondary containment facility.
610	Saline and Sodic Soil Management	Potential Effect	Management of land, water, and plants to reduce the accumulation impacts of salts, sodium, or combination of salts and sodium on the soil surface and in the rooting zone.
604	Saturated Buffer	Potential Effect	A subsurface, perforated distribution pipe used to distribute drainage system discharge beneath a vegetated buffer along its length and discharge channel.
350	Sediment Basin	Potential Effect	A basin constructed with an engineered outlet, formed by constructing an embankment, excavating a dugout, or a combination of both.
646	Shallow Water Development and Management	Potential Effect	The inundation of lands to provide habitat for fish and/or wildlife.
527	Sinkhole Treatment	Potential Effect	A treatment of karst or pseudokarst sinkholes or sinkhole areas on agricultural land.
572	Spoil Disposal	Potential Effect	Disposal of surplus excavated materials from construction activities.
574	Spring Development	Potential Effect	The collection and use of water from seeps or springs.
570	Stormwater Runoff Control	Potential Effect	Measures or systems to control the quantity and quality of stormwater runoff.
578	Stream Crossing	Potential Effect	A stabilized area or structure constructed across a stream to provide controlled access for people, livestock, equipment, or vehicles.
395	Stream Habitat Improvement and Management	Potential Effect	Improve, restore, or maintain the ecological functions of a stream and its adjacent floodplain and riparian area.
580	Streambank and Shoreline Protection	Potential Effect	Treatment(s) used to stabilize and protect banks of streams or constructed channels and shorelines of lakes, reservoirs, or estuaries.
587	Structure for Water Control	Potential Effect	A structure in a water management system that conveys water, controls the direction or rate of flow, maintains a desired water surface elevation, or measures water

606	Subsurface Drain	Potential Effect	A conduit, or system of conduits, installed beneath the ground surface to manage soil water conditions.
607	Surface Drainage, Field Ditch	Potential Effect	A graded channel on the field surface for collecting and conveying excess water.
608	Surface Drainage, Main or Lateral	Potential Effect	An open drainage ditch for moving the excess water collected by a field ditch or subsurface drain to a safe outlet
600	Terrace	Potential Effect	An earth embankment or a combination ridge and channel, constructed across the field slope.
575	Trails and Walkways	Potential Effect	A constructed path with a vegetated, earthen, gravel, paved, or other hard surface to facilitate the movement of animals, people, or off-road vehicles.
620	Underground Outlet	Potential Effect	A conduit or system of conduits installed beneath the ground surface to convey surface water to a suitable outlet.
630	Vertical Drain	Potential Effect	A well, pipe, pit, or bore in porous underground strata into which drainage water can be discharged without contaminating groundwater resources.
360	Waste Facility Closure	Potential Effect	The decommissioning of a facility where agricultural waste has been treated or stored, and is no longer used for the intended purpose
CEMA 226	Waste Facility Site Suitability and Feasibility Assessment	Potential Effect	Soil data collection, investigation and interpretation of the properties and characteristics to determine the appropriateness of the site for a planned storage facility. The suitability will be determined by the characteristics of the site that allow, limit, or prevent various types of storage facilities. The site characteristics that determine suitability will vary depending on the type of storage facility. Volume capacity, type of storage facility and physical size indicate it is at least feasible to install the planned storage facility at the location selected.
632	Waste Separation Facility	Potential Effect	A filtration or screening device, settling tank, settling basin, or settling channel used to partition solids and/or nutrients from a waste stream.
313	Waste Storage Facility	Potential Effect	An agricultural waste storage impoundment or containment structure.

634	Waste Transfer	Potential Effect	A system using structures, pipes, or other conduits installed to convey wastes or waste byproducts from an agricultural source to a storage facility, treatment facility, or land application site.
359	Waste Treatment Lagoon	Potential Effect	A waste treatment impoundment made by constructing an embankment and/or excavating a pit or dugout.
638	Water and Sediment Control Basin	Potential Effect	An earth embankment or a combination ridge and channel constructed across the slope of a minor drainageway.
642	Water Well	Potential Effect	A hole drilled, dug, driven, bored, jetted, or otherwise constructed into an aquifer for agricultural water supply.
640	Waterspreading	Potential Effect	A system of diverting or collecting runoff from natural watercourses and spreading the runoff over relatively flat areas.
658	Wetland Creation	Potential Effect	A wetland created on a site location that was historically not a wetland.
659	Wetland Enhancement	Potential Effect	The augmentation of wetland functions beyond the original natural conditions on a former, degraded, or naturally functioning wetland site; sometimes at the expense of other functions.
657	Wetland Restoration	Potential Effect	The return of a wetland and its functions to a close approximation of its original condition as it existed prior to disturbance on a former or degraded wetland site.

APPENDIX D

Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation

This document can be viewed at: https://www.nps.gov/articles/series.htm?id=62144687-B082-538A-A0174FFF26496394

Updated link 3/12/2024

APPENDIX E

Guidelines for Conducting Archeology in Vermont

This document can be viewed at:
https://outside.vermont.gov/agency/ACCD/ACCD_Web_Docs/HP/Archaeology/ARCHEO_GUIDELINES.pdf

Updated link 3/12/2024

APPENDIX F

STANDARD CULTURAL RESOURCES PROCEDURES FOR VT NRCS PERSONNEL

A. Trained VT NRCS field office personnel will use Appendices A-C to determine whether or not a planned undertaking has the potential to affect cultural resources.

B. Trained VT NRCS field office personnel will then complete the *Practice Description Form for Cultural Resources Review* and submit it to the Cultural Resources Specialist (CRS). The CRS will review the undertaking and determine if a recorded or suspected cultural resource may be affected by the proposed project. If no known or suspected cultural resources are located within or near the Area of Potential Effect (APE) then the project may proceed. If the undertaking is located near a recorded site or archeologically sensitive landform the CRS will conduct a field inspection, which may include a systematic surface survey and/or subsurface testing, to determine if cultural resources are present in the APE.

C. If no cultural resources are identified, then the CRS and VT NRCS field office personnel will document that information and proceed.

D. If a cultural resource is identified and the undertaking may adversely affect the site, then the CRS will notify the District Conservationist (DC) who will:

1. Re-evaluate alternatives to planned action(s) with the landowner, in lieu of conducting further archeological investigation;
2. Inform the CRS of decision regarding alternatives.

E. If an alternative, non-sensitive location or non-ground disturbing action can be planned that will not disturb the cultural resource the DC, in consultation with the CRS, documents the alternative action and proceeds with assistance.

F. If no feasible alternative can be found, the CRS will proceed with additional archeological investigation that will:

1. Determine the boundaries of the cultural resource relative to the planned undertaking to see if redesigning the project will avoid the site;
2. If avoidance is not possible then obtain sufficient information to evaluate the significance of the cultural resource for potential listing on the National Register of Historic Places (NRHP).
3. If the cultural resource is considered significant and potentially eligible for listing on the NRHP, the CRS will revisit the concept of project modifications with the DC and landowner in order to avoid the site. If avoidance is impractical then the CRS, in concurrence with the VT SHPO, will develop and conduct a data recovery study of the threatened portions of the cultural resource prior to project construction.

G. If the VT NRCS Cultural Resources Specialist is not available, the Cultural Resources Coordinator (CRC) will arrange for the following:

1. A site visit to obtain additional technical information and/or confirm the VT SHPO's recommendation about the sensitivity or likelihood of the APE having significant cultural resources.
2. The CRC will obtain a cost and time estimate for further investigation. The CRC will discuss the need and feasibility of further investigation with the DC who informs the landowner of NRCS requirements and asks if they are willing to pay for the work.

3. If funding from the VT NRCS or the landowner is available, but the landowner does not wish VT NRCS to proceed according to policy, then VT NRCS will withdraw assistance related to the planned undertaking(s).

H. If the landowner decides to proceed according to policy, then the VT NRCS CRC will coordinate arrangements or contract with State and Federal certified CRS and other staff to conduct field investigations as required by the VT SHPO.

I. If the contracted CRS determines that any cultural resources in the APE is potentially eligible for inclusion in the National Register of Historic Places, then the contracted CRS will conduct a formal evaluation of the site through a testing program in accordance with VT SHPO standards.

J. VT SHPO and specialist will analyze the information and determine whether or not further investigations are required. VT SHPO agrees to respond to the CRC within 30 calendar days.

K. If before or after the Phase I testing is conducted, the cultural resource is determined by the VT NRCS to not be of significance for inclusion in the NRHP, and VT SHPO concurs, or if VT SHPO fails to respond within 30 days, then VT NRCS has met its Section 106 obligations and the practice may proceed.

L. If the cultural resource is determined eligible for the NRHP, then the VT NRCS, in consultation with the VT SHPO, shall develop plans to mitigate any adverse effects upon the resource. The preferred option is to redesign the project to avoid any disturbance of the cultural resource(s).

M. In the case that the cultural resource(s) cannot be avoided, a data recovery plan will be developed by VT NRCS in consultation with VT SHPO. Details and conditions of the data recovery plan will be developed by VT NRCS and signed and agreed to by the VT NRCS, VT SHPO and other interested parties as may be necessary.

N. If no further investigations are required, the CRC will notify the VT NRCS field office, provide copies of pertinent correspondence, and the work may proceed.

APPENDIX G

PRACTICE DESCRIPTION FORM FOR CULTURAL RESOURCES REVIEW

PRACTICE DESCRIPTION FORM FOR CULTURAL RESOURCES REVIEW

VT-ECS-1
Page 1

NRCS Contact:	A. Planner	*Customer:*	Farm by a River	*CR Review No:*	vtwa0624
County:	Washington	*Town:*	Marshfield	*State:*	Vermont
Office Assisted:	Berlin	*Proposed Construction Date:*	2025	*FY:*	24
Fund:	EQIP	*USGS quad:*	Marshfield	*Request Date:*	April 4, 2024

1. Describe the environmental setting and actual extent of disturbance planned within the area of potential effect (APE)

Producer plans to install 500 feet of irrigation on a terrace along the Winooski River.

Current Land Use: Cropland

2. Describe the extent of ground disturbance anticipated for each practice

Practice Name	Code	Length (ft)	Width (ft)	Depth (ft)		Soil Name	Feet to closest natural drainage	Slope %
Irrigation Pipeline	430	500	2	4	ft	Adams	180	0-3%
					ft			
					ft			
					ft			
					ft			
					ft			
					ft			
					ft			

3. Integrity: Is some or all of the project area(s) located in fill or severely disturbed soils (excluding plowed soils)? No

If 'Yes' describe the disturbance and how it was determined.

4. List any landowner knowledge of cultural resources on the property.

Document cellar holes, stone foundations, mill dams, arrowheads, pot sherds, etc.

Landowner has no knowledge of cultural resources on the property.

==========

Determination of Effect (CR Specialist only): No Historic Properties Affected

Site Visit April 4, 2024

Recorded Site Number(s) The historic period site VT-WA-90 is located approximately 2,000 feet southwest of the project area

Comments/Required Action:

site visit made - see attached Trip Report

April 4, 2024
Review Date

JACOB CLAY Digitally signed by JACOB CLAY Date: 2024.04.04 14:28:21 -04'00'
Signed

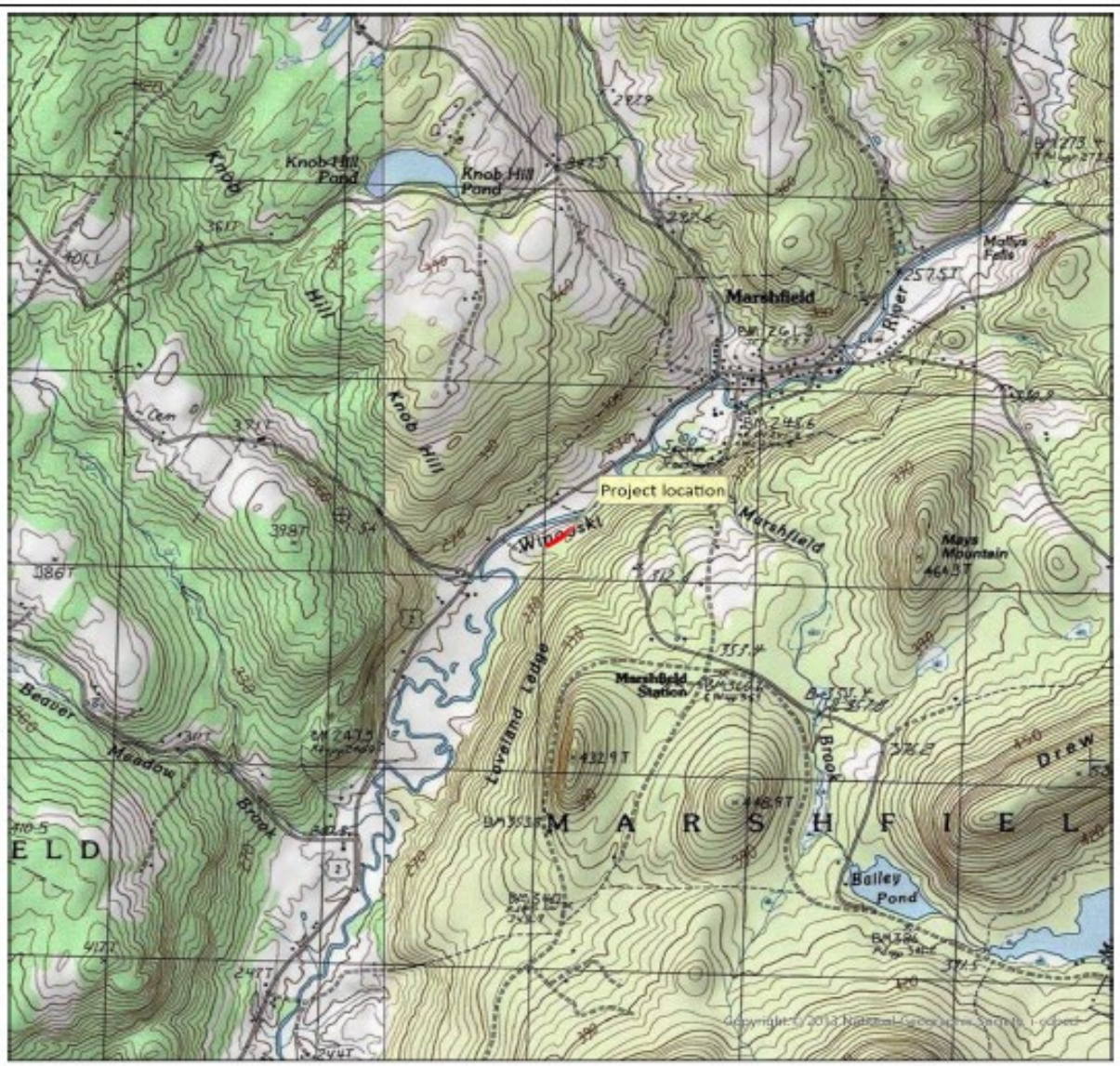
Title: Archeologist (revised 1/2019)

*(This is an example of a completed VT-ECS-1 form and not an actual project).

PRACTICE DESCRIPTION FORM FOR CULTURAL RESOURCES REVIEW

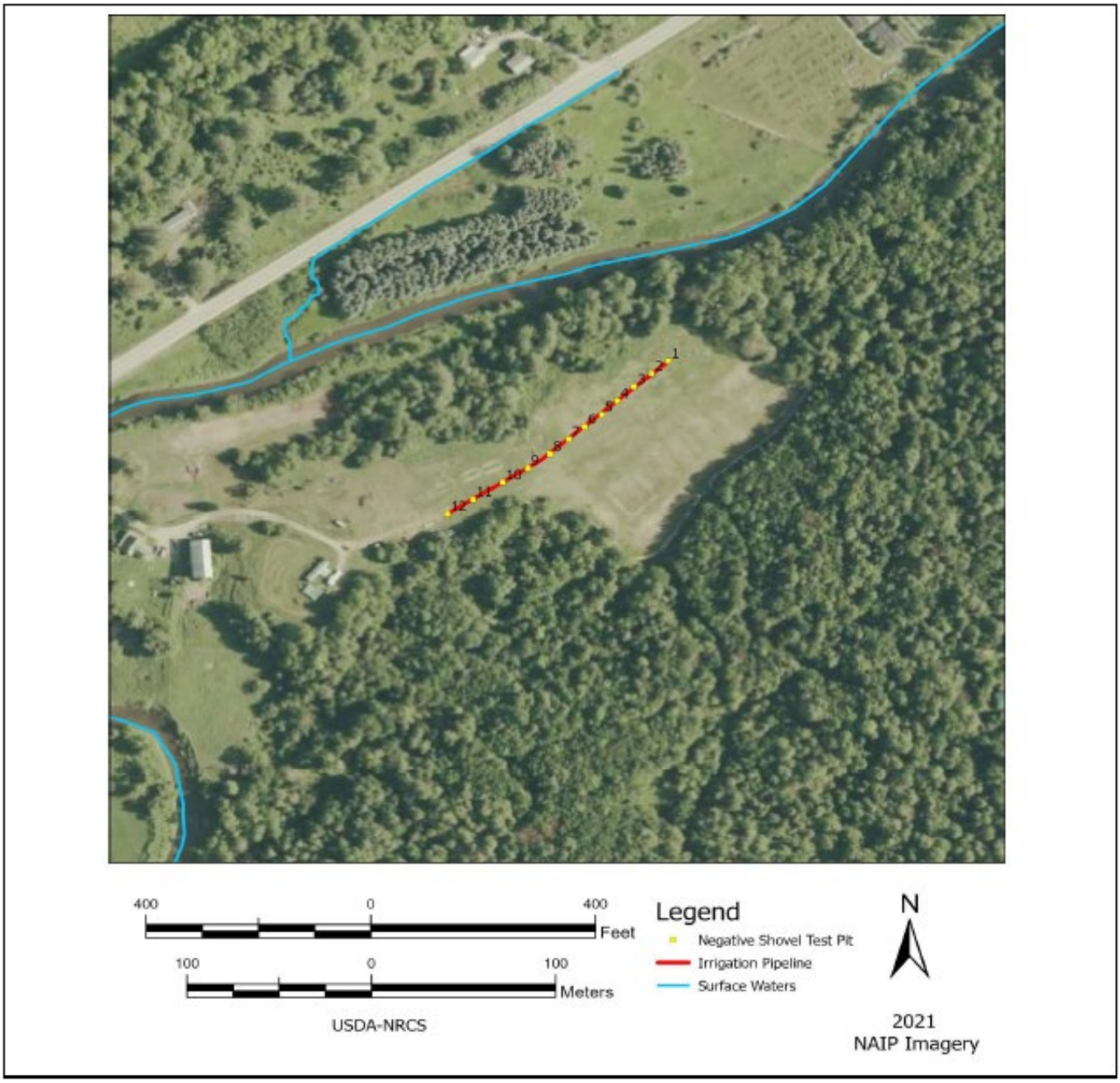
CR File No. *vtwa0624*

Project Located on USGS Quad:



*(This is an example of a completed VT-ECS-1 form and not an actual project).

Orthophoto/NAIP Imagery:



*(This is an example of a completed VT-ECS-1 form and not an actual project).

APPENDIX H

CULTURAL RESOURCES TRIP REPORT

NRCS CULTURAL RESOURCES TRIP REPORT vt-ecs-1

To: A. Planner **Date(s) Visited:** 4/4/2024 **CR Review Number:** vtwa0624

Office Assisted: Berlin **FY:** 24 **Fund:** EQIP **Customer:** Farm by a River

Town: Marshfield **County:** Washington **State:** Vermont **USGS Quad:** Marshfield

Code	Practice	Length	Width	Depth	Units	Slope%	Soil
430	Irrigation Pipeline	500	2	4	feet	0-3	Adams loamy sand

Project Description: **Review Type:** Shovel testing

On April 4, 2024, Evan Lisle, Jaron Rochon, and I examined the area of potential effect for the proposed irrigation pipeline practice located on a kame terrace along the Winooski River. Such environmental settings on terraces and along natural drainages were often used by precontact Native Americans as habitation or special use sites. Any disturbance to intact soils within this archeologically sensitive landform has the potential to adversely affect significant cultural resources. We also excavated 12 shovel test pits within the area of potential effect for the irrigation pipeline practice. Shovel test pits were placed at 10 meter intervals and excavated in 50 centimeter (19.5 in) square units, removed by stratigraphic layer and sifted through a 1/4 inch mesh hardware cloth.

Results:

The shovel test pits revealed a 27-34 cm thick dark grayish brown loamy fine sand Ap horizon overlying a 22-25 can thick dark yellowish brown loamy fine sand B horizon over a light yellowish brown sand C horizon. No precontact Native American or historic period artifacts or cultural features were identified during the excavation of the 12 shovel test pits (see Stp Records for additional informtaion).It is unlikely that installation of this practice will adversely affect any significant cultural resources.

As the project is currently designed it does not appear that any important archeological sites or properties listed in or considered eligible for listing in the National Register of Historic Places will be affected by installation of the irrigation pipeline practice. A finding of "No Historic Properties Affected" was made for the proposed conservation project because no artifacts or cultural features were identified during the investigation. No further cultural resources review is required at this time for these specific practices. Additional cultural resources review will be required if the location, depth or extent of any practice changes, if access roads, borrow or spoil areas are needed, or if unexpected archeological deposits are exposed during construction.

Determination of Effect: **No Historic Properties Affected**

Agree-To-Actions:

Additional cultural resources review will be required if there are modifications to the project design that includes changes in the location or extent of earth moving activities, if borrow or spoil areas are needed, or if unexpected archeological resources are exposed during construction.

Recommended Follow up:

None required unless any of the criteria in Agreed-to-Actions above have been met.

Recorded Site(s): The historic period site VT-WA-90 is located approximately 2,000 feet southwest of the project area.

Sensitivity Rank: **Site(s) Identified:** none

NRHP Eligibility: **Site Number(s):** none

Signed: JACOB CLAY Digitally signed by JACOB CLAY Date: 2024.04.04 14:45:12 -04'00' **Title: Archeologist**

Thursday, April 4, 2024 Page 1 of 1

*(This is an example of a completed Cultural Resources Trip Report and not an actual project).

APPENDIX I

13 V.S.A. § 3761. UNAUTHORIZED REMOVAL OF HUMAN REMAINS

A person who, not being authorized by law, intentionally excavates, disinters, removes or carries away a human body, or the remains thereof, interred or entombed in this state, or intentionally excavates, disinters, removes or carries away an object interred or entombed with a human body in this state, or knowingly aids in such excavation, disinterment, removal or carrying away, or is accessory thereto, shall be imprisoned not more than fifteen years or fined not more than $10,000.00, or both. (Amended 1989, No. 142 (Adj. Sess.), § 1.)

13 V.S.A. § 3764. CEMETERIES AND MONUMENTS-GRAVE MARKERS AND HISTORICAL TABLETS

A person shall not intentionally and without right or authority excavate, steal, remove, injure or destroy, or procure or cause to be excavated, stolen, removed, injured or destroyed, a gravestone or monument erected to the memory of a deceased person, or erected and intended for such use, or a grave, tomb or burial site, or portion thereof, in which the body or remains of a deceased person is interred, or which is intended for the interment of a deceased person, or a monument, tablet or marker erected for the commemoration of some historical event or place by a historical or patriotic association or society on land on which such association or society has a right to erect the same. (Amended 1989, No. 142 (Adj. Sess.), § 2.)

Updated 3/12/2024

APPENDIX J

NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT (NAGPRA)

This document can be viewed at: 25 USC Ch. 32: NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION (house.gov)

APPENDIX K

SPOT CHECKING OR QUALITY REVIEW OF NRCS CULTURAL RESOURCE COMPLIANCE IN VERMONT

Responsibilities

A. The Assistant State Conservationist-Management and Strategy is responsible for overall quality of work done by NRCS field offices in Vermont. The State Soil Scientist is responsible for the overall quality of work done by Soil Scientists.

B. Program responsibility for Cultural Resources and conducting spot checks or quality reviews belongs to the State Resource Conservationist.

C. Cultural Resources spot-checks will be done in consultation with the VT SHPO, according to the State Memorandum of Agreement and National policy.

D. NRCS District Conservationists and Soil Survey Party Leaders are responsible for the quality of work, and cultural resources compliance, in their respective offices.

Activities Spot Checked

All undertakings as defined by NRCS policy (GM 401, part 420) and section 106 of the National Historic Preservation Act, as amended are subject to be spot checked. A minimum of (2) offices will be spot checked annually.

Frequency

Spot checks are to be done annually, based on the fiscal year and will be completed by the end of the calendar year.

Quantity of Undertakings Spot Checked

A. Conservation plans & revisions: 5% with minimum of 2

B. Conservation practices applied: 5% with minimum of 2

C. Other undertakings, projects and other activities not included above: minimum of 1 or 5%, whichever is larger.

If errors or deficiencies are found, additional undertakings in the same category will be checked until reasons for deficiencies, are defined and corrected.

Methods

Cultural Resources spot checking should be combined with other spot checking such as EQIP, AMA, etc. where possible and practical to meet the requirements of each program.

A. Environmental evaluation (EE) will be checked for consideration of cultural resources.

B. Practice Description Form for Cultural Resources Review will be checked for accuracy

and completeness of documentation.

C. Field checks will be made of the area of potential effect (APE) to confirm accuracy of information on evaluation worksheet for the following:

1. Type and description of undertaking
2. Description, size and location of APE
3. Confirmation of geomorphologic criteria, soils, slope, water sources, and historic features, etc.
4. Discussion with landowner/operator, where practical and possible, to confirm questions they were asked about possible cultural resources by VT NRCS.

Documentation

The Vermont Spot Check Report will include the following to document cultural resources compliance activities:

A. Has a **Practice Description Form for Cultural Resources Review** been completed and submitted to the Cultural Resources Specialists? ____ (yes, no, not applicable)

B. Has the practice been cleared of all cultural resources issues or concerns prior to installation? _____(yes, no, with conditions)

C. If a cultural resource(s) was identified have all potential adverse effects been mitigated?

Quality

The spot check will review the environmental and preliminary cultural resource evaluation. If there are deficiencies such as incomplete or inaccurate documentation, error in description or size of APE, etc., then the spot check report is to include:

A. Details of deficiencies in relation to compliance with National policy and established State procedures.

B. Recommendations for corrective actions needed for policy and Section 106 compliance.

C. Suggested training needs for specific persons or staffs to help prevent recurrence of deficiencies.

D. Deficiencies that result in possible adverse effects to cultural resources will be documented with notification of the SHPO and the Advisory Council on Historic Preservation, if needed.

E. Corrective or necessary mitigation actions will be scheduled as part of the follow-up.

F. The spot check report will be completed before leaving the NRCS office and will be reviewed by the NRCS office supervisor and spot-check team leader. Items not agreed to will

be documented along with the reasons for not agreeing and proposed actions for correction.

Recognition

High quality work and significant efforts by VT NRCS employees, which is revealed in the spot check will also be documented and appropriately recognized.

APPENDIX L

PROCEDURES FOR EMERGENCY RESPONSE

Emergencies: The following procedures will ensure that the need to protect life and property in an emergency is accomplished while taking cultural resources into account to the maximum extent congruent with rapidly changing priorities and circumstances. These emergency situations are divided into two types.

A. Exigent Situations: In this situation the VT NRCS shall notify the VTSHPO of planned emergency work. The VT NRCS may provide notification of exigent situations to the VTSHPO which shall include circumstances creating the exigent situation, work to be undertaken, any consideration of historic properties, as appropriate, and request for concurrence by the VTSHPO. The VTSHPO will then have 5 days to respond to VT NRCS after receipt of said notification. If VTSHPO does not respond within 5 days concurrence is presumed. NRCS will document and avoid adverse impacts to cultural resources encountered during exigency work to the fullest extent practicable.

B. Non-exigent Situations: The VT NRCS field personnel will report these projects as undertakings in the manner described above in Stipulation 1.

In major disasters, VT NRCS may elect to waive all or part of its cultural resources responsibilities as allowed under 36 CFR 78.

APPENDIX M

GLOSSARY OF ACRONYMS USED IN THIS DOCUMENT

USDA	United States Department of Agriculture
NRCS	Natural Resources Conservation Service
ACHP	Advisory Council on Historic Preservation
NHL(s)	National Historic Landmark(s)
NRHP	National Register of Historic Places
SHPO	State Historic Preservation Officer
THPO	Tribal Historic Preservation Officer
NCSHPO	National Conference of State Historic Preservation Officers
NHO	Native Hawaiian Organization
NEPA	National Environmental Policy Act
CEQ	Council on Environmental Quality
DHS	Department of Homeland Security
FEMA	Federal Emergency Management Agency
NHPA	National Historic Preservation Act
FPO	Federal Preservation Officer
SPO	Senior Policy Official (NRCS)
NHQ	National Headquarters (NHQ)
APE	Area of Potential Effect-from ACHP regulations 36 CFR Part 800
CRS	Cultural Resources Specialist (NRCS-meets Secretary of Interior's

Professional Qualification Standards, generally an archaeologist or historian)

EWP Emergency Watershed Program (NRCS program)