

Wetland Delineation Protocol

Tetra Tech will conduct a wetlands survey of the proposed Project. A map of these areas will be produced to help micro-site project facilities and avoid unnecessary wetland impacts. Off-site (desktop) determination methods will first be used to identify probable locations of wetlands and waterbodies, while on-site methods will be employed to verify wetland identifications and gather information to support Tetra Tech's assessment of probable jurisdictional determinations.

The desktop analysis of wetlands will include assessment of USFWS National Wetlands Inventory (NWI) Maps, wetland easements, and Waterfowl Protection Areas (WPA); Natural Resource Conservation Service (NRCS) Wetland Reserve Program (WRP) and Conservation Reserve Program (CRP) easements, state-owned land, nature preserves (public and private), and county or municipal parklands that may be present in the proposed project area. The desktop determination activities will also be used to identify potential impacts to wetland areas from the construction of the proposed array, access roads, underground electrical collection lines other project features (met towers, operations building, and construction laydown areas) and transmission line corridor. The results will be used to estimate total project related impacts to wetlands and waterbodies, provide an opinion of federal jurisdiction and offer alternatives to project design and activities to avoid and minimize impacts to jurisdictional areas.

Wetlands within the project area will be delineated using the methods described in the 1987 USACE Wetland Delineation Manual (Environmental Laboratory, 1987). A site visit will be conducted to determine if any jurisdictional wetlands or other waters of the United States (WUS) exist within the boundaries of the project footprint (buffers discussed in assumptions). The wetland boundaries will be marked at 50- to 75-foot intervals (depending on the line of sight) and pin flags or stakes numbered sequentially. The presence of hydric soils will be verified by a certified North Dakota soil classifier.

A formal wetland delineation report, suitable for submittal to the USACE, will be prepared and will detail the findings of the review and field investigation. Information included in this report will include: a description of the project areas including figures and acreage calculations, soil and vegetation conditions, an assessment of the jurisdictional status based on field observations of hydrologic, vegetative conditions, and soil conditions, including wetland delineation data sheets. This report will focus on those wetlands which may be impacted by the proposed array, access roads, laydown areas, other project features and transmission line. The report and accompanying maps will be provided electronically to NextEra Energy.

Following completion of the wetland delineations, a jurisdictional determination of the Project Area will be required from the USACE. If the project impacts exceed the notification thresholds of the Nationwide Permit Number 12, and modification of the proposed project layout cannot reduce the proposed impacts below the notification threshold, Tetra Tech will prepare a Pre-construction Notification (PCN) to the USACE – Omaha District. The PCN will include a

description of how proposed impacts to wetlands and waters have been avoided and minimized during project design. Tetra Tech will work with the project design team and engineer to develop the avoidance/minimization narrative. Project drawings showing proposed wetland/water impact areas will be prepared for completion of this task.

Subtask USACE Section 404 Permit Application

If necessary, Tetra Tech will prepare a Department of the Army Permit (33 CFR 325) Section 404 Individual Permit Application for the proposed project. Tetra Tech will coordinate with the project team to obtain the necessary information required for a complete wetland permit application. Individual permit applications are evaluated on a case-by-case basis using the Section 404(b)(1) Guidelines. The Guidelines spell out a sequential review process whereby the applicant must first show that all available alternatives to the wetland impact have been considered and that no practicable alternative exists which would have less adverse impact on the aquatic ecosystem. If all USACE conditions are met, then the applicant must show that all appropriate and practicable steps will be taken to minimize adverse impacts of the discharge on wetlands. Only after avoidance and minimization criteria are satisfied can the USACE consider mitigation.

Tetra Tech will prepare a wetland and waters mitigation plan to meet USACE compensatory wetland mitigation requirements. Once proposed wetland impact areas have been determined, Tetra Tech will design a mitigation plan to provide functional replacement for the proposed impacts.

Cultural Resources Inventory Protocol

Tetra Tech will conduct a Class III Cultural Resources Inventory. A Management Summary Report will be written following the completion of the field work, to be submitted to the North Dakota State Historic Preservation Office (SHPO). A Final Report detailing the results and recommendations of all phases of field work will be submitted to the SHPO upon completion of the entire project.

It should be noted that this undertaking may fall under the jurisdiction of the USACE if a Section 404 permit is required and may require completion of an Individual Permit, which may trigger the National Environmental Policy Act (NEPA) and compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended.

The cultural resources services described below are intended to provide the necessary information for completion of the Oliver Expansion Project USACE Individual Permit, and to assist in Section 106 and other compliance requirements under federal and state law. Since federal involvement in this project is likely, consultation with the applicable federal agencies, the SHPO, and American Indian tribes has been included within the scope of services.

The cultural scope of services includes SHPO consultation, Tribal consultation, Pedestrian Survey, and Reporting. Subsurface evaluation costs will be determined once desktop studies, pedestrian survey, and SHPO consultation is complete. Costs to complete the subsurface survey task will be submitted at a later date.

Subtask Class I Inventory, SHPO and Tribal Consultation

Class I Cultural Resource Inventory (File Search and Literature Review)

Prior to the initiation of field work, Tetra Tech will complete a file search and literature review of the proposed project area. This review includes the collection of archaeological site forms, architectural history property/structure forms, and previous survey reports. The file search and literature review includes the proposed project area of potential effects (APE) and an additional one to five mile buffer. The purpose of the review is to 1) gain an understanding of the site types that may be encountered during the field survey, 2) document site density within the project APE and 3) identify previously recorded sites to assist with site avoidance and micro-siting. Based on discussions with Paul Picha, the Chief Archaeologist with the North Dakota State Historical Society, the Class I inventory must be completed within a one year time frame prior to the initiation of the Class III field survey. Class I inventories performed greater than one year from the initiation of the field survey require an update to detect additional archaeological sites and surveys. The Class I file search was completed for this project in May 2008. Depending on when field work occurs, an update to the file search may be necessary, therefore, this has been included in this cost estimate.

SHPO Consultation

Tetra Tech will initiate consultation with the SHPO to:

- 1) identify any concerns that the SHPO may have regarding direct or visual impacts to known cultural resources in and around the Project Area,
- 2) develop a field surveying strategy that appropriately addresses buried cultural resources within the Project Area, and
- 3) discuss impacts to any cultural resources documented during the field survey and mitigation approaches.

The expected timeline for consultation includes initial consultation in late fall 2008 to discuss the impacts to known cultural resources within the Project Area, early summer 2009 to discuss appropriate survey strategies to identify buried cultural resources, and late summer 2009 to discuss potential impacts to cultural resources documented during the survey and mitigation.

Tribal Consultation

Tetra Tech will initiate consultation with the Native American tribes that have expressed cultural ties to North Dakota to:

- 1) identify any concerns that these tribe may have regarding direct or visual impacts to known cultural resources and traditional cultural properties in and around the Project Area,
- 2) develop a field surveying strategy that appropriately addresses tribal concerns regarding undocumented cultural resources and traditional cultural properties within the Project Area, and
- 3) discuss impacts to any traditional cultural properties and cultural resources documented during the field survey and mitigation approaches.

The expected timeline for consultation includes initial consultation in the late fall 2008 to discuss the impacts to known cultural resources within the Project Area, early summer 2009 to discuss appropriate survey strategies addressing tribal concerns regarding undocumented cultural resources and traditional cultural properties, and late summer 2009 to discuss potential impacts to cultural resources documented during the survey and mitigation. Tribal members may request to be present during the cultural resource survey or participate as members of the field crew.

Subtask Field Survey-Pedestrian Survey

Tetra Tech will conduct a pedestrian survey of the Project Area at no more than 15 meter (50 feet) intervals with the purpose of identifying cultural resources on the surface and identifying areas that may require additional subsurface (shovel) testing. The 15 meter interval is adequate to identify cultural resources under normal circumstances; however, in areas with known archaeological sites, traditional cultural properties, a high potential for previously undocumented

sites, or poor surface visibility, these intervals may be reduced to 10 meters (32 feet) or 5 meters (16 feet) to better document these resources. Since it is assumed that this project may require compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, the North Dakota SHPO recommends that surface visibility conditions between 30 and 100 percent are adequate to identify surficial archaeological deposits. Pedestrian surveys of areas with less than 30 percent surface visibility are not adequate to identify surficial archaeological deposits and subsurface testing will be required.

Subtask Field Survey-Subsurface Survey – Costs not included in this proposal (will be submitted at a later date)

Since it is assumed that this project will require compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, the North Dakota SHPO recommends subsurface testing in portions of the Project Area with surface visibility conditions less than 25 percent to identify subsurface archaeological deposits. In Tetra Tech's experience, native prairies and pastures in central North Dakota generally have poor to good surface visibility due to dryer conditions and poorer soils. It is likely that a significant number of shovel tests may be required within the Project Area.

In an attempt to satisfy SHPO requirements, and provide NextEra Energy with an accurate cost estimate for subsurface testing within the Project Area, Tetra Tech recommends that a shovel testing model be developed after the completion of the pedestrian survey. This would allow for an accurate assessment of the areas requiring subsurface testing. However, at this time it is unknown if the area requiring subsurface testing would be lesser or greater than the approximately 25 percent of the Project Area assumed above. Upon identifying these areas, a subsurface testing strategy would be developed in consultation with the SHPO. This strategy would focus the majority of shovel testing in areas with higher potential for buried sites and lesser amounts of shovel testing in areas with lower potential for buried sites. This strategy would reflect an appropriate level of effort needed to satisfy compliance with Section 106 if necessary. Consultation with the SHPO would occur immediately after completion of the pedestrian survey. Depending on the consultation with the SHPO, subsequent shovel testing may take several months to complete.

Costs for shovel testing have not been provided in this proposal. Once further details are known and consultation has been initiated, Tetra Tech will submit a cost estimate to complete the subsurface testing that will be required and approved by SHPO.

Reporting

Upon completion of the cultural resource inventory, Tetra Tech will assemble and review the collected survey data to complete analysis and project documentation. Archaeological sites identified during the cultural resource inventory will be assigned official state site numbers and

site forms will be completed. Artifacts associated with identified archaeological sites will be cleaned, analyzed, and catalogued and the data will be integrated into the cultural report. Cultural materials will only be collected in areas in which permission was granted by the landowner prior to survey. Cultural materials will not be collected in areas in which permission was not granted. These materials will be identified and entered into a field catalog, but will not be removed. A total of 10 copies of the final report will be distributed to interested parties.

Depending on the level of effort suggested by the SHPO and Tribal representatives, the cultural report may require a section addressing traditional cultural properties within the Project Area or within close proximity. If included, this portion of the report would be written in conjunction with Tribal members.