



U.S. Department of Transportation  
Federal Railroad Administration

## Environmental and Corridor Planning Division (RPD-13)

### Memo to File

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DN: c=US, o=U.S. Government, ou=FRA Volpe,  
ou=DOT Volpe, cn=LYDIA KACHADOORIAN  
Date: 2017.12.13 15:04:16 -05'00'

**Parties:** Lydia Kachadoorian/FRA and Dan Higginbottom/Iowa SHPO

**Day & Time:** 11/08/17, 2:52 pm – 4:18 pm; updated 11/09/17 to include list of tribes; updated 12/13/17 to include Section 4f concerns and clarify easement purchase

**Grant Program/Project Type:** Rail Line Relocation and Improvement Capital Grant Program (RLR)/Final Design & Construction

**Grant No. & Name:** FR-LRI-0047 Sioux Valley Railroad Relocation (FY11)

**Recipient/Subrecipients:** South Dakota Department of Transportation (SDDOT)/Sioux Valley Regional Railroad Authority/D&I Railroad

**Grant Amount:** \$1,803,801

**Subject:** NHPA/Section 106 and DOT Act/Section 4f compliance requirements; SDDOT wetland mitigation easement in Plymouth Co. Iowa (*Iowa SHPO Identifier: 150800009/120684038-COE-Soux and Plymouth-CEMVR-OD-P-2015-0057-South Dakota DOT-Rail realignment, borrow, and wetland mitigation*)

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After a series of emails & voicemails starting in August 2017, I was able to reach Dan Higginbottom ([daniel.higginbottom@iowa.gov](mailto:daniel.higginbottom@iowa.gov), 515-281-8744) by phone. He indicated that his office had moved and he was still trying to locate relevant project files. However, he did have a chance to review my email of 11/2/17 wherein I included a copy of the March 24, 2015 report entitled, “*Wetlands Mitigation Options*” as prepared by HDR Engineering as part of the Clean Water Act Section 404 permitting process. Dan indicated that while the memo may have been sufficient under Section 404 requirements, it did not address consideration of alternatives under Section 106 requirements. I agree with his assessment on this point.

Dan initially identified consideration of alternatives as a remaining task, but during the course of our conversation he agreed that since the SDDOT already purchased a wetlands conservation easement from Plymouth County, Iowa (February 9, 2016; \$135,000) and a portion of that parcel

contains an archaeological site, that it would be more appropriate to discuss ways to avoid, minimize, and mitigate potential adverse effects to archaeological site 13PM2 (Tracy Village Site). Dan believes that the archaeological site is likely a prehistoric house site associated with the Great Oasis cultural period (AD 900-1100) [i.e. a late prehistoric occupation], but that spatial boundaries remain unknown. He has concerns about the potential to find human remains at the site; these concerns are based on similar sites in the area and known burial practices during this time period. In addition, bones were encountered during the initial Phase I investigation and the determination of species was inconclusive (could be human), so this is problematic. If human remains are at the site than a permit would need to be issued for additional work under the authority of the State Archaeologist; the State Archaeologist rarely issues permits to excavate human remains of tribal origin, so the presence of human remains of tribal origin can shut down the development of a wetlands on this parcel (**this is very important**).

Dan indicated that in order to move ahead he needs to see revisions and additions to the August 4, 2015 report entitled “*Phase I Archaeological Survey of a Proposed Offsite Wetland Mitigation Project Area in Plymouth County, Iowa*” as prepared by Kogel Archaeological Consulting Services (under contract to HDR Engineering Inc.). He doesn’t have the information he needs in order to concur with a finding of effect (no historic properties affected) proposed in the report. He requested that the SDDOT contract out additional work to revise the existing report as he stands by his initial assessment that it is insufficient; it should be a Phase I/Phase II report that is more comprehensive.

Per his September 01, 2015 email to Marlyn Schafer and Brant Vollman of the US Army Corps of Engineers, a revised report should include additional fieldwork, laboratory analysis & hydrological studies. He would like to see an expanded area of potential effect (APE) [Army Corps interpretation was too narrow], more subsurface 50 cm X 50 cm test pits in 15 meter intervals across the remaining portion of the wetlands mitigation area, some strategically placed larger 1 meter X 1 meter units, better artifact descriptions accompanied by higher quality photographs, a more thorough analysis of both ceramic & lithic materials and their stratigraphic distribution/spatial parameters as related to separate human occupational episodes, a better analysis of bone recovered by a qualified faunal specialist and/or physical anthropologist, an analysis of changes in potential upstream flooding, and an analysis of hydrology & chemical composition of soils as a result of wetlands creation and how this can impact the Tracy Village Site. He believes that archaeological consultants can do a better job of factoring in geomorphology and he supports placement of a soil & landform analysis test trench outside the boundaries of the site to evaluate the soils. He suggested that this be done according to the Association of Iowa Archaeologists Guidelines (dated Sept. 23, 2017), specifically Chapter 3 – Geomorphological Guidelines (<http://aiarchaeologist.org/data/documents/AIA-Guidelines100517.pdf>). Per past research in the area, sites in the vicinity tend to be deeply buried and location specifics will determine the best options for avoiding adverse effects.

At one point Dan’s office had suggested that a 100-foot no-work zone buffer be established outward from the outermost perimeter boundary as a means of avoidance, but to date he has not seen any compelling documentation that clearly defines the archaeological sites boundaries. To a certain extent he is willing to assume that the archaeological site maintains National Register of Historic Places significance, but he can’t discuss methods to avoid and minimize without knowing the spatial extent of the site. It is **important to note** that the August 4, 2015 Kogel Archaeological

Consulting Services report did recommend additional fieldwork in the form of a Phase II if it appeared that the Tracy Village Site could not be avoided. The report failed to make it clear that the site could be avoided (including indirect & cumulative impacts), so both FRA and SHPO are left in the position of needing more information.

The report did not clearly define the boundaries of the archaeological site so I do agree that additional work will be necessary in order to establish ways to avoid, minimize, and/or mitigate adverse effects that could be created by the development of a wetlands near the archaeological site; currently we are at an impasse without this additional work (**this is very important**). I am not sure how much this additional work would cost, but would not be surprised if it ranged between \$25K-\$50K given how much needs to be done, including some H&H modeling to understand potential impacts. Ideally FRA would review the proposed field and analysis methods first, to ensure that any subsequent report & field efforts were going to be more comprehensive than the previous report.

This additional work is also necessary under Section 4f of the DOT Act because we do not know if the Tracy Village Site is a Section 4f resource. In this situation, Section 4f requires a full National Register of Historic Places eligibility assessment in order to determine the primary value of the archaeological site. If the primary value can be retrieved through data recovery/excavation (could cost \$50-\$100K, or more), then the archaeological site would not be a Section 4f resource that warrants preservation in place. But under Section 106 that extra cost for data recovery/excavation could become a project requirement/environmental commitment. However, if the Tracy Village Site's primary value is tied to being preserved in place (e.g. possessing human burials), then Section 4f requires a deeper exploration of alternatives to avoid taking action that triggers adverse effects. Section 4f mandates a preservation friendly outcome for archaeological sites that are valued for being preserved in place. If additional study reveals that the Tracy Village Site is a Section 4f resource that warrants preservation in place, then FRA would require that the SDDOT re-consider other parcels for the wetlands mitigation project (**this is very important**).

In addition, Dan recommended that the parcel be placed under an archaeological conservation easement which would be held by the State Archaeologist. There would be a one-time fee (between \$5K-\$40K) for monitoring the site in perpetuity, depending on area, location, and nature of cultural resource. Additional information on archaeological conservation easements can be found by contacting the State Archaeologist at 319-384-0751, [john-doershuk@uiowa.edu](mailto:john-doershuk@uiowa.edu), and reviewing information at this website: <https://archaeology.uiowa.edu/services-and-fees>. This archaeological conservation easement is one that Dan would like to see memorialized in a NHPA/Section 106 Memorandum of Agreement (MOA), in addition to other items that included tribal monitoring and no-work zone buffers (**this is very important**).

Since the SDDOT doesn't own the parcel, Plymouth County, the actual land owner, would need to be involved in the MOA process, especially if an archaeological conservation easement is sought. In addition the Natural Resources Conservation Service (NRCS) may have some jurisdiction over the parcel, per pages 4 & 5 of the March 24, 2015 *Wetlands Mitigation Options* report, and may have interest in becoming a consulting party to the MOA. Since the Army Corps permitted this project they would also be invited to participate in the MOA process. Both the Sioux Valley Regional Railroad Authority and the D&I Railroad would also need to be invited as

consulting parties. The State Archaeologist would also be considered an additional consulting party; that office has separate authority apart from the State Historic Preservation Office. The Advisory Council on Historic Preservation (ACHP) in Washington DC would also have to be invited as a consulting party; they regulate the NHPA/Section 106 process that would require the MOA. SDDOT would have to take the lead on the MOA development in partnership with FRA; additional consulting parties may later be identified, such as the Association of Iowa Archaeologists and other interested parties. MOAs of this scope, complexity, and with this many consulting parties (at least 22) can easily take 2-3 years to execute (sometimes years longer). They are very time intensive legal agreements that require multiple meetings, numerous conference calls, frequent document revisions, and active legal counsel. An MOA is a collaborative legal document that requires consensus between the parties; achieving consensus on MOA language is a substantial time, energy, and financial investment not to be taken lightly by any party, especially by FRA and SDDOT (**this is very important**).

Dan also believes that FRA and SDDOT need to engage the tribes once again; FRA is in agreement. He believes that too much time has transpired and that contact with tribes has been insufficient and sporadic at best. He indicated that the Iowa DOT may be helpful in this regard as Brennan Dolan ([brennan.dolan@dot.iowa.gov](mailto:brennan.dolan@dot.iowa.gov)) has an excellent relationship with most of the interested tribes. Dan is requesting that FRA coordinate with 14 different tribes in 7 states, this will require a significant time, energy, and financial investment not to be taken lightly (**this is very important**). Currently I am the only FRA Environmental Protection Specialist and Registered Professional Archaeologist assigned to this project, working towards resolution could take 50% or more of my time and require that multiple SDDOT staff dedicate time to resolving the issues with this one project.

The SDDOT has spent \$135K on the wetlands conservation easement, but the cost involved in the next steps to resolve issues related to NHPA/Section 106, DOT Act/Section 4f, and CWA/Section 404 could easily exceed that amount and may therefore not be advisable (**this is very important**). To my knowledge FRA has no additional grant funds for this project so the additional funding would need to be found at the state or private level.

In summary the next steps in this project would involve the following (**this is very important**):

1. Revised Phase I/Phase II report to include recommendations for avoidance, minimization, and mitigation (see recommendations above for details).
2. Analysis of Section 4f issues; is the Tracy Village Site a 4f resource that must be avoided? If it is, then adverse effects to the site must be avoided and an alternative location may need to be considered.
3. Active tribal engagement with 14 tribes in 7 states; seek assistance from Iowa DOT, as appropriate.
4. NHPA/Section 106 MOA with over 20 consulting parties (to possibly include an archaeological conservation easement, no-work zone buffers, and tribal monitoring).

11-09-17: UPDATE TO FILE: Dan Higginbottom sent an email to the following 14 tribes, which he deemed to have a likely interest:

**TRIBAL CONSULTING PARTIES UNDER NHPA/SECTION 106**

## Kansas

1. Iowa Tribe of Kansas & Nebraska (White Cloud, KS) - Lance Foster, THPO, [lfoster@iowas.org](mailto:lfoster@iowas.org);

## Minnesota

2. Lower Sioux Indian Community (Morton, MN) - Cheyanne St. John, THPO, [lowersiouxthpo@lowersioux.com](mailto:lowersiouxthpo@lowersioux.com) or [cheyanne.stjohn@lowersioux.com](mailto:cheyanne.stjohn@lowersioux.com)
3. Upper Sioux Community (Granite Falls, MN) - Samantha Odegard , THPO, [samanthao@uppersiouxcommunity-nsn.gov](mailto:samanthao@uppersiouxcommunity-nsn.gov);

## Nebraska

4. Omaha Tribe of Nebraska (Macy, NE) - Thomas Parker, THPO, [thomaslp99@yahoo.com](mailto:thomaslp99@yahoo.com);
5. Ponca Tribe (Niobrara, NE) - Shannon Wright, THPO, [swright@poncatribene.org](mailto:swright@poncatribene.org);
6. Winnebago Tribe (Winnebago, NE) - Randy Teboe [randy.teboe@winnebagotribe.com](mailto:randy.teboe@winnebagotribe.com);

## North Dakota

7. Three Affiliated Tribes (Mandan, Hidatsa & Arikara Nation) (New Town, ND) - Peter Coffey, Jr., Compliance Officer, [pcoffey@mhanation.com](mailto:pcoffey@mhanation.com);
8. Spirit Lake Tribe (Fort Totten, ND) - Erich Longie, THPO, [thpo@gondtc.com](mailto:thpo@gondtc.com);
9. Standing Rock Sioux Tribe (Fort Yates, ND) - Jon Eagle Sr., THPO [j.eagle@standingrock.org](mailto:j.eagle@standingrock.org)

## Oklahoma

10. Otoe-Missouria Tribe (Red Rock, OK) - Elsie Whitehorn, THPO, [ewhitehorn@omtribe.org](mailto:ewhitehorn@omtribe.org);

## South Dakota

11. Cheyenne River Sioux Tribe (Eagle Butte, SD) – Steve Vance, THPO [vance@crst-nsn.gov](mailto:vance@crst-nsn.gov);
12. Flandreau Santee Sioux Tribe (Flandreau, SD) – Garrie KILLSAHUNDRED, THPO [garrie.killsahundred@fsst.org](mailto:garrie.killsahundred@fsst.org); Sara Childers [sara.childers@fsst.org](mailto:sara.childers@fsst.org);
13. Yankton Sioux Tribe (Wagner, SD) – Kip Spotted Eagle, THPO [kipspottedeagle247@gmail.com](mailto:kipspottedeagle247@gmail.com);

## Wisconsin

14. Ho-Chunk Nation (Black River Falls, WI) – Bill Quackenbush, THPO, [bill.quackenbush@ho-chunk.com](mailto:bill.quackenbush@ho-chunk.com);