

DEPARTMENT OF THE ARMY INSTALLATION MANAGEMENT COMMAND HEADQUARTERS, U.S. ARMY GARRISON ALASKA 1046 MARKS ROAD #6000 FORT WAINWRIGHT, ALASKA 99703-6000

MEMORANDUM OF AGREEMENT BETWEEN THE U.S. ARMY GARRISON ALASKA AND THE ALASKA STATE HISTORIC PRESERVATION OFFICER REGARDING ARCHAEOLOGICAL EXCAVATION AND MITIGATION OF THE NIIDHAAYH NA' SITE (XBD-00110), DONNELLY TRAINING AREA, FORT WAINWRIGHT, ALASKA

MOA-WC1SH5-2108

WHEREAS, USAG Alaska proposes to permit University of Wyoming to excavate the Niidhaayh Na' archaeological site (XBD-00110) located on land that USAG Alaska manages; and

WHEREAS, USAG Alaska determined that this was an Undertaking subject to review under Section 106 of the National Historic Preservation Act (NHPA), 54 U.S.C. 306108, and its implementing regulations, 36 CFR § 800; and

WHEREAS, USAG Alaska defined the Undertaking's Area of Potential Effects (APE) as a 250 meter by 50 meter square area at monomorphic potential effects (APE) as north of Delta Creek (Attachment A); and

WHEREAS, USAG Alaska proposes to permit University of Wyoming to undertake block excavation (approximately 10 m²), including full documentation of all destructive archaeological activities of the Niidhaayh Na' site (XBD-00110) following the guidelines outlined in the ARPA Permit; and

WHEREAS, USAG Alaska initiated consultation with the Alaska State Preservation Officer (SHPO) on 29 January 2021 pursuant to 36 CFR § 800; and

WHEREAS, USAG Alaska determined that the Niidhaayh Na' site (XBD-00110) is eligible for the National Register of Historic Places (National Register) and the SHPO concurred 2 October 1984; and

WHEREAS, USAG Alaska is a lead federal agency for this undertaking because it has authority to issue an Archaeological Resources Protection Act (ARPA) permit for excavation of an archaeological site on public domain lands and because the

Undertaking would take place on lands withdrawn for military use and would require permission from USAG Alaska for access; and

WHEREAS, USAG Alaska notified and invited the University of Wyoming to consult on this Undertaking pursuant to 36 CFR § 800.6(c)2 as they are the applicant for the ARPA permit, and the University of Wyoming accepted the invitation to consult and sign this MOA as an invited signatory on 2 February 2021; and

WHEREAS, USAG Alaska notified and invited the Federally recognized tribes of Village of Dot Lake, Healy Lake Village, Nenana Native Association, Northway Village, Native Village of Tanacross, and Native Village of Tetlin to consult regarding the Undertaking pursuant to 36 CFR § 800.3(f) during a meeting on 14 January 2021 with follow-up by letter on 2 April 2021, and no tribes accepted the invitation to consult nor requested to sign this MOA as concurring parties as of June 2021; and

WHEREAS, USAG Alaska notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination pursuant to 36 CFR § 800.6(a)(1) on 2 March 2021 and the ACHP chose to not participate in the consultation on 8 March 2021; and

WHEREAS, USAG Alaska notified and invited the Bureau of Land Management to consult on this Undertaking pursuant to 36 CFR § 800.3(f) on 4 April 2021; and

WHEREAS, USAG Alaska consulted with the Fort Wainwright Cultural Resources Working Group—a group of interested parties and individuals who meet with USAG Alaska Cultural Resources staff twice a year to discuss and provide input on cultural resources projects at Fort Wainwright—on this Undertaking pursuant to 36 CFR § 800.3(f) on XX May 2021; and

WHEREAS, USAG Alaska provided the public with information on the Undertaking and an opportunity to consult through USAG Alaska Environmental Division website; and

WHEREAS, USAG Alaska issued a Short Term Lease to the University of Wyoming for the purposes of excavation under the ARPA permit; and

NOW, THEREFORE, USAG Alaska, University of Wyoming, and the SHPO agree that the Undertaking will be implemented in accordance with the following stipulations in order to take into account the effect of the Undertaking on the historic properties.

STIPULATIONS

USAG Alaska will ensure that the following measures are carried out by the applicant, University of Wyoming:

I. DATA RECOVERY

A. Data recovery activities shall locate, recover, and document significant archaeological information at the Niidhaayh Na' site (XBD-00110) in the 2021-2023 field seasons.

B. The data recovery work will be in accordance with the attached research design and data recovery plan (Attachment B). The research design and data recovery plan have been developed in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties, the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, and the Advisory Council on Historic Preservation's Treatment of Archeological Properties: A Handbook.

II. SUBMITTALS

A. USAG Alaska shall ensure that the following products of data recovery activities are submitted:

1. A draft data recovery report shall be submitted to SHPO within one year after the completion of all fieldwork and analysis. USAG Alaska shall ensure that the report is responsive to professional standards and to the *Secretary of the Interior's Format Standards for Final Reports of Data Recovery Programs* (42 FR 5377-79). Upon receipt, SHPO shall have 30 days to review the draft and submit comments to USAG Alaska.

2. USAG Alaska shall take into consideration SHPO's comments. Submittal of the final data recovery report shall consist of two printed copies sent to SHPO no later than 90 days after receipt of comments.

3. USAG Alaska shall send two printed copies of the final data recovery report to the Library Depository Clerk at the Alaska State Library.

4. An updated Alaska Heritage Resources Survey (AHRS) form shall be submitted to the SHPO within nine months after the completion of all fieldwork and analysis.

III. CURATION

A. All artifacts shall remain the property of USAG Alaska.

B. All artifacts, faunal remains, original field notes, and related materials shall be accessioned to the University of Alaska Museum, compling with federal regulation for curation (36 CFR § 79).

IV. PROFESSIONAL STANDARDS

All work pursuant to this MOA will be developed by or under the supervision of a person or persons meeting the minimum professional qualifications for an Archaeologist listed in the Secretary of the Interior's Professional Qualification Standards (36 CFR § 61, Appendix A).

V. ANNUAL REPORTING REQUIREMENT

University of Wyoming will provide USAG Alaska with an annual report for SHPO submission that summarizes the actions under this MOA by June the following year, for every year this MOA is in effect.

A. Annual reports will include the following information.

1. A printed or electronic color copy of the report outlining the efforts and accomplishments of that field season.

- 2. Date the data recovery action was performed.
- 3. List of actions scheduled for the coming year.

4. Recommendations to amend this MOA or improve communications among the parties.

B. Review of Annual Report: the SHPO and the interested parties may review each report and provide review comments to the USAG Alaska.

1. The SHPO and the interested parties may request additional documentation or further explanations from the USAG Alaska.

2. The SHPO and the interested parties must comment and/or request additional documentation within 30 calendar days of receipt of the USAG Alaska's report, otherwise, acceptance will be presumed. Received comments will be used by the USAG Alaska to determine if the MOA needs amendment.

VI. POST REVIEW DISCOVERIES

If potential historic properties are discovered or unanticipated effects on historic properties occur, USAG Alaska will implement the discovery plan included as Attachment C of this MOA.

VII. DISPUTE RESOLUTION

A. Should any signatory party to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, USAG Alaska will consult with such party to resolve the objection. If USAG Alaska determines that such objection cannot be resolved:

1. USAG Alaska will forward all documentation relevant to the dispute, including USAG Alaska's proposed resolution, to the ACHP. The ACHP will provide USAG Alaska with its advice on the resolution of the objection within 30 calendar days of receiving adequate documentation. Prior to reaching a final decision on the dispute, USAG Alaska will prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP and the signatories, and provide them with a copy of this written response. USAG Alaska will then proceed according to its final decision.

2. If the ACHP does not provide its advice regarding the dispute within the 30-calendar day time period, USAG Alaska may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, USAG Alaska will prepare a written response that takes into account any timely comments regarding the dispute from the signatories to the MOA, and provide the signatories and the ACHP with a copy of such written response.

3. USAG Alaska will be responsible for carrying out all other actions that are not the subject of the dispute.

B. If an objection pertaining to this MOA is raised by a member of the public at any time during implementation of any stipulation in this MOA, USAG Alaska will notify the signatories to this MOA and take into account the objection.

VIII. AMENDMENT

This MOA may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy is signed by all of the signatories.

IX. TERMINATION

A. If any signatory believes that the terms of this MOA are not being honored or cannot be carried out, or that an amendment to its terms should be made, that signatory will immediately consult with the other signatories to consider and develop amendments to the MOA per Stipulation VIII.

B. If this MOA is not amended as provided for in Stipulation VIII, USAG Alaska, the SHPO, or the ACHP may propose in writing to terminate this MOA with an explanation of the reasons for termination. If the signatories have found no alternative solution to

termination within 30 calendar days after receipt of the written notice, the MOA shall be terminated. If this MOA is terminated, prior to work continuing on the Undertaking, USAG Alaska must either (a) execute a new MOA pursuant to 36 CFR § 800.6, or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7 and notify the signatories as to the course of action it will pursue.

X. ANTI-DEFICIENCY ACT

All requirements set forth in this MOA requiring the expenditure of USAG Alaska or NSF funds are expressly subject to the availability of appropriations and the requirements of the Anti-Deficiency Act (31 U.S.C. § 1341). No obligation undertaken by USAG Alaska or NSF under the terms of this MOA will require or be interpreted to require a commitment to expend funds not obligated for a particular purpose.

XI. DURATION

This MOA will become effective upon execution by the signatories and will remain in effect until terminated or five years after its execution. If all stipulations are not completed prior to such time, USAG Alaska may consult with the signatories to reconsider the terms of the MOA and amend it in accordance with Stipulation VIII.

EXECUTION of this MOA by USAG Alaska, University of Wyoming, and the SHPO, and implementation of its terms evidence that USAG Alaska has taken into account the effects of this Undertaking on historic properties and afforded the ACHP an opportunity to comment.

MEMORANDUM OF AGREEMENT AMONG THE U.S. ARMY GARRISON ALASKA AND THE ALASKA STATE HISTORIC PRESERVATION OFFICER REGARDING ARCHAEOLOGICAL EXCAVATION AND MITIGATION OF THE NIIDHAAYH NA' SITE (XBD-00110), DONNELLY TRAINING AREA, FORT WAINWRIGHT, ALASKA

MOA-WC1SH5-2108

Signatories:

U.S. ARMY GARRISON ALASKA

By:

CHRISTOPHER J. RUGA Colonel, US Army Commanding

Date: 29 JUN 21

ALASKA STATE HISTORIC PRESERVATION OFFICER

By: JUDITH E. BITTNER State Historic Preservation Officer

Date: Ju 15,21

MEMORANDUM OF AGREEMENT AMONG THE U.S. ARMY GARRISON ALASKA AND THE ALASKA STATE HISTORIC PRESERVATION OFFICER REGARDING ARCHAEOLOGICAL EXCAVATION AND MITIGATION OF THE NIIDHAAYH NA' SITE (XBD-00110), TANANA FLATS TRAINING AREA, FORT WAINWRIGHT, ALASKA

MOA-WC1SH5-2108

Invited Signatories:

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UNIVERSITY OF WYOMING ۵ By:

BRIANA DOERING Assistant Professor of Anthropology

Date: 7/4/2021

Attachment A



AREA OF POTENTIAL AFFECT FOR THE UNDERTAKING

Attachment B

RESEARCH DESIGN (next page)

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Proposal to Conduct Archaeological Testing at XBD-00110, Fort Wainwright, Central Alaska Briana Doering, University of Wyoming

This proposal outlines a plan to excavate prehistoric site XBD-00110 (a.k.a, Niidhaayh Na', Delta Creek Site), adjacent to Delta Creek in the western portion of Fort Wainwright's Donnelly Training Area. The project is designed to broaden our understanding of prehistory in central Alaska and entails archaeological testing on military land. The site of interest was first located in 1977 and subsequently tested (2012, 2017, 2018) for subsurface deposits via nine 1x1 m units excavated by the U.S. Army, Colorado State University, and the University of Michigan under the direction of Julie Esdale and Briana Doering (Bacon and Holmes 1980; Esdale 2012). These preliminary tests yielded a wealth of prehistoric stone tools, tool fragments, and animal remains from four separate occupations spanning the terminal Pleistocene (ca. 12,000 cal BP) to the late Holocene (ca. 1500 cal BP) (Doering 2020). Moreover, the site is precariously located on the edge of an actively eroding bluff above Delta Creek. This proposal seeks to expand our understanding of the Pleistocene-Holocene transition and its impact on lithic production and subsistence in central Alaska before the context for this evidence is lost.



Figure 1 Location of Niidhaayh Na' relative to other terminal Pleistocene archaeological sites in the Middle Tanana Valley

BACKGROUND

Page 11 of 18

Archaeologists have long argued that Alaska was the entry point for the initial colonization of the Americas (Dixon 2001), and have spent multiple decades searching extensively for unequivocal traces of the first Alaskans. While this effort has identified large numbers of sites, research attention has been biased toward this earliest period in Alaskan prehistory and our understanding of prehistoric behaviors during subsequent millennia remains incomplete (Holmes 2008), particularly with regard to the development of technological, subsistence, and cultural systems (Goebel and Potter 2016). Paleoenvironmental data indicate that, after the last ice age, Alaska became more hospitable, with slightly warmer temperatures, increased moisture and an expanding forest biome, after a centuries-long return to cold and dry glacial conditions, known as the Younger Dryas (Graf and Bigelow 2011). Archaeologists still debate the extent to which prolonged climate changes during the terminal Pleistocene and early Holocene affected human behavior and culture in this region, known for short-term climatic extremes unique to the interior Subarctic (Mason and Bigelow 2008; Potter 2008; Wygal 2010).

Based on evidence from a handful of sites in central Alaska, archaeologists have suggested that humans may have responded to the Younger Dryas by changing their subsistence practices (Graf and Bigelow 2011; Hoffecker and Elias 2007; Mason and Bigelow 2008). Specifically, evidence from sites with occupations that span this climate interval suggest that central Alaskans may have survived by pursuing mostly large game instead of a broad diet of waterfowl, small game, and large game that is characterized by the earliest Alaskan subsistence evidence (Holmes 2001; Potter 2008). As a result of these changes in diet breadth, technology manufacture and use may have also shifted to include more highly refined technologies, such as microblades, and fewer unsystematically produced bifaces (Graf and Bigelow 2011; Wygal 2010). However, the equivocal evidence that underlies this interpretation originates largely from sites in lowland areas adjacent to the Tanana River and road system that pre- and post-date the Younger Dryas climatic interval. Evidence from a greater diversity of archaeological sites that date specifically to the Younger Dryas is necessary to refine our understanding of human behavior and culture at diverse ecological settings in the Middle Tanana Valley. Such evidence is only available through excavation.

NIIDHAAYH NA' (XBD-00110)

Niidhaayh Na' is a buried, intact, archaeological site located on Delta Creek in the Delta Training Area West (DTA West), Fort Wainwright, south of Fairbanks, Alaska, at Since 2012, archaeologists have returned to the site to complete limited site testing that establishes the site as potentially important to on-going debates regarding human-environment interaction during the Pleistocene-Holocene transition (Figure 2).



Figure 2 Previous site testing extents at Niidhaayh Na' (XBD-00110)

Buried materials at Locus II of Niidhaayh Na' offer an important opportunity to profile human behavior and culture at the end of the Pleistocene and beginning of the Holocene. First, the site is located off the road system in a transitional upland-lowland ecological zone that has been understudied in previous archaeological research in the region. Second, Locus II at the site comprises four AMS radiocarbon dated components, including one from the Younger Dryas climatic event and one from the Early Holocene (Figure 3). Third, initial site testing at Locus II yielded faunal remains, extensive lithic production debitage, and formal tools and tool fragments. These initial results suggest that excavations at Niidhaayh Na' will yield additional evidence directly pertinent to tool production and subsistence during and after the Younger Dryas climate event. However, these data must be collected before mass wasting destroys the site's stratigraphic integrity.

Additionally, the proposed project includes innovative analytical methods for evaluating human behavior at the site. Recent advances in isotopic analysis will be applied to the soil, any preserved hearth material that is recovered, and butchered faunal remains at Niidhaayh Na' to better understand past subsistence. This, in conjunction with thorough stratigraphic, lithic, and traditional faunal analyses will contribute to a more nuanced understanding of behavior and culture during the Younger Dryas and broader Alaskan history.



Figure 3 Stratigraphic profile and AMS radiocarbon dated cultural components at Niidhaayh' Na' (XBD-00110)

OBJECTIVES

For the 2021, 2022, and 2023 field seasons, the goals of this project are to:

- 1. Recover additional artifacts and feature soils pertinent to reconstructing diet, behavior, and culture through time at Niidhaayh Na'.
- Expand the excavated area at Niidhaayh Na' to evaluate potential activity areas and intersite patterning.
- 3. Conduct a thorough analysis of fauna, lithics, and stratigraphy to understand behavioral and potential cultural differences between the four occupations at the site.

METHODS AND ACTIVITIES FOR 2021-2023

Excavation

In order to meet the goals of the research questions and objectives we will excavate 10 onemeter square units during the 2021-2023 field seasons. These units will be excavated in arbitrary 5 cm levels within stratigraphic units until bedrock is encountered. Initial excavation units will be placed between previous 1x2 m test units at Locus II to connect them into a block that parallels the edge of the landform. Additional unit placement will be based on data from previous excavations and site notes. Stone artifacts, faunal remains, and other evidence of prehistoric human occupation that are recovered *in situ* will be mapped three dimensionally relative to a permanent site datum. Feature fill (sediments extracted from cultural features) will be entirely collected for isotopic and molecular analysis in a laboratory setting. All other sediments will be screened through a 1/8th inch hardware mesh, which is the standard for archaeological excavations in central Alaska. The base of every level will be mapped and described in detailed on level- and unit-specific excavation forms.

Stratigraphic Analysis

When the excavation has been completed, a detailed profile drawing of the north wall of the excavated block will be recorded. Data pertaining to soil texture, composition, and color will be noted following the conventions presented in the Munsell soil guide. Where appropriate, soil samples will be collected for further analysis (e.g., isotopes, radiocarbon). The resulting stratigraphic profiles will be analyzed to assess site and soil formation throughout prehistory. These stratigraphic records, any carbon sampled collected, and all other data generated during the proposed excavation, will be used to refine the site's chronology.

Material Analysis

All materials pertaining to past human occupations of the site will be analyzed in a laboratory setting. For lithic and faunal remains, this will entail detailed typological description and analysis (e.g., identification of species and tool types). We will also conduct spatial analyses of material distributions to reconstruct living areas for all prehistoric occupations. Any feature fill (e.g., from hearths) will be sieved through a fine screen to recover macroscopic plant and animal remains, which will then be analyzed and identified by a specialist.

Isotopic and Molecular Analysis

Hearth soils and fragmentary faunal remains will be sent to the Zooarchaeology Lab at the University of Wyoming where they will be subjected to comprehensive geochemical analysis. Compoud specific isotopic analysis has recently been applied to hearth remains of various ages to reconstruct the fauna cooked in these ancient hearths by comparing the carbon isotopic signatures of trace fatty acids. Similarly, zoologic mass spectrometry is a novel technique that is used to identify fragmentary faunal remains to a genus level through an analysis of surviving proteins.

Destructive Analysis

This project does not require destruction of artifacts recovered from Niidhaayh Na'. Unidentifiable faunal remains judged to be suitable for isotopic analysis will provide samples smaller than a grain of salt, to be carefully extracted and chemically to extract the proteins. Samples of carbon (including bone) judged to be suitable for radiocarbon dating will have a small portion removed and sent to a professional lab for assay, leaving a portion of the original sample in reserve for future testing.

Protocol for the Treatment of Human Remains

Following USAG Alaska protocol and federal law, if human remains are inadvertently discovered, University of Wyoming shall cease all work and ensure that the remains are

secured from further disturbance or vandalism until after the appropriate law enforcement authorities have ensured that the remains are not related to any crime, and until a plan for treatment has been developed. If, in consultation with a qualified forensic anthropologist, USAG Alaska determines that the remains are Native American, The USAG Alaska Garrison Commander shall immediately undertake any actions necessary under the Native American Graves Protection and Repatriation Act (NAGPRA), as amended. If USAG Alaska determines that the remains do not warrant criminal investigation, USAG Alaska shall notify the SHPO and consult to identify descendants or other interested parties, if any. USAG Alaska, in consultation with the SHPO and any interested parties, shall develop a plan for the respectful treatment and disposition of the remains.

Final Housing of Artifacts

After the analysis of material remains from Niidhaayh Na' is completed, they will be transferred to the University of Alaska Fairbanks Museum of the North. The Museum of the North comprises many sites from across the state and is the ideal repository for the artifacts recovered from Niidhaayh Na'. Dedicated curatorial staff will house these remains with artifacts previously excavated at Niidhaayh Na' so that future Alaskan archaeologists can also benefit from this resource.

References Cited

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Attachment C

POST REVIEW AND UNANTICIPATED DISCOVERIES PLAN

A. In the course of conducting approved activities, the Army shall not intentionally or knowingly affect (such as remove, disturb, or cause to be removed or disturbed) any historic properties outside the approved scope of work.

B. In the event that a previously unidentified archaeological site is discovered during the execution of this undertaking, all ground disturbing activity shall immediately cease in the area of the discovery until the Army archaeologist or other Army personnel who meet *The Secretary of the Interior's Professional Qualification Standards for Archeologists* can evaluate the archaeological site. Excavation may continue in the project area outside the archaeological resource area. The Army shall notify the SHPO and appropriate Alaska Native tribes within 3 business days of discovery. The Army shall ensure that any archaeological work that may be necessary shall be completed in accordance with the NHPA and the Archaeological Resources Protection Act. The SHPO and/or the Alaska Native tribes, if they so request, may immediately inspect the work site to determine the nature and area of the affected archaeological site. Within 10 business days of the original notification of the discovery, the Army, in consultation with the SHPO and interested Alaska Native tribes, will determine the National Register eligibility of the resource and will propose action to resolve possible adverse effects to any affected National Register-eligible archaeological sites. Work may resume in affected areas after approval by the Army Cultural Resources Manager and the SHPO.

C. If human remains are inadvertently discovered; the Army shall notify the SHPO within 24 hours of discovery. The Army shall cease all work by their contractors and ensure that the remains are secured from further disturbance or vandalism until after the appropriate law enforcement authorities have ensured that the remains are not related to any crime, and until a plan for treatment has been developed. If the Army determines that the remains are Native American, the Garrison Commander shall immediately undertake any actions necessary under the Native American Graves Protection and Repatriation Act, as amended. If the Army determines that the remains are not Native American, and do not warrant criminal investigation, the Army shall immediately notify the SHPO and consult with the SHPO to identify descendants or other interested parties, if any. The Army, in consultation with the SHPO and any interested parties, shall develop a plan for the respectful treatment and disposition of the remains. Work may resume in affected areas after approval by the Army Cultural Resources Manager and the SHPO.

D. If during the course of the undertaking there are any unforeseen or unanticipated effects to historic properties other than the identification of a previously unknown archaeological site, the Army shall initiate consultation pursuant to 36 CFR § 800.13(b)(3) to resolve the unforeseen effects.

United States Army Garrison Alaska

Permit for Archaeological Investigations

To conduct archaeological work on Army lands under the authority of:

The Archaeological Resources Protection Act of 1979 (16 U.S.C. 470aa-mm) and its regulation (43 CFR 7). The Antiquities Act of 1906 (P.L. 59-209; 34 Stat. 225; 16 U.S.C. 431-433) and its regulation (43 CFR 3). Army Regulation 200-1(Environmental Quality: Environmental Protection and Enhancement) Sec. 6.

1. Permit issued to: Briana Doering		2.Under application dated February 02, 2021		
3. Mailing address Department of Anthropology 1000 E. University Ave Dept 3431 Laramie WY 82071		4. Telephone nur 5. Email address		
6. Name of Permit Administrator7. Name of Principal addresses: Briana Doering7. Name of Principal addresses: Briana Doering,		sses:	Investigator(s) with Telephone numbers and Email	
8. Name of Field Director(s) authorized to carry out field projects with Telephone numbers and Email addresses: Briana Doering,				
9. Activity authorized Excavation at Niidhaayh Na' (XBD-00110)				
10. On lands described as follows: Donnelly Training Area West				
11. During the duration of the project From June 2021 To December 2023				
12. Name and address of the curatorial facility in which collections, records, data, photographs, and other documents resulting from work under this permit shall be deposited for permanent preservation on behalf of the United States Government. University of Alaska Museum of the North				
13. Permittee is required to observe the listed standard permit conditions and the special permit conditions attached to this permit.				
14. Signature and title of approving official			15. Date	
Jul USAG Alaska, barrison Commander 29 5UN 21				

Standard Permit Conditions

- a. This permit is subject to all applicable provisions of 43 CFR 3, 43 CFR 7, and AR 200-1, and applicable Army policies and procedures which are made a part hereof.
- b. The permittee and this permit are subject to all other Federal, State, and local laws and regulations applicable to the public lands and resources.
- c. This permit shall not be exclusive in character and shall not affect the ability of the Army to use, lease or permit the use of lands subject to this permit for any purpose.
- d. This permit may not be assigned.
- e. This permit may be suspended or terminated for breach of any condition or for management purposes at the discretion of the approving official, upon written notice.
- f. This permit is issued for the term specified in 11. above.
- g. Permits issued for a duration of more than one year must be reviewed annually by the agency official and the permittee.
- h. The permittee shall obtain all other required permit(s) to conduct the specified project.
- i. Archaeological project design, literature review, development of the regional historic context framework, site evaluation, and recommendations for subsequent investigations must be developed with direct involvement of an archeologist who meets the Secretary of the Interior's Standards for Archaeology and Historic Preservation; fieldwork must be generally overseen by an individual who meets the Secretary of the Interior's Standards for Archaeology and Historic Preservation.
- j. Permittee shall immediately request that the approving official (14. above) make a modification to accommodate any change in an essential condition of the permit, including individuals named and the nature, location, purpose, and time of authorized work, and shall without delay notify the approving official of any other changes affecting the permit or regarding information submitted as part of the application for the permit. Failure to do so may result in permit suspension or revocation.
- k. Permittee may request permit extension, in writing, at any time prior to expiration of the term of the permit, specifying a limited, definite amount of time required to complete permitted work.
- Any correspondence about this permit or work conducted under its authority must cite the permit number. Any
 publication of results of work conducted under the authority of this permit must cite the approving Army installation
 and the permit number.
- m. Permittee shall submit a copy of any published journal article and any published or unpublished report, paper, or manuscript resulting from the permitted work (apart from those required in items q. and s., below), to the approving official and the appropriate official of the approved curatorial facility (item 12. above).
- n. Prior to beginning any fieldwork under the authority of this permit, the permittee, following the Army's policies and procedures, shall contact the Army Cultural Resource Manager (CRM) in the Department of Public Works (DPW) Environmental Division to obtain further instructions.
- Permittee may request a review, in writing to the official concerned, of any disputed decision regarding inclusion of specific terms and conditions or the modification, suspension, or revocation of this permit, setting out reasons for believing that the decision should be reconsidered.
- p. Permittee shall not be released from requirements of this permit until all outstanding obligations have been satisfied, whether or not the term of the permit has expired. Permittee may be subject to civil penalties for violation of any term or condition of this permit.

Standard Permit Conditions (continued)

- q. Permittee shall submit a preliminary report to the approving official within a timeframe established by the approving official, which shall be no later than 2 months after the completion of any episode of fieldwork, setting out what was done, how it was done, by whom, specifically where, and with what results, including maps, GPS data, an approved site form for each newly recorded archaeological site, and the permittee's professional recommendations, as results require. If other than 2 months, the timeframe shall be specified in Special Permit Condition p. Depending on the scope, duration, and nature of the work, the approving official may require progress reports, during or after the fieldwork period or both, and as specified in Special Permit Condition r.
- r. Permittee shall submit a clean, edited draft final report to the agency official for review to insure conformance with standards, guidelines, regulations, and all stipulations of the permit. The schedule for submitting the draft shall be determined by the agency official.
- s. Permittee shall submit a final report to the approving official not later than 12 months after completion of fieldwork. Where a fieldwork episode involves only minor work and/or minor findings, a final report may be submitted in place of the preliminary report. If the size or nature of fieldwork merits, the approving official may authorize a longer timeframe for the submission of the final report as specified in Special Permit Condition q.
- t. Two copies of the final report will be submitted to the office issuing the permit.
- u. The permittee agrees to keep the specific location of sensitive resources confidential. Sensitive resources include threatened species, endangered species, and rare species, archaeological sites, caves, fossil sites, minerals, commercially valuable resources, and sacred ceremonial sites.
- v. Permittee shall deposit all artifacts, samples, and collections, as applicable, and original or clear copies of all records, data, photographs, and other documents, resulting from work conducted under this permit, with the curatorial facility named in item 12. above, not later than 3 months after the date the final report is submitted to the approving official. Not later than 6 months after the report is submitted, permittee shall provide the approving official with a catalog and evaluation of all materials deposited with the curatorial facility, including the facility's accession and/or catalog numbers.
- w. Permittee shall provide the approving official with a confirmation that museum collections described in v. above were deposited with the approved curatorial facility, signed by an authorized curatorial facility official, stating the date materials were deposited, and the type, number and condition of the collected museum objects deposited at the facility.
- x. Permittee shall not publish, without the approving official's prior permission, any locational or other identifying archaeological site information that could compromise the Government's protection and management of archaeological sites.
- y. For excavations, permittee shall consult the OSHA excavation standards which are contained in 29 CFR §1926.650, §1926.651 and §1926.652. For questions regarding these standards contact the local area OSHA office, OSHA at 1-800-321-OSHA, or the OSHA website at http://www.osha.gov.
- z. Special permit conditions attached to this permit are made a part hereof.

Special Permit Conditions

- a. Permittee will obtain access approval through Public Affairs Office (PAO) using the "Request for use of a facility or access to land located on US Army, Fort Wainwright, Alaska" form and a Short Term License through DPW Master Planning.
- b. Permittee will obtain a Dig Permit through DPW Environmental Division.
- c. Permittee will undergo annual unexploded ordnance (UXO) training prior to entering Army lands. Permittee must establish daily contact with the relevant Range Control office during the field project.
- d. Permittee shall allow the approving official and the CRM, or their representatives, full access to the work area specified in this permit at any time the permittee is in the field, for purposes of examining the work area and any recovered materials and related records.
- e. Permittee shall cease work upon discovering any human remains and shall immediately notify the CRM. Work in the vicinity of the discovery may not resume until the CRM has given permission.
- f. Permittee shall backfill all subsurface test exposures and excavation units as soon as possible after recording the results, and shall restore them as closely as reasonable to the original contour.
- g. Permittee shall not use mechanized equipment unless authorized by the agency official or a designee in additional specific conditions associated with this permit.
- h. Permittee shall take precautions to protect livestock, wildlife, the public, or other users of the public lands from accidental injury in any excavation unit.
- i. Permittee shall not conduct any flint knapping or lithic replication experiments at any archaeological site, aboriginal quarry source, or non-site location that might be mistaken for an archaeological site as a result of such experiments.
- j. Permittee shall perform the fieldwork authorized in this permit in a way that does not impede or interfere with other legitimate use of the public lands, except when the authorized officer specifically provides otherwise.
- k. Permittee shall restrict vehicular activity to existing roads and trails unless the authorized officer provides otherwise.
- I. Permittee shall keep disturbance to the minimum area consistent with the nature and purpose of the fieldwork.
- m. Permittee shall clear all necessary vegetation prior to May 1 or after July 15 in accordance with US Fish and Wildlife Service Advisory for protection of migratory birds. Permittee shall also cover all stockpiled soil during the same period to prevent nesting of migratory birds.
- n. Permittee shall salvage all trees over four inches in diameter. Timber may not be given away or destroyed. Timber will be disposed of through the Fort Wainwright firewood program.
- Permittee shall take precautions at all times to prevent wildfire. Permittee shall be held responsible for suppression costs for any fires on public lands caused by the permittee's negligence. Permittee may not burn debris without the authorized officer's specific permission.
- p. Permittee shall conduct all operations in such a manner as to prevent or minimize scarring and erosion of the land, pollution of the water resources, and damage to the watershed. Permittee will establish Best Management Practices suitable to the project to prevent storm water pollution. Permittee will not infill or dredge wetlands.
- q. Permittee shall not disturb resource management facilities within the permit area, such as fences, reservoirs, and other improvements, without the authorized officer's approval. Where disturbance is necessary, permittee shall return the facility to its prior condition, as determined by the authorized officer.
- r. Permittee shall remove temporary stakes and/or flagging, which the permittee has installed, upon completion of fieldwork.

Special Permit Conditions (continued)

- s. Permittee shall clean all camp and work areas before leaving the permit area. Permittee shall take precautions to prevent littering or pollution on public lands, waterways, and adjoining properties. Refuse shall be carried out and deposited in approved disposal areas. Permittee will follow Department of Environmental Conservation (DEC) regulations for temporary camps.
- t. Permittee shall submit the preliminary report within <u>12</u> months of completion of any episode of fieldwork.
- u. Permittee shall submit the final report within <u>12</u> months of completion of fieldwork.
- v. Permittee shall submit progress reports every 9 months over the duration of the project.
- w. Additional special permit conditions are attached.

NOTE: "X" means that the special permit condition that follows on the same line is required.

Additional Site Documentation Standards and Reporting Requirements

• Permittees shall acquire an Alaska Heritage Resources Survey (AHRS) number for each cultural resource documented while undertaking work authorized by this permit within 30 days of completion of that episode of fieldwork.

• The AHRS number request will be accompanied by a 1:63,360 USGS quad map indicating the location of the site, decimal degrees coordinates of the site centroid with WGS84 datum, model of Global Positioning System (GPS) device used, indication of whether data is post-processed, and thorough site description.

• Permittee with Geographic Information System (GIS) capabilities will provide both the Army and the Alaska Office of History and Archaeology digital GIS files.

• Files will contain points, lines, and polygons indicating the location, method, and results of all activities (survey and testing) conducted on Army lands under this permit.

• Data will be presented in Alaska Albers, WGS84 format.

• Archaeological sites smaller than 500 square meters may be represented by GIS points. Those larger than 500 square meters will be recorded as polygons. All archaeological site attribute tables will present a coordinate pair representing a geographic centroid of the site.

• Surveyed space will be represented as polygons. Positive and negative shovel tests will be represented by points. These standards are minimum and may be exceeded.

• Submission must meet the Federal Geographic Data Committee (FGDC) metadata standards.

• This geospatial data will be provided at the estimated mid-point of the field season. Data submission will be completed at the time of the preliminary reports (6 weeks after the completion of any episode of fieldwork).

• File types, database field requirements, feature class metadata, and attributes will meet Army and State of Alaska data requirements.

• The Cultural Resources Progress and Final Report shall provide an executive summary or abstract for the report which outlines the report's contents and summarizes the findings and recommendations of the consultant. The abstract shall identify as follows:

- Project name/title.
- Agency: The lead Federal Agency for the project and any other Federal or State Agencies involved in the undertaking.

Special Permit Conditions (continued)

- Army ARPA permit number.
- Location of the project and field survey.

Additional Site Documentation Standards and Reporting Requirements

- Dates of field survey.
- A statistical summary of survey activities, including:
 - Total acreage of the Area of Potential Effect.
 - Total acreage surveyed.
 - Total number of cultural properties for which site records were completed (newly recorded cultural properties).
 - Number of new cultural properties on Army lands.
 - Total number of cultural properties located only within the project's Area of Potential Effect. Provide AHRS for both newly recorded and previously recorded properties.
 - AHRSNumbers of cultural properties that the consultant has recommended are eligible for the National Register of Historic Places, if applicable.
 - Number of cultural properties that the consultant has recommended as not eligible for the National Register of Historic Places, if applicable.
 - Number of cultural properties within the Area of Potential Effect that can/will be avoided.
 - Number of cultural properties within the Area of Potential Effect that cannot be avoided and would be affected.

• All cultural artifacts and other related materials such as notes, photographs, etc. acquired under the provisions of this permit remain the property of the United States Government and may be recalled at any time for the use of the Department of Defense or other agencies of the Federal Government. Cultural materials collected under the provisions of this permit must be curated at a repository approved by the Army. Curation shall be at a local qualified repository, if feasible, and an approved curation facility shall be designated prior to all field projects. An itemized list of all materials with accession numbers curated at the repository will be submitted to the Army Cultural Resources Manager within 180 days of the completion of individual field projects. A copy of a receipt from the curation facility must be submitted with the list or catalogue.

• The person(s) in direct charge of fieldwork shall be on site at all times when work is in progress. Failure to comply with permit stipulations will result in removal of subject's name(s) from the approved list of person-in-direct-charge.

• Progress Reports and Final Report will be provided on CD-ROM, DVD, or similar durable storage media in portable document format (PDF) and submitted along with two bound hard copies.

Note: Permittee shall return a copy of this signed page to the Approving Official marked to the attention of the Army Cultural Resources Manager.

By signing below, I, the Principal Investigator, acknowledge that I have read and understand the Permit for Archaeological Investigations and agree to its terms and conditions as evidenced by my signature below and initiation of work or other activities under the authority of this permit. I also acknowledge that I am financially responsible for any damage on Army Lands caused by my activities. I understand that violation of any terms stated above will be considered a breach of the permit and the permit will be immediately terminated.

Signature and tille: - Assistant Professor,	Date: 7/4/2021
Thur University of Wyoming	//4/2021