## Categorical Exclusion Form

Project: Geotechnical Investigations, Alaska Railroad Realignment Feasibility Study

PEPC Project Number: 70887

Description of Action (Project Description):

This categorical exclusion (CE) approves issuance of a special use permit authorizing geotechnical investigative drilling of boreholes in Denali National Park near the park's entrance near mileposts 235-237 of the Parks Highway (Alaska Railroad MP 345 to 347.5).

The location for the activity occurs along a route being considered for re-alignment of the Alaska Railroad in order to eliminate two locations where the railroad currently crosses the Parks Highway. In order to conduct initial steps in assessing the feasibility of re-routing the railroad, the Alaska Railroad Corporation desires to understand the soils & geology characteristics along the corridor under consideration. The findings from this investigation would indicate if further study of the proposed alignment is sensible for further environmental analysis.

The impetus for considering this re-alignment is to examine options to enhance public safety through compliance with the 2008 Railroad Safety Enhancement Act (Public Law No: 110-432) & the goals of the Alaska State Rail Plan by eliminating at-grade railroad crossings throughout the state of Alaska. The alignment to be considered would eliminate 2 locations within Denali Park where the travel corridors currently cross. If the information from the proposed geotechnical investigation work suggests the feasibility of an alternate route west of the Parks Highway, extensive additional research, compliance with federal laws, & planning would be undertaken.

The 5 proposed borehole locations were chosen specifically such that travel distances for the drilling equipment would be minimized and such that no vegetation clearing would be required. All sites are within 1/4 mile of the Parks Highway in areas with sparse vegetation. The activity would occur in designated Wilderness due to the proximity of the Parks Highway and the Wilderness boundary at the location where a realignment of the railroad would be necessary to eliminate the highway crossings.

The activity would be conducted in winter to minimize impacts to surface vegetation by virtue of travel over the winter's cumulative snowpack. No extraordinary circumstances per the National Environmental Policy Act (NEPA) are triggered because while the activity does occur in Wilderness, significant impacts to the human environment or park resources are not anticipated. Therefore, a categorical exclusion permitting data collection & soil surveys is an appropriate NEPA pathway for this activity.

The activity would take place over the course of approximately 9 days, using a drill rig mounted to a tracked carrier during April of 2017, provided that adequate snow cover remains. The equipment would travel over a total linear distance of approximately 2400 feet within Denali National Park. No trees would be removed & all activity would occur within 1/4 mile of the Parks Highway. The boreholes would be drilled to approximately 50 feet deep. Removed cuttings would be returned to the holes and disturbed vegetation at the sites (16-inch diameter) would be replaced. NPS staff will ensure minimal travel to the sites and monitor impacts to park resources during and after the field operation (e.g., vegetation, archaeology). Drill logs will be provided to the NPS. The geology of this area is of interest to the NPS as the area is generally proximal to the Denali Fault.

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The chosen minimum tool for this activity is a drill rig mounted to a tracked carrier. This decision was informed by the Alternatives 3 and 4 of the Minimum Requirements Decision Guide and analyses as required by the Wilderness Act of 1964. This analysis assessed multiple alternatives (types of equipment, tools, drill rigs) and found that the mounted drill rig would have the minimum impact on wilderness character and park resources. The use of snow machines to support the operation and the use of an all-terrain truck were eliminated as potentially posing more adverse impacts on park resources.

A "No Historic Properties Affected" concurrence memo has also been provided by the State Historic Preservation Office per Section 106 of the National Historic Preservation Act to provide for consideration and protection of archaeological and paleontological (all cultural) resources in the area.

Stipulations for ensuring that the activity is carried out with minimum impact are delineated for the Alaska Railroad and their contractor via a special use permit (ARO-DENA-9500-1714). These stipulations encompass the mitigation measures identified to ensure minimal impacts.

This CE permits only this feasibility study (the drilling of five boreholes). Any further action, analysis, or changes to the proposed subsurface investigation plan would occur under the appropriate NEPA process.

Supporting documents accompanying this CE:

- Minimum Requirements Decision Guide per the Wilderness Act of 1964
- No Historic Properties Affected memo per Section 106 of the National Historic Preservation Act
- Executed Special Use Permit (ARO-DENA-9500-1714).

Project Loc	ations:			
Location				
County:	Denali Borough	State:	AK	

## Mitigation(s):

- Park staff will be informed about the drilling operation (to intranet and front-line staff via PIO). NPS will
  monitor for "adequate snow cover" throughout period of field operation. Operation will be completed by
  April 14, 2017. No vegetation clearing will occur. RR to report to NPS each day during operation. NPS
  field monitors will conduct periodic site visits during the operation. Unrestricted drill logs are to be given
  to the NPS. Field surveys in summer 2017 will be conducted to assess any impacts to park resources.
  (These and other mitigations additionally found in conditions of Special Use Permit.)
- Multiple mitigation measures to protect vegetation, cultural resources, and visitor experience are
  delineated specifically for the Alaska Railroad and their contractor in the conditions of their special use
  permit. Please see the special use permit (available in PEPC and with paper decision file) for these
  mitigations.

CE Citation: E.5 Nondestructive data collection, inventory (including field, aerial, and satellite surveying and mapping), study, research, and monitoring activities.

CE Justification:

Soil Survey.

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Signatura		
Signature		- 00 / 0 .
Superintendent:	- Miceria Ma	Date: 31 March 2017
	Don Striker	

Decision: I find that the action fits within the categorical exclusion above. Therefore, I am categorically excluding the described project from further NEPA analysis. No extraordinary circumstances apply.

## **Extraordinary Circumstances:**

If implemented, would the proposal	Yes/No	Notes
A. Have significant impacts on public health or safety?	No	
B. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation, or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas?	No	
C. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources (NEPA section 102(2)(E))?	No	
D. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?	No	
E. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?	No	
F. Have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?	No	
G. Have significant impacts on properties listed or eligible for listing on the National Register of Historic Places, as determined by either the bureau or office?	No	
H. Have significant impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species?	No	
I. Violate a federal, state, local or tribal law or requirement imposed for the protection of the environment?	No	
J. Have a disproportionately high and adverse effect on low income or minority populations (EO 12898)?	No	
K. Limit access to and ceremonial use of Indian sacred sites on federal lands by Indian religious practitioners or adversely affect the physical integrity of such sacred sites (EO 130007)?	No	
L. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?	No	