THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Natural Resources
DIVISION OF PARKS AND OUTDOOR RECREATION
Office of History & Archaeology

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Anchorage, AK 99501-3561
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June 12, 2026

File No.: 3130-1R NPS / 2025-00788

Brooke Merrell
Deputy Superintendent
Denali National Park and Preserve
P.O. Box 9
Denali Park, AK 99755

SUBJECT: Alaska Road Commission Basement Stabilization and Fill Project

Dear Ms. Merrell,

The Alaska State Historic Preservation Office (AK SHPO) received your correspondence (dated Jan 12, 2026) concerning the subject project and report on April 16, 2026. Thank you sincerely for your patience. We have reviewed the documentation provided pursuant to Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR 800). AK SHPO offers the following comments for your consideration.

Thank you for your consideration of our comments submitted on August 29, 2025. We have reviewed the additional documentation pursuant to 36 CFR 60.4, and we concur that the *ARC Station* is not eligible for the National Register of Historic Places (NRHP). Subsequently, we also concur that a finding of *no historic properties adversely affected* is appropriate for the proposed undertaking.

Thank you for the opportunity to review and comment. Please contact Molly Herron at molly.herron@alaska.gov if you have any questions or if we can be of further assistance.

Sincerely,

Nicholas Schmuck
Nicholas Schmuck
State Archaeologist
Deputy State Historic Preservation Officer

NS: mah

United States Department of the Interior

NATIONAL PARK SERVICE
Denali National Park & Preserve
Mile 237 Parks Highway
P.O. Box 9
Denali Park, AK 99755

IN REPLY REFER TO:
D30 (DENA)
File No.: 3130-1R NPS / 2025-00788

January 12, 2026

Ms. Sarah Meitl
State Historic Preservation Officer
Department of Natural Resources
Office of History and Archaeology
550 W. 7th Avenue, Suite 1310
Anchorage, Alaska 99501-3565

Dear Ms. Meitl,

We appreciate the Alaska State Historic Preservation Office's (SHPO) recommendation that the Alaska Road Commission (ARC) basement or underground storage and surrounding area at McKinley Park Station receive more intensive documentation, such as sub-surface testing and partial excavation of the structure. However, it should be noted that the ground in this area has been significantly altered over time. ARC buildings were frequently relocated, and the grade was repeatedly adjusted to accommodate the railroad and later to provide more apron area of the airstrip, which has compromised the integrity of the original ground surface.

Since the submittal of the original consensus Determination of Eligibility (cDOE), the ground penetrating radar (GPR) data which was collected over the cavity feature in June 2024 was processed and the report was received in November 2025 (see Attachment 1). This investigation confirmed the presence of only the previously identified cavity, which measures approximately 15 feet by 15 feet and is 10 feet deep, covered by dirt and gravel.

The SHPO also recommended further research into the use of basements in ARC buildings. Historical records indicate that basements were indeed used by government entities prior to a full understanding of their interaction with permafrost in Alaska. For example, the attached 1945 ARC progress report references structural issues with the basement of the bunkhouse at the same McKinley Park Station complex (see Attachment 2).

Based on the available evidence and analysis, both park and regional office staff concur that the identification and evaluation of the potential historic properties has been sufficiently completed. The ARC basement lacks the integrity required for listing in the National Register of Historic Places. Furthermore, the original cDOE provides adequate historical research and context to understand the structure's significance within the broader history and development of Denali National Park and Preserve.

Given the safety concerns posed by the cavity's proximity to an active airstrip, it is imperative that this issue be addressed promptly. If consensus cannot be reached regarding the eligibility determination, our office is prepared to seek a formal Determination of Eligibility from the Keeper of the National Register, as outlined in 36 CFR Part 63.

Sincerely,

Brooke Merrell
Superintendent

Enclosures

Denali National Park: Processing of GPR data over runway vault

Incorporates vault coordinates received from J. Junge on August 13, 2025

Note: This report is not an assessment of vault size, geotechnical stability, or hazard of any feature or features. This report presents ground-penetrating radar data slices, which are the results of a geophysical data processing flow applied to the dataset acquired by Justin Junge in Denali National Park for archaeological purposes. The purpose of this processing was to determine if there is a geophysical anomaly in the ground-penetrating radar data near a known subsurface vault. This report does not identify voids in the survey area. Keranen has no background in or expertise in evaluation of structural or geotechnical stability. Keranen was not involved in data acquisition and was not involved in choosing acquisition parameters. This report is not for hazard assessment.

A subterranean structure is known by National Park Service (NPS) staff to be present near a runway in Denali National Park. Ground penetrating radar (GPR) data were acquired over this feature in June 2024 by Justin Junge of the NPS, accompanied by David DeVito of Cornell University. Junge used the NPS's USRadar triple frequency GPR system to acquire data on ~50-m long, parallel transects spaced 1 m apart. Note that no information was acquired on the radar velocity of the subsurface; any depth estimates presented have high uncertainty. The data cover an area ~80 m N-S including part of the runway and an area alongside of the runway used for parking planes and for helicopters. One subsection within the overall area was not surveyed and is shown as a blank area within the results. This report incorporates coordinates measured by and received from Justin Junge in August 2025 on the locations of 1) the known vault and 2) the nearby helicopter pad. Data were processed to an initial level by Kade Keranen of Cornell University and are presented here. This report is presented purely from an archaeological standpoint.

Keranen has no background information on why the vault is present at this location, the vault history or discovery, the vault construction, the vault location relative to any other features, or the vault's potential hazard. This report simply presents an initial processing of the acquired data. Different processing parameters would modify results; the parameters used here were selected on the basis that the processed data highlight an anomaly near the known vault location.

Interior measurements need to be taken to map the size and full shape of the subterranean feature. The GPR data cannot be used to map the dimensions of the subsurface vault.

Recommendations:

1. If information is desired on subsurface hazard, ground stability, safety, or for a thorough mapping of all possible subsurface voids beyond the known vault, **it is necessary for an engineering firm to analyze the data** and determine whether more data collection or processing is needed. **The presence or absence of hazardous or potentially unsafe infrastructure is not within the scope of my report or within Keranen's expertise.** As

noted above, this report is presented purely from an archaeological standpoint and is not for hazard assessment.

2. Acquisition: Data acquisition for this survey was conducted in one long, continuous GPR line without precise GPS positioning. A concerted effort was made to accurately break the continuous data line into individual transects, 1 m apart and 50 m long based on discussion with J. Junge. Positioning of each data trace along the line assumed even trace spacing. The distance wheel of the GPR instrument was been poorly calibrated during fieldwork in summer 2025, and thus the trace spacing reported by the instrument in the header is likely not accurate. I set the trace spacing for each line by dividing the line length (50 m) by the number of traces in that line. For future surveys it is recommended that the wheel be calibrated before acquisition and that each transect be acquired as an individual line. Lines should also be collected north to south to tie the transects together. This is particularly important over the vault, however north-south lines should extend over the entire survey area.
3. The locations of the corners of any futures survey should be acquired using a high-precision GPS instrument.
4. The maximum recording time should be doubled for each frequency.
5. A common-midpoint survey is recommended to estimate radar velocity if depth estimates are needed, or another method, e.g. burial of a known object.
6. The size of the feature needs to be determined with interior measurements.

Main conclusions:

1. The known vault appears to be identifiable in the data, both in time slices and in cross-sections (individual GPR transects). The vault may extend over a larger area than measured at the surface.
2. There are other areas in the survey with similar features to the known vault.

Survey acquisition:

Note: The data were acquired by J. Junge. The survey information is presented here as Keranen best understands it. Any questions related to acquisition are referred to J. Junge.

Data were acquired in an approximately rectangular survey in Denali National Park, over part of a runway and over a zone along the runway where planes park (Figures 1 and 2). Data were acquired in two continuous files, Single-01 and Single-02. Within Single-01 there are 75 lines. Single-02 continues on the southern edge of Single-01 and contains 6 additional lines. These two datasets were not acquired on the same day, and ground conditions differed between the two surveys. Each transect is oriented roughly East to West, rotated ~2 degrees south (92°; Figures 1-2). The first ~42-43 meters of each transect are relatively flat after which the ground slopes up steeply for the final ~7 meters (Figures 1,3).

No common-midpoint data were acquired for velocity estimation, so a generic radar velocity of 0.1 m/ns was used for any depth estimates, but this estimate is unconstrained by local data.

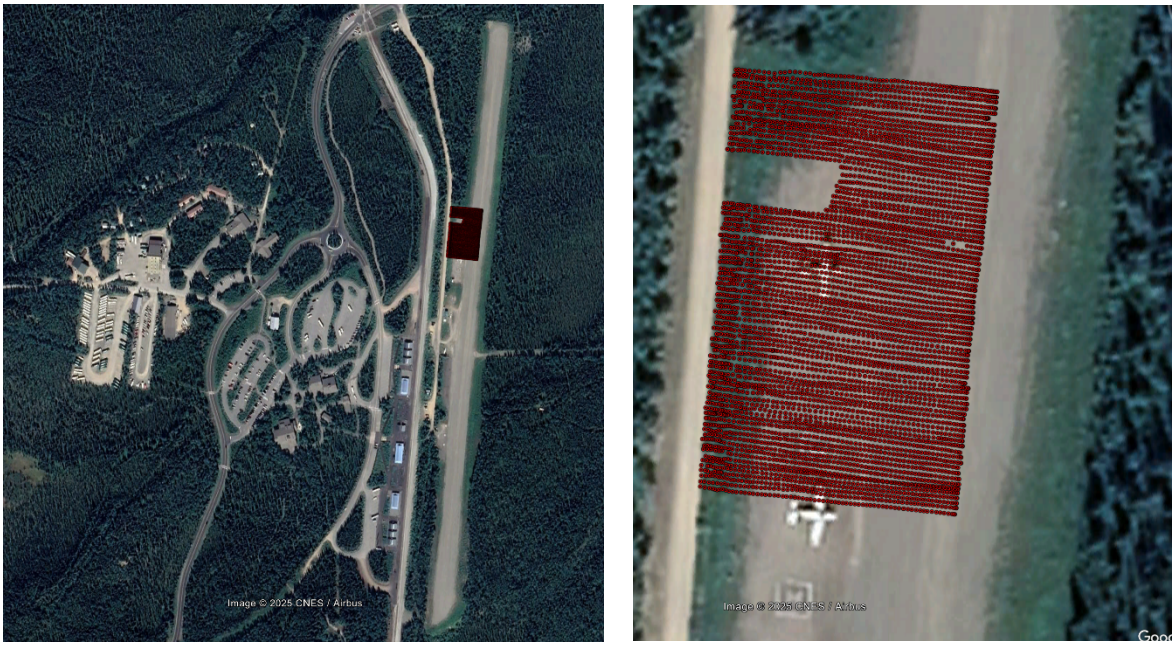


Figure 1: GPS points marking GPR transects overlain on Google Earth satellite imagery. The left panel shows a zoomed out view for context, and the right panel is zoomed in for detail. Images are from Google Earth.

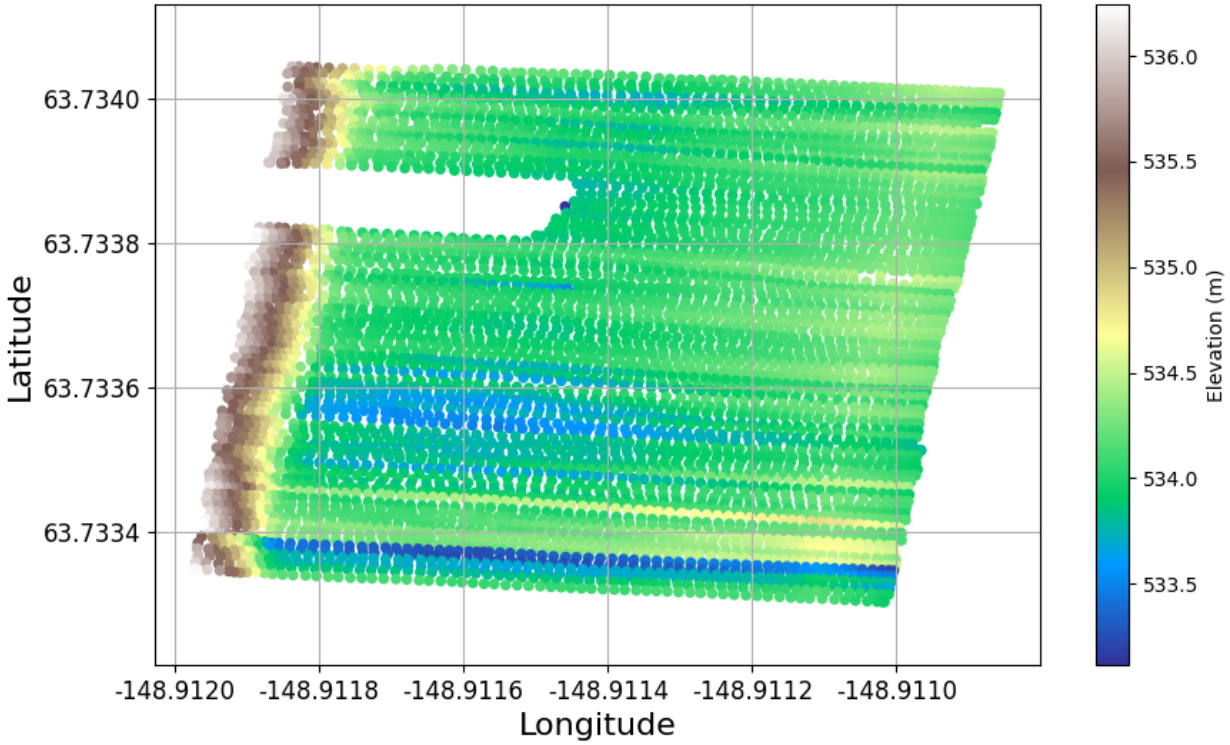


Figure 2: GPR lines collected at Denali National Park, colored by elevation. The six lines furthest south, identifiable by the offset (green to blue) in measured elevation, were acquired on a different day than the 75 lines to the north. For processing, locations were manually added to every trace using the survey geometry based on discussion with J. Junge. GPS locations were not used in processing.

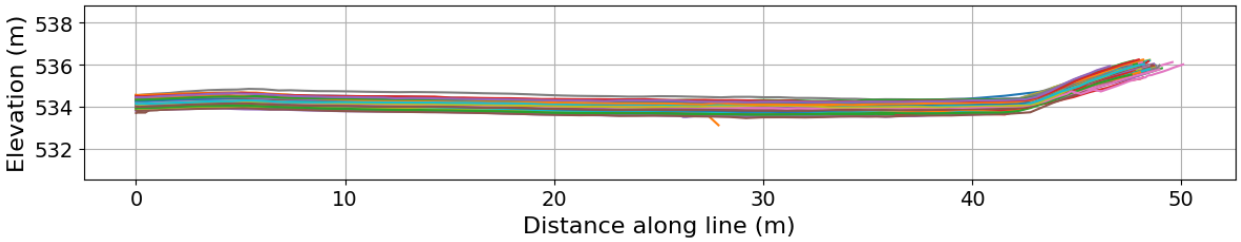


Figure 3: Elevation along each transect in Single-01 file, from east to west. The first 40+ m of each line are relatively flat, followed by an upward slope on the west side of the survey area. Note that each transect is 50 m long as measured with tape measure.

Data within each file were separated into individual transects by identifying large longitude gaps (relative to the average difference) between adjacent points in each survey and cutting the data into individual transects between gaps. The individual transects were then processed in Seismic Unix software (Rousset et al., 2020). The processing flow used here is detailed in Appendix A.

The GPS data acquired by the instrument was not used for trace locations. The GPS data provided by the instrument have uncertainty much greater than the trace spacing and potentially higher than the transect spacing and are therefore not useful at the scale of this survey. Instead, geometry was assigned to each trace by estimating the average trace spacing along the transect (from the following computation: 50 meters divided by the number of points on the transect). After processing and assigning geometry, data were exported and a python script was used for gridding and slicing. Data are presented in a local coordinate system and not using latitude and longitude because of the scale of the survey; each line is 50 meters long, parallel to and 1 m south of the prior line. Transects are oriented ~2 degrees north of east.

In attempting to locate the GPR data relative to ground features, GPS data from the GPR instrument were used. However, an anomaly in the GPR data that likely represents the helipad is offset from the helipad coordinates collected by J. Junge using a high-precision GPS instrument, indicating that the GPR instrument and the GPS instrument likely use different coordinate reference systems (CRS). This offset is apparent at the location of the helipad in the 5-ns time slice for the RA1 data (Fig. 9). The helipad outline is visible in the GPR data but does not align with the GPS coordinates from J. Junge. Junge collected points using NAD1983 (2011) State Plane zone 4; the offset suggests that the GPS on the USRadar instrument uses a different CRS such as WGS84. **This offset or difference in CRS needs to be accounted for when determining where, on the ground, anomalies visible in the GPR data are located.**

Three frequencies of data were acquired by the USRadar instrument. For this application, the lowest and the middle frequencies, RA2 and RA1 respectively, give the best results and are the datasets processed and presented here.

Features in data:

Cross-sections of the data (e.g., individual transects; Fig. 4) show that a thin sedimentary layer exists beneath the runway (the first/eastern ~17 m of each line), with a strong sub-horizontal reflection at its base. The layer pinches out (disappears) near the western edge of the runway. This layer is present across the survey from north to south. Small objects (likely rocks) exist within the layer in the north.

Near the vault, near the southwestern corner of the dataset, an anomaly is visible in processed data (Figure 5) and in time slices of the GPR data (Figure 6a-b). The anomaly appears in 10 ns-thick time slices from 15-25 ns and from 20-30 ns (Figure 6a-b). The anomaly consists of a high-amplitude core, surrounded by low radar amplitudes in an approximately rectangular shape. Strong, continuous reflections end at the eastern edge of the rectangular anomaly, potentially indicating a disruption to this layer. The approximately rectangular anomaly could alternatively be caused by overprinting of high amplitude diffractions from the strong central anomaly on data around it, reducing amplitude within that zone. The low amplitudes could be artificially caused by overprinting and only the high-amplitude anomaly present.

The western edge of each line has steep dips and poor image quality.

In the maps presented (Figs. 6-8), the anomaly near the vault is located primarily west of the known vault location. However, as discussed above, the GPR data and the GPS coordinates for the vault and helipad are offset from one another because of differences in the coordinate reference systems used. The primary GPR anomaly discussed here may be shifted closer to or underly the vault coordinates (e.g., Figs. 9-11). **The positioning in the GPR data is not correctly aligned with the GPS coordinates measured on the ground; this offset must be accounted for in determining the location of any subsurface features.**

The anomaly near the vault is present from roughly 58 m to 65 m along the x-axis, and from 38 to 46 m along the y-axis. Note that data were only acquired at 1-m spacing along the x-axis. The rectangular zone in the time slices is not visible on transects at 58 m or 65 m but is visible on transects from 59-63 m. If this zone represents a buried structure, the N-S extent is estimated to be at least 5-7 and the E-W extent to be at least 7 meters. If only the high amplitude anomaly represents the vault, it is much smaller in size (Fig. 6). The rectangular zone may appear to be rectangular because the transects crossed the anomaly approximately perpendicular manner: if the low amplitudes are caused by diffractions from the strong anomaly, they would decrease amplitudes of data collected during the same transect. The transects north and south of the main anomaly would not be impacted and would retain normal amplitudes along the transect, creating an artificially linear boundary. **GPR data are not conclusive regarding the shape of the subsurface anomaly, and data should be collected inside of the subsurface structure to map its extent.**

Additional high-amplitude anomalies are visible in the data in certain time slices/frequency bands (see attachments for all time slices of varying depths and thicknesses and for both RA1 and RA2). The causes of these anomalies are unknown.

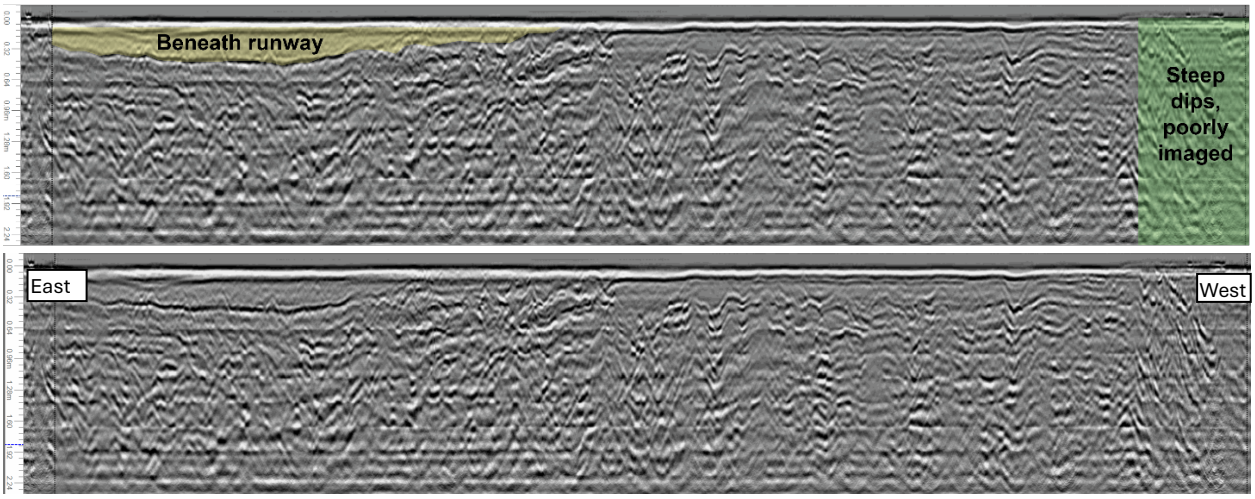


Figure 4: Cross-section of the data from East to West. The bottom image includes interpretation of the fill beneath the runway and of the area on the west end of the line with step dips of unknown origin. The rectangular anomaly is not present in this transect.

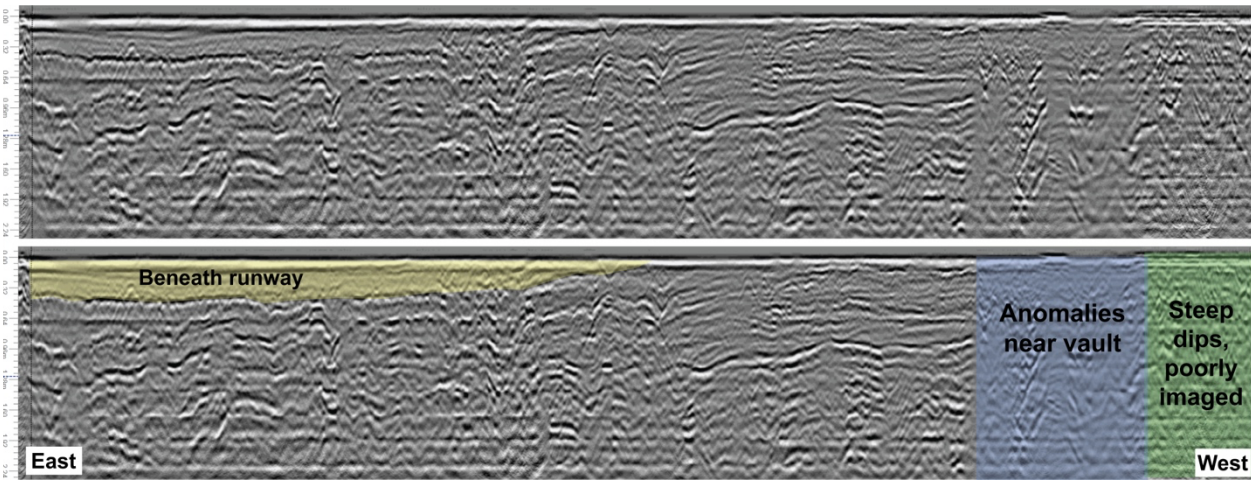


Figure 5: A transect from the region across the vault location. The layer beneath the runway and the poorly imaged zone on the west end of the transects are present. A zone of poor imaging and chaotic reflections indicate the anomalous zone imaged near the vault location.

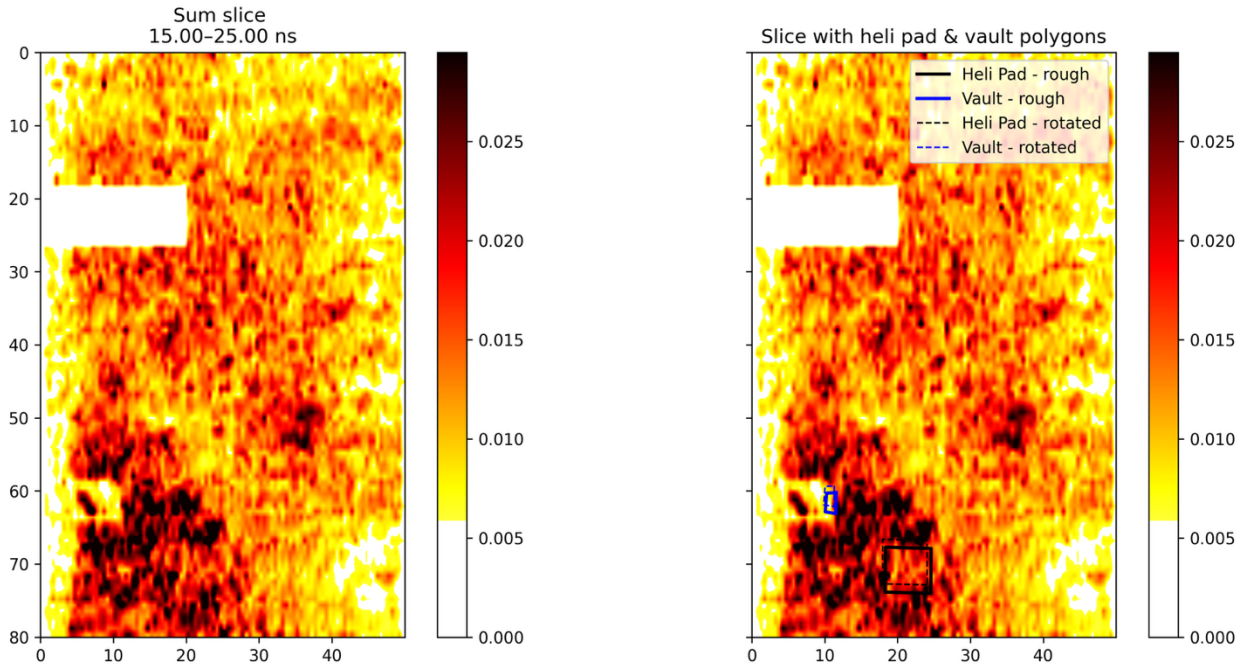


Figure 6a: Time slice from RA1 data from 15-25 ns. For each trace, the magnitude of every sample within that time window is summed. A rectangular anomaly is visible in the data approximately to the west of the known vault location. Note: it is possible that the strong anomaly within the broader, rectangular anomaly could align with the vault outline. The local coordinate system is with respect to the acquired ground-penetrating radar survey grid. The runway is from ~30-50 meters on the x-axis and continues beyond the survey. The area with no data from 20-30 m on the y-axis was skipped during acquisition.

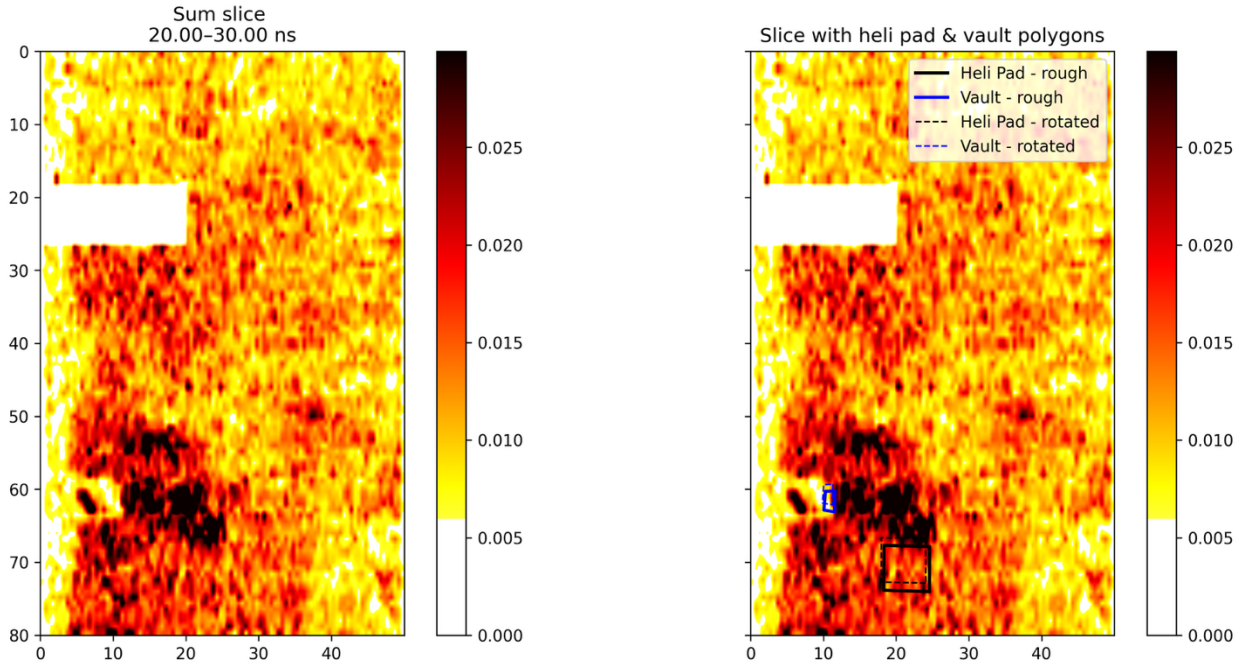


Figure 6b: Time slice from RA1 data from 20-30 ns, including the same anomaly near the known vault location.

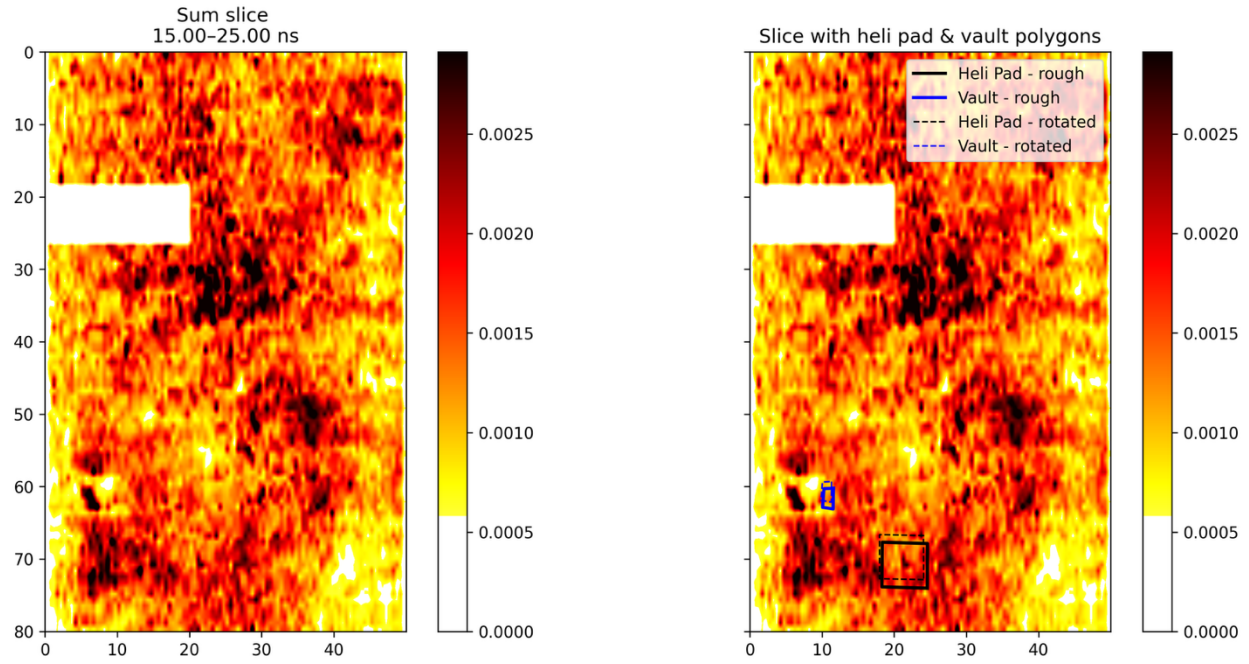


Figure 7a: Time slice as in Figure 6a, but from RA2 (lower frequency) data

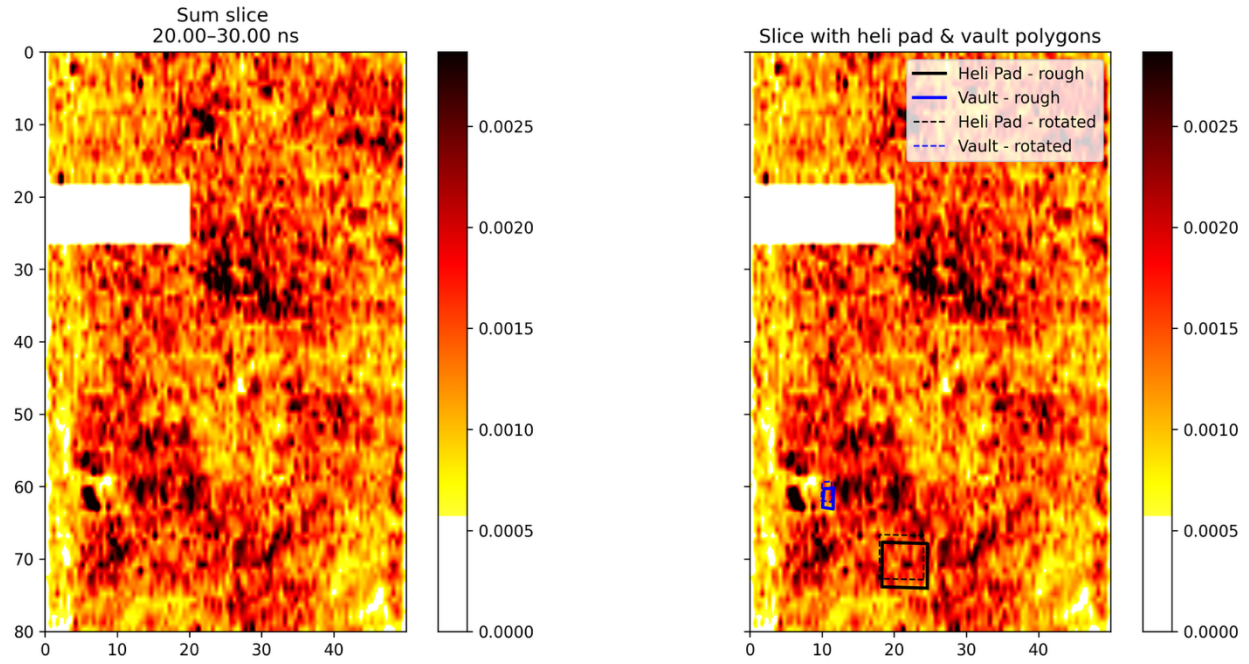


Figure 7b: Time slice as in Figure 6b, but from RA2 (lower frequency) data

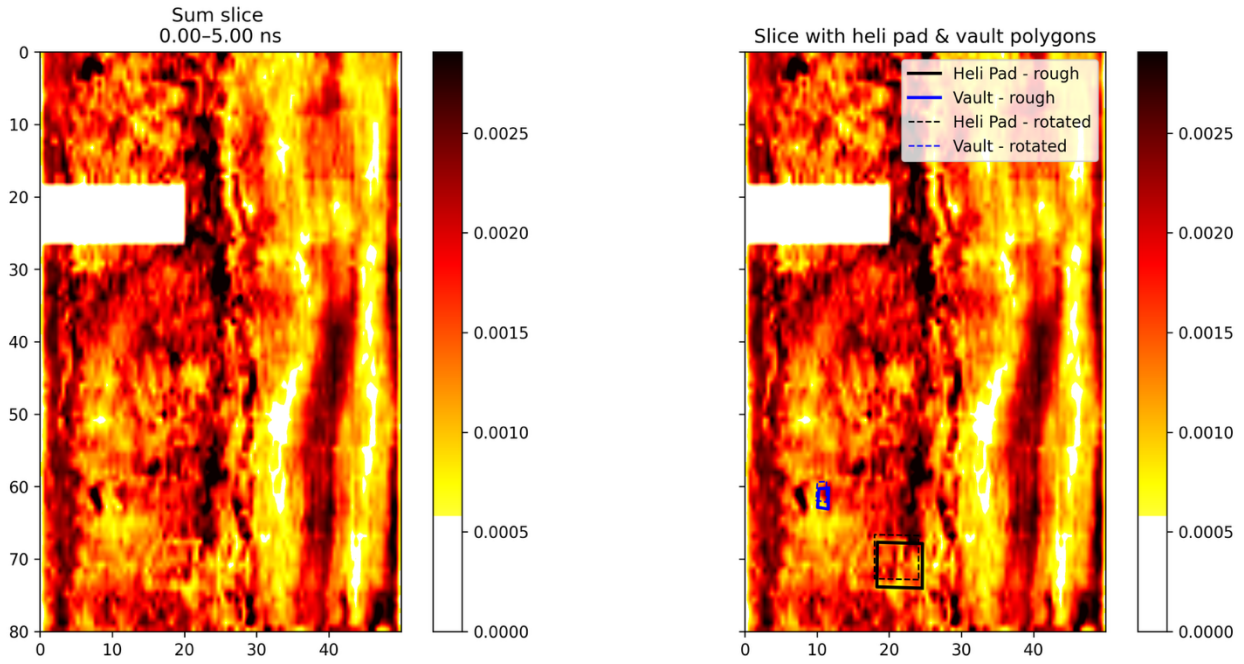


Figure 8a: Time slice from RA1 data from 0-5 ns. These shallow data highlight the runway between 30-50 m on the x-axis. A strong (dark color) anomaly is also visible to the west of the mapped vault polygon, of an unknown origin. This is likely offset because of the mismatch between the GPS coordinates for the vault and the GPS coordinates for the GPR data (see text for discussion). The anomaly that plots west of the vault is possibly directly beneath the vault.

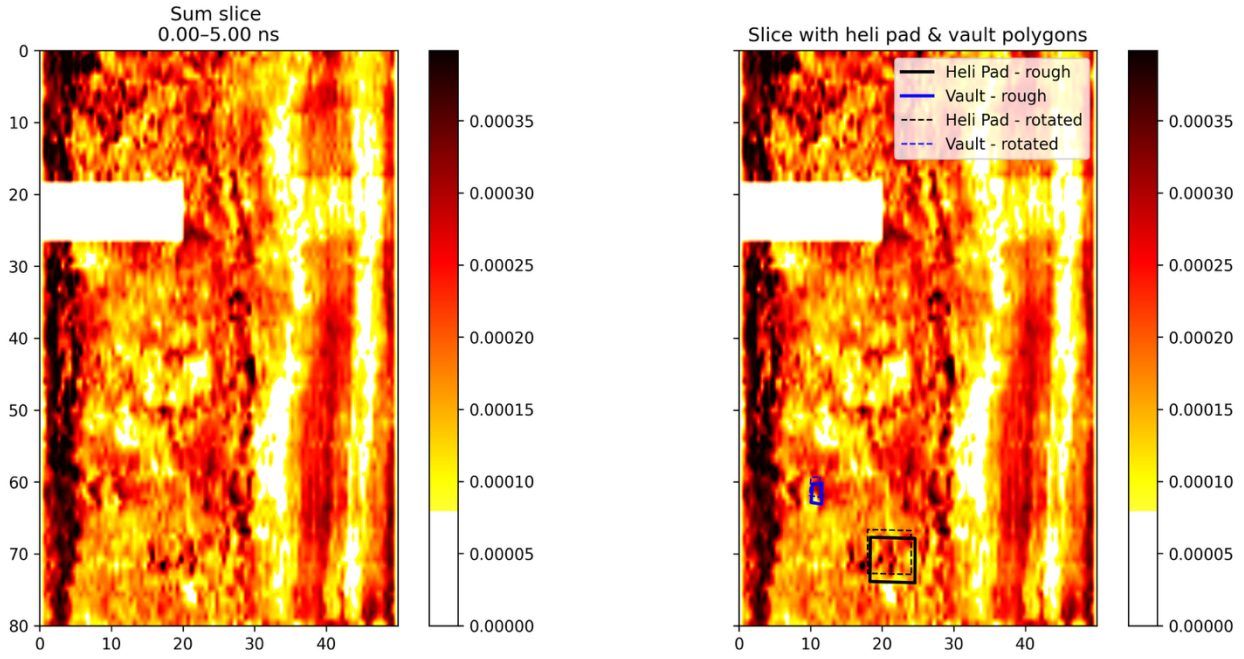


Figure 8b: Time slice from 0-5 ns from RA2 data.

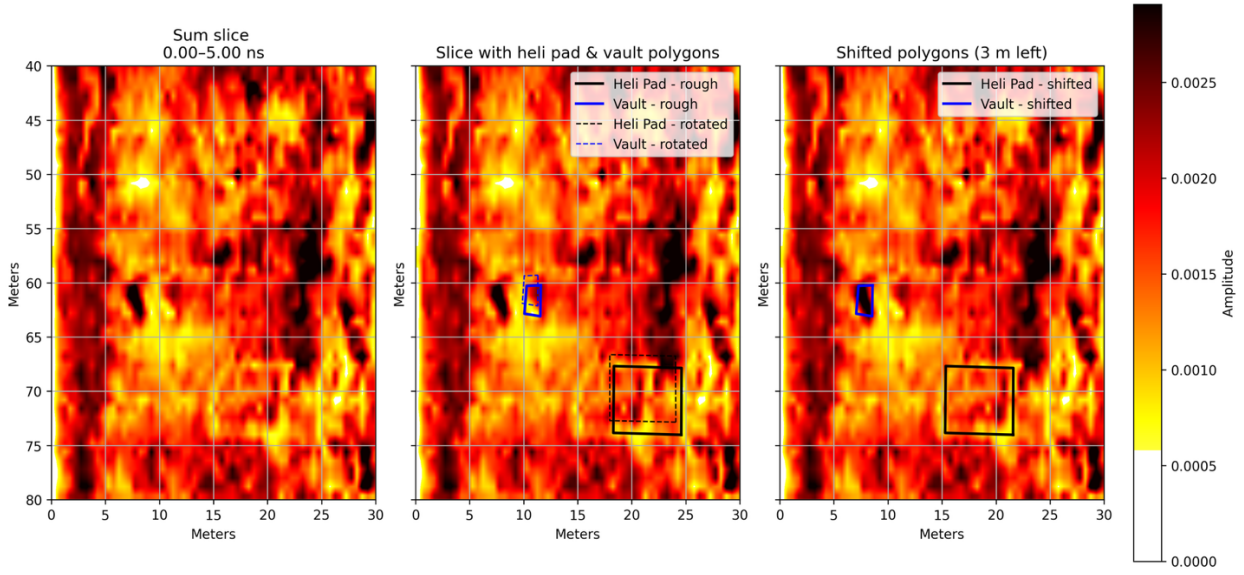


Figure 9: Left: RA1 data slice from 0-5 ns with no vault or helipad polygons. Middle: Data with polygons overlain using coordinates from J. Junge converted into the local coordinate frame (in two different ways). Right: Data with coordinates shifted by 3 m. When coordinates for vault and helipad are shifted by 3 meters, the helipad polygon aligns with the helipad outline visible in the GPR data and the vault polygon overlies the strong GPR anomaly at approximately x=7-9, y=60-64.

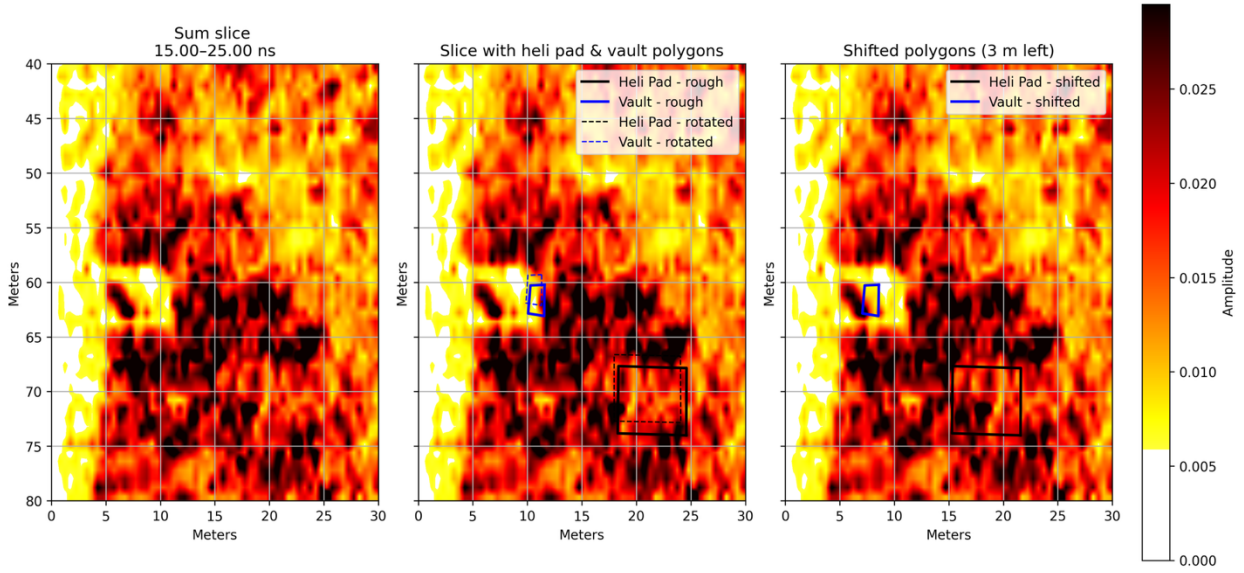


Figure 10: RA1 data from 15-25 ns with the same three panels as in Figure 9.

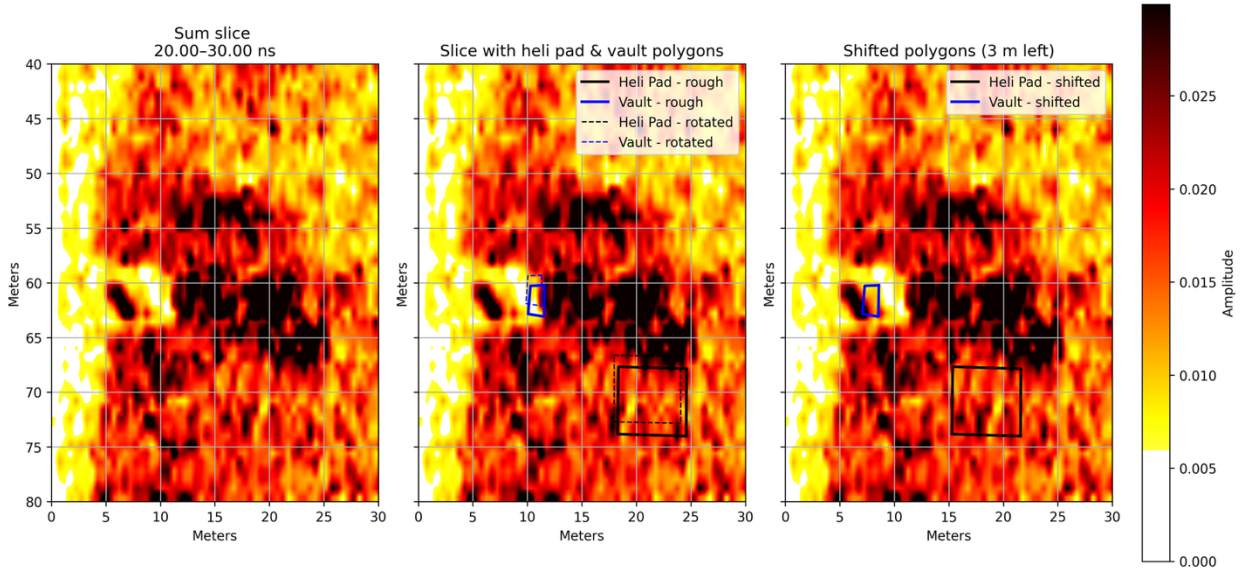


Figure 11: RA1 data from 20-30 ns with the same three panels as in Figure 9.

Western edge of survey:

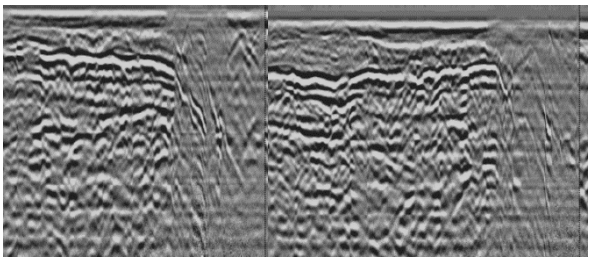


Figure 12: Examples of data from western end of lines 16 and 65. Little is visible in the data beneath the grassy berm between the runway and the road other than steeply dipping arrivals.

On the far west edge of the survey, at the top of the slope, little signal is present. This zone of low reflectivity has steeply dipping arrivals (Fig. 12), with little to no reflectivity otherwise. The data quality on these last/western ~3 m of each line is too poor for any interpretation to be made. The source of the steep reflections is not known. This could be related to the upslope in the western part of the survey; however, the slope starts prior to the rapid data quality decrease/start of the steep reflections. These steeply dipping reflections on the western edge are persistent within the entire survey in the N-S direction. It is not clear if this is a geologic feature beneath the slope, or a feature associated with site construction. These features are beneath what on imagery appears to be a grassy berm up to a gravel road and could be associated with an excavation and fill for the roadbed. Keranen has not been to the site and is unfamiliar with the site construction history.

Discussion

A high-amplitude anomaly is visible in the GPR data near the known vault. This anomaly is surrounded by an approximately rectangular, low-amplitude anomaly. It is unknown if the low-amplitude anomaly represents a true subsurface feature or is the result of strong diffractions from the central anomaly artificially decreasing amplitudes in the processed data. The size of the vault

is not well-constrained by GPR data. **The dimensions of the vault need to be determined with interior measurements.**

In the data as processed there are additional similar anomalies, though not identical (see all figures in this document and in compiled PDFs). It is not known if these represent other subterranean features. Further processing by a company with geotechnical expertise is required. The area beneath the grassy berm along the road to the west of the runway is not well-imaged by the GPR data (Figure 12).

References

Rousset, D. and Seismic Unix Users Group, (2020), "Seismic Unix, a valuable tool for seismic processing," *SEG Global Meeting Abstracts* : 251-254, https://doi.org/10.1190/gpr2020-067.1

Appendix A: Processing Flow

1) Removal of the mean trace value from each trace
2) Time shift to correctly set zero time on each trace
3) Dewow filter
4) Bandpass filter
5) fk-filter to suppress steeply dipping energy
6) Gain to boost amplitudes at later arrival times
7) Taper applied to traces on either end of each transect (3 traces per side)
8) Migration
9) fk-filter post-migration
10) Gain for later amplitudes post-migration

Appendix B: History and timing of the Denali vault GPR project

1. In June 2024 my employee traveled to Alaska to work with Justin Junge at archaeological sites. Access to a planned site at a different national park was blocked by a slope failure, and my employee instead accompanied Junge to Denali National Park and helped him acquire ground-penetrating radar data over a known subsurface vault near a runway.
2. I was informed after the data collection effort that the data acquired would be processed by T. Urban, also affiliated with Cornell University, but fully independent of myself.
3. In November 2024 I attended a meeting in Anchorage, Alaska of NPS archaeologists, when I was informally asked to look at GPR data over a coffee break. I quickly loaded and very briefly viewed the lines, at which time I asked for the location of the known vault so that I could find its signature in the data. I did not receive the coordinates at the meeting.
4. After this meeting in Alaska, I did not receive communication from the Denali NPS staff with a vault location or with a request to process the data.
5. In summer 2025, I was informed that Denali National Park staff were concerned that they had not received any report from that data acquisition effort. I had not received any email at any point from Denali, nor any information on vault location, and had never received any indication that any processing was expected from me, nor was there a specific agreement to undertake this work.
6. In summer 2025 after this message from Denali reached me, I began processing the Denali data. However, no report could be produced without the location of the vault. This was requested from Denali staff again but not received. In mid-August of 2025, when my data processing window ended for the summer, Justin Junge made the trip to Denali to acquire the coordinates himself since they had not been received from park staff.
7. This current report combines the coordinates from Junge with a basic level of data processing. I present time slices from the data, which indicate an anomaly at the location of the known vault and possibly extending over a larger area. Other anomalies are present in the data.
8. Interior measurements need to be taken to map the size and full shape of the anomaly. The GPR data cannot be used to map the dimensions of the subsurface vault.

UNITED STATES
DEPARTMENT OF THE INTERIOR
ALASKA ROAD COMMISSION
ANCHORAGE, ALASKA

December 5, 1945

Mr. Ike P. Taylor
Chief Engineer
Alaska Road Commission
Juneau, Alaska

RECEIVED
DEC 7 1945
Alaska Road Commission
Juneau, Alaska

Dear Sir:

The following is the Progress Report of the work at Mt. McKinley National Park for the working season of 1945.

Due to the small amount of funds available, no work was done on equipment from the time the crew left the Park on September 28th, 1944, and the crew's arrival on April 25th, 1945.

The Special Service Branch of the Army stopped operating the hotel at the railroad during the month of March, taking their equipment and personnel away and closing up the building.

On April 25th a foreman, cook and two men arrived at the Park; on May 1st the crew was increased by one man and another sent up on May 14th.

During this period work was started overhauling equipment and the road protected during the breakup, the road being opened as far as the Sanctuary River, Mile 22, with ditches being cleaned out, culverts opened up, and slides removed from sidehill sections so that cars could travel by the end of May.

Another man was added to the crew on June 1st and the crew kept busy opening up and taking care of the road to the East bank of the Toklat River, Mile 52.5, so that cars could travel this distance. Large slides of rock blocked the road at this point and the bridges across the Toklat River were damaged to such an extent as to prevent them being used.

During July two more men were added to the crew, one mechanic and one shovel operator, and on July 28th the truck shovel was put into operation and very good results were obtained.

In numerous places slides covered the road on sidehill sections, much settlement had taken place, particularly in frozen areas and on sidehills, where the outside shoulder was away low. The shovel was used in clearing off the slides, raising the outside shoulder and filling low places which had settled.

The first pile bent from the West Abutment of the East Trestle across the Toklat River which was damaged during 1944 was in very poor condition, being undermined two feet and being three feet out of alignment, and the roadbed adjacent to both center abutments had washed away.

Rock was hauled to hold the bent in place, and the holes on both of

the abutments filled.

One bent near the West end of the Teklinika Bridge was undermined and a timber placed as a "strongback" to hold the loose cap in place.

Washes at bridges and culverts were filled with tractor and dozer, and slides removed so that the road was in fair condition to Mile 72. The balance of the road to the boundary was in fair condition.

The sidehill section at Mile 68 which had settled badly was raised on the outside with dozer and washed out portions from Miles 69 to 72 filled by truck haul.

Outlets of culverts were repaired from Mile 0 to Mile 27 with brush being cut from the lower ends of the culverts for a distance of fifty feet to facilitate thawing operations in the spring.

Water from the adjacent hills filled culverts and ran down the road in the vicinity of Mile 10, narrowing up the road surface. The road was widened and a new ditch established which was later filled up.

The wash in the vicinity of Mile 11.5 where the creek bed above the road has filled up until it is higher than the road and the bridge openings filled up so that there is a very small area for water to pass through, causing it to run over the road at high water stage, was opened up twice during the season so that the water could pass under the bridges.

All bridges between Miles 2 and 34 were cleaned of gravel to protect the deck timbers from rotting.

The cabin at the Toklat which was damaged by bears and the cache in front of the cabin which was torn down, the door broken and windows ruined by them, were repaired. The bunkhouse at Toklat which had also been damaged by bears was repaired. The inside of the cabin was lined with celotex and made livable.

The road was staked in snow areas to facilitate the opening of the road in the spring.

Early in September the outside of the road at the hill in Mile One settled two feet for a distance of two hundred feet. This area was filled up by truck haul.

Low places which had settled at Miles 16, 30, 40 and 47, were also leveled up and sluffings cleared off Sable Pass Grade, Mile 37.5.

A fresh channel was opened up in Igloo Creek near Mile 37 and the revetment on the right limit of the Sanctuary Bridge at Mile 22 repaired and a channel opened up to divert the water from the bank.

The ditches in the vicinity of the places where glaciation occurs in

Miles 3 and 4 were cleaned out and covered the watercourse at 3 Miles from the road to the source with willows.

Repairs were made to the bunkhouse at the railroad station where the basement walls had caved in and allowed the building to settle.

Due to the preliminary work entailed by the expected revival of tourist travel and construction activities, an effort was made to make minimum repairs over the whole road which has been deteriorating rapidly during the war years when funds only permitted the employment of a few men for a short season during the summer months.

At the end of the season the road was in better condition than it has been as far as (a one way) driving surface was concerned since 1941, but brush is growing along the shoulders and getting to be a problem.

The items of work accomplished are as follows:

MAINTENANCE 91.3 Miles
(Includes placing 3974 cu. yds. gravel loaded with shovel
" 326 " " " " by hand
Patroling with motor grader, cleaning out ditches, opening up culverts, repairing washouts, removing slides, etc.

BRIDGES 1011 Lin. Ft.
Repairing, wood

Mile 31 Teklinika River	443	Lin. Ft.
" 54 Toklat River	568	" "
	1011	" "

Yours very truly,

M. C. Edmunds,
Superintendent.

MCE:p

THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Natural Resources
DIVISION OF PARKS AND OUTDOOR RECREATION
Office of History & Archaeology

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https://dnr.alaska.gov/parks/oha

August 29, 2025

File No.: 3130-1R NPS / 2025-00788

Brooke Merrell
Deputy Superintendent
Denali National Park and Preserve
P.O. Box 9
Denali Park, AK 99755

SUBJECT: Alaska Road Commission Basement Stabilization and Fill Project

Dear Ms. Merrell,

The Alaska State Historic Preservation Office (AK SHPO) received your correspondence (dated July 24, 2025) concerning the subject project and report on July 28, 2025. We have reviewed the documentation provided pursuant to Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR 800). AK SHPO offers the following comments for your consideration.

Upon review of the determinations of eligibility (DOE) compiled in the report titled *Cultural Resource Report No. 2025-DENA-006,* we concur that the McKinley Airfield (HEA-00616) is eligible for listing on the National Register for Historic Places under Criteria A and B. However, as the period of significance for this site (1932-1952) includes Army use until 1952, our office recommends an analysis of the Army's use of the airstrip in the future.

Additionally, AK SHPO recommends that the Alaska Road Commission (ARC) Basement and the area surrounding the structure receive more intensive documentation, such as sub-surface testing and partial excavation of the structure. Our office is not familiar with other examples of ARC buildings incorporating a basement and we recommend researching further the use of the structure before and after the ARC buildings were moved in 1947. Pursuant to Section 106 of the National Historic Preservation Act, until the identification and evaluation of potential historic properties have been resolved, we are unable to concur with the DOE and finding of effect for the proposed undertaking.

Thank you for the opportunity to review and comment. Please contact Molly Herron at molly.herron@alaska.gov if you have any questions or if we can be of further assistance.

Sincerely,

Sarah Meitl

Sarah J. Meitl
Deputy State Historic Preservation Officer
SJM:mah

Eligible _____ Not Eligible __X__

1. **Name of Property:** Alaska Road Commission (ARC) Basement
2. **Historic name**: Alaska Road Commission Warehouse and Office

3. Other name:

AHRS number: Not assigned
FMSS Location (or Asset): Not assigned
CRIS-HS Number: Not assigned

4. Location

Map sheet: USGS Healy (C-4), Alaska
Aliquot: Fairbanks Meridian, Alaska T. 14 S., R. 7 W., sec. 4
Latitude: 63°44'2.04"N **Longitude:** 148°54'41.40"W
City or town: Fifteen miles south of Healy, Alaska
Borough (or Census Area): Denali Borough
Land Status: Federal; National Park Service; Denali National Park and Preserve
Verbal Boundary Description: Footprint of basement, Denali National Park and Preserve
Boundary Justification: The basement cavity is the only remaining feature of the ARC Warehouse and Office.

3. Description

Ownership of property: National Park Service
Category of property: Site or Structure
Property's function:
Historic: TRANSPORTATION/road-related
Current: No longer in use
Materials:
Other: EARTH/WOOD

Summary Paragraph:

During summer 2024, DENA personnel discovered an underground cavity measuring approximately 15 feet (ft.) squared and 10 ft. deep on the edge of the airstrip when DENA mowing equipment inadvertently broke through a portion of the ceiling. Work stopped and the vehicle was removed without damage to the equipment nor further damage to the basement. The area was cordoned off and cultural resource specialists investigated the discovery, determining that it was the basement or underground storage room of a former Alaska Road Commission (ARC) building that was part of the McKinley Park Station, within the proposed McKinley Park Station Historic District (HEA-00075). During the summer, National Park Service (NPS) archeologists investigated with limited physical entry/observations due to safety concerns. By

August 2024, the opened section was already slumping with white mold seen growing on the interior cribbing. Due to safety concerns and the need to stabilize the area, DENA is planning to fully expose the basement, remove the wooden cribbing, and fill the cavity with approximately 20 cubic yards of existing stockpiled material in 2025.

The basement, without the standing Alaska Road Commission (ARC) building, lacks the integrity needed for listing on the National Register of Historic Places. The ARC building would be the essential visible physical feature needed to convey the history, association, and feeling during the 1924-1956 period within the Mount McKinley Park Station. There are ARC built cabins that remain along the park road that have been evaluated for listing on the National Register – these have integrity and serve as reminders of the ARC activities in the park.

Setting

Broadly, the ARC Basement is located approximately 10 miles north of Healy, Alaska, within Section 4 of T14S R7W of the Healy C-4 NW, Alaska-Denali Borough (2016) 7.5" USGS Quad, Fairbanks Meridian. Situated within a forested area in the front country of Denali National Park and Preserve, there are several hiking trails are present in the immediate vicinity. At 1700 feet elevation, the area is within a typical boreal forest consisting primarily of spruce, birch, aspen and alder.

The ARC Basement is located west and adjacent to the McKinley National Park/INR Airstrip (McKinley Airfield HEA-00616) and north about 1,240 ft. from the Alaska Railroad Denali depot. The Alaska Railroad runs roughly parallel to the west of the airstrip, separated from the runway by a narrow corridor of vegetation. Further west of the railroad are park buildings and parking areas that serve as the first points of contact for visitors, notably the Denali Visitor Center and the Murie Science & Learning Center. The Park Road roughly parallels the west side of the airstrip and then curves around the northern end. Horseshoe Lake is located to the north, to the east lies the Riley Creek Campground. Hines Creek is located to the south.

Narrative Description:

The basement measures approximately 15 ft. (width) x 15 ft. (length) x 10 ft. (depth) with wooden cribbing and supports. The basement was part of the former ARC Office and Warehouse.

4. Statement of Significance

Applicable National Register Criteria

Criterion A: If the ARC Basement had maintained integrity, its potential significance would be related to the Alaska Road Commission's presence and activities associated with road and trail building within the park. There are ARC built cabins that remain along the park road that have been evaluated for listing on the National Register – these have integrity and serve as reminders of the ARC activities in the park.

Criterion B: The ARC Basement does not have potential significance under Criterion B, since it is not associated with the lives of significant persons in our past. The design and construction, as well as modification of the building were not by any one individual or individuals with any known significance. Although a multitude of individuals built and worked within the ARC building, there is no distinct important individual associated with the ARC effort.

Criterion C: The ARC Basement does not have potential significance under Criterion C because it does not embody the distinctive characteristics of a type, period or method of construction, and does not represent the work of a master, or possess high artistic values whose components may lack individual distinction. The basement is of standard construction, made of common building materials.

Criterion D: The ARC Basement does not have potential significance under Criterion D because it has not yielded nor is likely to yield information important in history or prehistory. Information about the structure is found in written documents, photographs and maps.

Areas of Potential Significance: TRANSPORTATION
Significant date(s): c.1924
Period of significance: c.1924-1956
Level of significance: N/A
Significant person(s): N/A
Cultural affiliation: N/A
Architect/Engineer: ARC

Statement of Significance:

This Determination of Eligibility (DOE) was drafted in response to an inadvertent discovery of the basement of a former Alaska Road Commission (ARC) McKinley Park Station building. Today, none of the ARC buildings at the McKinley Park Station buildings (office, warehouse, garage) remain. The basement measures approximately 15 ft. x15 ft. x 10 ft. feet deep and is covered by dirt and gravel. The ARC Basement is within a larger graveled area that is associated with airstrip activities for plane tie downs and vehicle parking.

Given that the ARC Basement lacks National Register integrity, this DOE provides sufficient historic research and historic context regarding the Alaska Road Commission to understand the structure's connection to history and development within Denali National Park and Preserve.

The basement is related to the Alaska Road Commission (ARC) operations in the park. In 1924, Congress authorized the ARC to construct the park road. Work started from the Alaska Railroad, at Mile 348, and proceeded west into the park nearly 90 miles to Kantishna. In connection with the park road work, the ARC established its base of operations at the McKinley Park Station constructing an office and a warehouse near the railroad depot in 1924. Eventually, the station included offices, warehouse, and garages. The ARC also built log cabins and

construction camps at five sites along the road corridor between 1924 and 1931 (Norris, 40, 50; Mead & Hunt, 54; Bryant, 36).

The ARC completed the park road in 1938 and continued to maintain the road and bridges until 1956 when the Bureau of Public Roads (BPR) assumed responsibility. BPR management of the Park Road was short-lived as the National Park Service took over the role in 1960 (Norris, 169). In 1947, the park superintendent noted in the September monthly report that the ARC buildings were considered too close to the airstrip and were moved to reduce a potential flying hazard.

McKinley Park Station

Within the broader geographical and historical context, the ARC basement is located within McKinley Park Station (HEA-00075), near the confluence of Riley and Hines creeks. During the 1920s and 1930s, the area included a former settlement around the current railroad station, the early railroad construction camp, the original park headquarters and tourist services, as well as the ARC operations.

Following the establishment of Mount McKinley National Park in 1917, Harry Karstens, the park's first Superintendent, decided that the Riley Creek area would serve as the entryway to the park and as well as the location for the park's base of operations. Shortly thereafter, the Alaska Engineering Commission (AEC) selected the site for a railroad depot and named the location McKinley Park Station in recognition of the newly designated park and entryway (Norris, 29-30).

A 700-foot-long rudimentary airstrip was started in 1932 by Maurice Morino, a local roadhouse operator, who levelled the ground for a plane to land in the event of an emergency. In 1943, Army engineers improved and expanded the airstrip to 3400 feet to accommodate commercial planes. (National Park Service, *Superintendent's Monthly Report,* 1932; Norris, 74, 110).

Other developments that shaped the area occurred during the 1930s with the community being annexed into the park in 1932 and the arrival of the Civilian Conservation Corps (CCC) in 1938. The CCC workforce made significant changes that helped transform the function and appearance of the McKinley Park Station. The CCC built employee housing, constructed water and sewer lines, as well as doing minor road work and landscaping around the park hotel that was being constructed. Among the NPS construction, was the hotel and associated power plant that were in operation by1939 (Norris, 98).

Today, the McKinley Park Station area continues to serve as the visitor entrance for the park with facilities and services including visitor center, hiking trails and camping. The powerplant and airstrip remain from the early period of development while the hotel is gone, destroyed by fire in 1972. None of the early railroad structures nor ARC buildings remain. The area has experienced heavy disturbance over the years. A NPS pedestrian investigation in 1994 noted historical archeological scattered features and remnants, including foundations and can dumps. (Norris, 87; Kain and Leeper, 3).

The ARC Warehouse and Office was built near the Mckinley Airfield (HEA-00616), however its construction was not related to the airstrip, rather to the building of the park road, bridges, and trails. Along the park road, there are several remaining ARC built cabins which are individually listed on the National Register as part of the historic Ranger Patrol Cabins Multiple Property Listing. These cabins are representative of the ARC activities at the park. The ARC Basement lacks integrity and therefore does not convey this significance.

5. Major Bibliographic References

Bryant, Jane
2011 *Snapshots from the Past : A Roadside History of Denali National Park and Preserve*. U.S. Dept. of the Interior, National Park Service, Washington, DC.

Evans, Gail
1987 *From Myth to Reality: Denali Road Corridor History*. MA Thesis, University of Caliofrnia Santa Barbara, CA.

Kain, Ann and Karlene Leeper
1994 *McKinley Park Station Historic District*, Draft NRHP Registration Form. National Park Service.

Mead & Hunt and Cultural Resource Consultants
2014 *Alaska Roads Historic Overview: Applied Historic Context of Alaska's Roads*. Alaska Department of Transportation and Public Facilities, Juneau, AK.

Norris, Frank B.
2006 *Crown Jewel of the North: An Administrative History of Denali National Park and Preserve. Volume 1.* Alaska Regional Office, National Park Service, U.S. Dept. of the Interior, Anchorage, Alaska.

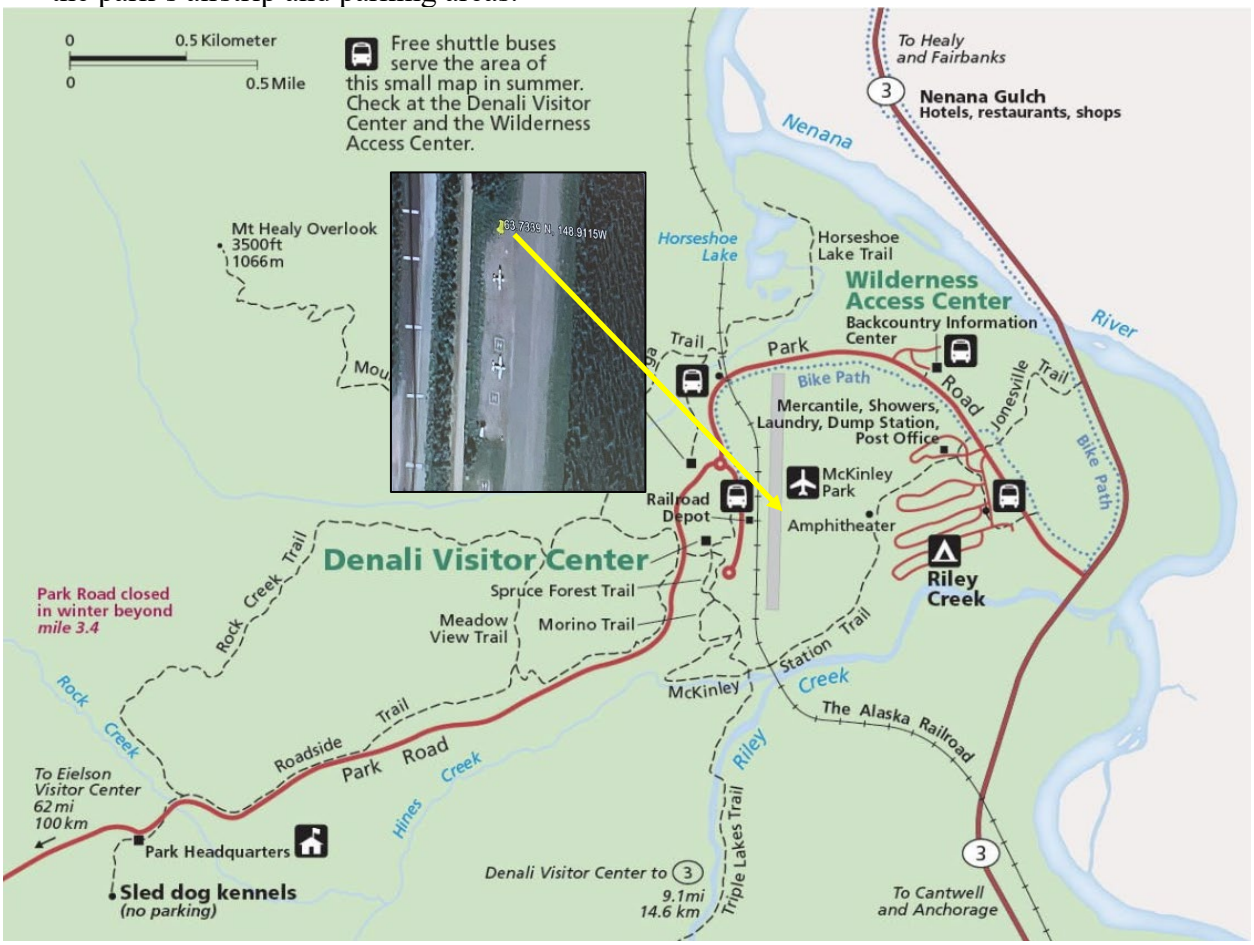
NPS
1932, 1947 *Superintendent's Monthly Reports, Mount McKinley National Park*. National Park Service.

2020 *Mount McKinley National Park Historic Road District, Denali National Park and Preserve, Alaska, National Register # 100004070*. National Park Service.

6. **Form Prepared By:** Janet Clements, Regional Historian National Park Service Interior Region 11- Alaska and Susannah Lemke, Historian, National Park Service, Denali National Park and Preserve

7. Additional Material

Map 1. Denali National Park "front country" area map from the NPS brochure. Map and image detail showing section of the INR airstrip, looking north, with pin and yellow arrow showing the approximate location of the Alaska Road Commission basement that is within the park's airstrip and parking areas.



Photographs
NPS images of the basement within the airstrip, 2024.





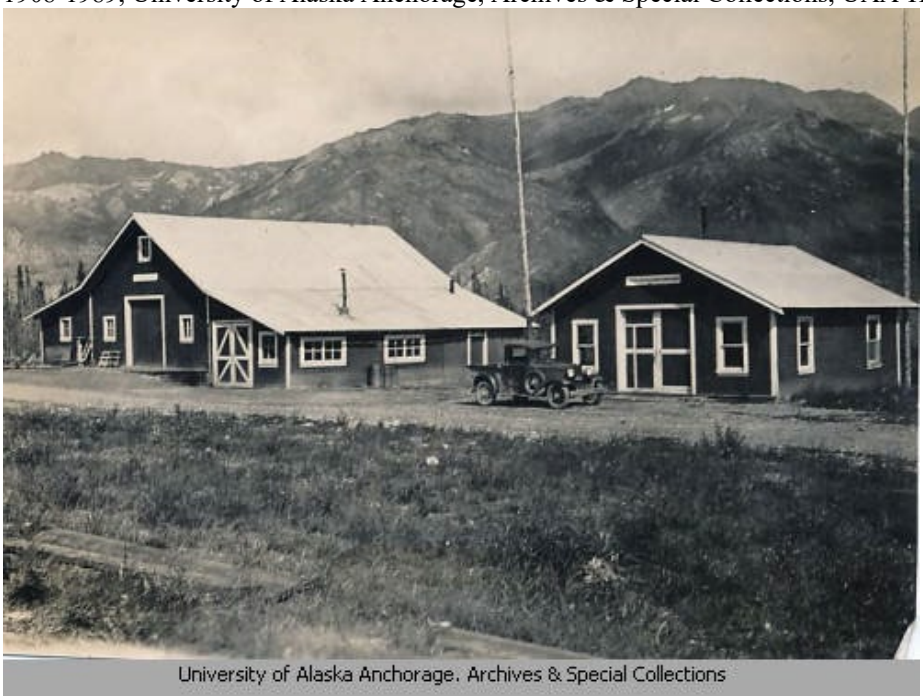






Historical Photographs:

Historical Photo 1: "Alaska Road Commission Office" c. 1930 (Harry and Norma Hoyt Family papers, 1908-1989, University of Alaska Anchorage, Archives & Special Collections, UAA-HMC-0988)



Historical Photo 2: "Alaska Road Commission Building at McKinley" View looking northeast c.1940 (Thayer Family Papers, Alaska and Polar Regions Collections, Elmer E. Rasmuson Library, University of Alaska Fairbanks, UAF-2010-25-429)



Historical Photo 3: “Alaska Road Commission Building at McKinley.” View looking northwest, showing hotel complex c.1940 (Thayer Family Papers, Alaska and Polar Regions Collections, Elmer E. Rasmuson Library, University of Alaska Fairbanks, UAF-2010-25-433)



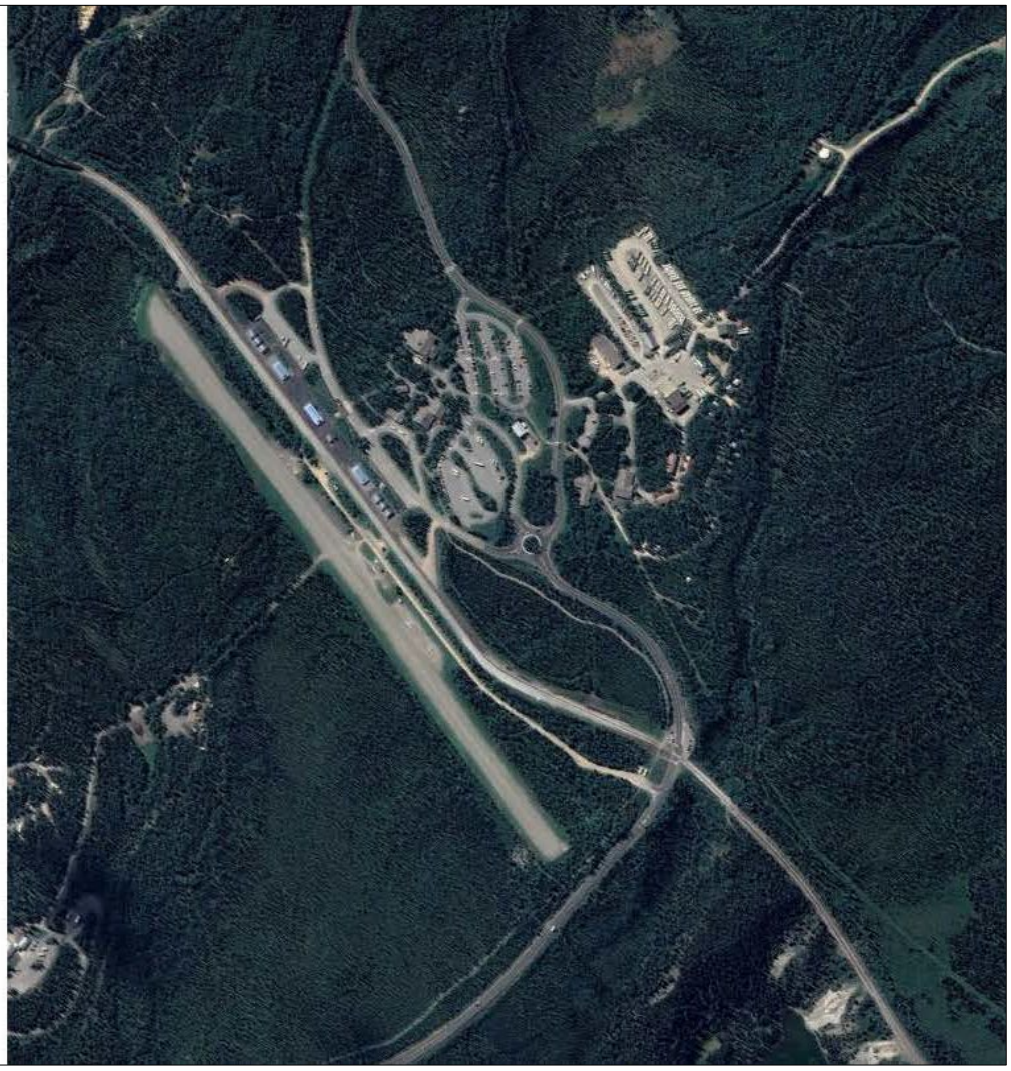
Historical Photo 4: “Overview of McKinley Park Station.” View looking east, c. 1938 showing Alaska Road Commission Office and Warehouse marked by red arrow (Bradford Washburn Photograph Collection, Alaska and Polar Regions Collections, Elmer E. Rasmuson Library, University of Alaska Fairbanks, UAF-Washburn-2391)



Compilation of Park Master Plans Showing McKinley Park Station (1937-51)
Compiled by Heather Feil, Architectural Historian, Interior Region 11–Alaska, NPS (DENA Master Plans on file at NPS, Interior Region 11 Office, Anchorage, AK)

Overlay 1: Aerial of McKinley Park Station Area, 2024, taken from Google Earth

2024 Aerial of McKinley Park Station Area



Overlay 2: 1937 Mt. McKinley National Park Master Plan overlaid on aerial of McKinley Park Station Area, 2024, taken from Google Earth



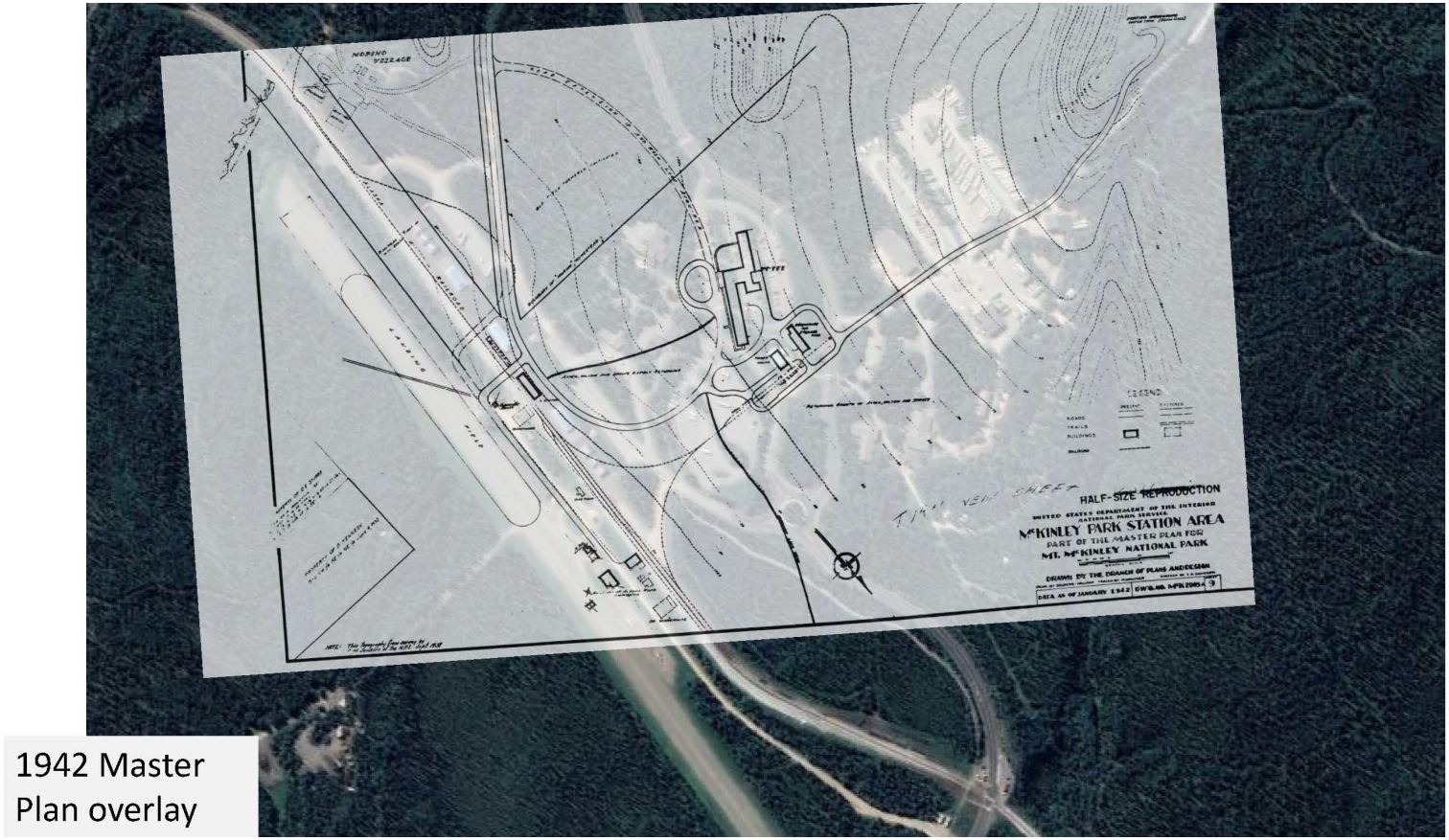
Overlay 3: 1938 Mt. McKinley National Park Master Plan overlaid on aerial of McKinley Park Station Area, 2024, taken from Google Earth



Overlay 4: 1939 Mt. McKinley National Park Master Plan overlaid on aerial of McKinley Park Station Area, 2024, taken from Google Earth



Overlay 5: 1949 Mt. McKinley National Park Master Plan overlaid on aerial of McKinley Park Station Area, 2024, taken from Google Earth



Overlay 6: 1951 Mt. McKinley National Park Master Plan overlaid on aerial of McKinley Park Station Area, 2024, taken from Google Earth



Map 2. Map of McKinley Landing Strip from the 1950, USGS Healy C-4 1:63360

