

## 2.2 Manchu Lake Fuel Break, YTA

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USAG-AK has proposed to rehabilitate an existing fuel break in the Manchu Lake area of the Yukon Training Area (YTA), Fort Wainwright (Figure 3). The existing fuel break was created in the early 1980s and was re-cleared in the 1990s. Improvements are necessary because the break has re-vegetated and is therefore not as effective in preventing the spread of fires. The existing fuel break is approximately 3330 meters long and approximately 30 feet wide, with a short 200 meter long spur to the north that intersects with Moose Creek. The proposed work will involve using a straight blade on a bulldozer to "roll" off the top layer of vegetation (2-3 inches deep). This work will be done while the ground is still frozen and will be limited to the footprint of the existing fuel break. The purpose of this particular fuel break is to contain wildfires within the Manchu Range. This project is located on map quadrangle FAI C1, T. 2 S., R. 4 E., Sections 30 and 31.

### ***Survey and Field Methods***

In the summer of 2002 the project area for the fuel break improvement project was investigated by an archaeological survey crew, employed by the Center for Environmental Management of Military Lands (CEMML, Colorado State University). This crew was supervised by William Hedman. This cultural resources survey was part of a survey for a larger range development project. All of the area shown in Figure 3 was archaeologically surveyed in the summer of 2002 (Hedman et al. 2003).

Parallel pedestrian transects spaced at 10-20 meters were walked in all areas that were not deemed too wet or too steep ( $>40^\circ$ ) to contain cultural material. Systematic sub-surface testing was undertaken in areas determined to be high probability (e.g., lake margins, ridges, benches adjacent to steeper slopes) during initial review of the proposed project area, and as determined by the supervising archaeologist and field crew leader based on survey findings. Shovel tests were approximately 40cm x 40cm, and were screened through  $\frac{1}{4}$ " hardware cloth.

### ***Cultural Resources***

There is one known site in the vicinity of the proposed project. This site has been determined to be outside of the project area.

#### FAI-00157

Latitude:

Longitude: (NAD 27)

Determination: Not evaluated

This site consists of one chert flake and a segment of an obsidian microblade. The artifacts were found on the surface of a clearing in 1978 (Holmes 1979:23). During survey activities in 2002, this site was re-located based on map coordinates and the presence of previously excavated test units. UTM coordinates for the site are Zone 6, (WGS84). The site area was shovel tested extensively in 2002, however no additional cultural material was located. This site was likely disturbed by previous clearing activities and all remaining cultural material collected in 1978. This site is located outside of the project area and no additional work is recommended at this time.



Figure 3. Manchu Fuel Break Project Area

### Results

Pedestrian survey and sub-surface testing of the proposed project area did not identify any cultural resources. All other previously recorded archaeological sites or historic properties in the Yukon Training Area fall outside of the proposed project area. USAG-AK determined that no historic properties will be affected by the proposed project.

## 2.3 Stuart Creek Impact Area Prescribed Burn, YTA

USAG-AK has proposed to burn 4031 acres in the Yukon Training Area (YTA), Fort Wainwright (Figure 4). The proposed prescribed burn is composed of three units. The project area is located off of Brigadier and Skyline Roads, as well as the road to Camera Site I in the central portion of the YTA (map quadrangles XBD C-6 T. 2 S., R. 6 E., Sec. 27-28, 32-34; T. 3 S., R. 6 E., Sec. 4-9, 17 and XBD C-5 T. 2 S., R. 6 E. Sec. 11-14, 23-26). The majority of the proposed burn area is located in the Stuart Creek Impact Area, an area that has not undergone cultural resources surveys due to the high risk to personnel from unexploded ordnance. The purpose of the proposed burn is to reduce fine fuel materials and prevent large scale uncontrolled burns. The area has been subject to fires throughout history as part of the natural environment and no ground disturbance is planned as part of this burn.

### ***Survey and Field Methods***

In the summer of 2002 a portion of burn unit #3, which extends below the southern boundary of the Stuart Creek Impact Area, was investigated by an archaeological survey crew, employed by the Center for Environmental Management of Military Lands (CEMML, Colorado State University). This survey was part of a larger cultural resources investigation for other range developments. This work was supervised by William Hedman.

Parallel pedestrian transects spaced at 10-20 meters were walked in all areas that were not deemed too wet or too steep ( $>40^\circ$ ) to contain cultural material. Systematic sub-surface testing was undertaken in areas determined to be high probability (e.g., lake margins, ridges, benches adjacent to steeper slopes) during initial review of the proposed project area, and as determined by the supervising archaeologist and field crew leader based on survey findings. Shovel tests were approximately 40cm x 40cm, and were screened through  $\frac{1}{4}$ " hardware cloth. Additionally, of the portion of unit #3 that is located outside of the Stuart Creek Impact Area, approximately 263 acres have not been archaeologically surveyed. Though prehistoric cultural resources may exist in this portion of unit #3, based on previous cultural resources inventory and literature review regarding the Yukon Training Area, USAG-AK has determined that this area is has a very low probability of containing historic era cultural resources. It is located in high and rugged terrain, is not in the vicinity of any known resources such as mineral deposits and is not adjacent to any significant water sources.

The remainder of the proposed burn project is located within the boundaries of the Stuart Creek Impact Area. This dedicated impact area has been used for decades for live fire training and the dropping of live ordinance. This area is off limits to personnel who are not specially trained in ordinance disposal and other hazardous materials. As a result, cultural resource investigations did not take place in the impact area.

### ***Cultural Resources***

There is one known site located within the project area:

#### XBD-00162

Latitude:

Longitude: (NAD 27)

Determination: Not evaluated

This site consists of one black chert flake found on a hilltop in an extensively disturbed area. The flake was not collected. The Bureau of Land Management originally located this site and the agency's assessment of it was that the flake was an isolated find from a site that had likely been destroyed by military activities. This site is currently located within the boundaries of proposed burn unit #3 and within the boundaries of the Stuart Creek Impact area. The UTM coordinates for the site are: Zone 6,

(WGS 84).

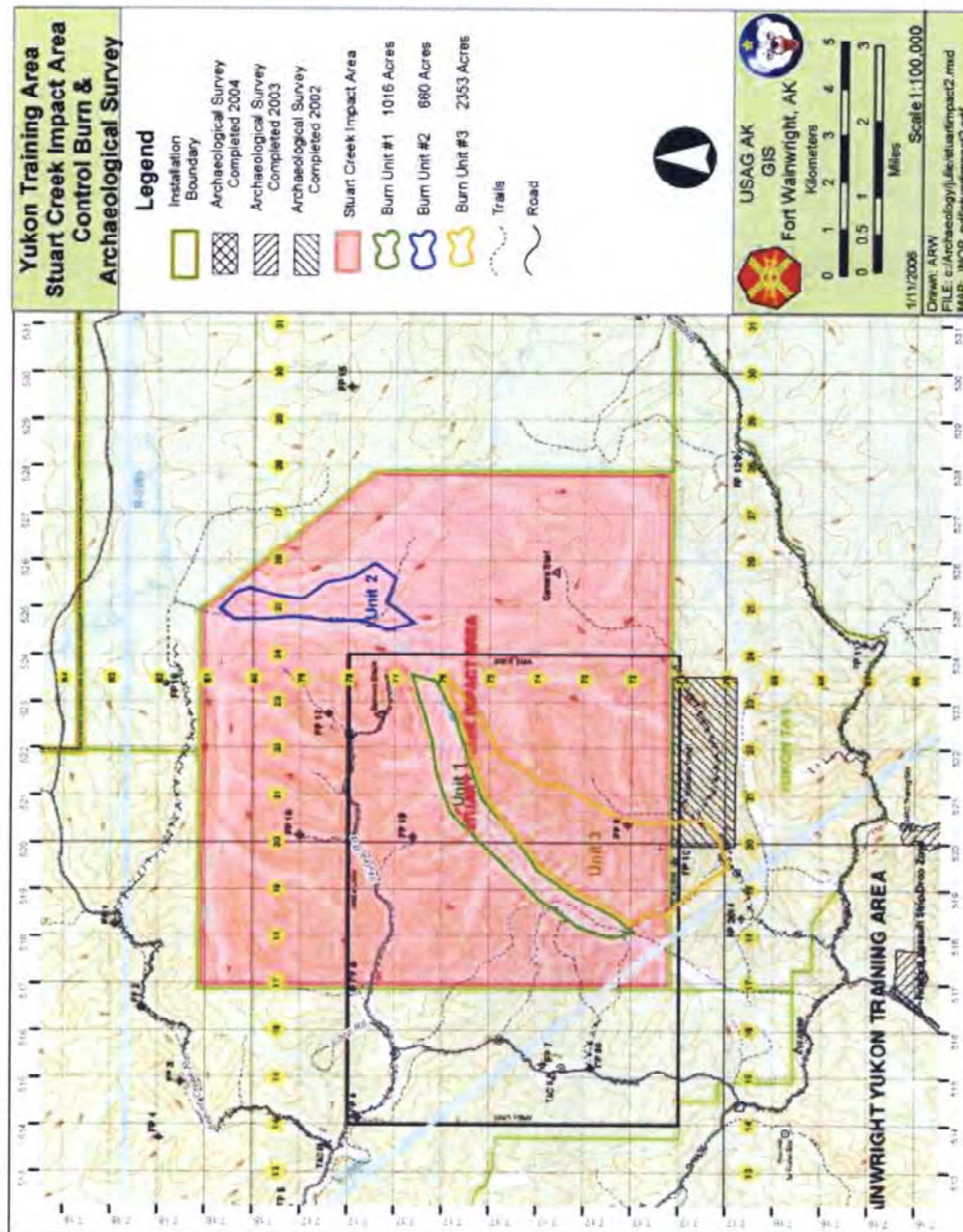


Figure 4. Stuart Creek Impact Area prescribed burn project area

### ***Recommendations***

This site has not been evaluated for its eligibility for listing in the National Register of Historic Places. Because this site is located within a dedicated impact area, the Stuart Creek Impact Area, it will not be physically visited to determine its eligibility. The burning of vegetation around and within the boundaries of a prehistoric archaeological site is not likely to cause an adverse effect. The Yukon Training Area, including the vicinity of this archaeological site, has likely burned many times throughout history and prehistory as a result of wildfires. Additionally, based on the original Bureau of Land Management observations of the site, it has been destroyed and no longer retains any integrity, and would therefore not likely be eligible for the National Register under Criterion D or any other Criteria. The proposed project will not have an adverse effect on XBD-00162 and no further action at this site is recommended under the proposed burn plan.

### ***Results***

A combination of literature review, pedestrian survey and sub-surface testing of the proposed project area identified one unevaluated cultural resource. Site XBD-00162, a prehistoric archaeological site, lies within the boundaries of proposed burn unit #3 and the Stuart Creek Impact Area. The proposed prescribed burn project will have no adverse effect on XBD-00162. All other previously recorded archaeological sites or historic properties in the Yukon Training Area fall outside of the proposed project area. USAG-AK determined that no historic properties will be affected by the proposed project.

## 2.4 Proposed Demolition Range, YTA

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USAG-AK has proposed to construct a demolition range in the Yukon Training Area. The demolition range will consist of an access road, a 15.5 acre hardened pad and a series of berms within the hardened pad to separate the different demolition stations (Figure 5). An existing 1800 meter long trail will be improved to a 24ft wide, all-season road. A small existing clearing at the range location will be upgraded to a hardened pad with berms. The purpose of this project is to provide additional locations for demolition-type training within the Yukon Training Area. The proposed project is located on map quadrangle XBD C6 at: T3S, R5W, Sections 4 and 9; and T2S, R5E, Section 33.

### ***Survey and Field Methods***

In July 2005 the proposed demolition range and access road project area was pedestrian surveyed by a crew of four to five archaeologists employed by the Center for Environmental Management of Military Lands (CEMML, Colorado State University).

Parallel pedestrian transects spaced at 20 meters or less were walked in all areas that were not deemed too wet or too steep ( $>40^\circ$ ) to contain cultural material. Systematic sub-surface testing was undertaken in areas determined to be high probability (e.g., lake margins, ridges, benches adjacent to steeper slopes) during initial review of the proposed project area, and as determined by the supervising archaeologist and field crew leader based on survey findings. In addition to pedestrian transects, 40cm x 40cm shovel tests were excavated in the project area. All excavated materials were screened through  $\frac{1}{4}$ " hardware cloth. None of the shovel tests excavated contained any cultural material.

An area larger than the proposed project footprint was surveyed and shovel tested. Site XBD-00095 was also reinvestigated (see below) as part of this project. No cultural materials were identified or recovered during the field inventory.

### ***Cultural Resources***

There is one known site in the vicinity of the proposed project. This site has been determined to be outside of the project area.

#### **XBD-00095**

Latitude:

Longitude: NAD 27)

Determination: Not Eligible

This site consists of two grey chert flakes, one a biface thinning flake, found on the disturbed surface of a roadcut in an old quarry pit. This site was found during survey in 1979 and is located north of Quarry Road. Attempts were made to relocate this site in the summers of 2002 and 2005. Pedestrian reconnaissance and shovel testing was undertaken at the specific location noted in the 1979 survey report, as well as in the general vicinity of the originally reported site location. The roadbed and old quarry are extant, but no additional cultural materials were found either in 2002 or 2005. This site lies outside the proposed area of potential effect for the proposed demolition range and access road. UTM coordinates for the site are: Zone 6,  
(WGS 84).

### Findings

Pedestrian survey and shovel testing produced a total of only two surface artifacts. This finding suggests that XMH-00095 is a small, localized occurrence. The paucity of cultural material indicates that this site does not contain additional information that is important to our understanding of the prehistory or history of the region and is not eligible for inclusion in the National Register of Historic Places.

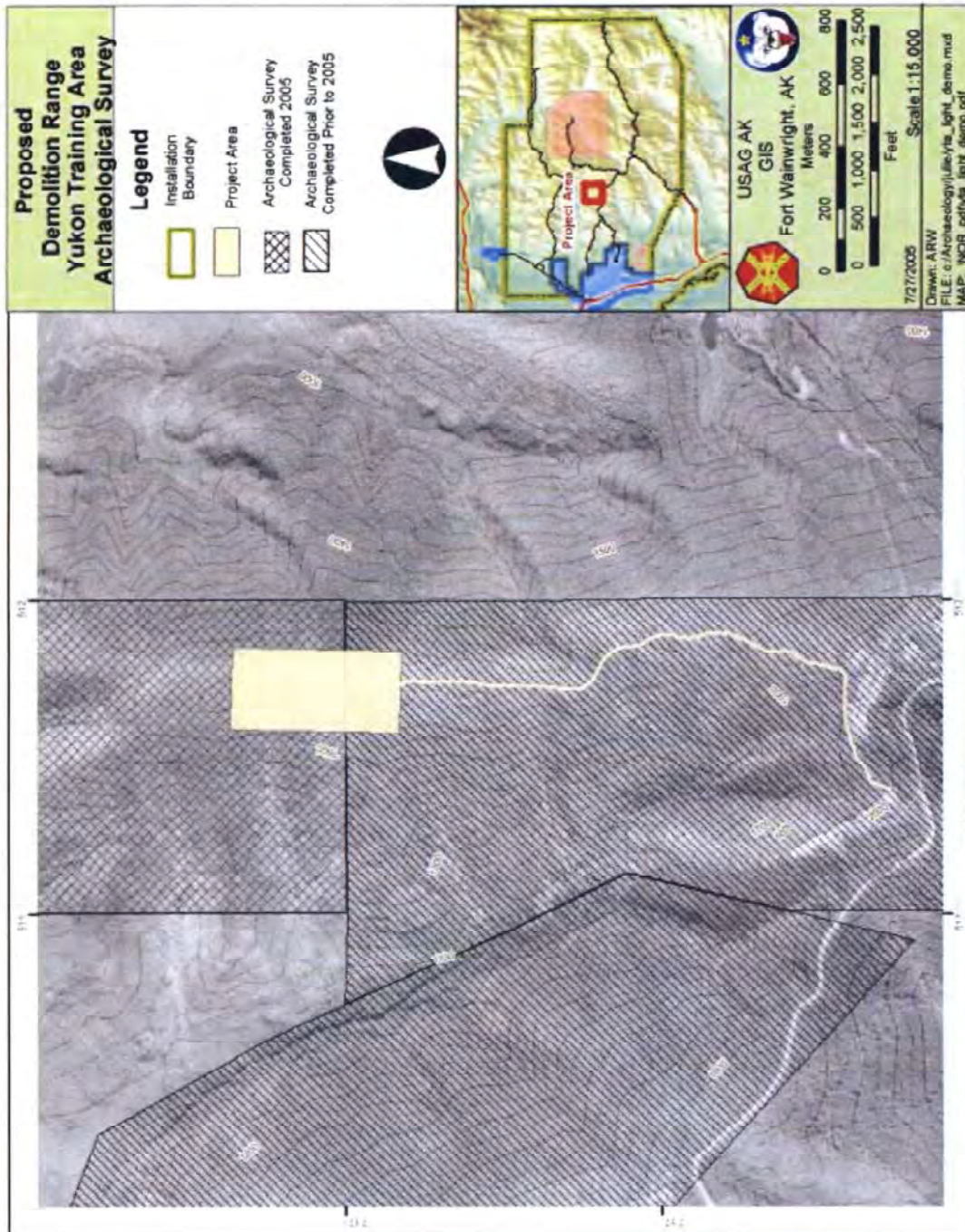


Figure 5. Location of proposed demolition range, YTA

**Results**

No cultural resources were identified within the demolition range and access road project area. Site XBD-00095 is located outside of the proposed project area and has been determined not eligible for inclusion in the National Register of Historic Places. All other previously-recorded archaeological sites and historic properties in the Yukon Training USAG-AK determined that no historic properties will be affected by the proposed project.

## 2.5 Husky Drop Zone Improvements, YTA

USAG-AK has proposed to upgrade the Husky Drop Zone within the Yukon Training Area (YTA) (Figure 6). The upgrades would include improving an existing access trail to a permanent year-round access road. Additionally, a large staging area for training exercises would be constructed on the east side of the drop zone. The purpose of these upgrades is to improve access and control erosion by improving drainage through grading, establishing ditches, installing geotextile and fill material and confining activities to hardened surfaces. The upgrades will also allow the accommodation of large scale brigade size training exercises. The proposed upgrades to the Husky Drop Zone are located on map quadrangle FAI D1 in: T2S, R3E, Sections 1, 2 and 12.

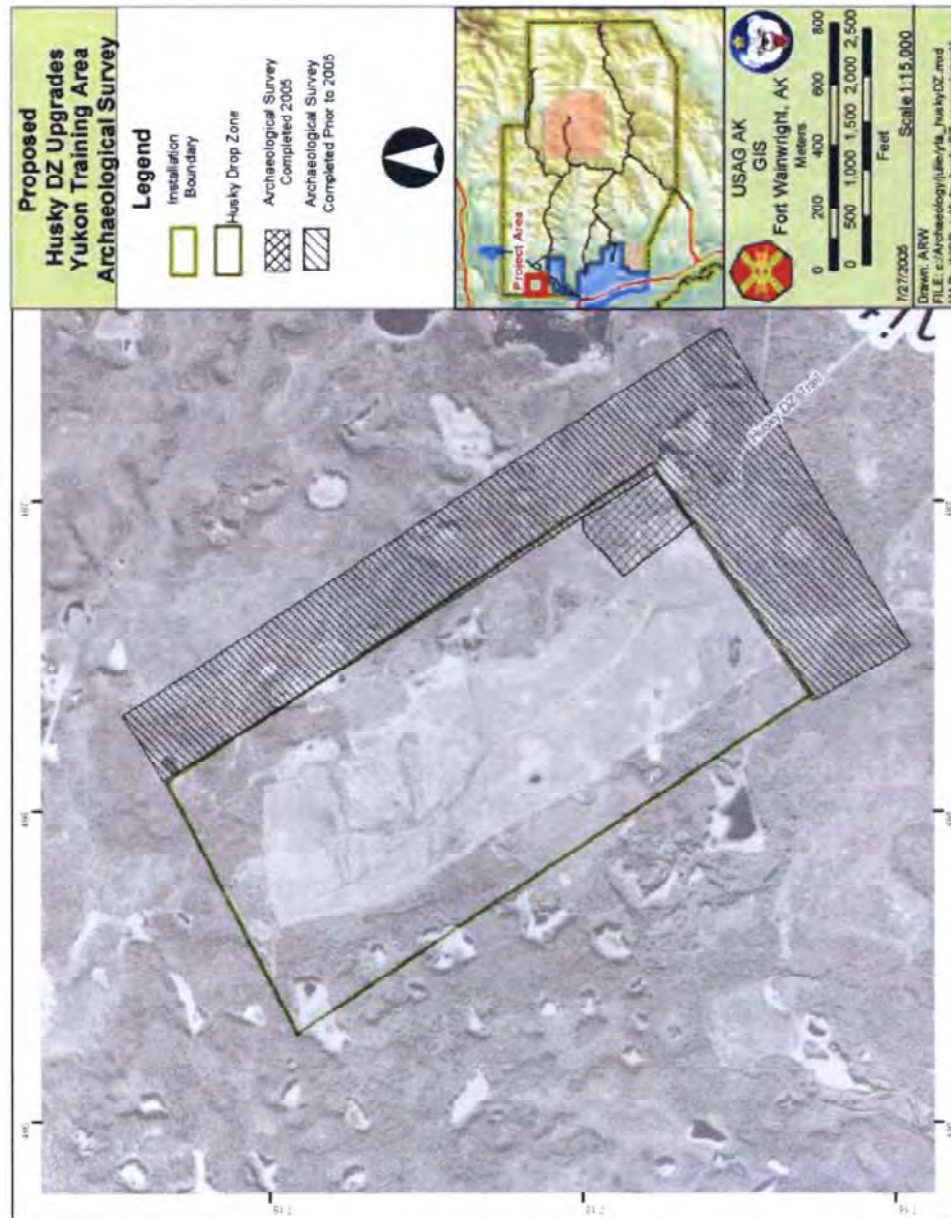


Figure 6. Husky Drop Zone and archaeologically surveyed areas

### ***Survey and Field Methods***

In July 2005 the location of the proposed upgrades at the Husky Drop Zone were investigated by a crew of four archaeologists employed by the Center for Environmental Management of Military Lands (CEMML, Colorado State University)

Parallel pedestrian transects spaced at 20 meters or less were walked in all areas that were not deemed too wet or too steep ( $>40^\circ$ ) to contain cultural material. Systematic sub-surface testing was undertaken in areas determined to be high probability (e.g., lake margins, ridges, benches adjacent to steeper slopes) during initial review of the proposed project area, and as determined by the supervising archaeologist and field crew leader based on survey findings. In addition to pedestrian transects, 40cm x 40cm shovel tests were excavated in the project area. All excavated material was screened through  $\frac{1}{4}$ " hardware cloth. None of the shovel tests excavated contained any cultural material.

The existing access trail to be upgraded into a year-round access road currently runs the length of the drop zone. This trail runs through an extremely wet area with a low potential for containing cultural resources. The wetlands character of the currently cleared drop zone, through which the access trail runs, was determined through wetlands maps, various aerial photos, and on the ground observation. No transects were walked through this area and no shovel tests were excavated. A staging area for training exercises is proposed for the area along the eastern border of the drop zone. This area is slightly higher and drier than the cleared drop zone itself. The eastern border of the drop zone was archaeologically surveyed and tested in 2002 and in 2005. No cultural resources were located during these investigations.

### ***Cultural Resources***

There is one known site in the vicinity of the proposed project. This site has been determined to be outside of the project area.

#### ***FAI-01156***

Latitude:

Longitude: (NAD 27)

Determination: Not Evaluated

This site consists of chert flakes found in a series of shovel tests on a bench above Horseshoe Lake. UTM coordinates for this site are Zone 6, easting 498072 and northing 7182192. This site lies outside the area of potential effect for the proposed upgrades at the Husky Drop Zone. This site has not been evaluated for eligibility for listing in the National Register of Historic Places and no additional action is recommended at this time.

### ***Results***

No cultural resources were identified within the project area for upgrades at the Husky Drop Zone. Site FAI-01156 is located outside of the area of potential effect for this project. All other previously-recorded archaeological sites and historic properties in the Yukon Training Area also fall outside the project area. USAG-AK determined that no historic properties will be affected by the proposed project.

## 2.6 Informational Kiosks, YTA

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USAG-AK has proposed to construct seven information kiosks at road intersections within and on roads entering the Yukon Training Area (YTA) (Figure 7). Kiosk locations at the boundary of the YTA include one on Transmitter Road at the north boundary of Eielson Air Force Base and one at the southern YTA boundary on Johnson Road. Kiosks will also be placed at the intersections of Beaver Creek Road and Transmitter Road; Quarry Road and Manchu Road; Quarry Road and Skyline Road; Skyline Road and Beaver Creek Road; and at the intersection of Quarry Road, Brigadier Road and Johnson Road.

The kiosks will consist of four inch by four inch posts to be set in holes approximately eight inches by eight inches and cemented in place. Attached to the post will be an information board. The kiosks will provide locational information to training area users. The kiosks will be within the road rights-of-way, much of which is already heavily disturbed. The proposed locations for the five kiosks in map quadrangle XBD C6 are: T2S, R5E, Section 26; T3S, R4E, Section 1; T3S, R5E, Section 14; T3S, R5E, Section 25 and T4S, R5E, Section 16. The proposed location for the one kiosk in map quadrangle FAI C1 is: T2S, R3E, Sections 12 and 13 (boundary). The proposed location for the one kiosk in map quadrangle FAI D1 is: T2S, R3E, Section 6.

### ***Survey and Field Methods***

In May 2005 the seven proposed kiosk locations were investigated by a crew of two archaeologists employed by the Center for Environmental Management of Military Lands (CEMML, Colorado State University).

Proposed kiosk locations were inspected visually for artifacts and disturbance. Sub-surface testing was undertaken in areas determined to be high probability (e.g., ridges, benches adjacent to steeper slopes) as determined by the supervising archaeologist based on the presence/absence of other sites in the area. Shovel tests were approximately 40cm x 40cm, and were screened through ¼" hardware cloth.

All seven of the proposed kiosk locations are within the previously disturbed road rights-of-way. This previous disturbance was confirmed visually and, in one case, through subsurface testing.

### ***Cultural Resources***

There are two known sites in the vicinity of the proposed project, both of which have been determined to be outside of the project area. One is a new site discovered during the investigations for the proposed project.

#### **XBD-00094**

Latitude:

Longitude: (NAD 27)

Determination: Not Eligible

This site consists of both surface and buried artifacts. Surface artifacts include six obsidian flakes, one rhyolite flake, three chert flakes, two retouched chert flakes, and three fragments of a rhyolite scraper. One of ten test pits produced two more chalcedony flakes. The site was found during survey in 1979 and is located just southeast of the intersection of Brigadier Road and Johnson Road. UTM coordinates for

the site are Zone 6, (WGS 84). This site may have been entirely destroyed by past military activities. This site lies outside the proposed location for the kiosk at this intersection and no more cultural material has been found in the vicinity. No additional action is recommended at this time.

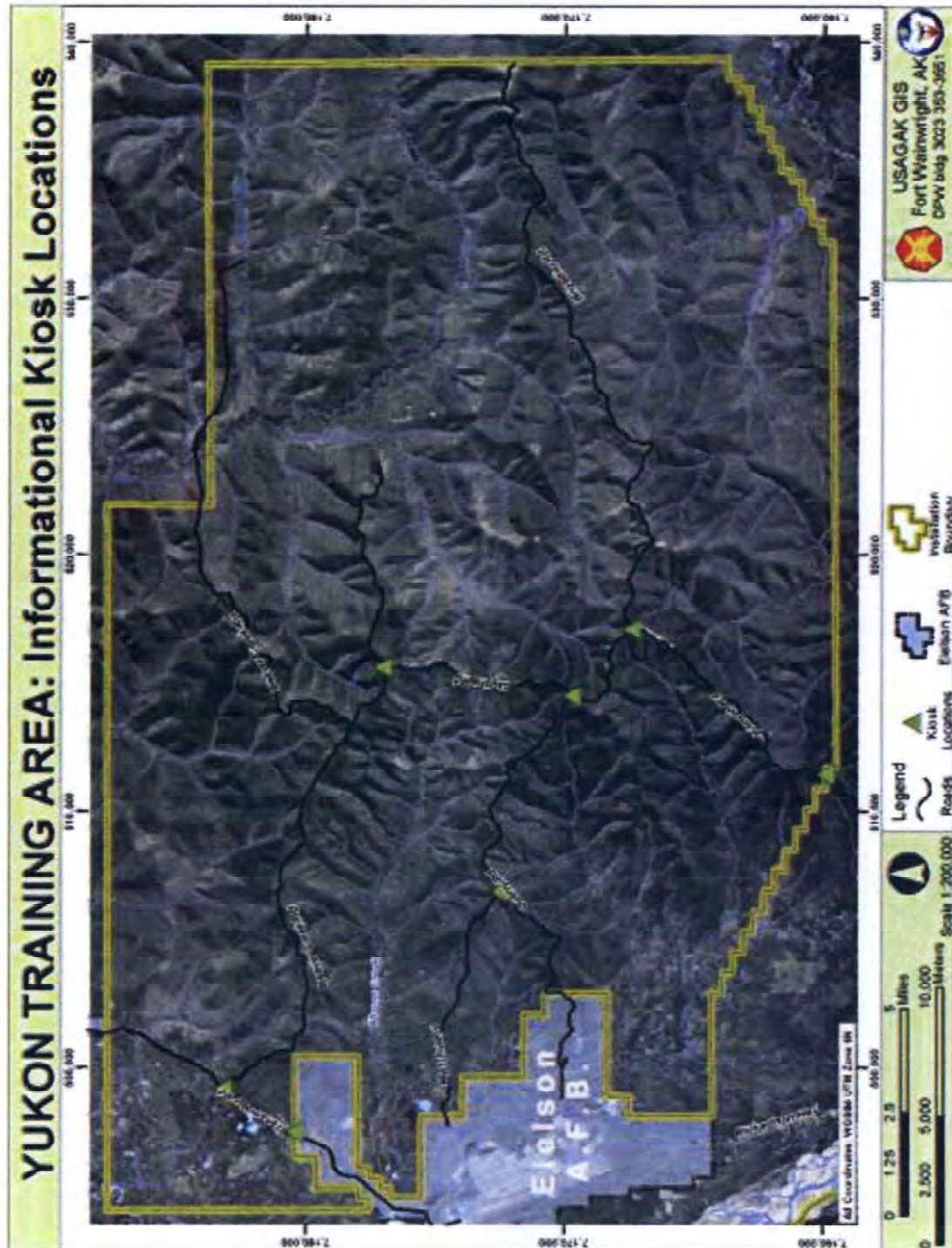


Figure 7. Location of proposed kiosks, YTA

XBD-00104

Latitude:

Longitude: (NAD 27)

Determination: Not Eligible

This site consists of two grey chert flakes, one a probable biface thinning flake, found on the disturbed surface of an apparent material source. This site was found during survey in 1979 and is located northeast of the intersection of Manchu and Quarry Roads. This site lies outside the proposed location for the kiosk at this intersection and no more cultural material has been found in the vicinity during re-investigations in 2005. UTM coordinates for this site are Zone 6, (WGS84).  
No additional action is recommended at this time.

XBD-00264

Latitude: 64° 43' 04"N

Longitude: -146° 40' 17"W (NAD 27)

Determination: Not Eligible

One new prehistoric site was located near to, but outside of, the proposed kiosk location at the intersection of Skyline and Beaver Creek Roads. Site XBD-00264 consists of two pieces of a lithic artifact located adjacent to an existing Remote Threat Emitter. The artifact is symmetrical and bifacially-flaked from gray chert. It is likely the base of a projectile point or point perform, the point-half of which is missing. The base is flat and slightly narrowed relative to the middle portion. The base was found in two pieces about 10 meters southwest of the Remote Threat Emitter tower. No other artifacts were found in the vicinity. The UTM coordinates for the site are: Zone 6, (WGS 84). This site has not yet been evaluated for National Register eligibility and no additional action is recommended at this time.

**Results**

No cultural resources were identified within the seven project areas. Sites XBD-00094, XBD-00104 and XBD-00264 are located outside of the proposed kiosk locations, and the kiosk locations will fall within the already-disturbed areas along the road system. All other previously recorded archaeological sites and historic properties in the Yukon Training Area also fall outside the project area. USAG-AK determined that no historic properties will be affected by the proposed project.



Figure 8. Proposed kiosk location at the intersection of Skyline and Beaver Creek Roads

## 2.7 Moose Creek Fuel Break, YTA

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USAG-AK has proposed to construct a fuel break at the Infantry Platoon Battle Course (IPBC) at Fort Wainwright Army Yukon Training Area (YTA). This project will consist of clearing black spruce on approximately 260 acres north of the Manchu Road in the Moose Creek drainage (Figure 9). The fuel break is intended to minimize impacts associated with fire that can result from military training. The fuel break is designed to mitigate the potential escape of wildfire from the range footprint. In addition, the clearings will give fire fighters an area in which to conduct suppression activities if a fire occurs. This project will also provide Alaska Fire Service (AFS) Personnel with the opportunity to train on fuel break construction and common fire fighting tasks.

The fuel break will be constructed on an existing trail network that divides the area into 4 separate units. Within each unit, approximately 22 polygons, each about 10 acres, will be cleared to initiate a stand conversion from spruce to a less fire prone hardwood species. These polygons will slow the progression of a high intensity crown fire, if one were to occur. This project is located on map quadrangles FAI C1, T. 2 S., R. 3 E. and R. 4 E., and quadrangle XBD C6, T. 2 S., R. 4 E.

### ***Survey and Field Methods***

In the summers of 2002 and 2003 the project area for the Moose Creek fuel break project was investigated by archaeological survey crews, employed by the Center for Environmental Management of Military Lands (CEMML, Colorado State University). These crews were supervised by William Hedman (2002) and Nancy Fichter (2003). These cultural resources surveys were part of a survey for a larger range development project. The entire area of potential effect for the fuel break construction project falls with areas previously surveyed in 2002 and 2003.

Parallel pedestrian transects spaced at 10-20 meters were walked in all areas that were not deemed too wet or too steep ( $>40^\circ$ ) to contain cultural material. Systematic sub-surface testing was undertaken in areas determined to be high probability (e.g., lake margins, ridges, benches adjacent to steeper slopes) during initial review of the proposed project area, and as determined by the supervising archaeologist and field crew leader based on survey findings. Shovel tests were approximately 40cm x 40cm, and were screened through  $\frac{1}{4}$ " hardware cloth. No cultural resources were located within, or near the proposed project area.

### ***Cultural Resources***

There are no known sites located in the vicinity of the proposed project.

### ***Results***

Pedestrian survey and sub-surface testing within the current project area did not identify any cultural resources. All other previously recorded archaeological sites or historic properties in the Yukon Training Area fall outside of the proposed project area. USAG-AK determined that no historic properties will be affected by the proposed project.

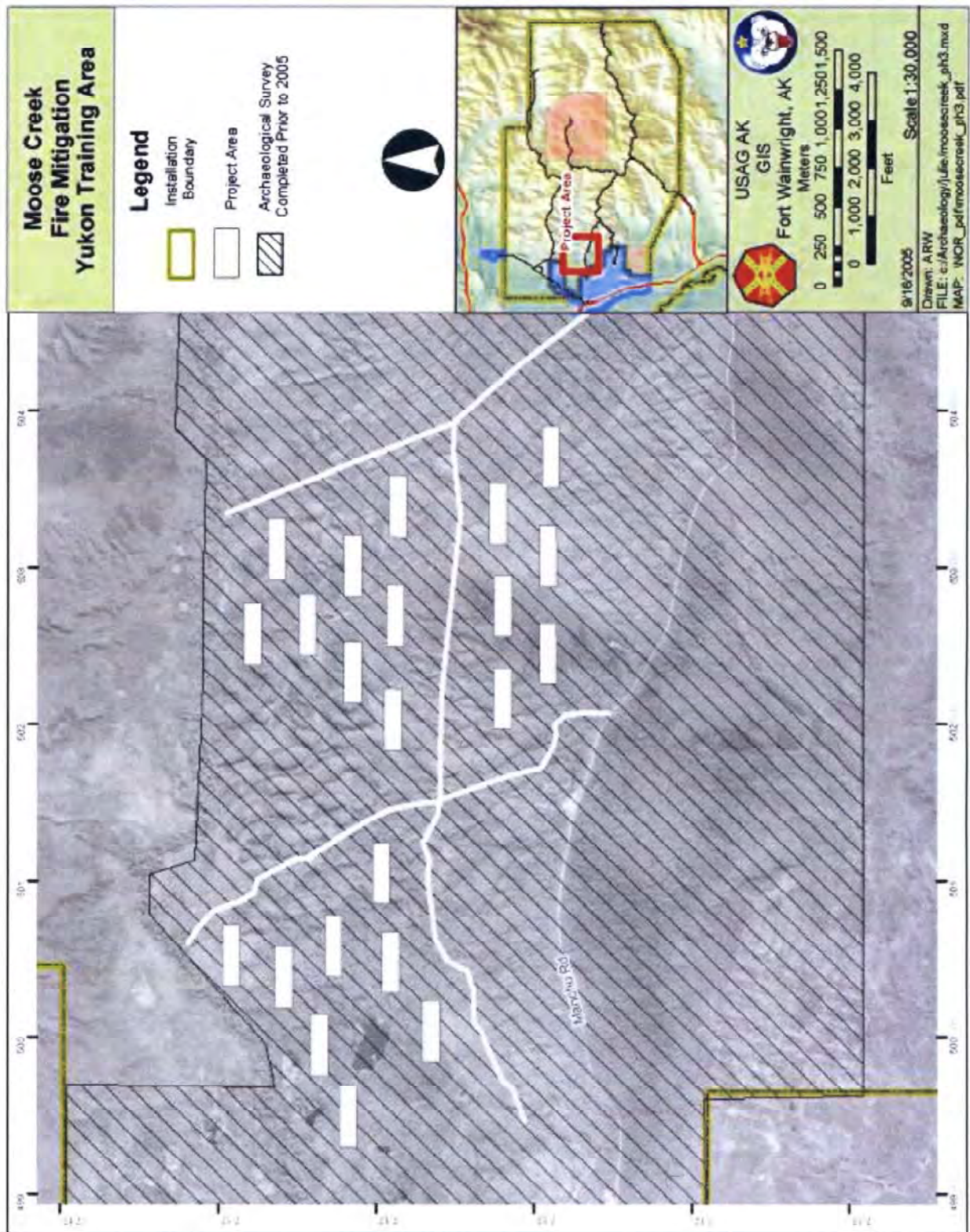


Figure 9. Location of Moose Creek Fuel Break, YTA

## 2.8 Convoy Live Fire Range, YTA

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USAG-AK has proposed to construct a Convoy Live Fire Range in the Yukon Training Area. The purpose of the Convoy Live Fire Range is to simulate enemy contact on a convoy mission. There will be multiple target, or "objective," areas which will represent enemy ambush sites. When the convoy moves through the "kill zone" of an ambush site and is attacked, the convoy commander should direct his or her forces through this area with minimal casualties and then counter attack. This type of range tests the leadership and communication abilities of the convoy commander. It also allows tactical units to practice proper reactions when involved in a convoy ambush. The range will use already existing roads, Skyline Drive and Beaver Creek Road, to access the objective areas. There will be one objective area located along Skyline Drive and four objective areas located along Beaver Creek Road (Figure 11). These objective areas will be cleared of vegetation and targets constructed, lines of sight between targets will be cleared and road maintenance such as spot hardening will be ongoing. The proposed project is located on map quadrangle XBD C6 at: T3S, R5W, Sections 4 and 9; and T2S, R5E, Section 33.

### ***Survey and Field Methods***

In July and August of 2005 the proposed range was pedestrian surveyed by a crew of four to five archaeologists employed by the Center for Environmental Management of Military Lands (CEMML, Colorado State University).

Parallel pedestrian transects spaced at 20 meters or less were walked in all areas that were not deemed too wet or too steep ( $>40^\circ$ ) to contain cultural material. In addition to pedestrian transects, 40cm x 40cm shovel tests were excavated throughout the project area. All excavated materials were screened through  $\frac{1}{4}$ " hardware cloth. Systematic sub-surface testing was undertaken in areas determined to be high probability (e.g., lake margins, ridges, benches adjacent to steeper slopes) during initial review of the proposed project area, and as determined by the supervising archaeologist and field crew leader based on survey findings. None of the shovel tests excavated contained any cultural material.

An area larger than the proposed project footprint was surveyed and extensively shovel tested. Sites XBD-00264 and XBD-00093 were also reinvestigated (see below) as part of this project. No National Register eligible cultural resources were identified during the field inventory. Some modern trash, barbed wire and a wingtip drop tank from an F-80 or T-33 airplane (Griffin, personal communication) were also found in the project area. The wingtip drop tank was likely jettisoned in flight, as that is what they were designed to do, and no other airplane parts were found within the project area. Additionally, a large amount of disturbance as a result of previous military activities, such as clearing and bulldozing, was found within the project area, particularly within 20-50 meters of the roads.

### ***Cultural Resources***

There is one known site within the project area and one site located in the vicinity of the proposed project, both of which have been determined to be not eligible for listing in the National Register of Historic Places.

#### XBD-00264

Latitude:

Longitude: (NAD 27)  
Determination: Not Eligible

This site consists of an isolated find of a gray chert projectile point base found on the surface next to a Remote Threat Emitter on Beaver Creek Road, on a cleared hilltop. The fragment of the projectile point base was found in two pieces, located directly adjacent to each other. The site is near the intersection of Skyline Road and Beaver Creek Road in the Yukon Training Area. UTM coordinates for the site are Zone 6, (WGS 84).



Figure 10. XBD-00264 site area, facing south

#### *Findings*

Pedestrian survey and shovel testing produced a total of only two surface artifacts, both fragments of the same projectile point base. This finding suggests that XMH-00264 is an isolated find. The site area may have been larger at one time, prior to the clearing of the hilltop where the artifact was located. The paucity of cultural material and high degree of disturbance indicates that this site does not contain additional information that is important to our understanding of the prehistory or history of the region and is not eligible for inclusion in the National Register of Historic Places.

#### XBD-00093

Latitude:  
Longitude: (NAD 27)  
Determination: Not Eligible

This site consists of one coarse grained beige chert flake found on the surface of Skyline Drive along a ridge top portion of the road (Holmes 1979). UTM coordinates for the site are Zone 6, (WGS 84).

#### *Findings*

This site was previously determined not eligible for the National Register in 1984. Because of the length of time that has passed since the original evaluation, and its proximity to the project area, this site was re-evaluated during investigations for this project. Pedestrian survey and shovel testing at the site location, as well as the surrounding ridge top area, did not locate any additional cultural materials. This finding

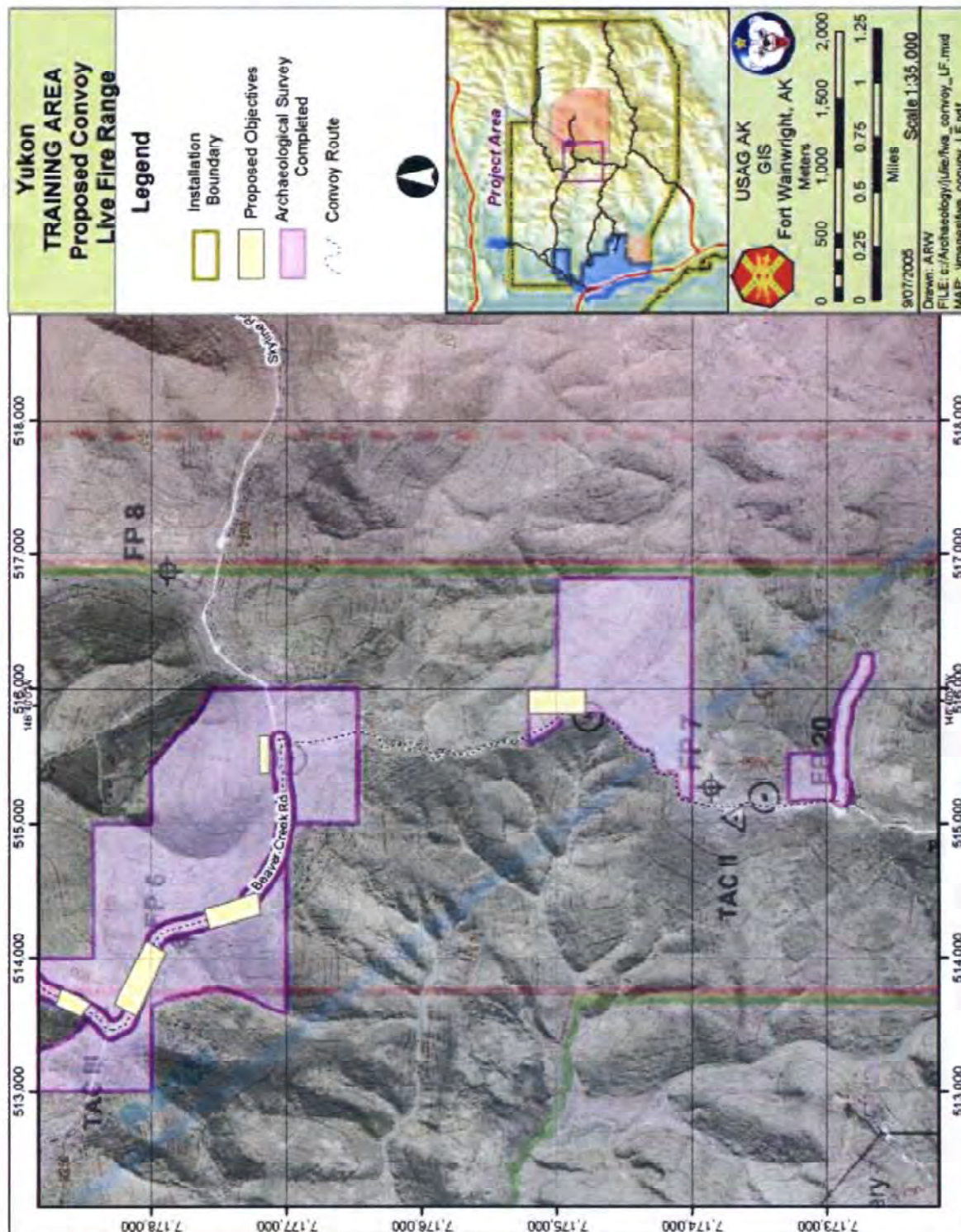


Figure 11. Proposed Convoy Range project area

suggests that XMH-00093 is an isolated find. The site area may have been larger at one time, prior to the clearing of the road and pull-off areas in the vicinity of where the artifact was located. The paucity of cultural material and high degree of disturbance indicates that this site does not contain additional information that is important to our understanding of the prehistory or history of the region and is not eligible for inclusion in the National Register of Historic Places.



*Figure 12. XBD-00093 site area, facing east*

### **Results**

No National Register eligible cultural resources were identified within the Convoy Live Fire Range project area. The one site located within the project area, XBD-00264, has been determined not eligible for inclusion in the National Register of Historic Places. Additionally, site XBD-00093, located in the vicinity of the project area, was re-evaluated and also determined to be not eligible for the National Register. All other previously recorded archaeological sites and historic properties in the Yukon Training Area fall outside the project area. USAG-AK has determined that no historic properties will be affected by the proposed project.

## 2.9 Military Working Dog Facility

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USAG-AK has proposed to construct a military working dog facility at Fort Wainwright, on the main post. The facility will provide adequate housing for the military working dogs as well as support spaces for the Military Working Dog Program. This building will include dog runs, food preparation areas, offices, storage, a multi-purpose/mission briefing room, classroom and emergency medical exam and treatment room. The purpose of this new facility is to provide adequate space for indoor kenneling and a training area for use during the harsh arctic winters at Fort Wainwright (Figure 13). The current facility does not provide the required space to effectively run the program. The project is located on map quadrangle FAI D2, T. 1 S., R. 1 W, Section 12.

### ***Survey and Field Methods***

In April 2005 the Post Archaeologist made a brief site visit to the proposed project area for the working dog facility (Figure 13). Additionally, a literature review was undertaken regarding the Fort Wainwright cantonment area and the possibility for cultural resources to be located within the project area. The site visit, in combination with a literature review and study of aerial photographs all indicate that the proposed project area has been heavily disturbed by military activities. No cultural resources were identified during the site visit or literature review.

### ***Cultural Resources***

There are no known cultural resources located within the area of potential effect for this project.

### ***Results***

A site visit and literature review of the proposed project area did not identify any cultural resources within the area of potential effect. All other previously recorded archaeological sites or historic properties in the cantonment fall outside of the proposed project area. USAG-AK determined that no historic properties will be affected by the proposed project.



Figure 13. Location of proposed military working dog facility

### 3.0 FORT RICHARDSON

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#### *Introduction*

A number of historic properties are located on or near Army lands in Alaska; many of these properties are historic structures and buildings pre-dating or associated with World War II and Cold War era Army activities (see e.g. Hollinger 2001; Shaw 2000). Previous archaeological work at Fort Richardson includes several projects since the late 1970s (Hedman et al. 2003; Reynolds 1996; Shaw 2000; Sheppard et al. 2001; Steele 1979, 1980; Veltre 1978). Of these surveys, only Hedman et al., Steele, Reynolds and Shaw reported the discovery of archaeological sites. Steele's 1980 review identified four sites, all of which contained 20<sup>th</sup> century cabins associated with early homesteading in the area (ANC-00263, ANC-00264, ANC-00265 and ANC-00268; Steele 1980). Reynolds recorded the multi-component historic site ANC-00822 near Ship Creek, in the vicinity of Moose Run Driving Range. Shaw reported approximately 20 sites, the majority of which comprised military related mounds, foxholes and bunkers. Shaw's work identified one prehistoric site, ANC-01175, consisting of a single lithic flake and a small lithic spall. This site is located within a cleared area along the edge of the Elmendorf Moraine (Shaw 2000). Shaw's and Steele's work indicate that moraine features throughout Fort Richardson, oriented roughly northeast-southwest, represent relatively high probability areas for identifying archaeological sites on Fort Richardson.

Additionally, Hedman et al. (2003) relocated an historic era fish camp site near Whitney Point which was used by the Eklutna Industrial (Vocational) School from 1924 to 1946 (the site was originally identified during a 1994 collaborative study conducted by Nancy Yaw Davis and the Dena'ina team; however, no locational details were recorded). In 1924, the Department of the Interior Bureau of Education built and maintained the Eklutna Industrial (Vocational) School. The fish camp site (ANC-01299) was constructed and used by the school to provide training in traditional fishing methods, while also providing fish for the school's subsistence (Yaw Davis 1994). By 1946 the buildings had been condemned and the school was permanently closed (Chandonnet 1979).

A recent floristic study of Fort Richardson was conducted by Livchar et al. (1997), with an appendix description of the Fort's ecological setting. The following description is from *Vegetation of Fort Richardson* (Livchar et al. 1997):

"Fort Richardson falls within the Cook Inlet Lowlands Section of the Coastal Trough Humid Taiga Province of Bailey's Ecoregions of the United States (McNab and Avers 1994). Forests in the Anchorage area closely resemble the Boreal Forest of Interior Alaska, although some understory and tree species occur that are typically found in the Coastal Spruce-Hemlock Forest. Fort Richardson's forests have been described as open, low-growing spruce and closed spruce-hardwood forests by Viereck and Little (1972), and as a lowland spruce-hardwood forest by the Joint Federal-State Land Use Planning Commission (1973). Packee (as quoted in Livchar et al. 1997), in examining Alaska's forest vegetation zones, characterizes the region as an area where white spruce (*Picea glauca*) and Sitka spruce (*Picea sitchensis*) naturally hybridize; balsam poplar (*Populus balsamifera*) and black cottonwood (*Populus trichocarpa*) intergrade; and mountain hemlock (*Tsuga mertensiana*) may form the subalpine forest. Vegetation reflects the transitional nature of the climate between maritime and continental. This maritime climatic influence has resulted in a lower incidence of natural fire than is found in the spruce-hardwood forests of interior Alaska (Gabriel and Tande 1983).

Upland sites on Fort Richardson are dominated by paper birch (*Betula papyrifera*), white spruce, and, on drier sites, quaking aspen (*Populus tremuloides*). Cottonwood and poplar are common in areas bordering principal streams. Black spruce (*Picea mariana*) is the dominant tree in wetter areas and on some well-drained sites. Most bogs are treeless or support stands of stunted black spruce. Grasses, herbs, willows (*Salix* spp.), and alders (*Alnus* spp.) dominate the vegetation in a narrow band along the Inlet and at elevations above 1,500 feet on the Chugach Mountain slopes' (Livchar et al. 1997: appendix)."

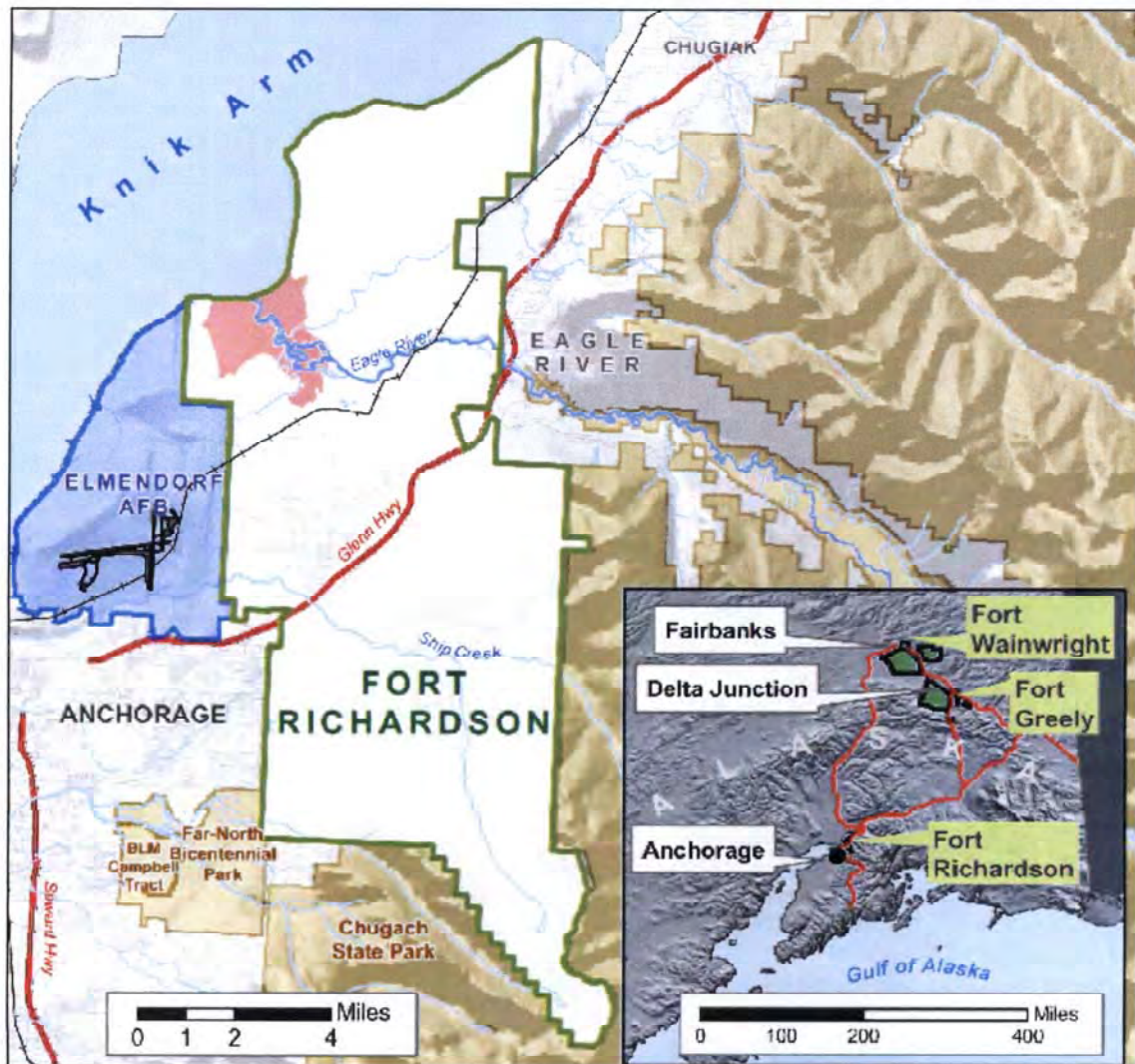


Figure 33. Location of Fort Richardson

### **3.1 Engineer Expressway and Firing Points 7, 8 and 9 Upgrades**

USAG-AK has proposed to upgrade Engineer Expressway, a dirt/gravel road that runs through training areas in the northern portion of Fort Richardson. Additionally, Firing Points 7, 8 and 9, along Engineer Expressway, are also proposed for upgrades (Figure 34). The purpose of upgrades along Engineer Expressway is to improve the existing road and to re-establish hardened road surfaces and drainage features, including crowns, slopes, ditches, water bars and culverts. This will include grading, ditching, installing geotextile and placing fill material. All work will be carried out within 15 meters of the road centerline. Upgrade work at the three firing points will consist of additional clearing and hardening. All three firing points are accessed from Engineer Expressway and have been previously cleared. These projects are located on map quadrangles ANC B8, T15N, R3W, Sections 20, 21, 29, 32 and map quadrangle ANC B7, T15N, R2W, Sections 14, 15, 22 and 23.

#### ***Survey and Inventory***

In July 2005 USAG-AK cultural resources staff reviewed the proposed project and the existing literature on cultural resources within the Fort Richardson cantonment area. In June 2005 a portion of the project area was pedestrian surveyed by a crew of 4-5 archaeologists employed by the Center for Environmental Management of Military Lands (CEMML, Colorado State University). Julie Raymond-Yakoubian, was the supervising archaeologist for this project. Survey work within the project area was also undertaken in the summers of 2002 and 2003 by CEMML archaeologists (supervised by William Hedman and Kirsten Andersen, respectively).

Parallel pedestrian transects spaced at 20 meters or less were walked in all areas that were not deemed too wet or too steep ( $>40^\circ$ ) to contain cultural material. Systematic sub-surface testing was undertaken in areas determined to be high probability (e.g., lake margins, ridges, benches adjacent to steeper slopes) during initial review of the proposed project area, and as determined by the supervising archaeologist and field crew leader based on survey findings. In addition to pedestrian transects, 40cm x 40cm shovel tests were excavated in the project area. None of the shovel tests excavated throughout the project area contained any cultural material.

The entire length of Engineer Expressway has been archaeologically surveyed for at least 100 meters on both sides and, for most of its length, for a kilometer on both sides. The area adjacent to the road (for at least 100 meters) around Firing Points 7, 8 and 9 has also been archaeologically surveyed. These three firing points have been previously cleared and disturbed and proposed upgrades will involve re-clearing and earthwork within the firing point boundaries.

#### ***Cultural Resources***

There are no known cultural resources located in the vicinity of the proposed projects.

#### ***Results***

After a review of the proposed projects USAG-AK has determined that there are no historic properties located within the project areas. All other previously recorded archaeological sites or historic properties at Fort Richardson fall outside of the proposed project areas. USAG-AK has determined that no historic properties will be affected by the proposed projects.



### **3.2 Ship Creek, Davis Highway and Otter Creek Gravel Pit Expansions**

USAG-AK has proposed to expand three existing gravel pits at Fort Richardson; the Ship Creek, Otter Creek and Davis Highway gravel pits (Figures 35-37). These gravel pits will be expanded over time, and no exact dimensions for the expansions are proposed here. The expansions will not, however, expand beyond the 2005 survey areas in any circumstances. This would include any access routes, stockpiling areas and actual gravel removal areas. The purpose of these expansions is to obtain gravel for construction projects throughout Fort Richardson. These projects are located on map quadrangles ANC A8, T13N, R2W, Sections 8 and 9 (Ship Creek pit); ANC B8, T14N, R3W, Section 24 (Otter Creek pit); ANC B8 T14N, R2W, Section 28 (Davis Highway pit).

#### ***Surveys and Inventory***

In June 2005 USAG-AK cultural resources staff reviewed the proposed project and the existing literature on cultural resources within the boundaries of Fort Richardson. The project areas were each pedestrian surveyed by a crew of 4-5 archaeologists employed by the Center for Environmental Management of Military Lands (CEMML, Colorado State University

Parallel pedestrian transects spaced at 20 meters or less were walked in all areas that were not deemed too wet or too steep ( $>40^\circ$ ) to contain cultural material. Systematic sub-surface testing was undertaken in areas determined to be high probability (e.g., lake margins, ridges, benches adjacent to steeper slopes) during initial review of the proposed project area, and as determined by the supervising archaeologist and field crew leader based on survey findings. In addition to pedestrian transects, 40cm x 40cm shovel tests were excavated throughout the project area. None of the shovel tests excavated in the project area contained any cultural material.

The area surveyed around the existing Ship Creek gravel pit was generally a spruce forest with scattered birch. An access road for Moose Run Golf Course (ANC-01335, determined not eligible for the National Register in 2003) runs approximately north-south through the surveyed area to the west of the gravel pit. The golf course itself is located to the west and north, and to the south on the opposite side of Arctic Valley Road. A large area to the west and northwest of the existing gravel pit has been previously disturbed and cleared and vegetation there consisted of a very close-growing second growth spruce forest with alder. Various types of military debris were found throughout the forest here. A large area to the east of the existing gravel pit is low and wet. To the north of the pit the surveyed area gradually slopes up to the north towards the Moose Run Golf Course. Shovel testing was done primarily in this area, all with negative results.

The area surveyed around the existing Otter Creek gravel pit was a mixed spruce and birch forest with thick undergrowth of berry bushes and mosses. A large portion of the survey area to the west and northwest of the existing pit was flooded by a large beaver dam on a small creek. Shovel testing was conducted in dry areas away from the beaver-created pond and all shovel tests were negative.

The area surveyed around the existing Davis Highway gravel pit consisted of a mixed spruce and birch forest. Much of the area surveyed had been previously disturbed. The surveyed area generally sloped up towards the north. Shovel testing throughout the project area was negative, with the exception of one shovel test that encountered an isolated piece of military debris (a hinge). The Kermit Roosevelt Memorial Cemetery (ANC-00013) is located along the Davis Highway, to the west of the existing gravel pit. The cemetery is far outside of the proposed project area and will not be impacted by expansion of this gravel pit. A portion of the Eklutna Power Plant Transmission Line (ANC-01330) is also located outside of the project area, but in the vicinity of the Davis Highway gravel pit. The transmission line was found not eligible for the National Register on 10/4/02.

### Cultural Resources

There are no known cultural resources located within the proposed project areas.

### Results

After a review of the proposed projects USAG-AK has determined that there are no historic properties located within the project areas. Additionally, all other previously recorded archaeological sites or historic properties at Fort Richardson fall outside of the proposed project areas. USAG-AK has determined that no historic properties will be affected by the proposed projects.

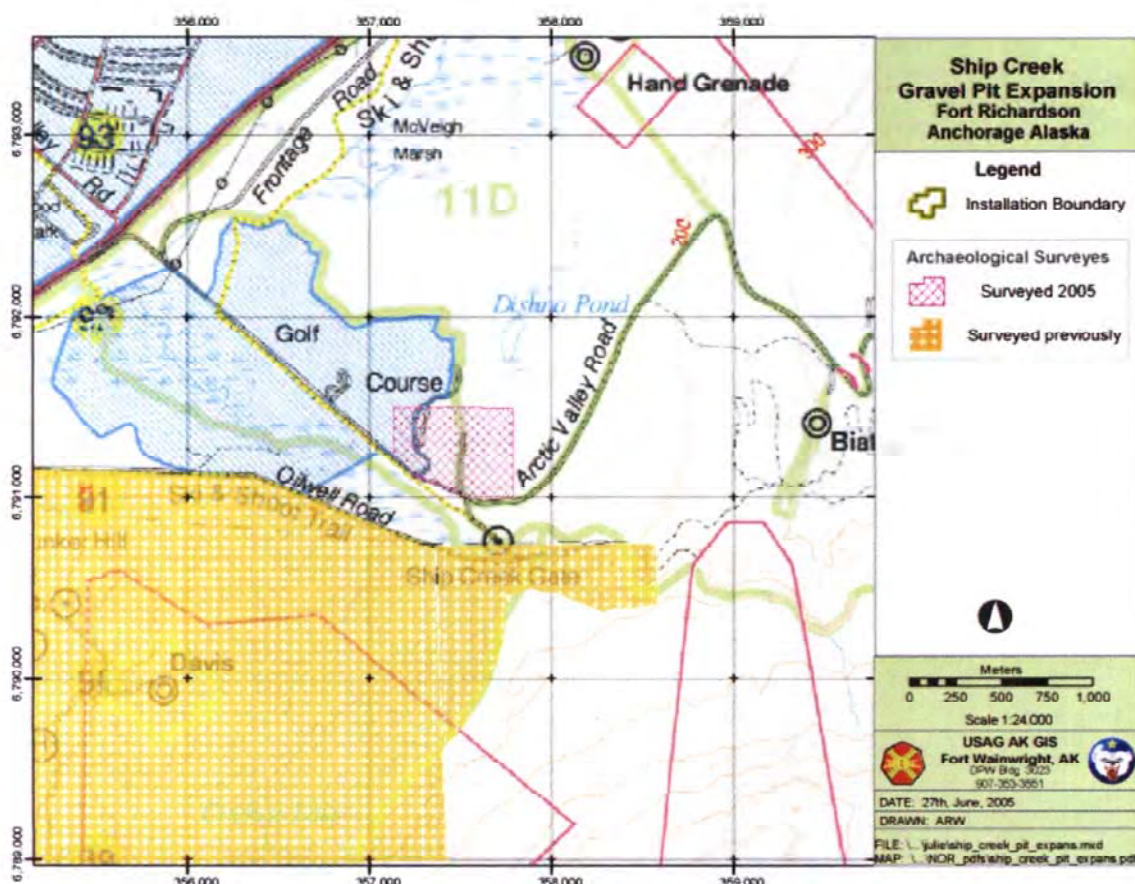


Figure 35. Ship Creek gravel pit expansion (surveyed 2005)

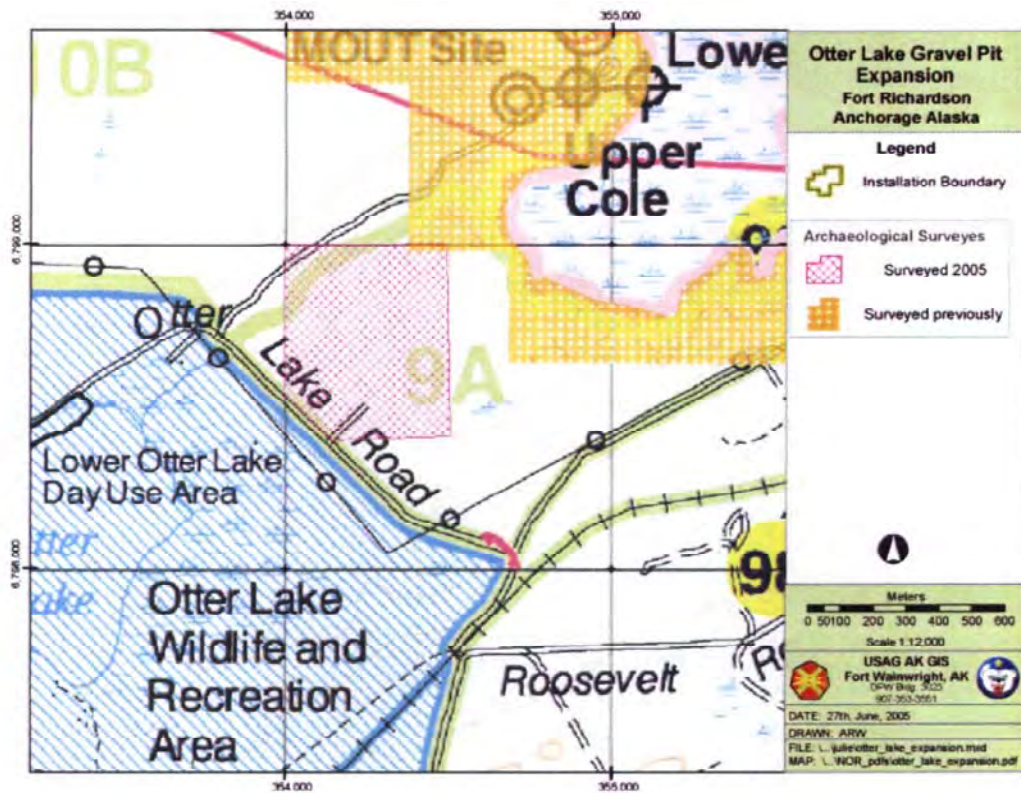


Figure 36. Otter Lake gravel pit expansion (surveyed 2005)

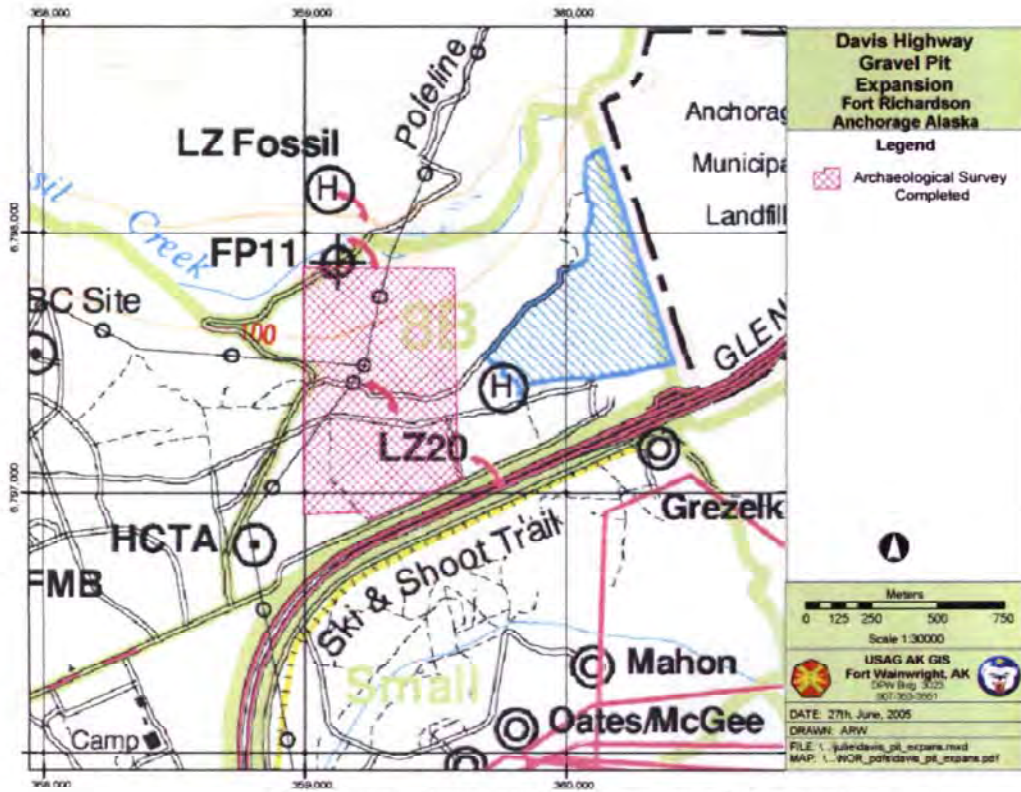


Figure 37. Davis Highway gravel pit expansion

### 3.3 Military Working Dog Facility

USAG-AK has proposed to construct a new military working dog facility at Fort Richardson (Figure 38). The proposed dog facility will provide adequate housing for the military working dogs as well as support spaces for the Military Working Dog Program. This building will be 2,435 square feet and will include dog runs, food preparation areas, offices, storage, a multi-purpose/mission briefing room, classroom and emergency medical exam and treatment room. The purpose of this new facility is to provide adequate space for indoor kenneling and a training area for use during the cold winters at Fort Richardson. The current facility does not provide the required space to effectively run the program. This project is located on map quadrangle ANC B8, T. 14 N., R. 2 W., Section 32.

#### ***Survey and Inventory***

In June 2005 USAG-AK cultural resources staff reviewed the proposed project and the existing literature on cultural resources within the Fort Richardson cantonment area. The site of the proposed working dog facility was visited and photographs were taken. This area appears to have been previously cleared and partially developed as a result of construction activities within the cantonment.

#### ***Cultural Resources***

There are no known cultural resources located within the proposed project area.

#### ***Results***

After a review of the proposed project USAG-AK has determined that there are no historic properties located within the project area. All other previously recorded archaeological sites or historic properties in the Fort Richardson cantonment area fall outside of the proposed project area. USAG-AK has determined that no historic properties will be affected by the proposed project.

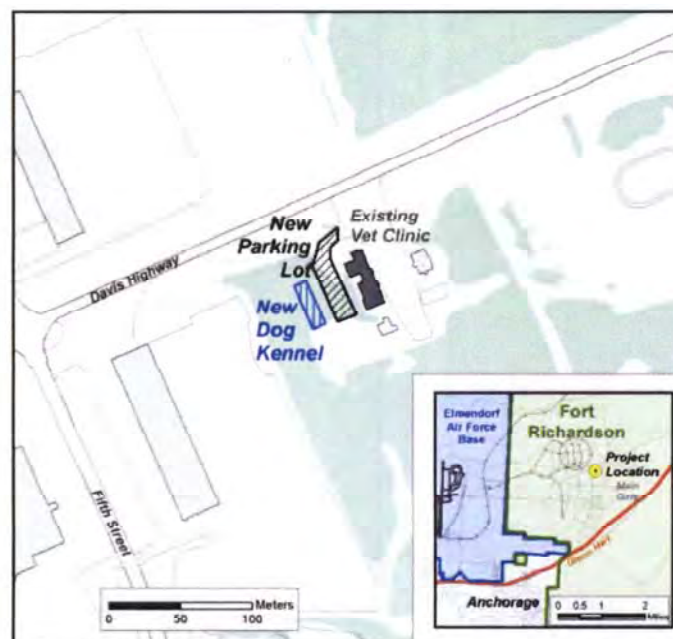


Figure 38. Military Working Dog facility

### 3.4 Clunie Lake Road Upgrades

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USAG-AK has proposed to upgrade Clunie Lake Road, a dirt/gravel road that runs through training areas in the eastern portion of Fort Richardson (Figure 39). The purpose of upgrades along Clunie Lake Road is to improve the existing road and to re-establish hardened road surfaces and drainage features including crowns, slopes, ditches, water bars and culverts. This will include grading, ditching, installing geotextile and placing fill material. This road is currently characterized by poor drainage, insufficient and inappropriate road base and cap material, rutting and large erosion features, which impede access. No road widening will occur and all work will be confined to hardened surfaces. This project is located on map quadrangles ANC B7, T15N, R2W, Sections 22, 27 and 34; ANC B8, T15N, R2W, Sections 33 and 28.

#### ***Surveys and Inventory***

In June 2005 USAG-AK cultural resources staff reviewed the proposed project and the existing literature on cultural resources within the Fort Richardson cantonment area. In June 2005 a portion of the project area was pedestrian surveyed by a crew of 4-5 archaeologists employed by the Center for Environmental Management of Military Lands (CEMML, Colorado State University). Julie Raymond-Yakoubian, was the supervising archaeologist for this project. Survey work within the project area was also undertaken in the summers of 2002 and 2003 by CEMML archaeologists (supervised by William Hedman and Kirsten Andersen, respectively).

Parallel pedestrian transects spaced at 20 meters or less were walked in all areas that were not deemed too wet or too steep ( $>40^\circ$ ) to contain cultural material. Systematic sub-surface testing was undertaken in areas determined to be high probability (e.g., lake margins, ridges, benches adjacent to steeper slopes) during initial review of the proposed project area, and as determined by the supervising archaeologist and field crew leader based on survey findings. In addition to pedestrian transects, 40cm x 40cm shovel tests were excavated in the project area. None of the shovel tests excavated throughout the project area contained any cultural material.

The entire length of Clunie Lake Road has been archaeologically surveyed for at least 100 meters on both sides, with one exception. From the "four corners" intersection for approximately 500 meters south, along the east side of the road, has not been archaeologically surveyed. This small portion was not surveyed due to access issues. All upgrade activities here, as along the rest of the road, will be confined to hardened surfaces and no widening will occur.

#### ***Cultural Resources***

No National Register eligible cultural resources were located during any of the survey activities in 2002, 2003 or 2005. AHRs maps at the Office of History and Archaeology indicate that a segment of the Iditarod National Historic Trail may have run through a portion of the project area. This segment of the trail currently has no AHRs number (personal communication with Mary Hermon, 12/28/05). The possible route of the trail found on AHRs maps differs from that of Clunie Lake Road. Additionally, no evidence of the trail was noted through pedestrian survey or shovel testing.

#### ***Results***

Pedestrian survey and shovel testing throughout the project area did not identify any National Register eligible cultural resources along, or in the vicinity of, Bulldog Trail.

USAG-AK has determined that no historic properties will be affected by the proposed project.

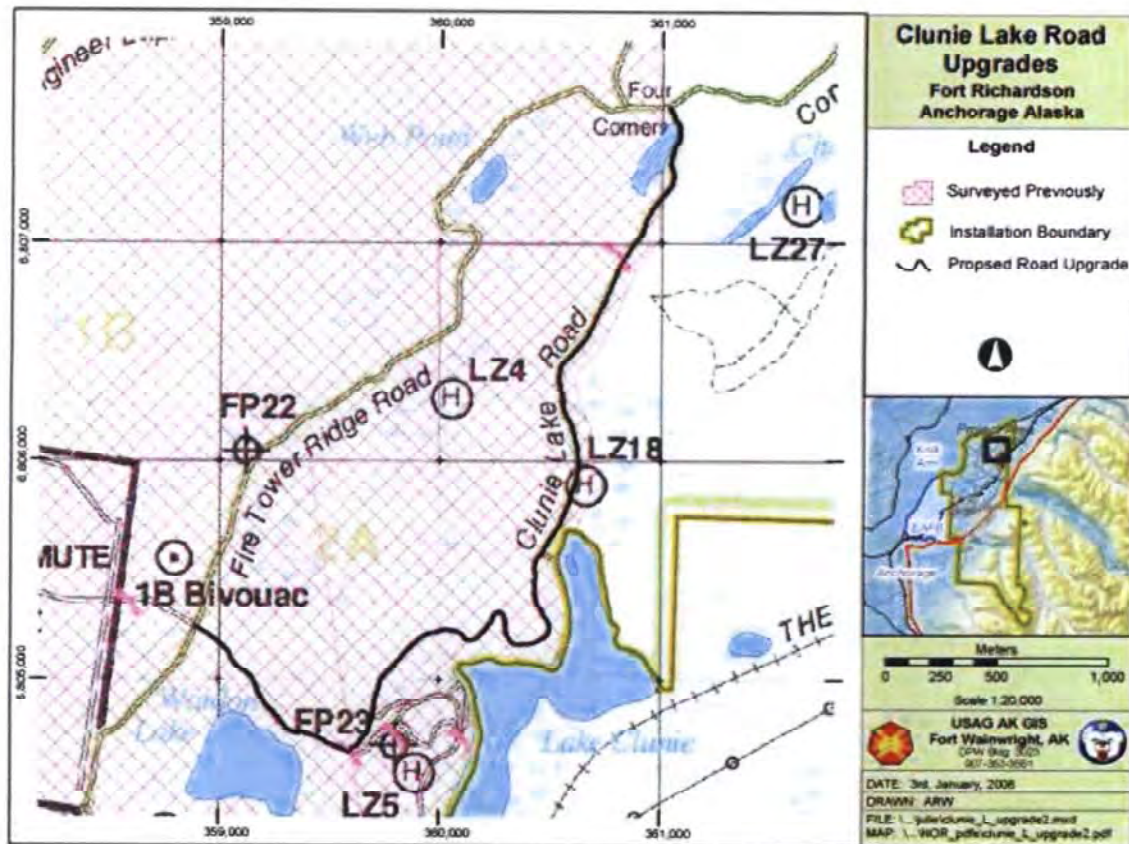


Figure 39. Project area map showing Clunie Lake Road



Figure 40. Backfilling a shovel test along Clunie Lake Road

### 3.5 Bulldog Trail Upgrades

USAG-AK has proposed to upgrade Bulldog Trail, a dirt/gravel road that runs through training areas in the southeastern portion of Fort Richardson. The trail upgrades will begin at the Davis Range and run south to the installation boundary (Figure 41). The purpose of upgrades along Bulldog Trail is to improve the existing road and to establish hardened road surfaces and drainage features, including crowns, slopes, ditches, water bars and culverts. This will include grading, ditching, installing geotextile and placing fill material. All activities will be confined to hardened surfaces. Upgrading the existing trail will allow for better access to areas used for troop training activities. This project is located on map quadrangle ANC A8, T13N, R2W, Sections 18, 19, 30 and 31.

#### ***Survey and Field Methods***

In May 2005 USAG-AK cultural resources staff reviewed the proposed project and the existing literature on cultural resources within the Fort Richardson training areas. In June 2005 the southern portion of the project area was pedestrian surveyed by a crew of 4-5 archaeologists employed by the Center for Environmental Management of Military Lands (CEMML, Colorado State University). Julie Raymond-Yakoubian, was the supervising archaeologist for this project. Survey work within the northern portion of the project area was also undertaken in the summers of 2002 and 2003 by CEMML archaeologists (supervised by William Hedman and Kirsten Andersen, respectively).

Parallel pedestrian transects spaced at 20 meters or less were walked in all areas that were not deemed too wet or too steep ( $>40^\circ$ ) to contain cultural material. Systematic sub-surface testing was undertaken in areas determined to be high probability (e.g., lake margins, ridges, benches adjacent to steeper slopes) during initial review of the proposed project area, and as determined by the supervising archaeologist and field crew leader based on survey findings. In addition to pedestrian transects, 40cm x 40cm shovel tests were excavated in the project area.

The entire length of the proposed Bulldog Trail upgrades project has been archaeologically surveyed for at least 100 meters on both sides. For much of its length, several hundred meters or more have been surveyed on each side.

#### ***Cultural Resources***

There are no known National Register eligible cultural resources located within the proposed project area. Additionally, pedestrian survey and shovel testing throughout the project area did not identify any National Register eligible cultural resources along, or in the vicinity of, Bulldog Trail. No National Register eligible cultural resources were located during any of the survey activities in 2002, 2003 or 2005. AHRs maps at the Office of History and Archaeology indicate that a segment of the Iditarod National Historic Trail may have run through a portion of the project area. This segment of the trail currently has no AHRs number (personal communication with Mary Hermon, 12/28/05). The possible route of the trail found on AHRs maps differs from that of Bulldog Trail. Additionally, no evidence of the trail was noted through pedestrian survey or shovel testing.

In 2003, CEMML archaeologists identified the remains of two log structures in the vicinity of Bulldog Trail (Robertson et al. 2004:14-18). Both of the structures were clearly modern and hastily and incompletely constructed with logs that still had bark attached. These structures were likely built as part of troop training exercises. Numerous fox

holes and other military training features were located in the vicinity of one of the structures, as well as throughout the entire project area.

### Results

After a review of the proposed projects USAG-AK has determined that there are no historic properties located within the project areas. Additionally, all other previously recorded archaeological sites or historic properties at Fort Richardson fall outside of the proposed project areas. USAG-AK has determined that no historic properties will be affected by the proposed projects.

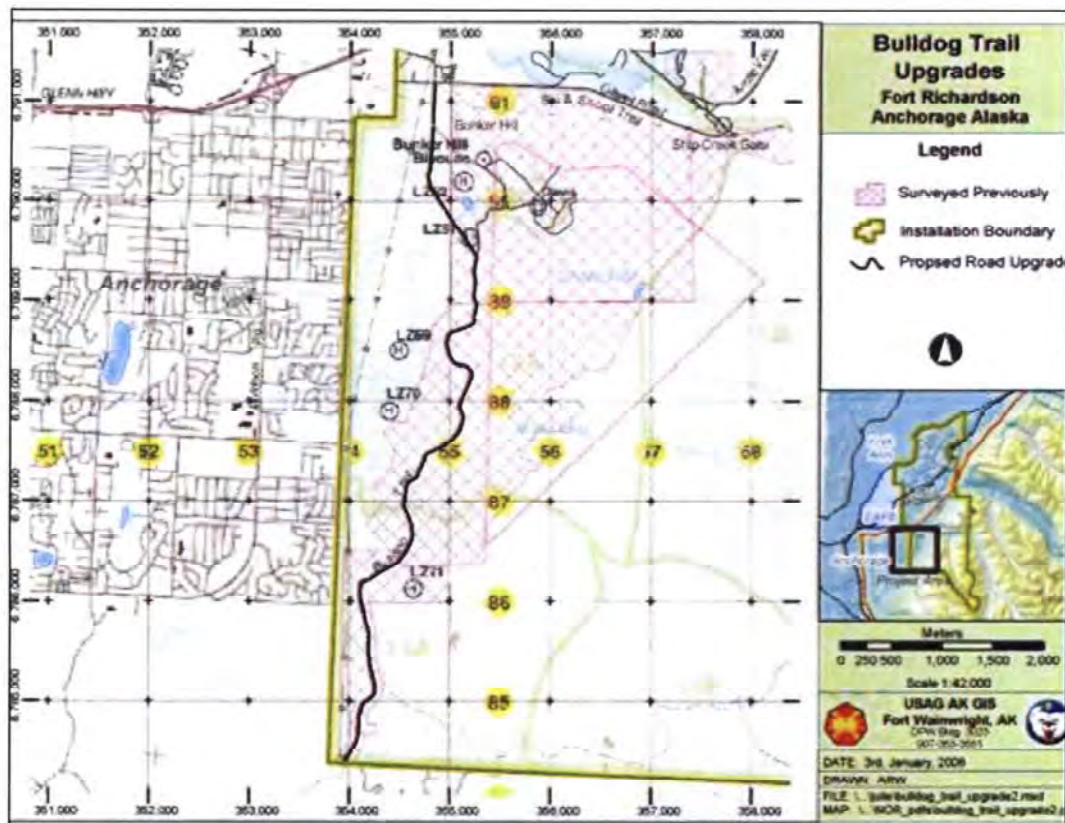


Figure 41. Project area map showing Bulldog Trail



Figure 42. General view of project area, along Bulldog Trail

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