



Bureau of Land Management

Anchorage Field Office
6881 Abbott Loop Road
Anchorage, AK 99507
<http://www.anchorage.ak.blm.gov>

Environmental Assessment
Water Vault, Site Right-of-Way
Applicant: Municipality of Anchorage, Anchorage Water and Wastewater Utility
Case File Number: AA-86851
AK-040-07-EA-032



Location:
N¹/₂ SW¹/₄, Section 3
T. 12 N., R. 3 W., Seward Meridian
Campbell Tract Facility

Prepared By:
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Realty Specialist
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I. INTRODUCTION

The pressure in the water distribution lines to the communities surrounding the Bureau of Land Management's Campbell Tract Facility in Anchorage, Alaska is insufficient to meet the communities' needs. After installation of a new water main along Abbott Loop Road, the western boundary of Campbell Tract, the Anchorage Water and Wastewater Utility determined that with the installation of a pressure relief valve, the new water main could provide increased water flow to the distribution lines and alleviate the water pressure problem in the local communities. The pressure relieve valve is of such a scale that it needs to be housed in its own structure. The only public land available to accommodate the structure and meet system design specifications is Campbell Tract.

In addition, the Bureau of Land Management has requested that the Anchorage Water and Wastewater Utility provide water to the administrative, maintenance, warehouse and Science Center complexes on Campbell Tract. The additional water draw by the Campbell Tract complexes will further undermine the utility's ability to provide adequate water to surrounding communities and its ability to provide adequate water for fire suppression in those communities.

A. Land Status:

Campbell Tract is a 730-acre parcel of Federal public land on the southeastern edge of the city of Anchorage, Alaska withdrawn from the public domain for administrative use by the Bureau of Land Management, *Public Land Order 7471*, dated 2/11/2002.

B. Relationship to statutes, regulations, policies, plans or other environmental analysis:

Pursuant to Section 501 (a)(1) of the Federal Land Policy and Management Act of 1976, the Secretary of Interior, through the Bureau of Land Management, is authorized to grant, issue or renew a right-of-way for distribution of water.

Although an application for use of the public domain is typically denied where the applicant, in this case the Municipality of Anchorage, owns adequate land to meet its own need, *Janet Read, BLM Case file No: AA-081642*, Campbell Tract is the only available public land in the area that meets system design specifications for installation of the pressure relief valve.

C. Conformance with Land Use Plan:

Installation of the pressure relieve valve on Campbell Tract is in conformance with BLM's Campbell Tract management plan entitled: *Public Use and Resource Management on the Bureau of Land Management Campbell Tract Facility*, dated June 1988:

Limit utility corridors and other rights-of-way to alignments where any impacts on existing natural conditions can be avoided or corrected.
Primarily limit these alignments to previously disturbed areas.

[Part IV: The Management Program, Paragraph D.
1. Action OR-1: Rights-of-way]

Further, installation of the Pressure Relief Valve Station on Campbell Tract is in conformance with the Southcentral Management Framework Plan (MFP), dated March 1980. Lands Objective Number L-1 of the MFP states that the BLM will”

.... satisfy state and local government needs as well as public and/or private demonstrated needs for land as they arise.

II. PURPOSE AND NEED

The water pressure of the domestic water supply, including that necessary for fire suppression, is inadequate in the communities surrounding Campbell Tract. The Anchorage Water and Wastewater Utility recently installed a new water main along the western boundary of Campbell Tract. The utility has determined that with the addition of a pressure relief valve, the water distribution system to the local communities could be connected to the new water main thereby alleviating the water pressure problem.

Campbell Tract is the only public land in the area that would meet the utility’s water distribution specifications for installation of the pressure relief valve. The utility has applied for a right-of-way for installation of a Pressure Relieve Valve Station on Campbell Tract.

III. PROPOSED ACTION AND ALTERNATIVE

A. Proposed Action:

The Anchorage Water and Wastewater Utility is proposing to install water distribution lines, construct a Pressure Relief Valve Station, and develop an access road to a Pressure Relief Station on Campbell Tract. The station will consist of a 50’x 50’ cement pad, a 12’x16’x 10’ building and a 10’ x 40’ access road. The road will be gravel and built to the north, off the Campbell Tract entrance road. The pipeline right-of-way for the water distribution lines will be from 50 to 75 feet long and 30 feet wide. The disturbed area will be re-vegetated with BLM-approved native plants and materials in an effort to restore the ara and to screen the station from public view. Additionally, the building will be painted in a neutral color so that it blends in with the surrounding plant life. The building will house the pressure relief valve.

A pressure relief valve is a valve designed to automatically reduce a higher inlet pressure to a lower constant outlet pressure regardless of fluctuating flow rates and/or varying inlet pressure. The pressure relief valve will be housed in a small building and will be connected to the new water main at the intersection of Campbell Tract’s entrance with Abbott Loop Road. The water pressure in the

new water main is approximately 250 psi. The pressure relief valve will reduce the water pressure to 70-80 psi to serve the existing water distribution system in the area.

Equipment used to construct the facility and install the pipelines will include a small bulldozer, a front-end loader and a small compacter. Small-scale construction equipment will be used to lessen site disturbance.

Vegetation and trees will be removed to accommodate construction of the road and the Pressure Relieve Valve Station and installation of the distribution lines. Felled trees will be trimmed, cut in 8-foot lengths, and stacked for use at Campbell Tract's Bio Mass Facility.

The contractor will strive to ensure that all construction vehicles carry no invasive, non-native plants by washing the tires and the undercarriage of any vehicle not currently already in the construction area.

It is anticipated that .067 of an acre of land ($((50' \times 50' = 2,500 \text{ square feet}) + (40' \times 10' = 400 \text{ square feet})) = 5,150 \text{ square feet} / 43,560 \text{ square feet} = .067 \text{ acres}$) will be permanently disturbed with development of the Pressure Relieve Valve Station and the access road. It is further anticipated that from .034 ($50 \times 30 = 1,500 \text{ square feet} / 43,560 \text{ square feet} = .034 \text{ acres}$) to .05 acres ($75' \times 30' = 2,250 \text{ square feet} / 43,560 \text{ square feet} = .051 \text{ acres}$) will be disturbed and subsequently re-vegetated with installation of the water distribution lines. The total area affected by the right-of-way will be between .10 acres and .12 acres.

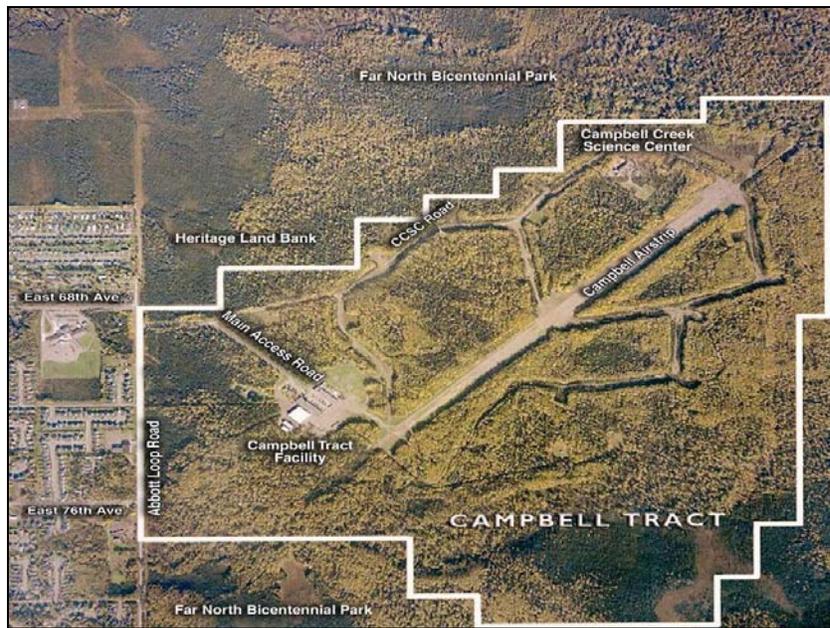


Figure 1 Campbell Tract

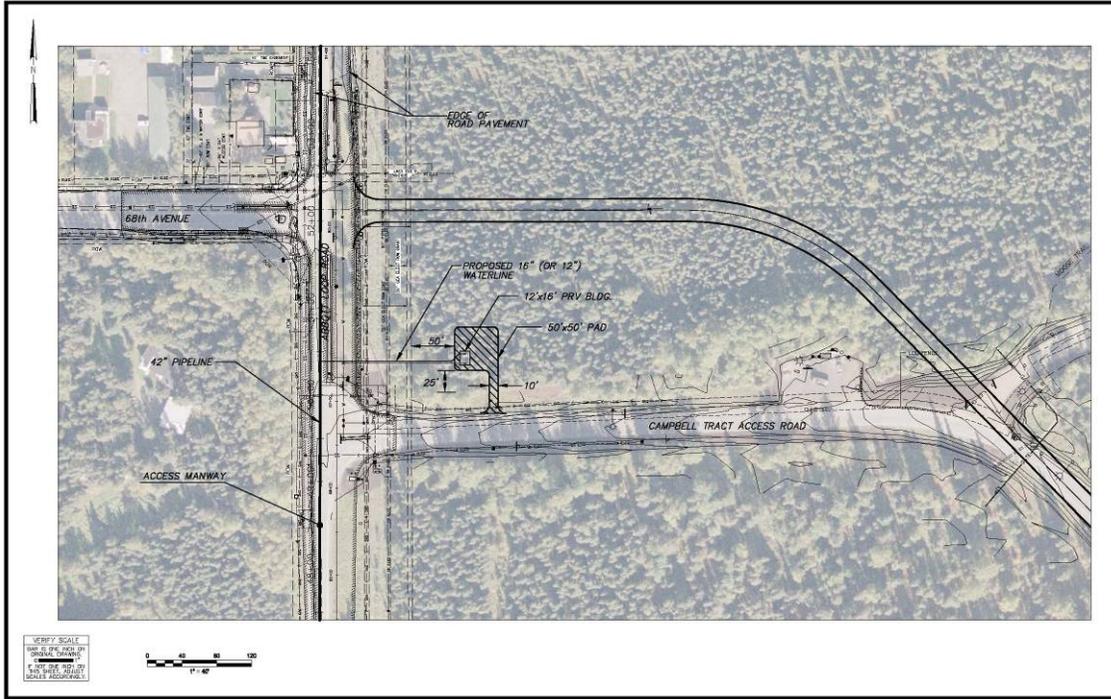


Figure 2 Proposed Pressure Relieve Valve Station Site

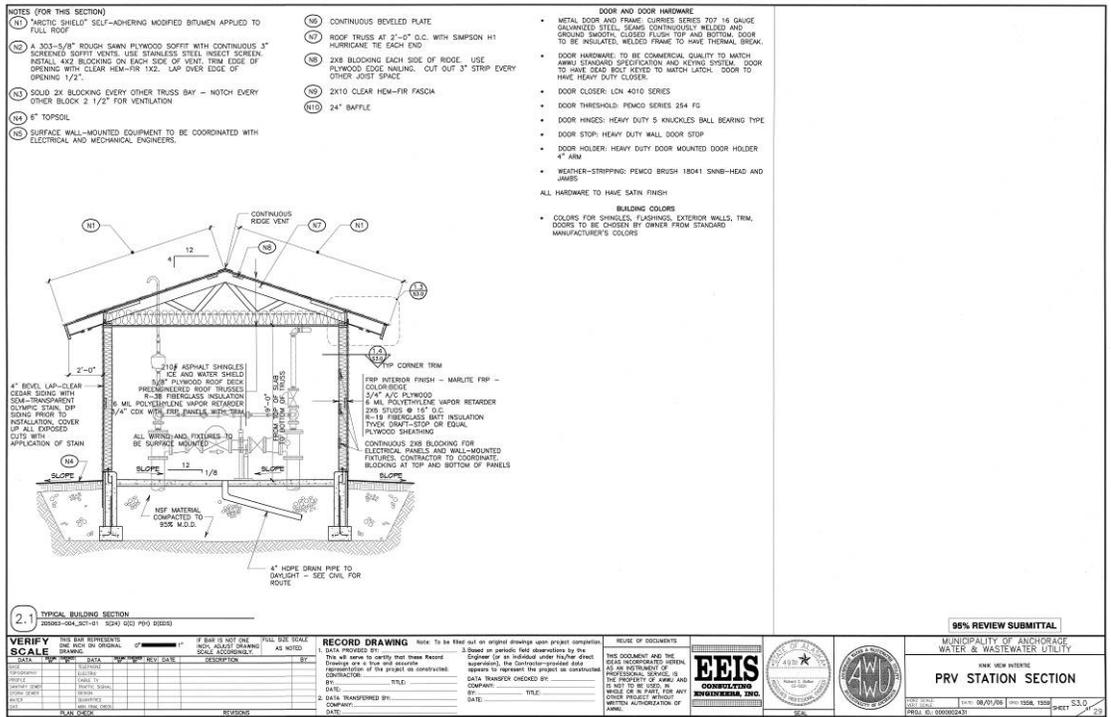


Figure 3 Proposed Pressure Relieve Valve Station

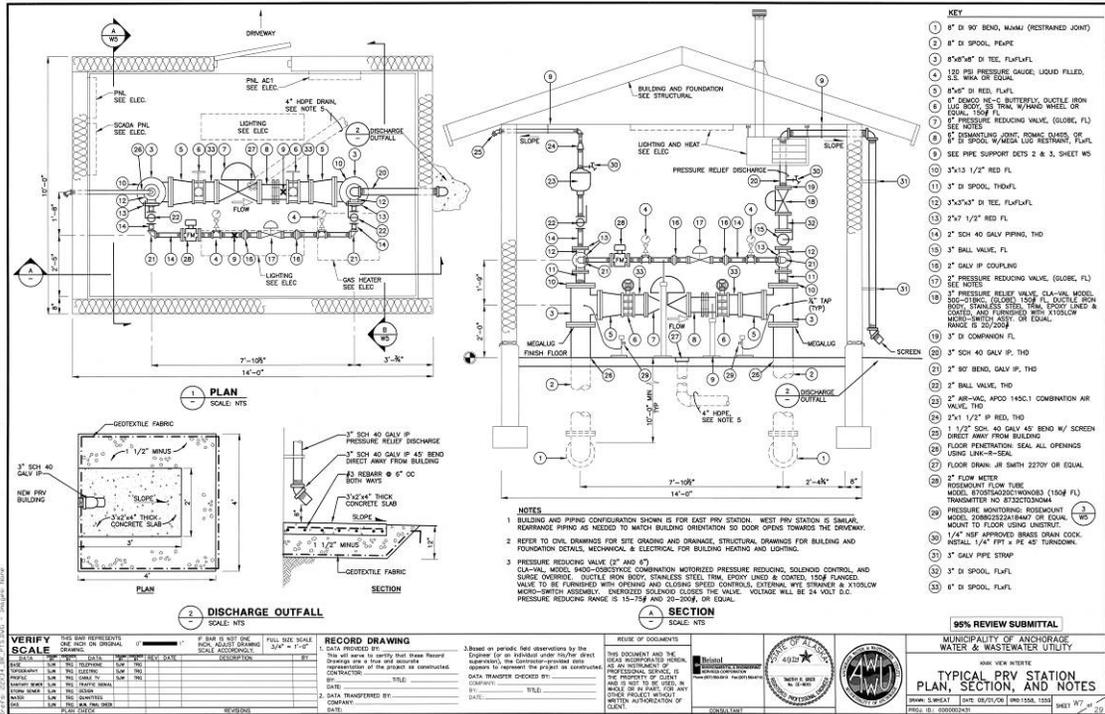


Figure 4 Pressure Relieve Valve Station Detail

B. No Action Alternative:

Under this alternative, the Pressure Relieve Valve Station would not be constructed on Campbell Tract. Further, it is unlikely that a Pressure Relieve Valve Station would be constructed in the surrounding area, as there is no other land available to accommodate the development. Consequently, water service to the surrounding communities may remain inadequate.

III. AFFECTED ENVIRONMENT

A. Critical Elements of the human environment:

1. The following critical elements of the human environment have been analyzed and are either not present or will not be affected by the Proposed Action or the No Action Alternative:

- Air Quality
- Areas of Critical Environmental Concern
- Environmental Justice
- Farmlands (Prime or Unique)
- Flood Plains
- Native American Religious Concerns
- Water Quality (Surface/Ground)
- Wetlands/Riparian Zones
- Wild and Scenic Rivers
- Wilderness

Cultural Resources:

The Abbott Loop road right-of-way and the right-of-way area for the gas line along the road right-of-way have been previously inspected for cultural resources. Both rights-of-way are along the western boundary of Campbell Tract. No cultural resources were observed. The project area is approximately 50' outside of the gas line right-of-way on Campbell Tract. The discovery of cultural resources in the project area is not anticipated.

Threatened & Endangered Species:

There is no reason to believe that:

1. an endangered or a threatened species is present in the area affected by the proposed action;
2. implementation of the proposed action will jeopardize the continued existence of an endangered or threatened species;
3. implementation of the proposed action will result in the destruction or adverse modification of critical habitat of such species;
4. implementation of the proposed action will jeopardize the continued existence of any species proposed to be listed as endangered or threatened;
5. implementation of the proposed action will result in destruction or adverse modification of critical habitat proposed to be designated for such species;

therefore, no consultation with the U.S. Fish and Wildlife Service is considered necessary pursuant to Section 7 of the Endangered Species Act of 1973, 16 U.S.C. §1536.

Subsistence:

The Proposed Action occurs on Federal public lands as defined in ANILCA § 102(3) and falls under the regulatory authority of the Federal Subsistence Board. Campbell Tract is in the Anchorage Management Area and Game Management Unit 14C.b. Campbell Tract is closed to the subsistence taking of wildlife in accordance with the Subsistence Management Regulations for the harvest of Wildlife on Public Lands in Alaska. Subsistence use of fisheries is unaffected by the Proposed Action.

The Proposed Action will not significantly restrict Federal subsistence uses, decrease the abundance of Federal subsistence resources, alter the distribution or movement of Federal subsistence resources, or limit qualified Federal subsistence users access from currently existing conditions. No further analysis is necessary at this time

2. The following critical elements of the human environment have been analyzed and may be affected by the Proposed Action or the No Action Alternative:

Invasive, Non-Native Species:

There are 38 species of invasive, non-native plants and noxious weeds that are known to exist in Anchorage. Some may occur in the project area whereas some are generally found in previously disturbed areas and often colonize areas around roads and trails.

Wastes, Hazardous or Solid:

There are no known hazardous or solid waste sites in the affected area.

B. Non-critical elements of the human environment:

The following non-critical elements of the human environment have been analyzed and may be affected by the Proposed Action or the No Action Alternative:

Vegetation:

The vegetation in the existing area consists of Birch Spruce, White Spruce, Black Spruce, Alder Spruce, and Willow Spruce. The under-story species consists of grasses and other herbaceous broadleaf species commonly found in this general area.

Visual Resources:

The project area is adjacent to a busy roadway there are no scenic vistas. The project area is presently forested.

Wildlife:

The project area is adjacent to Abbott Loop Road. Animal species found along the road are potentially the same as those found on the Campbell Tract. The Campbell Tract provides habitat for most of the terrestrial animal species found in south central Alaska. Moose are common and are often seen browsing in winter in the shrubs along the road corridor. Black bear, brown bear, and wolf are seen on the Campbell Tract, and may frequent areas along the roadway. Snowshoe hares are abundant and support a lynx population. Coyotes are seen or heard regularly and breed in the area. Other animals that live and breed in the area include beaver, red fox, porcupine, red squirrel, wood frog and several species of microtine rodents.

There are 20 bird species that are year round residents, and an additional 21 migrant species that breed here, all of which may frequent shrub or

forest habitats along Abbott Loop Road. Three species of owl breed in adjacent forest habitats, and bald eagles nest in adjacent areas near the road and use the prey base of Campbell Tract to raise their young. Thirty-five species of resident and migrant land birds have been documented using the forest and shrub habitats during fall migration through studies using mist netting and bird banding. The Olive-Sided Flycatcher, Gray-Cheeked Thrush, Townsend's Warbler and Blackpoll Warbler move through the area during fall migration, may frequent the forest and shrub habitats in the area, and are included on the State of Alaska's list for Species of Special Concern.

IV. ENVIRONMENTAL CONSEQUENCES

A. Impacts of the Proposed Action:

1. Critical Elements:

Invasive, Non-Native Species:

There is a possibility that construction equipment used to develop the Pressure Relief Valve Station may harbor debris or seeds from invasive, non-native plants or noxious weeds.

Wastes, Hazardous or Solid:

Potential for harm to the environment is presented by risks associated with spills of fuel, oil and/or hazardous substances during operation of machinery in the construction area. Accidents and mechanical breakdown of machinery are possible.

2. Non-Critical Elements:

Vegetation:

This project will physically damage and/or remove plant species from the project area. Many of the negative effects of habitat loss will be offset with restoration of the vegetation. The restored areas will facilitate development of habitat similar to the lost habitat. Because of the large increase in the edge effect, with time, the restored areas may become more productive overall than the habitat lost to development.

Visual Resources:

The Proposed Action should have no impact on the existing visual quality of the site once restoration is complete. Although, the 10' wide driveway will be apparent when entering Campbell Tract, it will be offset to block the public's view of the Pressure Relief Valve Station. The right-of-way for the water distribution lines will be re-vegetated and its visual impact is anticipated to be short term.

Wildlife:

Installation of the Pressure Relief Valve Station, the water distribution lines and access road will result in loss of potential nesting habitat and cover for some resident and migratory bird species and winter forage for moose. Some loss will be permanent. Some is anticipated to be short term, as the project area, exclusive of the access road and pad, will be re-vegetated with native vegetation including shrubs and trees.

B. Impacts of the No Action Alternative:

1. Critical Elements:

Invasive, Non-Native Species:

There will not be an increased risk of an unnatural occurrence or increase in the incidence of invasive, non-native plants or noxious weeds in the project area as a consequence of denying the right-of-way application.

Wastes, Hazardous or Solid:

There will be a reduced risk of environmental harm associated with spills of fuel, oil and/or hazardous substances if the right-of-way application is denied.

2. Non-Critical Elements:

Vegetation:

No vegetation would be lost as a consequence of denying the right-of-way application and the forested area would remain intact.

Visual Resources:

There would be no visual impact along the entrance to Campbell Tract as a consequence of denying the right-of-way application and the vegetative canopy and its visual presentation would remain intact.

Wildlife:

Wildlife would not be impacted as a consequence of denying the right-of-way application. Wildlife habitat would remain intact.

C. Cumulative Impacts:

The Campbell Tract is a recreation area subject to urban encroachment along its western boundary. Housing developments press against the that boundary and the western boundary of the adjacent Far North Bicentennial Park, see Figure 1 above. The Municipality of Anchorage has built ball fields and parking lots south of Campbell Tract. The population of Anchorage continues to grow and land suitable for development is at a premium. Urban encroachment will continue to affect Campbell Tract.

The expansion of Abbott Loop Road is certain to increase the public's awareness and visibility of Campbell Tract.

V. MITIGATION:

Vegetation treatments will be designed to prevent the introduction of invasive non-native plants or noxious weeds. Operators must prevent and control invasive non-native plant and noxious weed introduction or spread by conducting a pre-disturbance site assessment of the presence of non-native plants or noxious weeds and by cleaning equipment (removing all mud, dirt, oil grease or other material that could carry seed) prior to moving onto BLM-managed lands.

Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by a user, permittee, claimant, or any person working on their behalf on public land will be immediately reported to the authorized officer. The user, permittee or claimant or any person working on their behalf will suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. This may include the professional collection and analysis of significant specimens by scientists. After scientific study, appropriate mitigation measures will be developed and implemented.

VI. CONSULTATION AND COORDINATION

A. Persons and Agencies Consulted:

AWWU	Damien Stella, Professional Engineer
CH2MHILL	Tom Wolf, Professional Engineer
CH2MHILL	Ian Van Blankenstein, Professional Engineer
ENSTAR	Manny Lopez, Realty Agent
Chugach Electric	Susan Truskett, Realty Agent
BLM	Dan DeWall, Civil Engineer

B. List of Preparers:

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