

TECHNICAL MEMORANDUM

To: Stetson Sannes – Hilcorp Alaska, LLC

From: Abby Bell, ASRC Consulting & Environmental Services, LLC

Date: September 18, 2026

Subject: Beluga River Unit Gas Storage Pad Alternatives Analysis

Project No.: 18384/03

Introduction

Hilcorp Alaska, LLC (Hilcorp) is proposing to construct a natural gas storage pad and associated pipeline infrastructure within the Beluga River Unit (BRU), north of the existing Chugach Electric Association power plant in Beluga, Alaska. The proposed project will involve placement of clean gravel fill to support expanded natural gas operations in the Beluga River Unit. The overall pad is estimated to total 7.38 acres (2.99 hectares) in size. An estimated 2.35 acres (0.95 hectares) of palustrine wetlands as defined by the U.S. Army Corps of Engineers (USACE) will be directly impacted/lost as a result of this project through the placement of approximately 17,682.3 cubic yards of gravel fill.

Five alternatives, including a No Action Alternative, were developed to evaluate pad designs that would support efficient operations while identifying a Least Environmentally Damaging Practicable Alternative (LEDPA).

Alternative B was identified as the Preferred Alternative because it satisfies the project's purpose and need while minimizing impacts to local wetlands. Available survey data and aerial imagery indicate that Alternatives C and D would not reduce wetland impacts relative to the Preferred Alternative. In addition, Alternative E has not been surveyed for wetlands and quantitative impact information is unavailable.

Purpose and Need

The purpose of the project is to construct a natural gas storage pad and associated infrastructure. These construction activities will support expanded natural gas storage in the area.

Alternatives

The alternatives described below include a No Action alternative and four action alternatives to construct a new pad. Alternatives were developed by repositioning the initial pad design within the general project area to evaluate whether alternate locations or orientations could reduce impacts to wetlands and other environmental resources while meeting the project's purpose and need. The alternatives were analyzed based on environmental impacts, availability of existing infrastructure, survey coverage, and overall practicability.

Figures AA1 through AA4 show the alternative pad designs relative to the existing infrastructure and surveyed area.

Alternative A – No Action

This alternative would not include pad construction or further development at the site. This alternative would have the least impact on undisturbed wetlands but would not support natural gas storage goals or meet the project's purpose and need.

Alternative B – Preferred Alternative

Alternative B consists of the initial pad design, with gravel placement occurring west of the Beluga Highway and incorporating existing development of the area. This design was selected because it would reduce the overall gravel requirements of the project while avoiding natural features in the area such as a riverine system identified in a June 2026 survey and previously mapped wetland resources.

This design minimizes impacts to area wetland resources and has been surveyed for both wetland and cultural resources. The pad design is shown in Figure AA1.

Alternative C – Rotated Alternative

Alternative C evaluates a rotated pad design by 90° and extend the pad further west, exchanging a north-south design with an east-west design. This alternative was developed to determine whether a different orientation of the required project footprint could further reduce environmental impacts while still meeting the project purpose and need.

This alternative would support natural resource development in the area, but would not utilize as much of the existing gravel infrastructure as Alternative B. Additionally, impacts to a local riverine system identified in a June 2026 survey would be greatly increased as the pad footprint lies directly over the system.

This alternative may support the project's purpose and need but would increase impacts to the overall local environment, including wetland resources. Therefore, it would not represent the LEDPA. The pad design is shown in Figure AA2.

Alternative D – Northern Alternative

Alternative D evaluates a shifted and rotated configuration of the proposed pad footprint north of the Preferred Alternative. This alternative was developed to determine whether relocating the footprint within the general project area would reduce environmental impacts while maintaining project functionality.

This alternative would support natural resource development in the area, but would not utilize as much of the existing gravel infrastructure as Alternative B, thus requiring additional gravel resources not accounted for in the project design. In addition, available survey data and aerial imagery indicate that this alternative would not reduce wetland impacts relative to the Preferred Alternative.

This alternative may meet the project's overall purpose and need, but does not avoid or minimize impacts to wetland resources compared to Alternatives B and C. Figure AA3 shows the pad design for this alternative.

Alternative E – Offset Alternative

This alternative would shift the total pad location to the northwest of the Preferred Alternative, along the Beluga Highway.

Alternative E was considered during the alternatives analysis; however, the alternative would relocate the project footprint outside the area selected for resource development and accessibility. Consequently, Alternative E may not satisfy the project purpose and need to the same extent as the alternatives evaluated within the initially proposed area. In addition, environmental and cultural-resource information for Alternative E is currently limited, preventing a direct comparison with the Preferred Alternative.

The location also lacks existing onsite gravel, access roads, and supporting infrastructure beyond its proximity to the Beluga Highway. This area Figure AA4 shows the pad design for this alternative.

Recommendations

Several factors must be considered when evaluating alternatives for natural resource development projects. After considering the environmental, operational, and practicability factors discussed above, Alternative B is the LEDPA. It minimizes impacts to environmental resources, is supported by existing wetland and cultural resource survey data, and meets the project's purpose and need while avoiding the greater environmental impacts or additional uncertainty associated with the other alternatives considered.

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Figure 1: Alternative B – Preferred Alternative

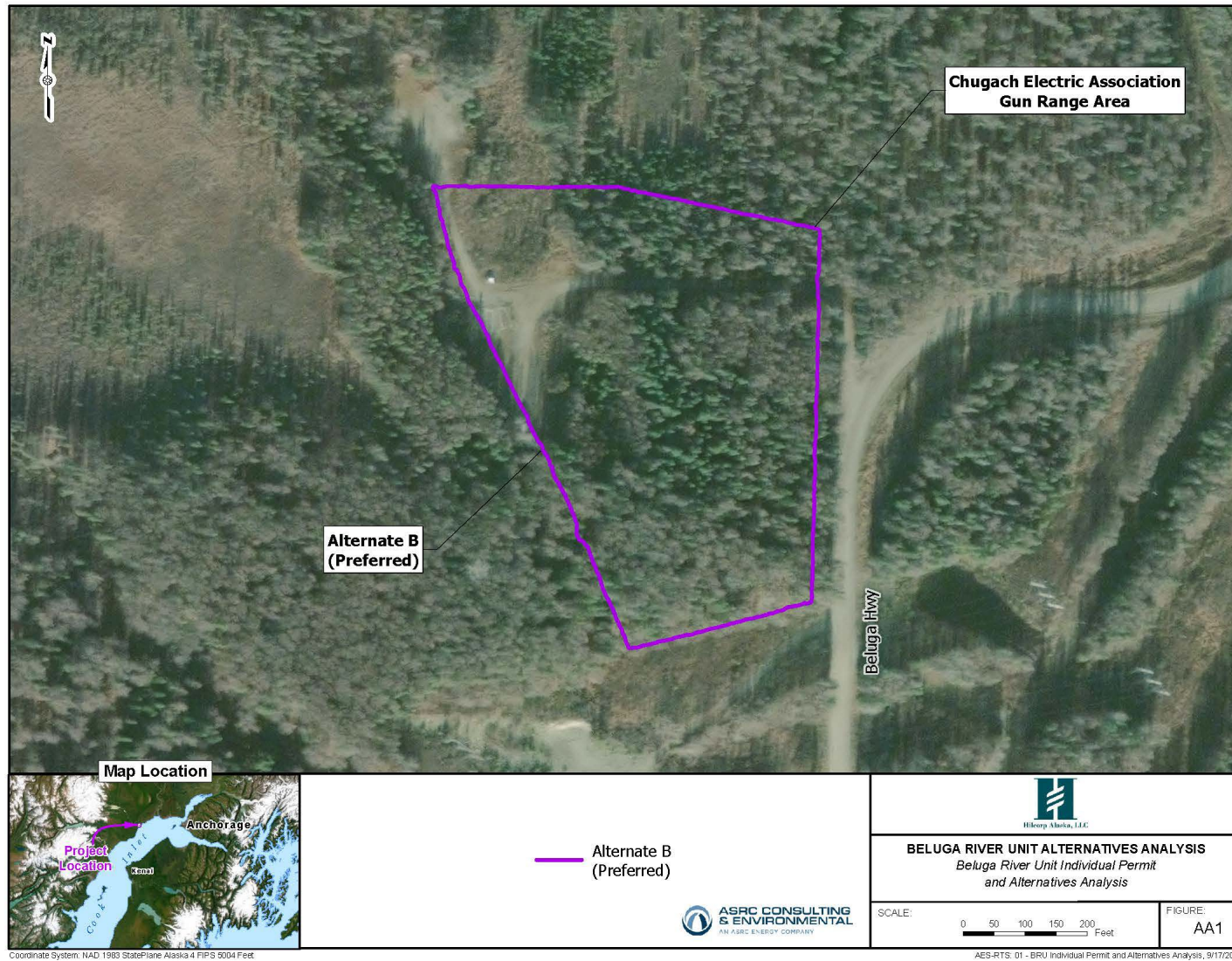


Figure 2: Alternative C – Rotated Alternative

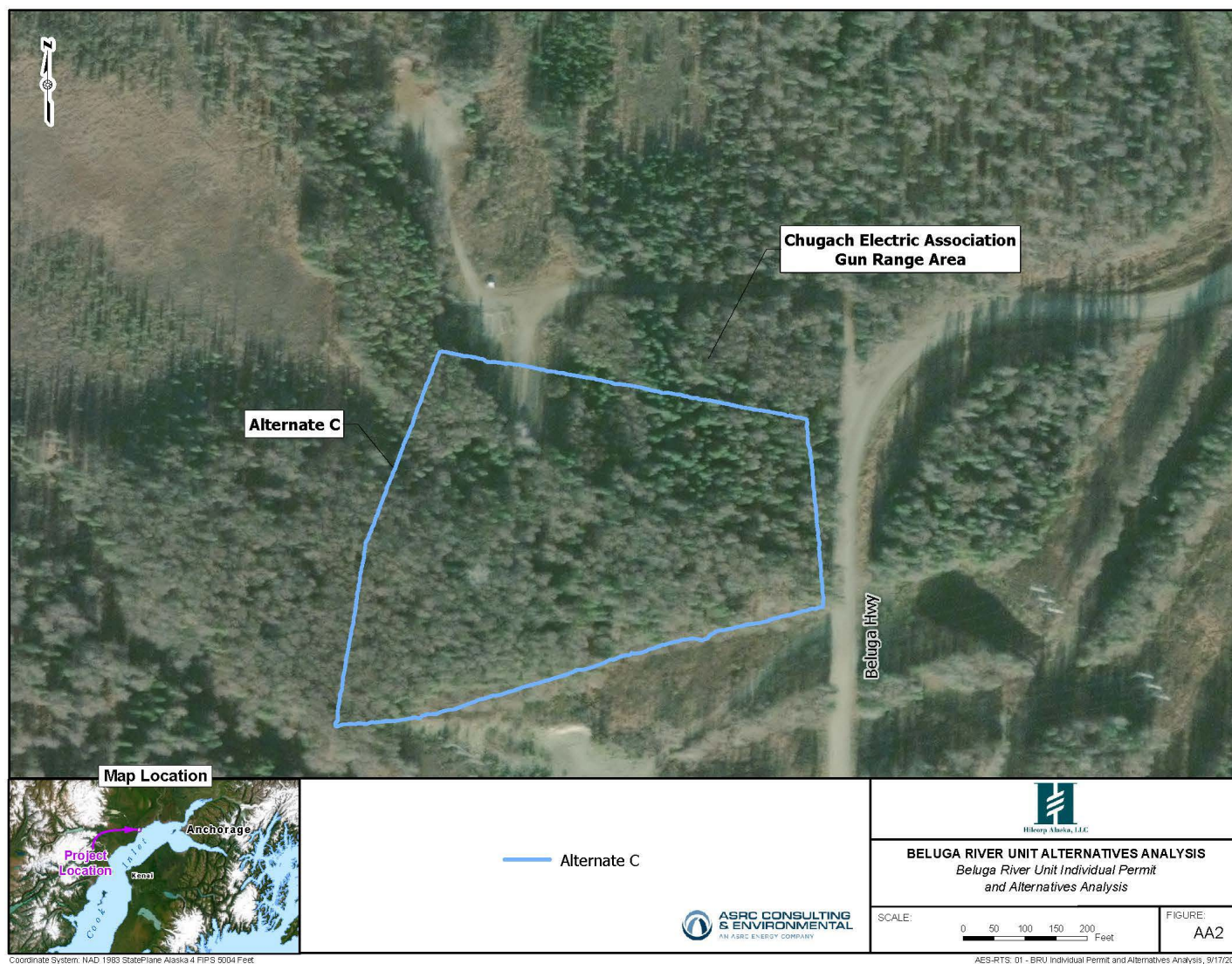


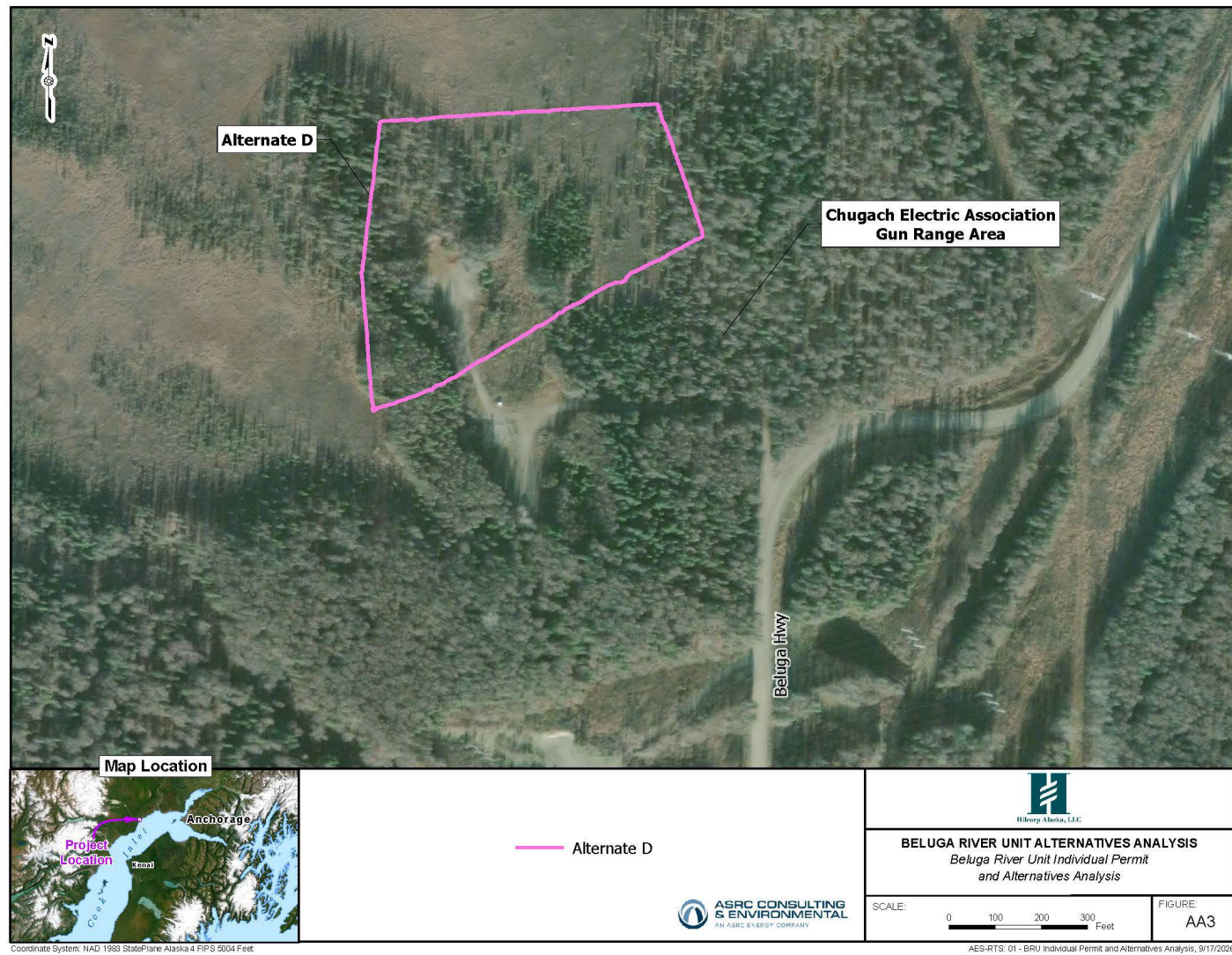
Figure 3: Alternative D – Northern Alternative

Figure 4: Alternative E – Offset Alternative

