

State of Alaska Department of Natural Resources
Division of Mining, Land and Water
Northern Regional Office

**Golden Valley Electric Association Eva Creek Wind Farm
AS 38.05.810(e) Public and Charitable Lease
ADL 418853
Preliminary Finding and Decision**

Proposed Action

Golden Valley Electric Association has applied to the Department of Natural Resources (DNR), Division of Mining, Land, & Water (DMLW) for a public and charitable lease under AS 38.05.810(e) to construct a 24 megawatt (MW) wind farm on the ridges above the Eva Creek valley, located east of the Nenana River approximately 15 miles northeast of Healy, Alaska. The proposed project includes a microwave communication site west of the Parks Highway that will provide communication back to Fairbanks. Power generated by the wind farm would feed into GVEA's 230 kilovolt (kV) Northern Intertie transmission line, which bisects the proposed project area. The power will then be available for distribution throughout GVEA's service area. GVEA has applied for a proposed lease term of 35 years.

DNR DMLW proposes to issue a public and charitable lease to GVEA for the purpose of constructing and operating the above-described wind farm for 25 years, subject to standard and special lease terms.

This document serves as the State's preliminary best interest finding regarding the lease of this property.

Authority

The file is being adjudicated pursuant to AS 38.05.810(e), which allows DNR to negotiate at Fair Market Value (FMV), a public and charitable lease to licensed public utilities or licensed common carriers. Other applicable statutes and regulations include: AS 38.05.035(e), AS 38.05.285, AS 38.05.945-946, and 11 AAC 58. The Director, Division of Mining, Land & Water (DMLW), is authorized by AS 38.05.035(a)(6) to act on behalf of the state in this matter.

The Director has subsequently delegated his authority under AS 38.05.035(b)(1) to the Northern Regional Manager, who has the authority to authorize the best interest finding, and is delegated authority to impose stipulations and issue the lease.

Administrative Record

The administrative record for this project consists of ADL 418853- the lease casefile. Also referenced are ADL 419234, which consists of the material sale contract; ADL 419216, which consists of the easement for access roads and power lines between turbine sites and the road to Communication Site #2; and ADL 419221, which is the administrative record for the Ferry Road realignment easement for the project; and the Tanana Valley Area Plan.

Scope of the Decision

The scope of this decision is to determine whether to issue a public and charitable lease under 38.05.810 to GVEA for the purpose of producing electricity via the construction and operation of a wind farm on State land, and what lease conditions should apply. The material sale and easements will be addressed in separate decisions.

Location and Legal Description

Geographic/Legal Description:

The lease will encompass a total of approximately 42.869 acres within two primary geographical areas: 1) two subalpine ridge sites at the head of Moose and Eva creeks in the northern foothills of the Alaska Range; 2) and a communication site on the west side of the Parks Highway. The lease will have up to 22 individual footprints ranging in size from 50'x 50' (0.057 acres) to 360' x 500' (4.132 acres) for support buildings with the wind turbines occupying a 300'x 300' (2.066 acres) footprint.

The legal description is as follows:

The wind turbines, support buildings, and transmission substations will be located with individual lease footprints in portions of the following:

Portions of Sections 3, 4, 9, 10, 11, 14, 15, 22, 23, 27, 28, 29, 30, Township 10 South, Range 7 West, Fairbanks Meridian, and portions of Sections 17, 25, 26, 27, 28, 34, 35, Township 10 South, Range 8 West, Fairbanks Meridian.

Comm Site #2, an off-site communication tower, legal description is as follows:

The SE corner of the SW corner of Section 17, Township 10 South, Range 8 West, Fairbanks Meridian. This site will occupy a 350'x 350' (2.87 acre) individual footprint. Access to this site is included in ADL 419216.

The locations for proposed facilities are shown on Attachment A of this document..

This legal description pertains only to the lease, administrative record ADL 418853. For locations of the material sites and easements, please see Preliminary Decisions for ADL 419234 for material sites and ADLs 419216 and 419221 for easements.

Borough/Municipality: The subject lease parcels and entire project are within the Denali Borough.

Regional/Village Corporation:

Doyon Regional Corporation.

No regional or village corporation lands are within the proposed lease or project boundaries.

U.S.G.S. Map: Fairbanks A-4 and Fairbanks A-5 1:63,360 Quadrangle.

Title

Acquisition:

FM 10S 8W: GS 24 Patent# 50-84-0695

FM 10S 7W: GS 24 Patent# 50-87-0273, Patent# 50-96-0600

A title report has been requested.

Restrictions: Standard, reservation of rights-of-way.

Other Conflicts and Pending Interests: Boot Hill Gold, Inc. (BHG) is the holder of several mining claims in the vicinity of the proposed project area

The following ADLs reference Boot Hill Gold mining claims: ADLs 607181, 607182, 607183, 607184, 607185, 607186, 607187, 607193, 607198, 607204, 607205, 612020, 612021, 612024, 612015, 612026, 612027, 612029, 612032, 613118, 613119, and 66192.

Usibelli Coal Mine has a gas exploration license under ADL 390606 in the area.

These authorizations are further considered in the Discussion and Alternatives portion of this Preliminary Decision.

Planning and Classification

Land Use Plan: The area encompassing the proposed project area is addressed within the 1991 updated Tanana Basin Area Plan (TBAP) under Management Unit Subregion 4M *Rex Dome to Liberty Bell Mine*.

Classification: The Primary Surface Use of land within Subregion 4M is Minerals and Wildlife Habitat. The Management Plan states: "**General:** *State land in this unit is retained in public ownership for multiple use management. The emphasis is on subsurface resource development and maintaining fish and wildlife habitat. Land is above timberline and quite steep. All state land in this unit is open to mineral entry.*

Fish and Wildlife: *Fish and wildlife habitat is designated a primary use in Subunit 4M1. This area has very high values for most wildlife species. The several domes will be managed as important winter feeding areas for the Delta caribou herd. Wildlife habitat and operation of a wind farm can be compatible with the appropriate plans and lease stipulations in place. GVEA is working with the US Fish and Wildlife Service to develop an Avian Protection Plan which will mitigate potential wind project impacts to birds. DMLW authorization will require compliance with this plan.*

Minerals: *Minerals is designated a primary use in Subunit 4M1. This subunit has high mineral potential and considerable exploration is currently taking place. The unit is open to mineral entry.*

There are dense blocks of mining claims near the Liberty Bell Mine, near Eva Creek, and along California Creek. The liberty Bell Mine is a stratiform gold-bismuth massive sulfide with over 100,000 tons of reserves blocked out. Gold and scheelite are known from Eva Creek.

California Creek has placer deposits of gold, platinum-group metals, and mercury. Lodes near California Creek consist of small quartz veins carrying precious and base metals, with one fissure assaying 259 ounces of silver per ton. Minerals, a sub-surface resource, is the designated primary use of this area, however, there is nothing in the planning and classification of this area to prohibit other uses of surface resources, such as this lease. As per AS 38.05.285, to the greatest extent consistent with public interest, DNR manages state lands for multiple uses, and the issuance of this lease as proposed allows for concurrent surface and subsurface resource use and development. Please see the Discussion and Alternatives section for further information.

Recreation: *Recreation is designated a secondary use in Subunit 4M1. The Rex Dome is a popular hiking area. Trails will be protected. GVEA's development plan aims to minimize facility footprints and limit site control, to allow the greatest amount of continued use of the ridgeline lands by the public. No existing trails will be permanently blocked. The construction of a wind farm will affect the view-shed of the area. GVEA factored minimizing visibility into the wind tower site selection in order to reduce this impact.*

Prohibited surface uses: Land Disposals and Remote Cabins. Under Prohibited Surface Use addendum, the plan states "*Other uses such as material sales, land leases, or permits that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management-intent statement, the management guidelines of this unit, and the relevant management guidelines.*" This lease is consistent with surface uses that are not prohibited. DNR desires to manage State land consistent with the mission statement "*To develop, conserve and enhance natural resources for present and future Alaskans.*" The issuance of this lease follows through with the Department's stated goals of allowing responsible development while making every effort to mitigate potential impacts to the land, other development opportunities, and the stated classification priorities through interagency cooperation, the implementation of lease and site operation stipulations, and the adherence to those stipulations by the applicant.

Borough Zoning: This area is zoned unrestricted per Chapter 9.15.020 of the Denali Borough Code. There are no prohibitions on land zoned unrestricted (Ord. 96-04-2). The Denali Borough has issued resolution 11-03 supporting the Golden Valley Electric Association Eva Creek Wind Project, and encouraging State support and expeditious permitting.

Traditional Use Finding (AS 38.05.830):

A traditional use finding is not required per AS 38.05.830 as the entirety of the lease falls within the Denali Borough.

Water bodies:

The Eva Creek Wind Project is located on alpine ridges, near the headwaters of Eva Creek, Cody Creek, Moose Creek, Little Moose Creek, and Walker Creek.

Access:

The proposed wind farm site is accessed by road beginning on the east side of the Nenana River. The community of Ferry is located on the west side of the river. The Ferry Road is directly accessed by railroad. Automobiles can be parked on the highway side of the river (west) and pedestrians can access the Ferry Road by walking along the footpath on the railroad's bridge. Automobile access is not directly available to the Ferry Road from the Parks Highway as the Nenana River separates the community of Ferry and the Ferry Road. GVEA is currently working with the Alaska Railroad to facilitate transportation of equipment and infrastructure to the east side of the Nenana River to the start of the Ferry Road. The Ferry Road extends from the eastside of the bridge eastward into the northern foothills of the Alaska Range. Access roads will extend northward from the east end of Ferry Road to access the proposed wind farm site, including the wind turbines, substation and operations and maintenance (O&M) building. Access to Comm Site #2 will be on the west side of the Parks Highway. Upgrades to Ferry Road and new road construction to support the wind project will be addressed in the easement decision, ADL 419216.

Environmental Risk:

GVEA submitted an environmental risk questionnaire and development plan to accompany their lease application. Lubrication oil and transformer oil will be used for each wind turbine (16 total turbines). During construction, heavy equipment and utility trucks will be used in the area. Diesel and/or gasoline powered vehicles and equipment will be used on site. Hydraulic fluids are used in various construction equipment.

The construction contractor will be required to produce a Hazardous Materials Control Plan and a Spill Prevention, Control and Countermeasure (SPCC) Plan to GVEA prior to commencing work on the project. Upon completion of construction, GVEA will develop its own SPCC plan for the lease site and will provide a copy of the plan to DNR. GVEA intends to have a 3,000-gallon aboveground diesel tank adjacent to the Warm Storage Building and another 3,000-gallon above

ground diesel tank adjacent to the O&M Building; each tank will provide fuel to a suspended diesel heater.

Solid waste will be collected and removed from the site. The O&M Building will have an on-site domestic wastewater disposal system which will be designed, permitted, and constructed by the construction contractor. It is expected to include a 1,000-gallon septic tank and drain field. The Warm Storage Building will have an incinerator toilet.

DMLW will require secondary containment and appropriate spill mitigation/response planning via standard lease stipulations.

Agency Review/Comments:

An agency review was conducted to ensure that disturbances are minimized and to allow mitigating stipulations to be built into the lease.

Agency comments were solicited from the Alaska Department of Environmental Conservation (DEC) Contaminated Sites Program; Alaska Department of Environmental Contamination Compliance Program; the US Fish & Wildlife Service; Alaska Department of Natural Resources (DNR) State Historic Preservation Office (SHPO); the US Army Corps of Engineers (ACOE); Alaska Department of Natural Resources Division of Oil & Gas (DO&G); the US Bureau of Land Management (BLM); Alaska Department of Natural Resources State Pipeline Coordinators Office; Alaska Department of Fish & Game (ADF&G) Habitat Division; the Denali Borough; The Alaska Department of Transportation (DOT), The Alaska Railroad (ARR), the Alaska Department of Natural Resources Alaska Coastal Management Program (ACMP), and the Alaska Department of Natural Resources Division of Mining, Land, and Water Mining Section (DMLW).

No comments were received from DEC Contaminated Sites Program; DNR SHPO; DO&G; the US ACOE; the BLM; DNR State Pipeline Coordinators Office; the Denali Borough; the ARR; and the DNR DMLW Mining Section. While DNR DMLW Mining Section did not comment directly, they have been deeply involved during project evaluation.

Comments were received from DEC Contamination Compliance Program-Drinking Water Protection, however these comments specifically dealt with material sites. These issues will be addressed in the material sale preliminary decision (ADL 419234).

Comments were received from DOT Northern Region:

DOT Northern Region ROW has no objections to this action. We are already coordinating the road relocation issues with DNR and GVEA.

DNR Response: DNR will continue to work with DOT and GVEA regarding the road relocation issues. Road relocation will be addressed in association with ADL 419221.

Comments were received from DNR DMLW Coal Program Manager:

At this time I don't see any conflict with coal projects.

DNR Response: Comment Noted.

Comments were received from ADF&G Habitat Division:

ADF&G has reviewed the subject requests for road right of way, material sites, wind tower sites, and communications site. Proposed right of way generally follows existing roads and trails which are heavily used by hunters in the fall - particularly during the September moose harvest season.

To minimize impacts on existing recreational hunters, we recommend that construction related activities associated with road construction not occur during the September harvest (September

1st to September 25th). Activities either before or after the September hunting season would have minor effect on existing use of the area. Post-construction use of the roads by GVEA for maintenance activities would likely be of insufficient magnitude to create future impacts on recreational uses.

DNR Response:

The building and operation of the Eva Creek Wind Project will require the applicant to use the Ferry Road during the September moose harvest season. GVEA has acknowledged the heavy recreational use and does not intend to close access on the road. GVEA is working out the schedule of construction and use in the area. Access will be maintained, but will be minimally impacted during hunting season. A Traffic Safety Plan will be submitted prior to the issuance of the Early Entry Authorization (EEA), and will be addressed in the Project Specific Stipulations.

This comment will also be addressed in the adjudication of ADL 419221, the Ferry Road easement when a decision is made regarding the road application.

Comments were received from the US Fish & Wildlife Service:

The US Fish & Wildlife Service recommends the following guidelines to protect breeding birds in the area: clearing, excavation, and fill activities in potentially suitable nesting habitats should be conducted prior to May 1 or after July 15 to avoid impacts to breeding migratory birds. If this is not possible, other measures to avoid impacts to breeding migratory birds should be initiated.

The Service also requests that GVEA develop an Avian Protection Plan and an Eagle Conservation Plan. These plans will include Best Management Practices incorporated in the design, construction, and operation of the Project that avoid and minimize disturbance and collision risks to migratory birds; the implementation of a post-construction bird mortality study; and the formation of a Bird Technical Advisory Committee whose purpose is to gather and analyze the bird mortality studies and advise an adaptive management strategy to avoid further bird injuries and mortalities.

DNR Response: DNR supports the guidelines and requests of the US Fish & Wildlife Service. GVEA is preparing the requested plan and DNR will require compliance with the final approved plan.

Performance Guaranties and Insurance:

A construction performance bond will be required to ensure compliance with early entry stipulations lease stipulations. Adequate stipulations will be included in the lease to assure that the site will be left in a marketable condition after the termination of the lease or the abandonment of the parcel. A performance bond and removal bond will be required for the issuance of the lease. However, should the lease be reissued after the authorized lease period, removal of the existing facility will not be necessary.

Survey and Appraisal

Survey: An Alaska State Land Survey (ASLS) will have to be completed and meet the standards of the DMLW prior to lease issuance.

Appraisal: An appraisal for fair market value will be required for all lease sites prior to lease issuance. The appraisal will be factored into the lease fee structure. The annual fee structure is based on the appraised fair market value of the land plus \$3,000 per megawatt installed capacity. The flat rate of \$3,000 per MW installed capacity will be adjusted per the consumer price index (CPI) every 5 years from the date of the first operational turbine. There is also a one-time installation fee of \$1500/megawatt plus an annual fee based on estimate of Fair Market Value during the construction phase of the operation, while under the Early Entry Authorization.

The site will be reappraised every 5 years for land value and kilowatt value will be adjusted based on the Consumer Price Index (CPI).

Public Notice:

Pursuant to AS 38.05.945, public notice is required for a lease. Notices will be published in the Fairbanks Daily News Miner, the Anchorage Daily News, and posted on the State of Alaska Public Notice Website. A notice will be sent to the Healy, Anderson, Cantwell, Clear, Fairbanks, Nenana and Denali Park postmasters. Pursuant to AS 38.05.945 and .946, a notice will be sent to the Denali Borough. A courtesy notice will also be sent to the Doyon Regional Corporation and nearby land/interest holders in the Ferry area. To ensure consideration and eligibility to appeal the Final Finding & Decision, comments must be submitted in writing during the comment period. A notice of the Final Finding & Decision will be sent to anyone who comments.

Background:

In 2010, Governor Sean Parnell's administration, along with the Legislature, pledged a new comprehensive energy strategy for Alaska's future. The stated goal is to achieve 50 percent of Alaska's energy consumption from renewable and alternative energy sources by 2025. Renewable energy is defined as energy derived from natural resources such as sunlight, wind, rain, tides, and geothermal heat which are naturally replenished.

Wind power is currently growing at a rate of 30% annually worldwide (iea.org). With growing strain on non-renewable resources such as oil and coal, a move towards renewable energy is consistent with a sustainable and affordable energy policy that will allow for economic growth.

In 1995, Alaska had a population of 604,000 residents. By 2025 that population is projected to expand to 885,000 (U.S. Census), adding more consumers to a statewide electrical system that currently is powered predominantly by diesel and coal. While diesel and coal are effective power sources, prices of these commodities are projected to rise. The International Energy Association (IEA), the leading autonomous organization that works to ensure reliable and affordable energy to it's 28 global members and beyond, projects the price per barrel of oil to be as high as \$250 in 2025 (iea.org). The Governor's 50% renewable goal for 2025 should assist offsetting the rising prices and rising demand for energy in the State of Alaska.

GVEA has been conducting wind feasibility studies in the Eva Creek area since 2003. Given the proposed project's close proximity to the GVEA Intertie and potential future mining sites that will require electricity, and the availability of energy generating wind, the project is consistent with efforts by the Governor's office to reach 50% renewable energy by 2025. This project will also allow GVEA to add an alternative energy source to their mix of fuels for electrical output, potentially lowering energy prices for members of their cooperative, thus providing lower costs to residents of the State of Alaska. This will be further reviewed in the Discussion and Alternatives portion of this Preliminary Decision.

Discussion and Alternatives:

In adjudicating this Public & Charitable Lease, the Department of Natural Resources seeks to facilitate development, conservation, and enhancement of state lands for present and future Alaskans, while minimizing disturbance to vegetative, hydrologic, and topographic characteristics of the area that may impair soil stability and water quality.

In 2010, the Legislature enacted House Bill 306 declaring its intent that the State obtain 50% of its electric generation from renewable and alternative energy sources by 2025. GVEA would like to construct a wind project that will add a renewable energy resource (wind) to their electricity generating fuel mix. Up to 16 wind towers will be erected in the lease site, and multiple buildings will be constructed to support the turbines. DNR recognizes that this is a reasonable request, and that this project is consistent with House Bill 306's stated goal of achieving 50% of Alaska's energy from renewable resources by 2025. The Eva Creek Wind Project is needed to ensure that GVEA and the State of Alaska meet their renewable energy goals. GVEA's 2001 Integrated Resource Plan (IRP) suggested wind power may provide favorable economic value to GVEA during the second ten-year portion of the study. In 2006, the GVEA Board adopted a goal of adding renewable energy equaling 20% of the annual peak load by 2014. At 24 MW, Eva Creek will meet this goal. This project also meets a portion of the Railbelt Integrated Resource Plan (RIRP) for alternative resource options. The Alaska Energy Authority's 2010 RIRP identified and promoted building approximately 70 MW of wind generation in the 2011-2016 timeframe. The Eva Creek Project will contribute to alternative resource options recommended in the RIRP. The project will also benefit residents of the State by reducing GVEA's carbon footprint through integration of renewable energy sources into its system and the benefit of a neutral impact to rates to GVEA's members. This land is reasonably required for the conduct of GVEA's operation.

If approved, DNR will issue an Early Entry Authorization (EEA) to GVEA to begin construction of the wind project. The EEA will only be issued if the lease is approved via the Final Finding & Decision. The EEA will include stipulations that require GVEA to adhere to a development timeline. GVEA's construction contractor may wish to acquire other authorizations.

The GVEA Eva Creek Wind Energy project is one of the first large-scale, renewable energy projects in interior Alaska. In 2003 GVEA obtained a Land Use Permit (LUP) from DNR to determine feasibility on several sites east of Ferry, including Rex Ridge, Walker Dome, and Eva Creek. By 2006, a new LUP was issued to erect meteorological data collection towers and begin conducting wind feasibility studies. In 2010 GVEA had determined that winds were consistent and strong enough to warrant a wind farm and submitted an application to lease State land for the Eva Creek Wind Farm. In January of 2011, the Denali Borough passed resolution 11-03, a resolution supporting the GVEA Eva Creek Wind Project and requesting State assistance in land rights and permitting. GVEA has also conducted avian studies, geotech/soil resistivity studies, wetlands determination, and cultural resource/archaeology surveys. Some of these studies have not been submitted to DNR, as they are proprietary. They have also held public meetings in the Healy and Tri-Valley area. The Ferry Community Corporation has also issued a letter supporting the Eva Creek Wind Project.

DNR reviews all applications with multiple use management in mind. DNR aims to allow as many different activities on public land as feasibly possible without unreasonably limiting or precluding other users or causing damage to the environment. To this end the Eva Creek Wind Project is proposed in an area that already has a variety of uses. Hunting, mining, recreation, and coal exploration have all taken place in this area for years. A professionally designed wind farm that will produce renewable energy is compatible with these other uses, and can be managed as a constructive and positive addition to a diverse and healthy array of activities on public land.

The Eva Creek area has been home to hunting, trapping, outdoor recreation, aviation uses and mining for decades. Through the decision process, and working with GVEA to mitigate potential conflicts, this lease should have a minimal impact on these other long term uses of the area.

There are two airstrips in the area, which have been used in the past. Neither airstrip is authorized by DNR, and only one of them is recognized by the FAA, DNR has submitted Form 7480-1 to the FAA to revise the traffic pattern at the FAA-recognized strip, Eva Creek Airport (2Z3), to avoid possible conflict between traffic using the airport and the wind project.

Boot Hill Gold (BHG), the owner of the mining claims under the proposed lease sites, had initially issued a letter of *objection* to GVEA concerning the building of wind towers over their mining claims. BHG's original letter noted that they had a lack of adequate mineral data, and that since a great deal of money had already been spent exploring the claims and gold had been located over many square miles, the source of the gold had not been found and the proposed tower locations may be within the vicinity of such a discovery and prevent operation of a mine. DNR issued a letter to both parties dated 5/3/2011 stating that the Governor's office supports co-development of both renewable energy and mineral projects as viable economic and public-benefit opportunities. DNR requested both sides come to a mutually accepted resolution so that both projects may proceed in a timely manner. BHG and GVEA have since been in negotiations to work out a compromise which is mutually beneficial to development of both resources. The final outcome will be addressed in the Final Finding and Decision. While Boot Hill Gold holds mining claims and has the right to use the surface estate to develop the subsurface estate, DNR has the statutory authority to authorize reasonable concurrent uses. Furthermore, the state constitution, Article VIII, Section 1 states that "it is the policy of the State to encourage the settlement of its land and the development of its resources by making them available for the maximum use consistent with the public interest." Article VIII, Section 11 states that "surface uses of the land by a mineral claimant shall be limited to those necessary for the extraction or basic processing of the mineral deposits, or for both."

DNR had requested that GVEA make changes to their development plan to reflect a judicious approach to this project. GVEA has been working to refine the development plan to address potential impacts and to allow for the most comprehensive multiple use management. For example, GVEA proposes to move tower 2 and 12 further to the north in 10S 7W FM in order to reduce potential bird disturbance. In addition, they have modified their application and overall plan to minimize the lease footprint. DNR is continuing to address other agency concerns with GVEA such as bird habitat and construction during the moose harvest to allow for the most positive possible use of the area by all parties. DNR will revisit the plan based on comments received during the public notice process to identify additional issues and evaluate whether the wind project design and plan will mitigate environmental damage and user conflict. Changes may be made to the development plan after the issuance of this Preliminary Decision, but only to lessen the impacts of the project, help to resolve multiple user conflicts, or allow DNR to add stipulations to ensure the best possible multiple use management of the land and resource.

Alternatives to this proposed lease include changes in tower configuration, reduction or addition in how many towers are erected, individual lease footprints vs. a large lease area, considering roads and powerlines within the lease area as part of the lease or Rights-of-Way, not issuing the lease, type of lease, and term of the lease.

Tower configuration: GVEA currently proposes 16 wind towers in positions listed in maps attached as part of the lease application. The positions of the towers 3 & 13 may be moved closer to the other towers, a "tightening up" of the over all lease area in an effort to avoid Golden Eagle nests. The towers will not be moved further from the other towers and outbuildings, but may be moved closer to the other apparatus. This will need to be finalized prior to the Final Finding and Decision.

Reduction or Addition of Towers: GVEA has suggested that it may not erect all 16 towers. For this Preliminary Decision GVEA is planning on erecting all 16, but they may erect as few as 12, a choice that will be made prior to issuance of the Final Finding and Decision.

Individual lease footprints vs. large lease area: DNR is considering issuing the lease as individual footprints for the wind towers and outbuildings, instead of one large lease area. Having individual footprints will reduce the overall size of the lease, thus allowing greater public access to the area and reducing the amount of acreage that could potentially be disturbed due to lease activities. It also minimizes the amount of surface lease lands which coincide with subsurface interest lands. Having individual footprint leases allows DNR a more comprehensive measure of control over a

large scale project such as this. The individual lease footprints may be fenced for safety and security reasons.

Rights-of-Way: DNR has determined that the roads and powerlines within the lease area will be adjudicated as easements instead of part of the lease. DNR will adjudicate the roads as public easements to allow continued public access within the area that will support the wind towers. GVEA is unsure if it will fence off the individual footprints (i.e. the wind tower base, the operations and maintenance building, etc), but DNR will maintain public access around the individual footprints by adjudicating the interconnecting roads as public easements. The transmission lines between the towers and buildings will be located below ground, therefore the lease footprint will not include the powerlines, they will be adjudicated as easements as well.

Type of Lease: This lease could potentially be leased competitively under AS 38.05.075(a). However, GVEA currently qualifies for a public and charitable lease under AS 38.05.810(e) as they are a licensed public utility, they reasonably require the land for the conduct of their electrical generation/distribution business, conducted extensive site research, and have submitted a reasonable, professionally designed development plan. There have been other expressions of interest in developing the area for wind power, but DNR has received no preliminary site investigation permit applications, lease applications or data to consider. The mere expression of interest in a project of this scale does not constitute a viable project ready to construct, operate and produce power with a ready customer for sale.

Terms of Lease: GVEA has applied for the public and charitable lease for 35 years. DNR DMLW Windpower Authorizations Guidelines dated May 10, 2010 recommend a maximum lease of 25 years, as this timeframe is typically enough to amortize the project and allows for reevaluation of the project at the end of the lease term. This is consistent with terms issued for similar wind projects in other states. A new lease must be adjudicated for continued use beyond this term. DNR proposes to issue the lease for a term of 25 years, not the applied-for 35 years. GVEA will also be subject to a required development timeline. As part of the final approval authorization for this lease, a development timeline approximately similar to the proposed GVEA development schedule will be stipulated to avoid any potential speculation and encourage timely development of the project. The lease is also subject to standard lease/permit stipulations and project-specific stipulations to address the issues/mitigations as described in this Preliminary Finding and Decision.

Non-Issuance: Non-issuance is not the preferred alternative as this project is being designed to mitigate impacts to surrounding land uses, may lower electricity costs for interior Alaska, and would advance the statewide goal to encourage and develop alternative energy sources.

Preferred Alternative: DNR proposes to issue the lease to GVEA under AS 38.05.810(e) as applied for, with the exception of changing the 35 year term applied for to 25 years. The Early entry authorization and lease will require fees to ensure economic return to the state. They will also include standard and project-specific stipulations to ensure performance, timely development, and mitigation of the potential impacts identified and addressed during the decision process.

Recommendation:

DNR has completed the Preliminary Finding and Decision process for casefile ADL 418853. Given the nature of the project in regards to construction of the wind turbines, buildings, road upgrades, and ongoing maintenance and operation of the site, I recommend that DNR issue a 25 year lease pursuant to AS 38.05.810(e) to Golden Valley Electric Association, subject to terms and conditions as described in the preferred alternative noted above. Issuance of this lease may advance DNR's stated mission: "*To develop, conserve, and enhance natural resources for present and future Alaskans.*" This preliminary finding and decision from the Department of Natural Resources should proceed to public notice. The request may be in the state's best interest as it will assist in achieving the Governor's goal of 50% renewable energy by 2025 and will move Alaska towards securing alternative forms of energy while maintaining economic viability.



Owen Coskey
Natural Resource Specialist

7-15-2011

Date

Preliminary Finding and Decision:

I find that the proposed action may be in the state's best interest and it is hereby approved to proceed with public notice. Additional stipulations or requirements identified during the public notice period may be included in final authorizations.

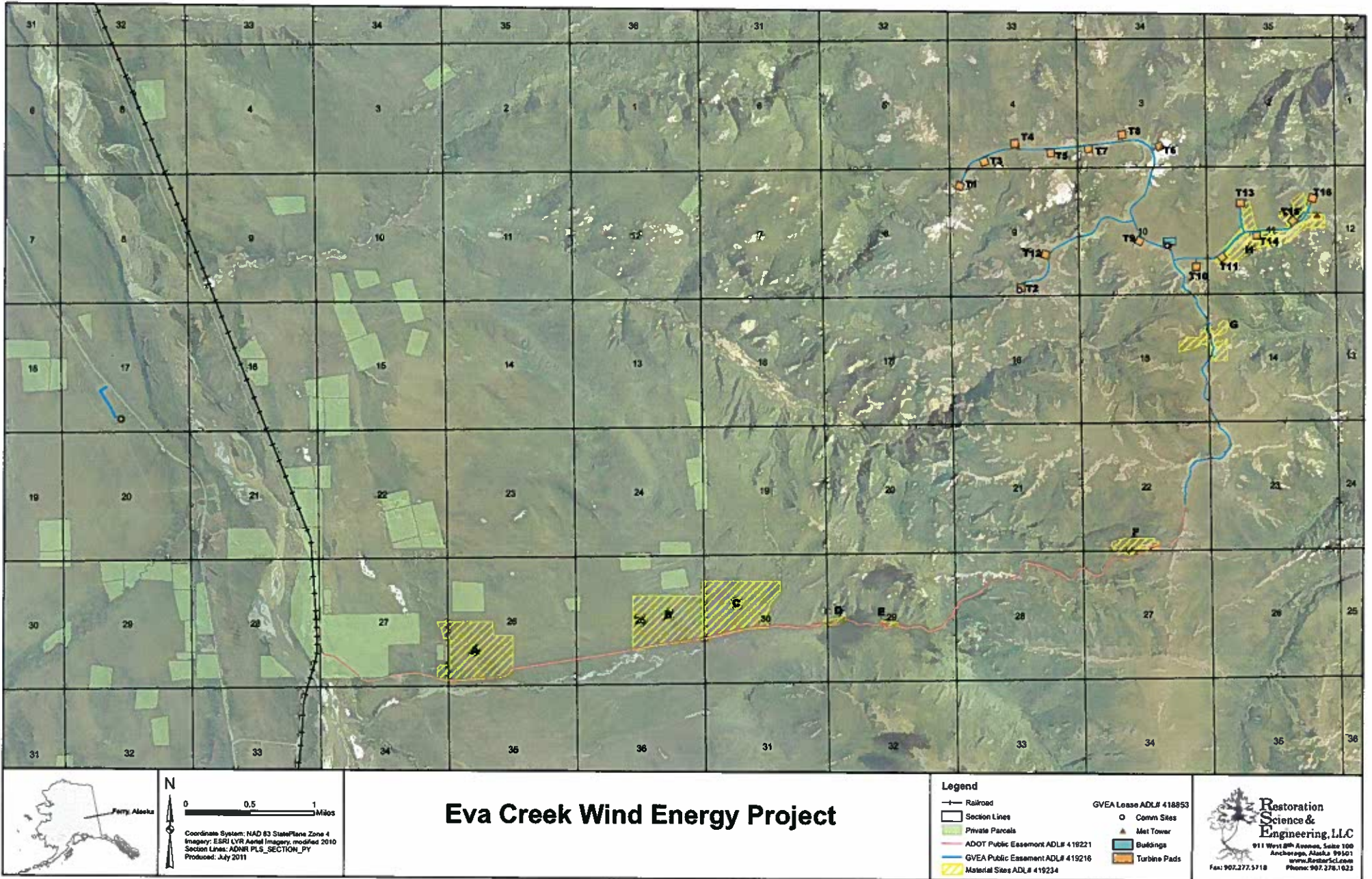


Chris Milles
Northern Regional Manager
DNR Division of Mining, Land and Water

7-15-2011

Date

ATTACHMENT A



ATTACHMENT B
Eva Creek Wind Energy Project
Development Plan
April 2011

Introduction

Golden Valley Electric Association (GVEA) is proposing to construct a 24 megawatt (MW) wind farm on the ridges above the Eva Creek valley, located east of the Nenana River approximately 15 miles northeast of Healy, Alaska. Power generated by the wind farm would feed into GVEA's 230 kilovolt (kV) Northern Intertie transmission line, which bisects the proposed project area. The power will then be available for distribution throughout GVEA's service area.

The project would encompass a total of approximately 170 acres within three primary geographical areas: 1) two subalpine ridge sites at the head of Moose and Eva creeks in the Northern foothills of the Alaska range; 2) Ferry-Eva-Moose Creek Road (or "Ferry Road") extending from the ridges to Ferry, Alaska; and 3) sites in Ferry, Alaska. The project will also require up to eight Gravel Extraction Sites to obtain necessary materials for construction. The gravel sites currently under consideration total approximately 658 acres.

The wind farm would be located on state-owned land. There are a number of mining claims in the proposed project area. See Table 1 for mining claims that may be affected by this project. GVEA is applying for a Land Lease as well as easement permits and material sales permits from Alaska Department of Natural Resources (ADNR) for this project.

DEVELOPMENT PLAN

1. **Legal description:** Portion of Sections 3, 4, 9, 10, 11, 14, 15, 22, 23, 27, 28, 29, 30 Township 10 South, Range 7 West, F.M, and portion of Sections 17, 25, 26, 27, 28, 34, 35, Township 10 South, Range 8 West, F.M..
2. **Terrain/ground cover:** The wind turbines will be erected on subalpine ridges dominated by gravelly, exposed land with tundra scrub and meadows occupying concave low-lying bowls. The ridges have a maximum elevation of approximately 3,500ft. The terrain at lower elevations to the west of the ridge sites contain low forested slopes and lowland floodplains dominated by well-drained soils supporting mixed forests and riverine corridors.
3. **Access:** The proposed wind farm site is accessed by road from the town of Ferry, Alaska. Ferry is directly accessed by railroad. The Parks Highway is located on the opposite side of the Nenana River from Ferry. Automobiles can be parked on the highway side of the river (west) and pedestrians can access Ferry by walking along the footpath on the railroad's bridge. Ferry Road extends from the town of Ferry eastward into the northern foothills of the Alaska Range. Access roads will extend northward from the east end of Ferry Road to access the proposed wind

farm site, including the wind turbines, substation and operations and maintenance (O&M) Building.

4. Buildings and other structures: (See Table 2 for coordinates of proposed project structures.) A transmission substation will be constructed in an area approximately 360ft by 500ft and surrounded with fencing. The substation will include a control building measuring approximately 20ft by 30ft for housing equipment and electronics. GVEA will construct an approximately 40ft by 80ft O&M warehouse-type building on a gravel pad measuring approximately 200ft by 200ft. This O&M Building will be adjacent to the substation and will house computer equipment, a small living area for employees, and a garage area for storing equipment such as a crane and spare turbine parts. There will be parking lot adjacent to the building. The perimeter of the building may be fenced for security reasons.

Up to 16 wind turbines will be assembled into two strings. The turbine tower height will be approximately 263ft, and the radius of the turbine rotors will be between 135ft and 152ft. These turbines will be constructed on 54ft diameter buried concrete reinforced foundations. Each turbine pad will be a 300ft by 300ft area.

The project will require three microwave communication towers, all to be located on state land. One tower, Microwave Tower SS, will be located on the south side of the substation. A repeater tower, Microwave Tower T2, will be located near turbine T2. A third communication tower, Comm Site #2, will be located near the Parks Highway. Each ridge-site communication tower will require an area measuring approximately 200ft by 200ft and will have its own backup generator. Comm Site #2 will require an area approximately 350ft by 350ft.

A permanent meteorological tower will be constructed approximately 300 feet south of turbine T7. The base of the tower will measure approximately 12ft by 12ft; GVEA is requesting a 50ft by 50ft lease area for the tower.

A temporary man camp and laydown area may be constructed on the ridge site for use during project construction activities and would be removed upon completion. The construction contractor would be responsible for design, permitting, and constructing the man camp.

5. Power source: GVEA's Northern Intertie transmission line will provide power in times when the wind turbines are not turning. When the turbines are turning they will provide any power required.

6. Waste types, waste sources, and disposal methods: Solid waste will be collected and removed from the site. The O&M Building will have an on-site domestic wastewater disposal

system which will be designed, permitted, and constructed by the construction contractor. It is expected to include a 1,000-gallon septic tank and drainfield. The Warm Storage Building will have an incinerator toilet.

7. Hazardous substances: The construction contractor will be required to produce a Hazardous Materials Control Plan and a Spill Prevention, Control and Countermeasure (SPCC) Plan to GVEA prior to commencing work on the project. Upon completion of construction, GVEA will develop its own SPCC plan for the site and will provide a copy of the plan to ADNR. GVEA intends to have a 3,000-gallon aboveground diesel tank adjacent to the Warm Storage Building and another 3,000-gallon aboveground diesel tank adjacent to the O&M Building; each tank will provide fuel to a suspended diesel heater.

8. Water Supply: A Class B Potable water well will be established near the Warm Storage Building. The well will serve a 300-gallon storage tank in the Warm Storage Building and, through that tank system, serve as the potable water supply for both the Warm Storage and the O&M buildings. During operation, potable water will be hauled from the watering point at the Warm Storage Building to the O&M Building on an as-needed basis.

During construction, water supply for the concrete plant is expected to be provided by a pump drawing water from the Nenana River and carried to the batch plant via temporary water lines laid on the surface of the ground. These installations would be removed after construction is completed. These permits will be obtained by the EPC Contractor.

9. Parking and storage areas: There will be parking outside the O&M Building. Minimal parking area will be required after construction is complete.

It is likely that there will be a need to store a crane outside of the O&M Building in a fenced area. This is necessary due to the challenging logistics of getting equipment to the site on short notice. Once a crane is located there, it will remain there for maintenance of the towers.

Spare turbine parts will be stored inside the O&M Building.

10. Number of people using the site: There will be approximately 50 people employed during the construction phase of the project. Once construction is complete, it is anticipated that two to four employees will be present at the site seven days a week.

11. Maintenance & Operations: In addition to the employees noted in item 10, periodically contractors and/or vendors will be on site to perform work as required.

12. Closure/Reclamation plan: It is not anticipated that a reclamation plan will be required for the Land Lease for the wind farm.

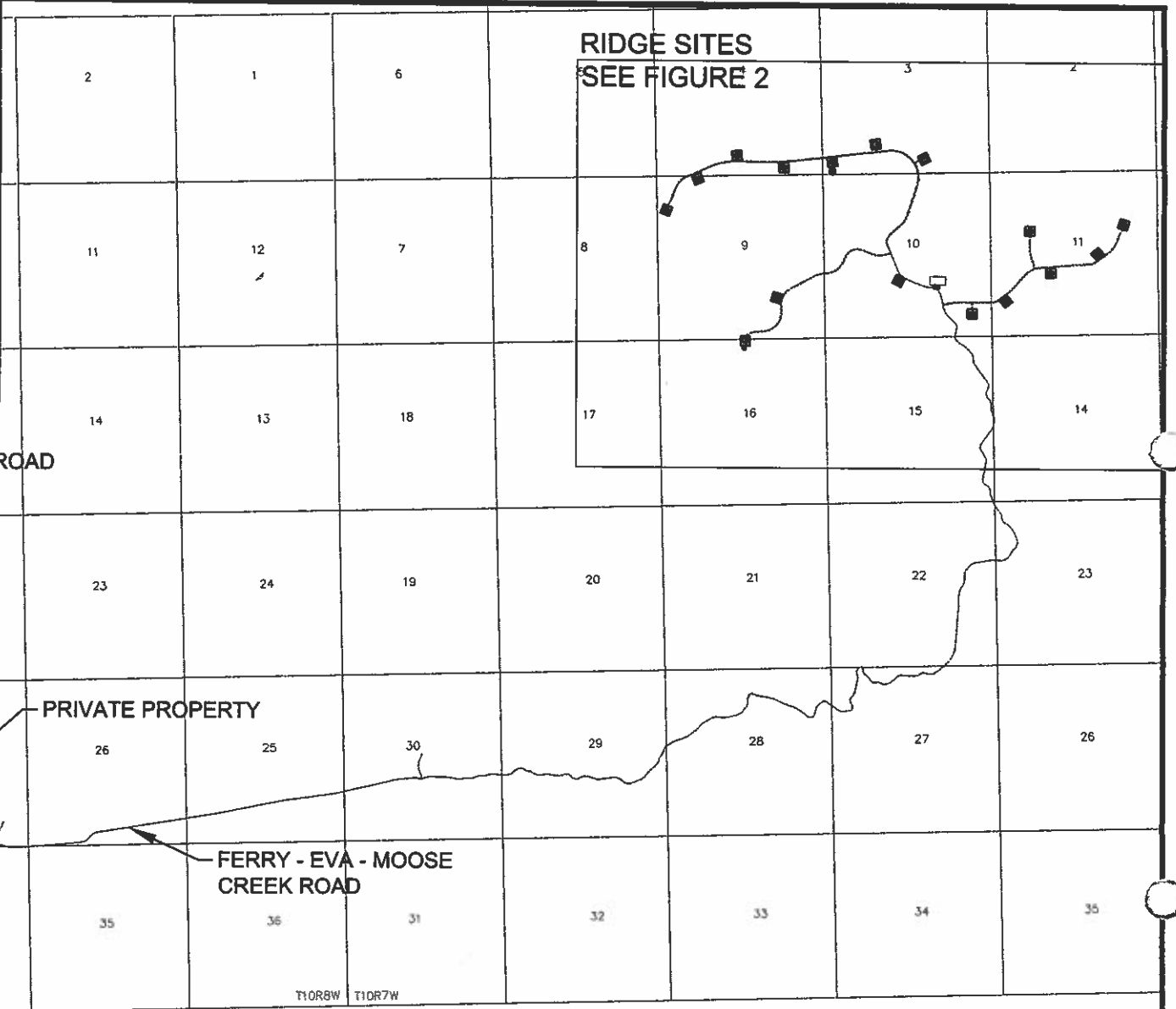
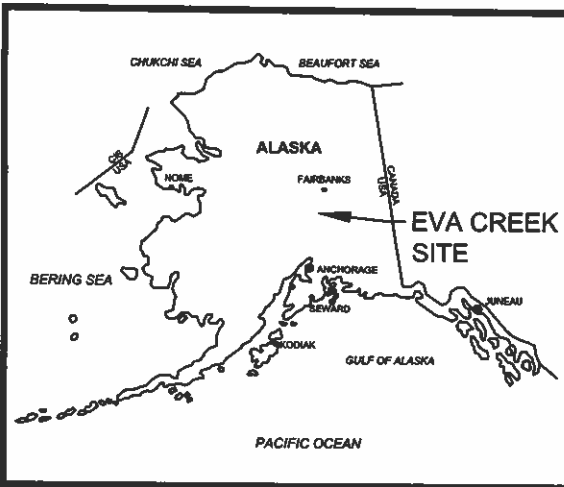
13. **Sketch:** See attached figures.

**Table 1: Mining Claims in the
Vicinity of the Proposed Eva Creek Wind Energy Project**

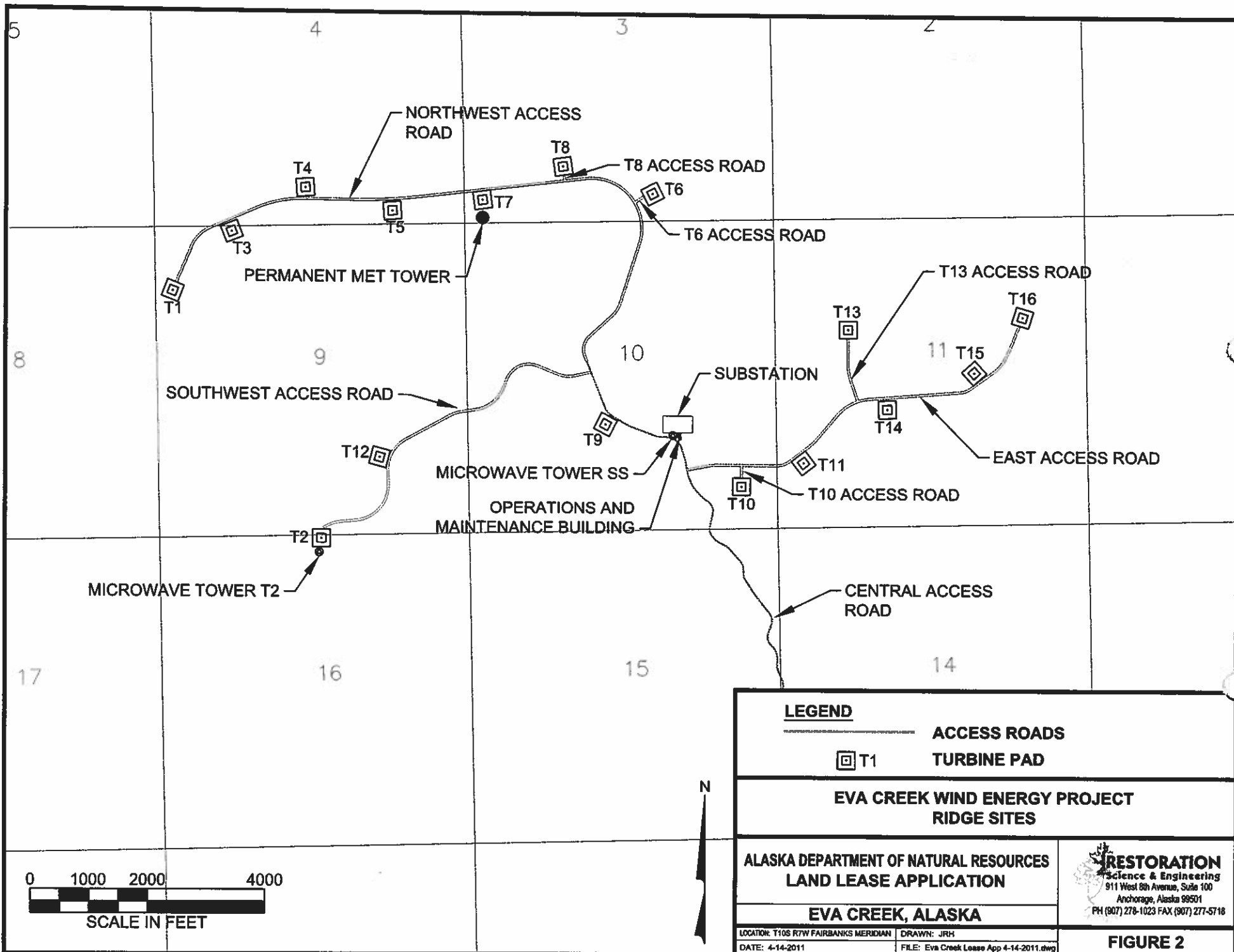
Mining Claim ADL #
607181
607182
607183
607184
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607204
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612021
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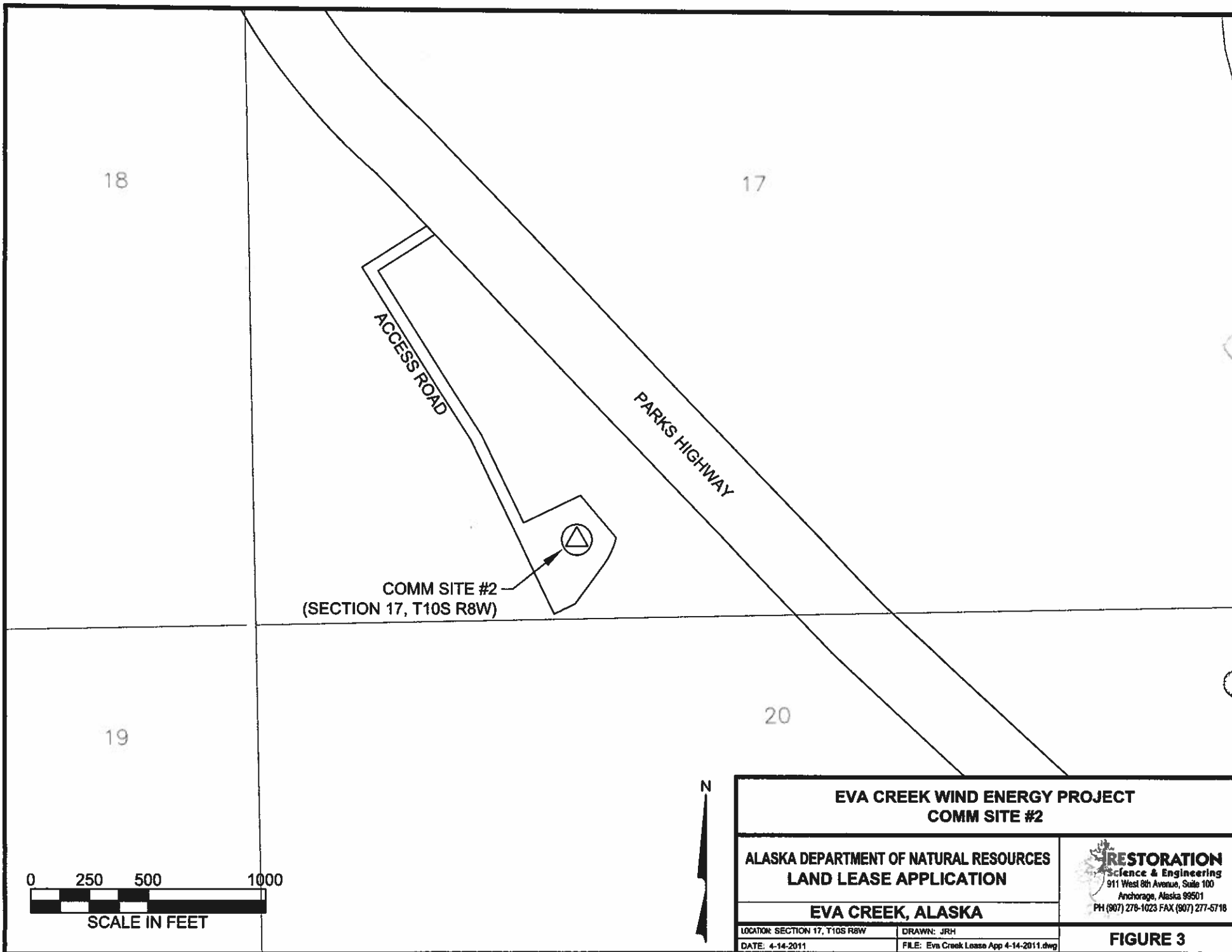
Table 2. Locations and Requested Leases Areas for Proposed Project Structures

Structure	Latitude	Longitude	Footprint	Lease Area (acres)
Turbine T-1	N64° 03' 59.03"	W148° 56' 59.36"	300' x 300'	2.066
Turbine T-2	N64° 03' 17.31"	W148° 56' 03.70"	300' x 300'	2.066
Turbine T-3	N64° 04' 08.88"	W148° 56' 36.47"	300' x 300'	2.066
Turbine T-4	N64° 04' 16.08"	W148° 56' 08.07"	300' x 300'	2.066
Turbine T-5	N64° 04' 12.09"	W148° 55' 34.75"	300' x 300'	2.066
Turbine T-6	N64° 04' 14.46"	W148° 53' 54.41"	300' x 300'	2.066
Turbine T-7	N64° 04' 13.74"	W148° 54' 59.97"	300' x 300'	2.066
Turbine T-8	N64° 04' 19.21"	W148° 54' 28.83"	300' x 300'	2.066
Turbine T-9	N64° 03' 35.90"	W148° 54' 13.70"	300' x 300'	2.066
Turbine T-10	N64° 03' 25.17"	W148° 53' 21.7"	300' x 300'	2.066
Turbine T-11	N64° 03' 29.03"	W148° 52' 57.63"	300' x 300'	2.066
Turbine T-12	N64° 03' 30.90"	W148° 55' 40.90"	300' x 300'	2.066
Turbine T-13	N64° 03' 51.20"	W148° 52' 39.86"	300' x 300'	2.066
Turbine T-14	N64° 03' 37.81"	W148° 52' 25.24"	300' x 300'	2.066
Turbine T-15	N64° 03' 43.71"	W148° 51' 51.87"	300' x 300'	2.066
Turbine T-16	N64° 03' 52.97"	W148° 51' 33.15"	300' x 300'	2.066
Permanent Met Tower	N64° 04' 10.79"	W148° 55' 00.09"	50' x 50'	0.057
O&M Building	N64° 03' 33.73"	W148° 53' 45.88"	200' x 200'	0.918
Substation	N64° 03' 35.62"	W148° 53' 45.89"	360' x 500'	4.132
Microwave Tower SS	N64° 03' 33.90"	W148° 53' 47.77"	200' x 200'	0.918
Microwave Tower T2	N64° 03' 16.31"	W148° 56' 05.17"	200' x 200'	0.918
Comm Site #2	N64° 02' 26.42"	W149° 09' 54.29"	350' x 350'	2.87
			Total:	42.869



EVA CREEK WIND ENERGY PROJECT PROJECT OVERVIEW	
ALASKA DEPARTMENT OF NATURAL RESOURCES LAND LEASE APPLICATION	
EVA CREEK, ALASKA	
LOCATION: T10S R7W, T10N R8W FARBANKS MERIDIAN	DRAWN: JRH
DATE: 4-14-2011	FILE: Eva Creek Lease App 4-14-2011.dwg
RESTORATION Science & Engineering 911 West 8th Avenue, Suite 100 Anchorage, Alaska 99501 PH (907) 278-1023 FAX (907) 277-5718	
FIGURE 1	





18

17

ACCESS ROAD


PARKS HIGHWAY

COMM SITE #2
(SECTION 17, T10S R8W)

19

20



EVA CREEK WIND ENERGY PROJECT COMM SITE #2	
ALASKA DEPARTMENT OF NATURAL RESOURCES LAND LEASE APPLICATION	
EVA CREEK, ALASKA	
LOCATION: SECTION 17, T10S R8W	DRAWN: JRH
DATE: 4-14-2011	FILE: Eva Creek Lease App 4-14-2011.dwg
 RESTORATION Science & Engineering 911 West 8th Avenue, Suite 100 Anchorage, Alaska 99501 PH (907) 278-1023 FAX (907) 277-5718	
FIGURE 3	