

**Agency: Commerce, Community and Economic Development****Grants to Named Recipients (AS 37.05.316)****Grant Recipient: Ekwok Village Council****Federal Tax ID: 94-3057295****Project Title:****Project Type: New Construction and Land Acquisition**

# Ekwok Village Council - Landfill Access Road Project

**State Funding Requested: \$2,677,488****House District: 36 / R**

One-Time Need

**Brief Project Description:**

Ekwok Landfill and Access Road Project requires the construction of a 115-foot-long bridge crossing Klutuk Creek that will provide access to the new landfill site.

**Funding Plan:**

Total Project Cost:	\$5,809,988
Funding Already Secured:	(\$1,249,675)
FY2015 State Funding Request:	(\$2,677,488)
Project Deficit:	\$1,882,825

*Funding Details:**Total Project Cost: \$5,809,988**Federal Funds secured: \$982,500 FY 08-10**Other Funds secured: \$267,175 FY 11-13**Funding requested: \$2,677,488 FY 15**Total Funds: \$3,927,163**Deficit: \$1,882,825\**

\* Ekwok is building the road to pioneer standards now and will complete the road to designed standards as additional funds become available. Installation of the bridge will allow the road to be open year round.

**Detailed Project Description and Justification:**

Ekwok Village Council (EVC) is requesting \$2,677,488 in funding for the construction of the designed and approved 115-foot single span bridge crossing Klutuk Creek.

The Ekwok Landfill Access Road Project consists of the access road from the community to the new landfill located west of Ekwok that includes the construction of a bridge over Klutuk Creek. The construction of the bridge is critical to providing access to the new landfill and ultimately new development and economic growth.

The existing landfill does not meet Federal Aviation Administration minimum distance requirements for runway clearance, is too close to housing and clinic, and is in close proximity to the community's water sources (a shallow aquifer). The existing landfill is over capacity, suffers from windblown litter, and open burning. The dumpsite does not have an Alaska Department of Environmental Conservation, class 111 permit. Additionally, the site is included as a "High Threat Site" on the Indian

Health Service's Report to Congress on Tribal Open Dumps/ Sanitation Deficiency System list. Therefore, with all the deficiencies the existing landfill must be closed. Ekwok has a good plan to manage solid waste in a way that protects the natural environment and human health at the new site.

The new landfill and access road project is the product of years of planning. During a joint meeting held on May 23, 2003, the Ekwok Village Council, City of Ekwok, and Ekwok Natives Limited agreed to relocate the existing landfill. When the Ekwok Airport runway was extended and improved during the summer of 2004 by the Alaska DOT&PF, it was noted in the airport design plans that the existing landfill was to be moved (see attachment). The project has priority status in the Ekwok Long-range Environmental Plan, adopted in 2007, and in the Ekwok Community Comprehensive Plan, adopted in 2004, and updated in 2009. The proposed new landfill site was chosen based on the fact that it was the only alternative that achieves the required runway separation, removes the landfill from proximity to the shallow aquifer, housing and the clinic, and does not impact allotments or BLM. It also has the least wetlands impacts and provides access to lands for subsistence activities as well as future development and access.

Details of the road, bridge, and landfill construction are as follows:

**Roadway:** The road will follow the existing terrain from the existing borrow sources to the proposed landfill location. The road will be approximately 5,470 feet long and will include a bridge with a 115-foot single span. The road will consist of a 14-foot-wide one-lane two-way road section through rolling terrain. Both road sections will have a three-percent cross-slope. Pullouts will be placed along the 14-foot-wide two-lane two-way road section and will increase the road width to 24 feet. The structural section of the road will consist of 6 inches of surface course material placed over 30 inches of select borrow material over existing ground or unclassified material. Geotextile will be placed on the western end of the project under the select borrow material. Culverts will be placed below the road at existing storm water drainage channels. (\$2,300,000)

**Bridge:** The Bridge crossing the Klutuk Creek will consist of an approximately 115-foot single span. Design of the bridge included determination of a crossing site, stream hydrologic research involving a streambed land survey to establish the stream profile grade, and cross-sectional characteristics within the area of affect. This information, in conjunction with runoff and peak flow discharges based on watershed area characteristics and USGS regression equations for estimating flood flow quantities, was used to perform hydrologic modeling at the bridge location using the Hydrologic Engineering Centers -- River Analysis System (HEC-RAS) computer modeling system. Analysis of this information helped minimize the initial capital construction costs, as well as the operational maintenance costs associated with the access road. (\$2,677,488)

**Landfill:** The landfill will be located at the terminus of a Bureau of Indian Affairs (BIA) funded 5,470 foot long road northwest of the Village. The working landfill area will be 200 foot by 105 foot with a 50 foot by 200 foot metal disposal and salvage area. The overall dimensions of the landfill area will be approximately 315 foot by 230 foot. The landfill area will be bermed and fenced with a controlled access point. The total landfill footprint will be approximately 2.0 acres. (\$832,500)

The United States Department of Agriculture has awarded funding in the amount of \$832,500 for the design and construction of the new landfill, and closure of the old landfill. The funds are contingent upon the construction of the access road. Ekwok Village Council received \$133,000 from Portage Creek Village Council Bristol Bay Economic Development (BBEDC) Block Grant for the new landfill design.

The EVC has \$150,000 of Indian Reservation Roads (IRR) program funds and \$267,175 BBEDC Block Grant funds available for the access road construction. Pending and anticipated requests for funding will be submitted to BBEDC for the FY 15 Block grant in the estimated amount of \$750,000. The Ekwok Village Council is determined to complete this project.

EVC received funds from IRR ARRA fund (\$688,619) to complete the access road design. In addition to the landfill and construction funds received, the Ekwok Village council received \$34,822 from Denali Commission for a new burn box and signs.

Ekwok Village Council has sought construction funding for this project for over six years. In addition to the entities that have funded the project, EVC has also applied for funds from HUD Indian Community Development Block Grant (ICDBG) Program, the U.S. Public Lands Highway Discretionary Fund, the U.S. Department of Transportation TIGER III grants program, the State of Alaska DOT State Transportation Improvement Program (STIP), the State of Alaska DOT Remote and Trails nomination process, and as a FY11 Federal appropriations request through Senator Mark Begich's office. More recent requests have gone out to the M.J Murdock Charitable Trust, Rasmuson Foundation, and Kresge Foundation. The project is at risk of losing existing funding commitments, specifically from USDA Rural Development, if construction dollars are not secured.

The Ekwok Village Council (EVC) has been innovative in the construction of the road work performed to date. Working under the guidance of licensed engineers to assure conformance with the federally approved design; the road is being constructed by EVC with available funding using local equipment, materials, and labor. EVC cleared the entire route and construction staking. A good useable pioneer road has been completed from the community to Klutuk Creek. Work has continued this summer by installing the culverts, grubbing, surveying, and staking the east side and continue bringing the gravel roadway to design standards as funds become available. Gravel has been stockpiled near the creek to begin constructing a pioneer road on the western portion of the project, west of the Creek to the new landfill site. (See attached photos)

Work is scheduled to continue this winter with the hauling of the gravel across the creek. The bridge, however, requires expertise not available at the community, and for practical and safety purposes must be completed as a lump sum effort under a competitive contract to a qualified bridge manufacturer/installer.

The new landfill and access road will provide economic stimulus for the community. The new landfill and access road will create five part-time to full-time jobs available to Ekwok residents that fall below the low-to-moderate income standards set by U.S. Department of Housing and Urban Development (HUD). These positions will include Landfill Master, Garbage Collector, Equipment Operator, Maintenance and Repair, and Hazardous Waste Collector. These new positions will be supported by the Ekwok Village Council. The access road will also provide economic and social benefits for residents by providing access to the new landfill, protecting Klutuk Creek, an anadromous stream, and providing safe crossing for lodges and a residential home. In addition, the access road will provide direct benefits for new subsistence gathering and harvesting activities. The access road and bridge will open up additional areas for future development, like power lines to connect to the other side of the Klutuk Creek allowing a residential home and lodges to be connected to power. We are also very eager in having pioneer road access to Aleknagik, the Klutuk Road serves as the first phase of that effort.

Our request to CAPSIS is for the one component of this critical project that we are unable to secure adequate funding: the purchase and installation of the bridge. The Bridge cannot be built in phases the way the road can. We have secured sufficient funding to complete the pioneer road to the landfill and the construction of the landfill. Therefore, our request is strictly for full funding of the bridge. The bridge as designed and proposed for construction will meet our present need without extravagance. The bridge is vital to the overall project and the safety of the community.

### Project Timeline:

Road + Bridge Construction - June 2014/FY15

This project can be complete within two years of funding award.

**Entity Responsible for the Ongoing Operation and Maintenance of this Project:**

Ekwok Village Council

**Grant Recipient Contact Information:**

Name: Lorraine King  
Title: Environmental Coordinator  
Address: P.O. Box 70/100 Main Street  
Ekwok , Alaska 99580  
Phone Number: (907)464-3300  
Email: King2lorraine@yahoo.com

Has this project been through a public review process at the local level and is it a community priority?  Yes  No

**Ekwok Village Council  
P.O. Box 70  
Ekwok, Alaska 99580  
(907) 464-3336  
Fax: (907) 464-3378**

**Resolution 2014 - 20**

**Title: Request for funding from the Alaska State Legislature for the Landfill and Access Road Project**

- WHEREAS,** the Ekwok Village Council is a federally recognized Tribe; and
- WHEREAS,** the Ekwok Village Council, acting as the duly recognized governing body pursuant to the Constitution of the Ekwok Village Council, has the authority to establish relationships and enter into contracts/grants for the benefit and well being of the Tribe; and
- WHEREAS,** the Ekwok airport rehabilitation project approved by the Federal Aviation Administration (FAA) and constructed by the Alaska Department of Transportation (DOT) in 2005, anticipated and noted in the plans the need to relocate the existing landfill that is out of compliance with 5000' FAA minimum distance requirements regarding safe proximity between landfills and airport runways; and
- WHEREAS,** the Ekwok Village Council is submitting a request to the Alaska State Legislature for \$2,677,488 for the construction of the bridge to access our new landfill site; and
- WHEREAS,** the new landfill and access road project plays an integral role in serving the community needs as documented in our Comprehensive Long-range Plan and our Long-range Environmental Plan, and is strongly supportive by surveys documented in our Environmental long-range plan; and
- WHEREAS,** Ekwok Village Council has received funding from the United States Department of Agriculture (USDA) Rural Utilities Service for the design, construction, and closure of the new landfill site, total \$832,500; and
- WHEREAS,** Ekwok Village Council has received funding from the Bureau of Indian Affairs (BIA) High Priority (ARRA) Projects for the design of the access road and bridge to the new landfill site, total \$688,619; and
- WHEREAS,** Ekwok Village Council has received funding from the Denali Commission for a new burn unit and signs for the landfill, total \$34,822; and
- WHEREAS,** Ekwok Village Council has received funding from Indian Reservation Roads, a total \$150,000 that has been approved by resolution by the Tribe as a local match for the road project; and
- WHEREAS,** Ekwok Village Council has established service fees in order to Operate and Maintain the access road and new landfill site; and upon completion Ekwok Village Council will take ownership of the landfill and the access road for the life span of the facilities. Ekwok Village Council will administer the service fees in order to operate and maintain a safe, healthy, and functional facilities; and
- WHEREAS,** Ekwok Village Council has received all required permits and clearances for the access road and has initiated construction of the road with the funds available; and

**WHEREAS,** Ekwok Village Council believes the access road and bridge is a vital link that will open up additional areas for future development as well as a pioneer road in the future to Village of Aleknagik.

**NOW THEREFORE BE IT RESOLVED,** that the Ekwok Village Council formally submits its application to the State of Alaska through CAPSIS for funding in the amount of \$2,677,488 to construct the bridge over the Klutuk Creek to allow for year-round access to the new landfill site and request the Governor and the Alaska Legislature to prioritize and fund this project in 2015.

**CERTIFICATION**

It is hereby certified that on the 21<sup>st</sup> day of November 2013, a quorum of the Ekwok Village Council was formed, and did pass and adopt the preceding resolution by 7 Affirmative, 0 negative, and 0 abstaining votes.

  
Council President

**ATTESTED BY:**

  
Council Secretary

**Ekwok Village Council  
P.O. Box 70  
Ekwok, Alaska 99580**

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**EKWOK LANDFILL ROAD PROJECT  
EKWOK, ALASKA**

**SPECIAL CONTRACT REQUIREMENTS**

**Modifications to Alaska Department of Transportation and  
Public Facilities Standard Specifications for Highway  
Construction  
2004  
English Units**

**Final Design Specifications**

**September 2012**

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Project No. 211033

**Bristol**

 **ENGINEERING  
SERVICES CORPORATION**

**EKWOK LANDFILL ROAD  
PROJECT  
EKWOK, ALASKA  
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## **DIVISION 100 – GENERAL PROVISIONS**

### **SECTION 104 – SCOPE OF WORK**

#### **104-1.01 INTENT OF THE CONTRACT. *Add the following:***

The Ekwok Village Council (EVC) has heavy equipment available for lease. The contractor shall contact EVC at (907) 463-3336 for lease rates.

**DIVISION 100 – GENERAL PROVISIONS**

**SECTION 106 – CONTROL OF MATERIAL**

**106-1.02 MATERIAL SOURCES.** *Add the following paragraph:*

Sheet D1 of the plan set indicates a potential material source which is owned by the City of Ekwok. This source has approved NEPA documents, permits, and approvals. No material shall be removed from the material source until receiving written approval from the City.

If the Contractor chooses an alternate source, the Contractor shall have obtained the NEPA documents, permits and approvals prior to any construction related activities. These documents need to be sent to EVC for verification.

## **DIVISION 100 – GENERAL PROVISIONS**

### **SECTION 109 – MEASUREMENT AND PAYMENT**

**109-1.01**     *Delete the entire section and add the following:*

This section covers the basis for payment for all work. Payment will be in accordance with the contract bid schedule. The contract is a fixed price, lump sum contract based on pay items listed in the contract bid schedule. This is not unit price contract.

## **DIVISION 200 – EARTHWORK**

### **SECTION 201 – CLEARING AND GRUBBING**

#### **CONSTRUCTION REQUIREMENTS**

**201-3.06 DISPOSAL.** *(Replace the entire section with the following.)*

Cleared material shall be hauled to a disposal area coordinated with the EVC. Tree stumps within the roadway prism shall be cut flush with the ground surface. Limits of clearing shall be a minimum of 10 feet beyond the slope limits surface or to the edge of right-of-way.

Care shall be taken during the clearing operations so as not to disturb the in-situ inorganic soils underlying the grass and/or moss cover.

Burning is not permitted.

## **DIVISION 200 – EARTHWORK**

### **SECTION 203 – EXCAVATION AND EMBANKMENT**

#### **203-3.01 GENERAL.** *(Add the following to the eighth paragraph.)*

Disposal in wetlands is prohibited, except as described in Subsection 107-1.11.

*(Add the following after the eighth paragraph.)*

The contractor shall certify in writing to the engineer that all permits and clearances relating to all waste disposal site selected by the contractor have been obtained prior to any clearing or ground disturbances in the disposal site.

#### **203-2.01 MATERIALS.**

##### **3. Borrow** *(Replace the entire section with the following.)*

Borrow material is available from a local borrow source located in Ekwok (See sheet D1). Material shall consist of hard durable particles or fragments of stone or gravel. Do not use material that break up when alternately frozen and thawed or wetted and dried. Do not include muck, frozen material, roots, sod, or other deleterious matter.

#### **203-3.04 COMPACTION WITH MOISTURE AND DENSITY CONTROL.**

*(Replace the second paragraph with the following.)*

Adjust the moisture content of the embankment material to within 2% of the optimum moisture content and compact each layer to not less than 90% of the maximum density. Acceptance densities will be determined by WAQTC FOPS for AASHTO T 310 and T 224. Testing methods can be changed with engineer approval.

## **DIVISION 300 – BASES**

### **SECTION 301 – AGGREGATE BASE AND SURFACE COURSE**

**301-3.03 SHAPING AND COMPACTION.** *(Replace the second paragraph with the following.)*

Spread and shape the material to the required grade and section. Water or aerate as necessary to provide the approximate optimum moisture content for compaction. Compact each layer to a density of not less than 95% of the maximum density. Acceptance densities will be determined by WAQTC FOPS for AASHTO T 310 and T 224. Testing methods can be changed with engineer approval.

## **DIVISION 500 – STRUCTURES**

### **SECTION 505 – PILING**

#### **505-3.07 EXTENSIONS, SPLICES, AND BUILD-UPS** *(Add the following below the second paragraph under item 1.:)*

Contractor shall submit their hourly costs (operating and stand by rates for equipment and labor rates for each position and grade – subject to negotiations and approval by the owner) prior to construction for use in determining a time and material compensation rate for splices in excess of those required to make up piles meeting the prescribed tip elevation shown on the plans. If additional splices are required, then the contractor will be compensated on a time and material basis for those efforts based on the approved rates.

#### **505-3.09 DRIVING PILES.** *(Add the following below the fourteenth paragraph:)*

Contractor shall submit their hourly costs (operating and stand by rates for equipment and labor rates for each position and grade – subject to negotiations and approval by the owner) prior to construction for use in determining a time and material compensation rate for excessive excavation to start piles. See SPECIAL PIPE PILE EXCAVATION notes on sheet S2 for requirements all requirements.

### **SECTION 515 – PRE-MANUFACTURED BRIDGE**

**515-1.01 DESCRIPTION.** Construct pre-manufacture bridge and the structural components in accordance with this specification and design plans.

#### **1. GENERAL**

##### **1.1 Definitions**

**AASHTO:** The American Association of State Highway and Transportation Officials (see their website at [www.transportation.org](http://www.transportation.org))

**Agreement:** The purchase order agreement under which the Owner or Owner's agent, and the Manufacturer have contractually agreed to perform and make payment including the general conditions.

**Bridge:** The prefabricated steel bridge superstructure supplied to the Contractor or Owner by the manufacturer. For purposes of these specifications, "Bridge" does not include any

abutments, piers, or other substructure components or foundations, nor does it include any part of the roadway to be located directly upon the bridge superstructure.

**BSI:** British Standards Institution (see their website at [www.bsigroup.com](http://www.bsigroup.com))

**Calculations:** Documentation related to the analysis, design, and load rating (when requested) in the form of hand computations, computer output, diagrams and summary tables in either hard copy or electronic portable document format (.pdf) files.

**CSA:** Canadian Standards Association (see their website at [www.csa.ca](http://www.csa.ca))

**Contract Documents:** The documents prepared by the Owner which govern the scope of work, design, manufacturing of the Bridge.

**Contractor:** The company responsible for installing the Bridge.

**Custom:** Items or features listed as *Custom*, *Customized* or *Customization*, will require special analysis and detailing and will lengthen the design, fabrication and delivery phases of the project.

**Design Loading:** The specified minimum live loads governing the bridge's design.

**Engineering Drawings:** Drawings prepared by the Manufacturer that represent the intended engineering design including criteria and general notes. These drawings typically depict the Bridge's framing plan, elevation, member sizes, transverse section(s), end-of-bridge section(s), field assemblies, and installation notes.

**Load Rating:** The live load capacity of the Bridge pursuant to Applicable Codes, Standards, and statutes of the state in which the bridge is located. Load ratings shall be reported as inventory or operating.

**LRFD:** Load & Resistance Factor Design

**Manufacturer:** The firm responsible for the design, preparation of drawings, fabrication and shipping of the Bridge.

**Manufacturer's Responsibilities:** The work to be performed in accordance with these specifications will consist of timely furnishing of structural steel design, and shop drawings; and manufacture of the Bridge pursuant to the Applicable Codes and Standards, and transportation to the location indicated in the Contract Documents.

**Owner:** The legal Owner of the installed Bridge.

**Owner's Responsibilities:** The owner will, in a timely way, provide the Bridge Manufacturer with approved Contract Documents sufficient in scope to define the requirements to plan, layout, design, and fabricate the Bridge; provide requirements for shop assembly and shop inspection; provide or approve paint color and finish (gloss); provide or approve a complete list of included and excluded items to be supplied with the Bridge; provide or approve the requirements for submitting Engineering Drawings; and provide adequate and accurate information as to the requirements for delivering the Bridge.



**Panel Bridge:** A bridge configuration based on an assembly of modular units that are constructed from angle shapes and gusset plates and welded into uniform truss panels. These units are pre-assembled into buildable units by connecting top and bottom chord members.

**Shop Drawings:** Drawings prepared by the Manufacturer that represent the intended fabrication of pieces and supplied items. These drawings include instructions for forming, fabricating, connecting and finishing the pieces, in the form of labels, symbols, notes, and dimensions.

**Standard:** Items or features listed in this Specification as “Standard” will be underlined and are pre-engineered and have associated standardized calculations and details available for expedited review and production.

**Timely:** In compliance with the time parameters of the agreement.

**Variable Span:** The Bridge shall have the ability to be re-configured into smaller modular span groups based on the purchased maximum span and corresponding accessories such as end posts and bearings.

## 1.2 Manufacturer’s Qualifications

**AISC Certification:** The Manufacturer shall have maintained certification by the American Institute of Steel Construction (AISC) (Major Steel Bridges), including Fracture Critical and Sophisticated Paint System endorsements, for a period of at least five (5) continuous years immediately preceding the bid opening.

**SSPC Qualifications:** The Manufacturer shall employ painters trained and certified under the Structural Steel Paint Council, SSPC QP3 Standard Procedure for Evaluating Qualifications of Shop Painting Applicators and familiar with material safety data sheets (MSDS), product data sheets, painting tools and equipment and quality procedures.

## 1.3 Pre-Approved Manufacturers

All prospective manufacturers, not pre-approved by the Owner are required to submit a signed application with the following documentation supporting their ability to meet the above referenced qualifications no less than twenty (20) business days prior to bid opening:

- Copy of current AISC certifications as provided above.
- Copy of Quality Assurance Programs.
- Splicing and erection procedures.
- Approved welding process procedures.
- The name and qualifications of the Manufacturer’s representative designated to represent the Manufacturer for all pre-bid activities.
- The name and qualifications of the Technical Assistant that will conduct on-site assistance during field installation of the Bridge until secure and stable.
- If any part of the Bridge is to be galvanized, a copy of the written warranty issued by the galvanizer that warrants against corrosion of the superstructure (other than bridge flooring) for a period of not less than 35 years.

- Complete list of plant, equipment, employees and others to be used by the applicant to design and manufacture the Bridge including copies of all Professional Engineering licenses for designers and welding certificates for welders.

**Notification:** The Owner will evaluate and verify the accuracy of the submittal and notify the prospective Manufacturer at least five (5) business days prior to bid opening whether the prospective Manufacturer meets the requisite qualifications. If the Owner determines that the requisite qualifications do not exist, the Manufacturer's bid shall not be eligible for consideration. The Owner will notify rejected bidders of the decision. The Owner's decision shall be final.

## **2. APPLICABLE CODES AND STANDARDS**

### **2.1 Governing Codes and Standards**

1. The Bridge shall be designed in accordance with current, recognized and accepted specifications for bridge design and construction, including all interims, and as stipulated by the Owner below. Bridge manufacturer shall use a live load basis as HS20 (AASHTO Std. Spec.).

**2.2** American Association of State Highway and Transportation Officials (AASHTO) Standard Specifications for Highway Bridges, 17th Edition (2002), Division I & II.

### **2.3 Reference Codes and Standards**

1. American Institute of Steel Construction (AISC), Steel Construction Manual, Thirteenth Edition.
2. ANSI/AF&PA National Design Specification (NDS) for Wood Construction 2005 Edition.
3. American Welding Society (AWS) D1.5 Bridge Welding Code (Use AWS D1.1 for welding not covered in AWS D1.5).
4. Research Council on Structural Connections (RCSC) Specifications for Structural Joint Using A325 or A490 Bolts (2004).
5. AASHTO/NSBA S2.1 Steel Bridge Fabrication Guide Specifications, 2nd Edition.

## **3. BRIDGE CHARACTERISTICS**

**3.1 Span(s):** The Bridge shall be composed of a single span. Span shall mean the center-to-center distance between bearing centerlines of the primary members. The standard span lengths are supplied in modules of 2.31M (7.5787 feet). The total span required is 113.681 feet.

**3.2 Width:** The proposed width shall be the clear roadway width between bridge railings or curb elements shall be. The five proposed widths listed below are standard.

4.33 M (14.206 feet) rail/rail

- 3.3 Skew:** The Bridge will have no skewed arrangement as the Bridge's longitudinal axis shall be square (90°) to the bridge's centerlines of bearing.
- 3.4 Sidewalks:** No sidewalk is required.
- 3.5 Finish:** The finished surface of the fabricated steel shall be hot-dip galvanized zinc.
- 3.6 Flooring/Deck:** The standard floor construction shall utilize a ¼" galvanized, checkered plate pre-attached to stringer beams in a panelized floor system. Specification of another floor construction is considered a *customized* option and will require additional engineering analysis and a longer fabrication time.

Galvanized steel checker plate pre-attached onto stringer beams (bare surface)

- 3.7 Bridge Railings:** The standard railing construction shall utilize a galvanized steel W-beam guardrail with a neoprene spacer mounted to the truss.

Galvanized Steel W-Beam Guardrail with Spacer (Single)

Railings will be shipped separately from the truss panels and shall be installed and spliced on site. The Owner shall be responsible for designing and completing the connection of the bridge railing to any approach railings or terminators, unless otherwise specified in the Agreement.

- 3.8 Bearings:** The standard bearing devices shall be pre-formed resin impregnated fabric pads with steel base & load plates. The expansion bearing shall have sliding surfaces made with PTFE & stainless steel. The Bridge shall utilize the following bridge bearings:

Pre-formed Resin Impregnated Fabric Pads on Steel Base & Load Plates

- 3.9 Expansion Joints:** The Bridge shall utilize the following expansion joints:

No Expansion Joint

#### **4. ENGINEERING**

- 4.1 Licensure:** The engineering design of the Bridge shall be performed by, or under the direct supervision of a Licensed Professional Engineer in the State where it is manufactured. The design shall be completed in accordance with recognized engineering principles and design practices and with a standard of care commensurate with the Manufacturer's role in the project.

- 4.2 Design Specification:** The Bridge shall be designed in accordance with:

- AASHTO Standard Specifications for Highway Bridges, 17<sup>th</sup> Edition (2002), Division I including all interims

Additionally, the live load shall be specified as:

- HS20 (AASHTO Std. Spec.)

- 4.3 Analysis:** The structural analysis for the Bridge shall include, at a minimum, a two dimensional analysis for gravity dead loads and moving live (truck) loads on transverse and longitudinal members, as applicable. Location of axle loads, lane loads, wheel loads; and the distribution of wheel loads shall be applied as such to produce the maximum effect (stress or applied force) in the member or members under consideration.

A U-frame analysis is required for half-through trusses, to confirm the top chord's stability by computing the relative stiffness of the Bridge's cross sectional members to determine the resistance of the top chord members to buckling. The analysis shall follow E. C. Holt, Jr. and R. M. Barnoff's research performed for the Column Research Council, (1950-1957).

- 4.4 Bridge Information Model (BIM):** The Manufacturer shall utilize three-dimensional CAD software with integrated model-data-CNC file transfer of the Bridge components and assemblies to prepare Engineering and Shop Drawings. This is to promote efficiency during plan development and to improve quality of the delivered Bridge order.
- 4.5 Loads & Load Combinations:** All applicable dead and live loads shall be applied and combined as specified in the Design Specification. A future wearing surface of 25 psf shall be applied to all deck or floor types selected, as a dead load, in anticipation of possible future paving overlays. Longitudinal forces from thermal expansion and contraction, and vehicles; along with lateral forces from wind, flood or seismic events shall be computed and combined as applicable and in accordance with this Design Specification.
- 4.6 Gusset Plates:** Gusset plates shall be adequately designed to transfer member forces in accordance with governing sections of the Design Specifications and FHWA Publication Number IF-09-014. All gusset plates shall have 1" radiused corners, except for the lower corners aligned toward the mid-line of the bridge. They shall be square to aid their orientation during assembly.
- 4.7 Camber, Deflection & Sag:** Calculation of the Bridge's dead and live load deflection is required. Live load deflection of the primary members should be limited to the span-to-deflection ratio of L/600 unless specified otherwise. Dead load deflection shall be accommodated by forming camber into the unloaded geometry of the members and their connections. Sag, an inherent characteristic of two-pin structures, is due to pin and pin hole clearance. Sag is undesirable and prohibited. Bidders with panel bridge types that sag shall be considered unresponsive and their bids will be disqualified.

- 4.8 Railings:** Railings shall be designed to provide a continuous, snag-free alignment along the bridge's edge of roadway. Additionally they shall transition smoothly to a ground mounted railing system eventually terminating as directed or planned by the Owner, unless otherwise stipulated in the Agreement. The railing system shall be designed to meet the dimensional requirements of the Design Specification and to resist vehicular impact loads in accordance with the Design Specification (10 kip for Std. Spec. or TL1 for LRFD).
- 4.9 Sidewalk Railings:** Not required.
- 4.10 Drawing Submittals:** The Manufacturer shall design the prefabricated bridge(s) and prepare Drawings in accordance with the following minimum requirements. Specific Project Engineering Drawings and Calculations, sealed by a Registered Professional Engineer in the state where the Manufacturer is located, will be submitted to the Owner for Approval within 8 weeks of receipt of the Purchase Order, contingent upon receiving all scope information at the time of purchase order; and after receiving answers to requests for information (RFI). Shop Drawings will be supplied to the Owner upon written request.

Unless otherwise requested, an electronic version of the Shop Drawings will be submitted in portable document format (.PDF) via email to the Owner or the Owner's designated contact. After final approval by the Owner, the Manufacturer shall provide the Owner with two 24" x 36" paper copies of the Engineering Drawings. Six (6) sets of the As-Fabricated Drawings (11" x 17") shall be transmitted to the Contractor at the time of Bridge Delivery.

## **5. MATERIALS & COMPONENTS**

- 5.1 Steel:** Members for vehicular bridges shall be fabricated from domestically produced , wide flange beam and/or channel shapes designated ASTM A709 Grade 50 and structural steel plate designated ASTM A709 Grade 50, all provided by an AISC recognized supplier. When tubular members are needed as secondary members, the shapes shall be designated as ASTM A500 Grade B (46 ksi) and shall also be domestically produced and provided by an AISC recognized supplier.
- 5.2 Structural Fasteners:** All bolted connections shall utilize ASTM A-325 High Strength Bolts. All bolts for weathering steel components shall be ASTM A325 Type 3. Galvanized bolts shall be A325 Type 1, hot dip galvanized in accordance with ASTM A-153 specifications.
- 5.3 Anchor Bolts:** The anchor bolts supplied with all bridge systems shall be ASTM A449 Full Thread Studs Hot Dip Galvanized as per ASTM A153. Each anchor bolt shall be provided with one A563 Galvanized Heavy Hex Nut and one F436 Galvanized Flat Washer.
- 5.4 Bearings:** This item consists of furnishing and installing bridge bearings in accordance with the Owner's requirements, this specification, and the manufacturer's recommendations. If none is previously determined, the following specifications shall apply and be included into the project:

Pre-formed fabric bearing pads shall be made from steel plates on fabric pads and sliding (PTFE) plates as manufactured by Con-Serv Inc. of Georgetown, SC. The fabric pads shall be composed of multiple layers of 8 oz. cotton duck impregnated and bound with high-quality natural rubber or equivalent. Bearing pads shall be designed to produce the specified thickness, after compression and vulcanizing, sufficient to withstand compression loads in accordance with the specified design method's governing section for bearing design.

**5.5 Expansion Joints:** Not required.

**5.6 Floor or Deck System:** The flooring or deck system shall be provided as designated in the Contract Documents and as specified below.

**5.6.1 Checkered Plate Orthotropic Deck:** The orthotropic deck shall be made from regular, modular units prefabricated steel stringer beams supporting steel checkered plate and connecting diaphragms. The steel plate shall be ¼" thick, ASTM A36 steel and welded to the top flange of the stringer beams. Hollow tubular members shall be interconnected to the stringer beams to transfer and distribute loads between stringers. The floor panel assemblies shall be galvanized as per ASTM A123 after fabrication.

**5.7 Waterproofing:** Not required.

**5.8 Asphalt Paving:** Not required.

## **6. MANUFACTURING AND QUALITY CONTROL**

**6.1 Certification Manual:** A current copy of the AISC Program Manual describing the Bridge Manufacturer's operations and practices shall be maintained by the quality Control Manager for review by designated quality control inspectors. Copies of the AISC Certification Manual shall be made available to customers and their representatives, upon requests.

**6.2 Cleaning and Surface Preparation:** Steel that is to be fabricated shall be cleaned by solvent or hand tools, or shot blasted, as needed to clean and remove rust and mill scale that might impede accuracy of fit-up or quality of fabrication prior to processing. Weathering steel shall be blasted to provide a uniform surface appearance. Steel to be galvanized shall be prepared in accordance with the galvanizers recommendations. Steel that is to be painted shall follow the Contract Documents and paint manufacturer's recommendations and as specified below.

**6.3 Cambering:** The Bridge shall be fabricated to produce an unloaded camber in accordance with the Owner's requirements and the design computations to offset the predicted total dead load deflection.

**6.4 Welding:** All welding shall conform to the AASHTO/AWS D1.5 Bridge Welding Code. Welding of tubular connections is covered in the AWS D1.1 Welding Code. All welding shall utilize E70 or E80 series electrodes. The weld process

used shall be Flux Core Arc Welding (FCAW) or Shielded Manual Arc Welding (SMAW) per ANSI/AASHTO/AWS D1.5 "Bridge Welding Code" or equivalent standard. Welding operators shall be properly accredited and experienced. Qualifications of welders shall be made available upon request.

- 6.5 Plate & Shape Cutting:** Plate and shape cutting shall conform to methods specified in AASHTO/AWS D1.5 Bridge Welding Code Section 3 Workmanship, or equivalent standard. Computer Numerically Controlled (CNC) cutting equipment shall be utilized as a manufacturing method as it allows for highly accurate dimensional cutting along with precise and rapid shop operations. Exceptions to CNC processing should be submitted in writing to the owner for approval, prior to commencing fabrication.
- 6.6 Bolt Holes:** All bolt hole fabrication for high strength, slip critical bolted connections shall conform to the workmanship requirements of the Research Council on Structural Connections (RCSC) Specifications for Structural Joint Using A325 or A490 Bolts, or equivalent standard. Computer Numerically Controlled (CNC) drilling equipment shall be utilized as a manufacturing method as it allows for highly accurate hole location along with precise and rapid shop operations. Exceptions to CNC processing should be submitted in writing to the owner for approval, prior to commencing fabrication.
- 6.7 Bolting:** All shop and field bolting shall comply with the AASHTO Construction Specifications, Section 11 and the Research Council on Structural Connections (RCSC) Specifications for Structural Joint Using A325 or A490 Bolts, or equivalent standard. Field and shop bolts shall be tightened using the Turn-of-Nut Installation Method (AASHTO 11.5.6.4.4).
- 6.8 Galvanized Steel Components:** Fabricated components shall be hot dip galvanized after fabrication in compliance with ASTM A-123. Damage to hot dip galvanized coatings resulting from welding, handling, or other factors shall be repaired in accordance with ASTM Standard Practice A-780. All bolts and fasteners shall be hot dip galvanized in accordance with ASTM specification A-153.
- 6.9 Shop Assembly:** Shop assembly shall conform to AASHTO Construction Specifications and AASHTO/NSBA S2.1 Guide Specifications. For bridges such as trusses, the Manufacturer shall shop assemble the entire span, to conform to the camber and blocking requirements shown in the Engineering Drawings in an unloaded, laydown process. If the span is too long for a complete shop assembly, the Manufacturer shall check-assemble a minimum of three adjacent shippable units of the bridge, in a sequential manner, to ensure that an accurate fit-up of assemblies are possible in the field. Complex framing members such as skewed floor beams shall also be check -assembled in the shop, to ensure geometric accuracy and fit-up has been achieved. Stringers beams, transverse bracing and accessory pieces are not required to be check-assembled to their primary members unless specified in the Contract Documents.
- 6.10 Shop Inspection:** Each Bridge shall be inspected by a qualified shop inspector. For all welded assemblies the inspector shall be a Certified Weld Inspector that is qualified under the AWS QC-1 program, or equivalent program. Each inspection

shall include as a minimum requirement the following: review of Shop Drawings, weld procedures, welder qualifications and weld testing reports, visual inspection of welds and verification of overall dimensions and geometry of the Bridge. Non destructive testing of welds shall be performed both prior to and after galvanizing. All welds shall be visually inspected 100%. All welds shall be magnetic particle tested for a minimum length or 12". Welds over 12" long shall be magnetic particle tested at least 12" for every 10' of length. A report of these inspections shall be provided.

- 6.11 Material Certification:** The Manufacturer shall maintain a program to receive, inspect, record and trace materials used in the Bridge. Material Test Reports shall be used to prove domesticity, and document chemistry and physical test records. Certificates of Conformance shall be used to document compliance with specifications. Traceability shall be met by heat and lot numbers records from the producing mill or supplier. This program shall be in evidence by the Manufacturer's AISC Certification and a written copy found in the Manufacturer's AISC Certification Manual.

## **7. SITE, DELIVERY & ERECTION**

- 7.1 Owner responsibility:** The Owner shall procure all necessary information about the site and soil conditions. The engineering design and construction of the Bridge abutments, piers and/or footings shall be the responsibility of the Owner. Pertinent information related to the design and performance of the bridge superstructure shall be made available to the Bridge Manufacturer upon execution of the agreement. The Owner/Contractor shall install the anchor bolts in accordance with the Bridge Manufacturer's Engineering Drawings and recommendations. All roadway approach work and paving of the Bridge's roadway shall be the responsibility of the Owner/Contractor. All electrical grounding and lightning protection shall be the responsibility of the Owner/Contractor.

- 7.2 Delivery:** Delivery of the Bridge will be within an agreed period of time after approval of Engineering Drawings. Bearing plates, anchor bolts and expansion joints can be furnished in advance of the Bridge for incorporation into the abutment construction, upon receipt of a timely request by the Contractor. Delivery of the bridge shall be coordinated with the Manufacturer.

**Erection:** The Manufacturer will advise the Owner/Contractor of the attachment points and other necessary information required to install the bridge. The method and sequence of erection shall be the responsibility of the Owner/Contractor unless otherwise included in the agreement. Unloading, stabilization, splicing, bolting, and proper rigging and lifting are the responsibility of the Owner/Contractor. The standard erection method is by conventional crane and rigging using a single lift or with multiple lifts and shored construction. The Bridge shall utilize the following erection method:

- Conventional crane and rigging

## **8. TECHNICAL ASSISTANCE**



**8.1** The successful bidder through the Manufacturer shall provide a qualified Technical Assistant at the jobsite while the primary structure components are installed. The Contractor shall notify the Manufacturer or their representative at least two weeks in advance of the planned installation. The Technical Assistant shall have at least five (5) years experience in the installation of similar bridges.

## **DIVISION 600 – MISCELLANEOUS CONSTRUCTION**

### **SECTION 641 – EROSION, SEDIMENT, AND POLLUTION CONTROL**

#### **641-1.02 DEFINITIONS** Replace (5) with the following

(5) NOI: Notice of Intent to commence ground-disturbing activities under APDES General Permit. All NOI references are to the Alaska Department of Environmental Conservation General Permit, not EPA.

#### **641-2.01 STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS.** Add to the end of the subsection:

A Storm Water Pollution Prevention Plan (SWPPP), which will cover erosion control plans for the project, shall be prepared and submitted by the Contractor in accordance with Section 641 of these specifications, and all necessary permits. The Contractor is hereby notified that EVC has obtained the following permits for this project:

1. Alaska State Historic Property Preservation Office (SHPO) Clearance.
2. Corps of Engineers Wetlands Permit.
3. Environmental Assessment (EA)

The Contractor shall be responsible to comply with all conditions of these permits. Any conditions, for which a specific bid item has not been established, shall be considered as a subsidiary obligation of the Contractor, covered under other Contract items of work.

**DIVISION 600 – MISCELLANEOUS CONSTRUCTION**

**SECTION 646 – CPM SCHEDULING**

**646-3.01 (3) Schedule Updates. Amend as follows:**

Delete the first sentence in the first paragraph and insert the following: Hold weekly job site progress meeting with the PM for the purpose of updating the CPM schedule.

A summary schedule shall accompany the bid as part of the bid.

**DIVISION 700 – MATERIALS**

**SECTION 703 - AGGREGATES**

**703-2.07 SELECTED MATERIAL.** *Amend as follows:*

1. Type B. Maximum particle size shall be 6 inches.

<u>Sieve</u>	<u>Percent Passing by Weight</u>
--------------	----------------------------------

No. 200	0-15%
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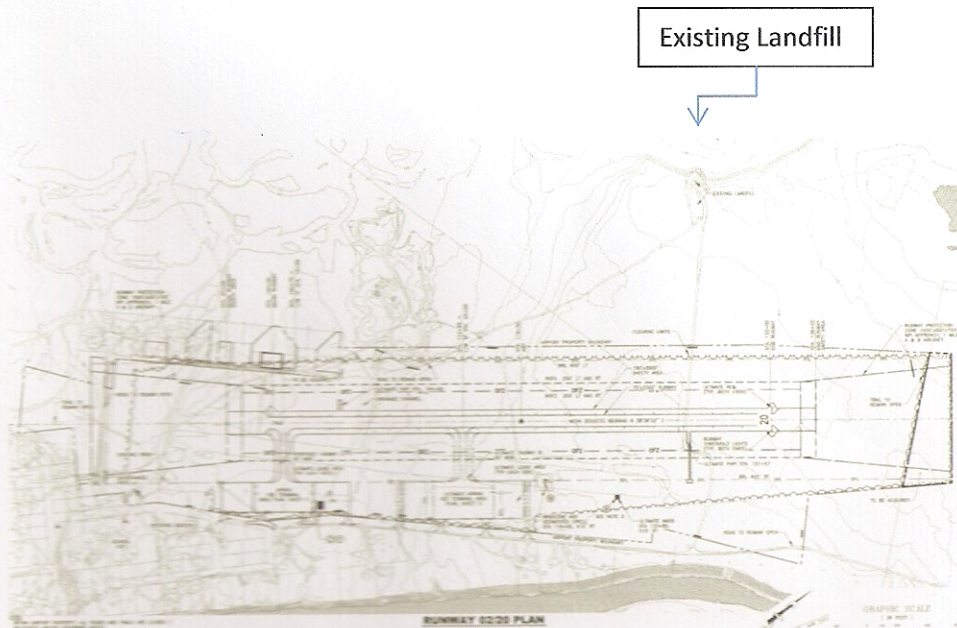
**End of Modifications to  
Alaska DOT&PF Standard Modifications**

## **APPENDIX A**

### **PERMITS**

The previous airport at Ekwok was already too close to the existing landfill. The new airstrip built by the State in 2004-2005 is even closer to the existing landfill. FAA anticipated that the landfill would be removed by the City in the near future when the plans for the airport improvements were approved and funding provided for construction of the project. The existing landfill is an ongoing health and safety threat beyond the threat to aviation, as it is also too close to the community's shallow aquifer water source, resident housing, and the healthcare clinic.

The following page includes a diagram and plan note from the Ekwok airport improvement project plans:



#### E. Non-Standard Conditions

The existing landfill is 1400' from the proposed runway, inside the 5,000 foot minimum radius recommended by the FAA. However, the City is seeking grant funds to relocate the landfill. USDA determined that wildlife hazards at Ekwok are limited. To further reduce the chance for conflicts, USDA recommended landfill management practices. ADOT&PF is working closely with the City in seeking funding and interim measures to reduce its attractiveness to wildlife. These measures include:

- Burning all animal carcasses and food waste frequently; cover or bury daily when burning is not possible.
- Installing a perimeter fence around the landfill to keep out scavenging mammals.
- Installing a wire grid or netting above the perimeter fence to keep birds out.

ADOT&PF has urged the Village Council to contact USDA directly to discuss specific details required to implement these measures. See the Environmental Assessment (EA) for additional details.



THE STATE  
of **ALASKA**  
GOVERNOR SEAN PARNELL

**Department of Environmental  
Conservation**

DIVISION OF ENVIRONMENTAL HEALTH  
Solid Waste Program

555 Cordova Street  
Anchorage, Alaska 99501  
Main: 907.269.7467  
fax: 907.269.7600

November 18, 2013

Lorraine King, Environmental Coordinator  
Ekwok Village Council  
P.O. Box 70  
Ekwok, Alaska 99580

Subject: Support for Funding to Construct a New Landfill at Ekwok, Alaska

Dear Ms. King:

The Alaska Department of Environmental Conservation (ADEC) Solid Waste Program regulates solid waste facilities in Alaska and provides technical assistance for developing and maintaining facilities to minimize the threat to human or environmental health and meet the requirements of State of Alaska regulations 18 AAC 60. ADEC strives to assist rural villages in improving solid waste management in their community. ADEC supports the efforts of Ekwok to secure funding to close their current landfill and to construct a new landfill that meets the requirements of an ADEC Class III Landfill Permit.

On October 5, 2010 I inspected the Ekwok landfill for the ADEC Solid Waste Program and spoke with the mayor of Ekwok, Julia Brandon, and Lorraine King, the IGAP Coordinator. The current landfill site, which is unpermitted, has been in operation for many years. They have recently opened the last planned cell in the landfill which will likely reach capacity by the year 2015. The community is working to promote waste sorting, use proper burning techniques, and encourage recycling in order to extend the useful life of the current site. The village has shipped out tin, aluminum, and copper to be recycled. We discussed further options for improving operations at the current landfill site such as establishing a garbage collection system and fee structure to keep traffic in the landfill to a minimum and to create a sustainable source of income for landfill maintenance and operations.

The ADEC Solid Waste Program supports Ekwok in their continued efforts to close out their current landfill and construct a new ADEC approved and permitted Class III Landfill. I look forward to working with the community to provide a safe and healthy solid waste management for the community of Ekwok. Please contact me with any comments or questions at (907) 269-7467 or email me at [kitrina.persson@alaska.gov](mailto:kitrina.persson@alaska.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Kitrina Persson".

Kitrina Persson  
Rural Landfill Specialist





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF RESEARCH AND DEVELOPMENT  
NATIONAL RISK MANAGEMENT RESEARCH LABORATORY  
CINCINNATI, OHIO 45268

November 19, 2013

Representative Bryce Edgmon  
State Capitol, Room 416  
Juneau, Ak 99801

Dear Sir:

This letter is in support of the CAPSIS application to the state of Alaska by the Native Village of Ekwok.

EPA and the Native Village of Ekwok recently conducted a study on the "Fate and Effects of Landfill Leachate on Alaska's Tribal Drinking Water Sources". The study was initiated due to a growing concern that the waste in the Ekwok dump could be released into surface water. Permafrost often functions as "liner", holding in the leachate, and keeping it from mixing with local waters. As the climate changes, this permafrost liner may be melting. The research model followed the guidelines for indigenous research from the Alaska Native Science commission. Ekwok environmental representatives actively participated in the research study providing landfill leachate and burn box ash samples for analysis of metals and waterborne pathogens. The Ekwok Tribal Council reviewed results and provided feedback on issues with the dump site and its impact on the Ekwok community.

Ekwok Village continues to implement strong solid waste management practices and effective site controls that insure proper management of the solid waste generated in their community and limit potential contact with contaminants. I fully support the CAPSIS project based on EPA's recent productive collaborative efforts with the Ekwok community.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Patterson".

Craig Patterson, P.E.  
USEPA-National Risk Management Research Laboratory  
26 West Martin Luther King Drive-MS679  
Cincinnati, OH 45268  
Phone: 513-487-2805  
e-mail: [patterson.craig@epa.gov](mailto:patterson.craig@epa.gov)

# BRISTOL BAY NATIVE ASSOCIATION

P.O. BOX 310  
DILLINGHAM, ALASKA 99576  
PHONE (907) 842-5257



November 18, 2013

Tribal Councils  
Served by BBNA:

- Aleknagik
- Chignik Bay
- Chignik Lagoon
- Chignik Lake
- Clarks Point
- Curyung
- Egegik
- Ekuk
- Ekwok
- Igiugig
- Iliamna
- Ivanof Bay
- Kanatak
- King Salmon
- Kokhanok
- Koliganek
- Levelock
- Manokotak
- Naknek
- New Stuyahok
- Newhalen
- Nondalton
- Pedro Bay
- Perryville
- Pilot Point
- Port Heiden
- Portage Creek
- South Naknek
- Togiak
- Twin Hills
- Ugashik

Governor Sean Parnell  
State of Alaska  
Office of the Governor  
Juneau, AK 99811

Dear Governor Parnell:

I am writing to support the Ekwok Village Council's CAPSIS application to the State of Alaska, which is to provide the additional funding needed to construct Ekwok's landfill Access Road project, a project that addresses a high risk to safety and the health of the community.

Ekwok is located in the Bristol Bay region and situated along the Nushagak River, 285 miles Southwest of Anchorage. Primary access is by small air craft. The existing landfill was identified as needing to be relocated prior to the State's 2004 airport improvement project. The landfill is FAA non-compliant, and being only 1400 feet from the existing airport is a serious safety issue for air access to the community. In addition, the existing landfill is located in an area that has a high potential for impacting the community's drinking water source, and in general is located too close to homes and the new health care clinic. The community has made valiant efforts to acquire funding for the combined new landfill and access road project.

The construction of the access road and new landfill is a top priority for Ekwok and Bristol Bay Native Association. Ekwok is a member of our transportation consortium and we have committed \$150,000 of Indian Reservation Roads (IRR) program funds for the landfill access road construction. The Ekwok Village Council was as able to fund the development of the Plans, Specifications, and Estimate package out of IRR American Recovery and Reinvestment Act funds. The project meets all criteria of the Federal Highway Administration for design and construction.

Thank you for your consideration of this very important project.

Sincerely,

A handwritten signature in blue ink that reads "Ralph Andersen". The signature is fluid and cursive, with the first name being the most prominent.

Ralph Andersen  
President & CEO



P.O. Box 50 Dillingham, Alaska 99576 Phone (907) 842-5956  
Fax (907) 842-2784 TTY Phone (907) 842-6541

November 18, 2013

Representative Bryce Edgmon  
State Capitol Room 416  
Juneau AK, 99801

Dear Representative Edgmon:

Ref: Ekwok Village Council Grant Application

BBHA is pleased to partner with the Ekwok Village Council in supporting and assisting the Council with their landfill access road project.

BBHA commits to working with the Council staff in a technical advisory role, to the extent our resources and personnel allow. We will review their technical plans and offer suggestions based upon our experience.

As well, we will assist their administrator, should any administrative questions arise. We have experience in working with the Ekwok Village Council, and have found them to be particularly sensitive to operating programs in accordance with the statute and regulations, and always seeking guidance on any issues of potential problems. In this respect, they are a model for other Councils to emulate.

We look forward to their successful project.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dave McClure".

Dave McClure  
Executive Director  
Bristol Bay Housing Authority



**Bristol Bay Area Health Corporation**  
6000 Kanakanak Road  
P.O. Box 130  
Dillingham, AK 99576  
(907) 842-5201  
800-478-5201  
FAX (907) 842-9354

*Bristol Bay Area Health Corporation is a tribal organization representing 34 villages in Southwest Alaska.*

Aleknagik  
Chignik Bay  
Chignik Lagoon  
Chignik Lake  
Clark's Point  
Dillingham  
Egegik  
Ekuk  
Ekwok  
Goodnews Bay  
Igiugig  
Iliamna  
Ivanof Bay  
Kanatak  
King Salmon  
Knugank  
Kokhanok  
Koliganek  
Levelock  
Manokotak  
Naknek  
New Stuyahok  
Newhalen  
Nondalton  
Pedro Bay  
Perryville  
Pilot Point  
Platinum  
Port Heiden  
Portage Creek  
South Naknek  
Togiak  
Twin Hills  
Ugashik

## ***Department of Environmental Health***

November 18, 2013

Representative Bryce Edgmon  
State Capitol Room 416  
Juneau, AK 99801

Dear Mr. Edgmon:

The purpose of this letter is to provide support for the Ekwok Village Council's efforts in obtaining funding for their landfill project. I whole-heartedly support their effort to improve the community's solid waste disposal system.

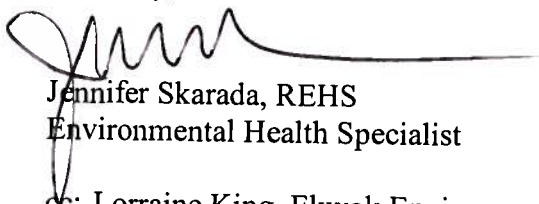
A sanitary landfill is imperative to protecting the health of the community. Appropriate access to a properly designed and operated landfill provides many benefits to the community and will significantly reduce the risk of serious environmental and occupational health affects. Proper disposal of solid waste is a major concern in many rural Alaskan communities and Ekwok is no exception.

Bristol Bay Area Health Corporation (BBAHC) Environmental Health Specialists have conducted surveys of the Ekwok solid waste site over the past several years. It is documented that the current solid waste site poses a significant risk for surface water impact. In addition, the site is approximately 1,300 feet from the runway which is well within the minimum required separation distance of 5,000 feet, set by the Alaska Department of Environmental Conservation (ADEC) and Federal Aviation Administration (FAA). Despite Ekwok's continuous hard work to operate the current site in an efficient manner, space is very limited and there is not room to expand.

Funding for this access road project will allow Ekwok to proceed with their much needed landfill project. These efforts protect public health at many levels, including protection to surface water, improving air quality in the village, achieving compliance with FAA runway requirements, and controlling vector and vermin problems associated with open dumps.

The BBAHC Environmental Health Department fully supports the efforts of the Ekwok Village Council to secure funding for this access road project and to make solid waste disposal improvements within the community. We are able to provide additional technical assistance upon request. Please contact me at 1-888-792-2242 or [jskarada@bbahc.org](mailto:jskarada@bbahc.org), if you have any questions or if our program can be of assistance in the future.

Sincerely,



Jennifer Skarada, REHS  
Environmental Health Specialist

cc: Lorraine King, Ekwok Environmental Program Coordinator  
EH File

# EKWOK LANDFILL AND ACCESS ROAD PROJECT

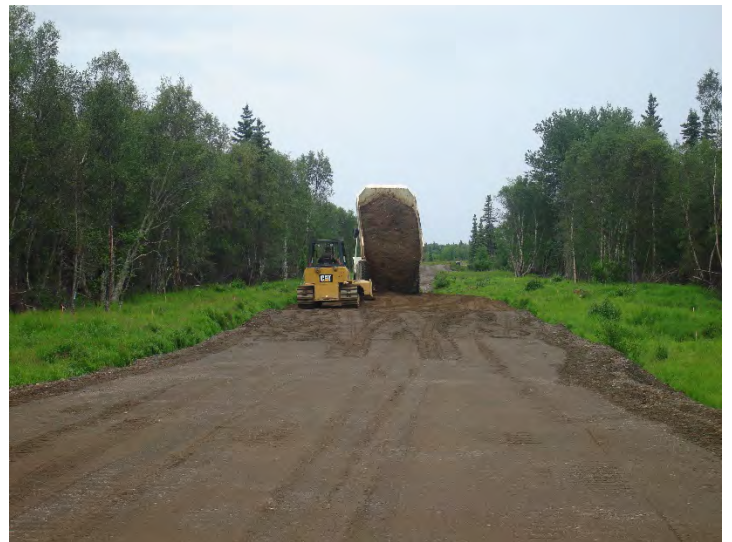
CONSTRUCTION WORK COMPLETED THIS SUMMER, 2013

Photos on this page are on the community side, Constuction of pioneer road in gravel pit to start of road connecting to pioneer road to the creek



# EKWOK LANDFILL AND ACCESS ROAD PROJECT

Photos on this page are applying more gravel to the pioneer road, completed last summer, to the creek



# EKWOK LANDFILL AND ACCESS ROAD PROJECT

Culverts being placed where needed



Stockpile of gravel to haul across the creek in the winter



# EXISTING LANDFILL HAZARDS

## Open burning

The homemade burnbox door hinges burnt off and wore out after continued heat from usage



## Open access creating vectors and scavengers to scatter litter

New burn box being put to use, you can see a crow flying away as we approached the dump



## Summer and winter



# EXISTING LANDFILL HAZARDS

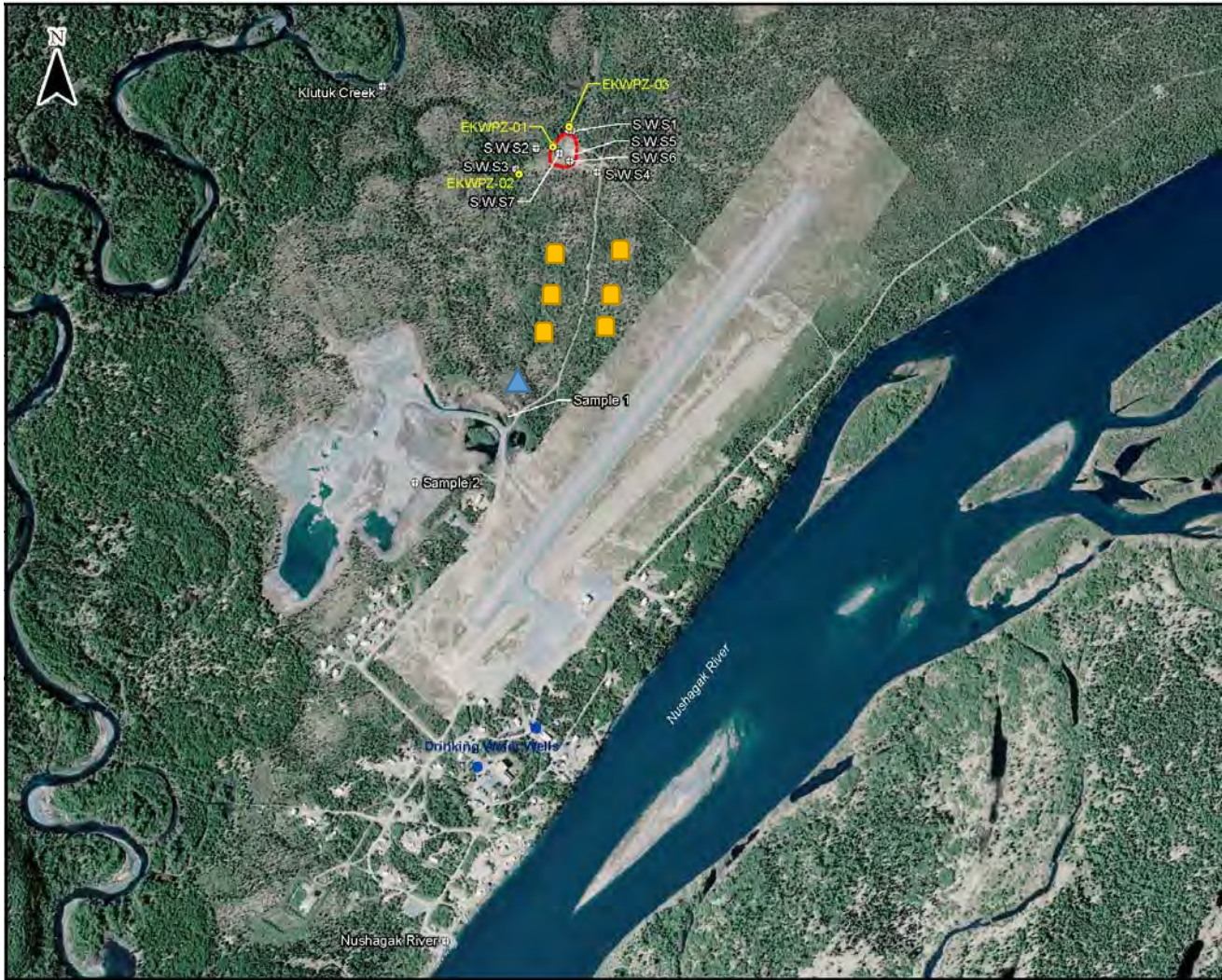
We've tried fencing, but the bears continue to tear down the fence. We've applied for the interagency grants to purchase the heavy duty fencing, but since we received the USDA grant for the new landfill, it was not awarded



We hold yearly community cleanups, recycling of batteries, fluorescent lights, electronics and aluminum



# EXISTING LANDFILL HAZARDS



- ▲ New Clinic
- New six Hud Homes

Above the six home is the dump with the three test wells around it.