



US Army Corps
of Engineers
Alaska District

Public Notice of Application for Permit

Regulatory Division (1145)
CEPOA-RD
Post Office Box 6898
JBER, Alaska 99506-0898

PUBLIC NOTICE DATE: October 10, 2012
EXPIRATION DATE: November 9, 2012
REFERENCE NUMBER: POA-2012-665
WATERWAY: Kanektok River

Interested parties are hereby notified that a Department of the Army permit application has been received for work in waters of the United States as described below and shown on the enclosed project drawings.

Comments on the described work, with the reference number, should reach this office no later than the expiration date of this Public Notice (PN) to become part of the record and be considered in the decision. Please contact **Mary Romero** at (907) 753-2773, toll free from within Alaska at (800) 478-2712, by fax at (907) 753-5567, or by email at mary.r.romero@usace.army.mil if further information is desired concerning this notice.

APPLICANT: John Mark, Native Village of Kwinhagak (NVK), PO Box 149, Quinhagak, Alaska 99655

AGENT: Brian Davis, CE2 Engineers, PO Box 232946, Anchorage, Alaska 99523

LOCATION: The project site is located within Sections 2, 3, 10, & 11, T. 5 S., R. 74 W., Seward Meridian; USGS Quad Map Goodnews Bay D-8; Latitude 59.7593° N., Longitude 161.8633° W.; east of Quinhagak, Alaska.

SPECIAL AREA DESIGNATION: The project is located within the Yukon Kuskokwim National Wildlife Refuge.

PURPOSE: The applicant's stated purpose is to develop an evacuation route from Quinhagak.

PROPOSED WORK: Place 24,900 cubic yards (cy) of fill into 4.8 acres of wetlands for the development of a 3,660' long x 44' wide evacuation route out of Quinhagak and a 1,092' long x 44' wide access road to the gravel source. Culverts would be utilized in drainage areas to maintain natural flow. This work would be phase I of a road that would eventually lead to additional gravel sources for fill placement needed for future development of homes and village infrastructure. At this time it is not known when the remainder of the road would be developed. This portion would

allow evacuation away from the coast to high ground in the event of an emergency and provide a measure of safety for residents. The extension of the road would be proposed at a later date as a modification to this project if permitted. All work would be performed in accordance with the enclosed plan (sheets 1-18), dated August 21, 2012.

ADDITIONAL INFORMATION: Approximately 4,500 cy would be imported D-1 surface course gravels, which are not available in Quinhagak, and 20,400 cy would be pit run gravel from the nearby Pit "A" owned by Calista Corp (the permit for this pit has expired and another PN to expand the pit is being sent out concurrent with this PN). The road would be built on geotextile fabric laid down on top of the existing tundra soil. No excavation would be performed for this project. Several non-anadromous tundra drainages would be crossed by the new road and culverts would be incorporated into the road construction to provide adequate drainage. The road would follow an alignment discussed at a community meeting and approved by tribal, city and ANCSA corporate land owners. It would lie 200 feet south of an existing winter snow machine trail, which itself lies several hundred feet away from the south bank of the Kanektok River, because the trail is a major winter snow machine route utilized for subsistence it is important not to have vehicles use the same area.

APPLICANT PROPOSED MITIGATION: The applicant proposes the following mitigation measures to avoid, minimize, and compensate for impacts to waters of the United States from activities involving discharges of dredged or fill material.

- a. Avoidance: In planning this project, the NVK was mindful of the need to avoid impacting waters of the U.S. including wetlands to the maximum extent practicable. However, two factors made this difficult. The first is that Quinhagak is a community like others in the Yukon-Kuskokwim Delta in that it is low-lying and situated mainly in wetland tundra soil. The other is that the primary function of the proposed road would be as an evacuation route away from low-lying wetlands in the case of a flood or tsunami. For both of these reasons, wetlands would have to be crossed. Alternative locations (route alignments crossing different spans of undeveloped tundra) were considered but all have essentially the same impact. The alignment of the road was the subject of discussion during the Community Development Planning sessions held in Quinhagak. As part of the planning for this project, NVK posted a Notice of Proposed Wetlands Development in the Quinhagak post office requesting input. After two weeks, no input was received.
- b. Minimization: Little could be done to reduce the footprint of the road and the area of impacted wetlands. However, the road was designed with close attention to providing sufficient drainage culverts to facilitate movement of seasonal surface groundwater. The placement and spacing of the road and the culverts are designed to maintain proper drainage.
- c. Compensatory Mitigation: NVK proposes that no compensation should be required for this project's impact to wetlands. Quinhagak is like other communities in the Yukon-Kuskokwim River delta, an area with a tremendous amount of wetland habitat. The impact of developing a road with a 4.8 acre footprint is relatively minor in the context of the larger aquatic environment, and especially in light of the fact that the purpose of the road is to protect human health and public safety, NVK believes that any requirement for compensatory mitigation would be unjustified.

WATER QUALITY CERTIFICATION: A permit for the described work will not be issued until a certification or waiver of certification, as required under Section 401 of

the Clean Water Act (Public Law 95-217), has been received from the Alaska Department of Environmental Conservation.

CULTURAL RESOURCES: The latest published version of the Alaska Heritage Resources Survey (AHRS) has been consulted for the presence or absence of historic properties, including those listed in or eligible for inclusion in the National Register of Historic Places. There are no listed or eligible properties in the vicinity of the worksite. Consultation of the AHRS constitutes the extent of cultural resource investigations by the District Commander at this time, and he is otherwise unaware of the presence of such resources. This application is being coordinated with the State Historic Preservation Office (SHPO). Any comments SHPO may have concerning presently unknown archeological or historic data that may be lost or destroyed by work under the requested permit will be considered in our final assessment of the described work.

ENDANGERED SPECIES: No threatened or endangered species are known to use the project area. We have determined the described activity would have no effect on any listed or proposed threatened or endangered species, and would have no effect on any designated or proposed critical habitat, under the Endangered Species Act of 1973 (87 Stat. 844). Therefore, no consultation with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service is required. However, any comments they may have concerning endangered or threatened wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). No EFH species are known to use the project area.

We have determined the described activity would not adversely affect EFH in the project area.

TRIBAL CONSULTATION: The Alaska District fully supports tribal self-governance and government-to-government relations between Federally recognized Tribes and the Federal government. Tribes with protected rights or resources that could be significantly affected by a proposed Federal action (e.g., a permit decision) have the right to consult with the Alaska District on a government-to-government basis. Views of each Tribe regarding protected rights and resources will be accorded due consideration in this process. This Public Notice serves as notification to the Tribes within the area potentially affected by the proposed work and invites their participation in the Federal decision-making process regarding the protected Tribal right or resource. Consultation may be initiated by the affected Tribe upon written request to the District Commander during the public comment period.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, reasons for holding a public hearing.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts, which the proposed activity may have on the public interest, requires a careful weighing

of all the factors that become relevant in each particular case. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. The outcome of the general balancing process would determine whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur. The decision should reflect the national concern for both protection and utilization of important resources. All factors, which may be relevant to the proposal, must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(1) guidelines. Subject to the preceding sentence and any other applicable guidelines or criteria (see Sections 320.2 and 320.3), a permit will be granted unless the District Commander determines that it would be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

AUTHORITY: This permit will be issued or denied under the following authority:

(X) Discharge dredged or fill material into waters of the United States - Section 404 Clean Water Act (33 U.S.C. 1344). Therefore, our public interest review will consider the guidelines set forth under Section 404(b) of the Clean Water Act (40 CFR 230).

Project drawings and a Notice of Application for State Water Quality Certification are enclosed with this Public Notice.

District Commander
U.S. Army, Corps of Engineers

Enclosures

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER
401 Certification Program
Non-Point Source Water Pollution Control Program

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WQM/401 CERTIFICATION
555 CORDOVA STREET
ANCHORAGE, ALASKA 99501-2617
PHONE: (907) 269-7564/FAX: (907) 334-2415

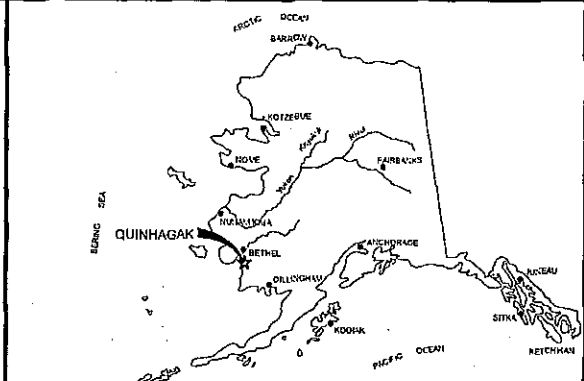
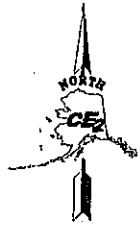
NOTICE OF APPLICATION
FOR
STATE WATER QUALITY CERTIFICATION

Any applicant for a federal license or permit to conduct an activity that might result in a discharge into navigable waters, in accordance with Section 401 of the Clean Water Act of 1977 (PL95-217), also must apply for and obtain certification from the Alaska Department of Environmental Conservation that the discharge will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. By agreement between the U.S. Army Corps of Engineers and the Department of Environmental Conservation, application for a Department of the Army permit to discharge dredged or fill material into navigable waters under Section 404 of the Clean Water Act also may serve as application for State Water Quality Certification.

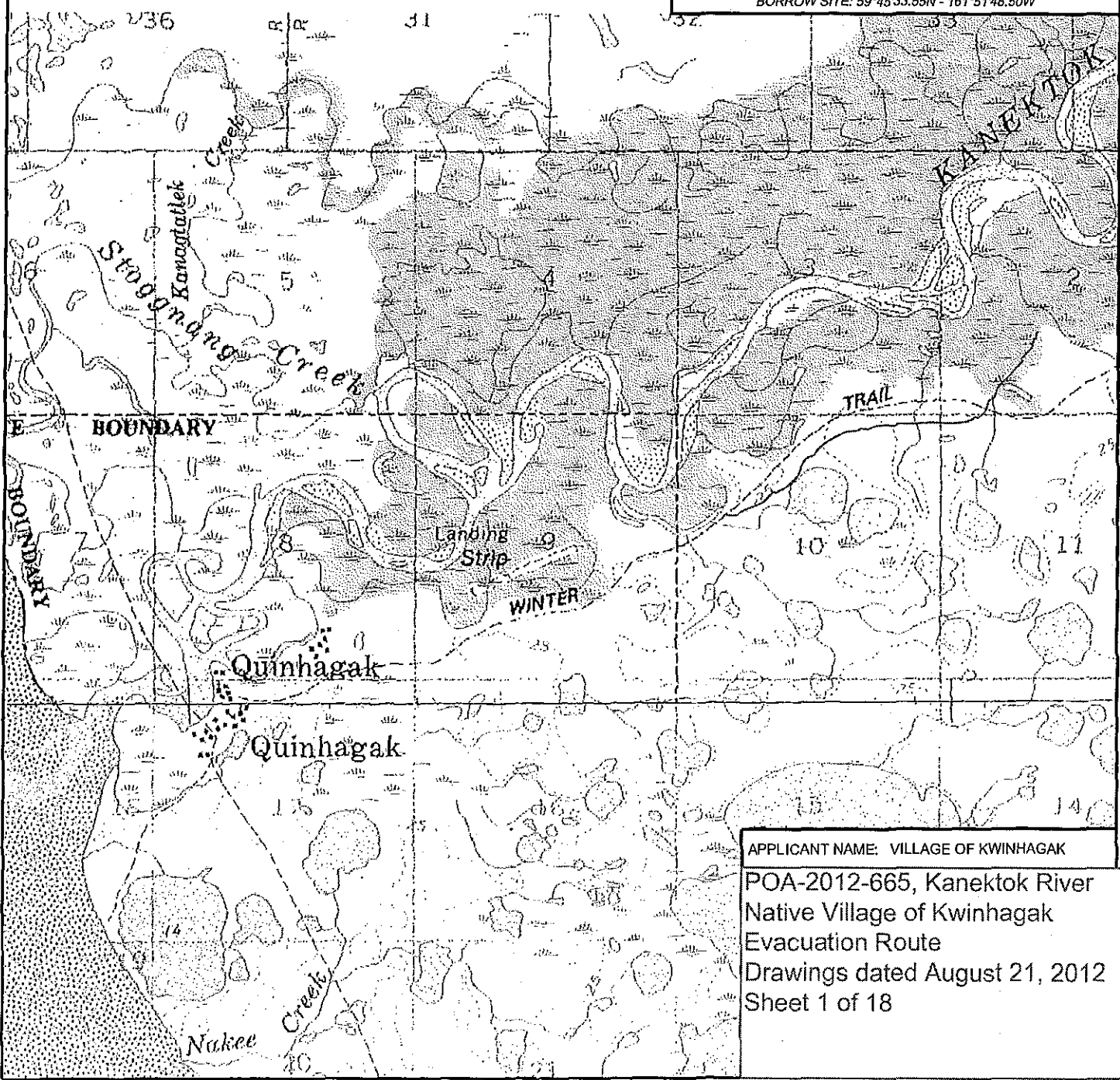
Notice is hereby given that the application for a Department of the Army Permit described in the Corps of Engineers' Public Notice No. POA-2012-665, Kanektok River, serves as application for State Water Quality Certification from the Department of Environmental Conservation.

After reviewing the application, the Department may certify there is reasonable assurance the activity, and any discharge that might result, will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. The Department also may deny or waive certification.

Any person desiring to comment on the project, with respect to Water Quality Certification, may submit written comments to the address above by the expiration date of the Corps of Engineer's Public Notice.



VICINITY MAP
USGS QUAD: GOODNEWS BAY D-8
BORROW SITE: 59°45'33.55N - 161°51'48.50W



APPLICANT NAME: VILLAGE OF KWINHAGAK
POA-2012-665, Kanektok River
Native Village of Kwinhagak
Evacuation Route
Drawings dated August 21, 2012
Sheet 1 of 18



NOTE:
POB = POINT OF BEGINNING
POE = POINT OF ENDING

SEC. 3

SEC. 2

SEC. 10

SEC. 11

PROPOSED BORROW
SITE ROAD (BIA ROUTE
3000), SEE SECTION A,
SHEET 3 FOR DETAILS

PROPOSED GRAVEL BORROW
SITE AND STOCKPILE AREA,
SEE SHEET 4 FOR DETAILS

POE (BIA ROUTE 2700)
POB (BIA ROUTE 3000)

FUTURE EXTENSION OF
KANEKTOK RIVER ROAD
(BIA ROUTE 2700)

EXISTING DRAINAGE
CHANNEL, INSTALL CMP
DRAINAGE CULVERT(S) AS
REQUIRED (6 LOCATIONS
TYP.), SEE SECTION B,
SHEET 3 FOR DETAILS

PROPOSED KANEKTOK
RIVER ROAD (BIA ROUTE
2700), SEE SECTION A,
SHEET 3 FOR DETAILS

EXISTING
ACCESS ROAD
POB (BIA ROUTE 2700)

PROPOSED KANEKTOK
RIVER ROAD (BIA ROUTE
2700), SEE SECTION A,
SHEET 3 FOR DETAILS

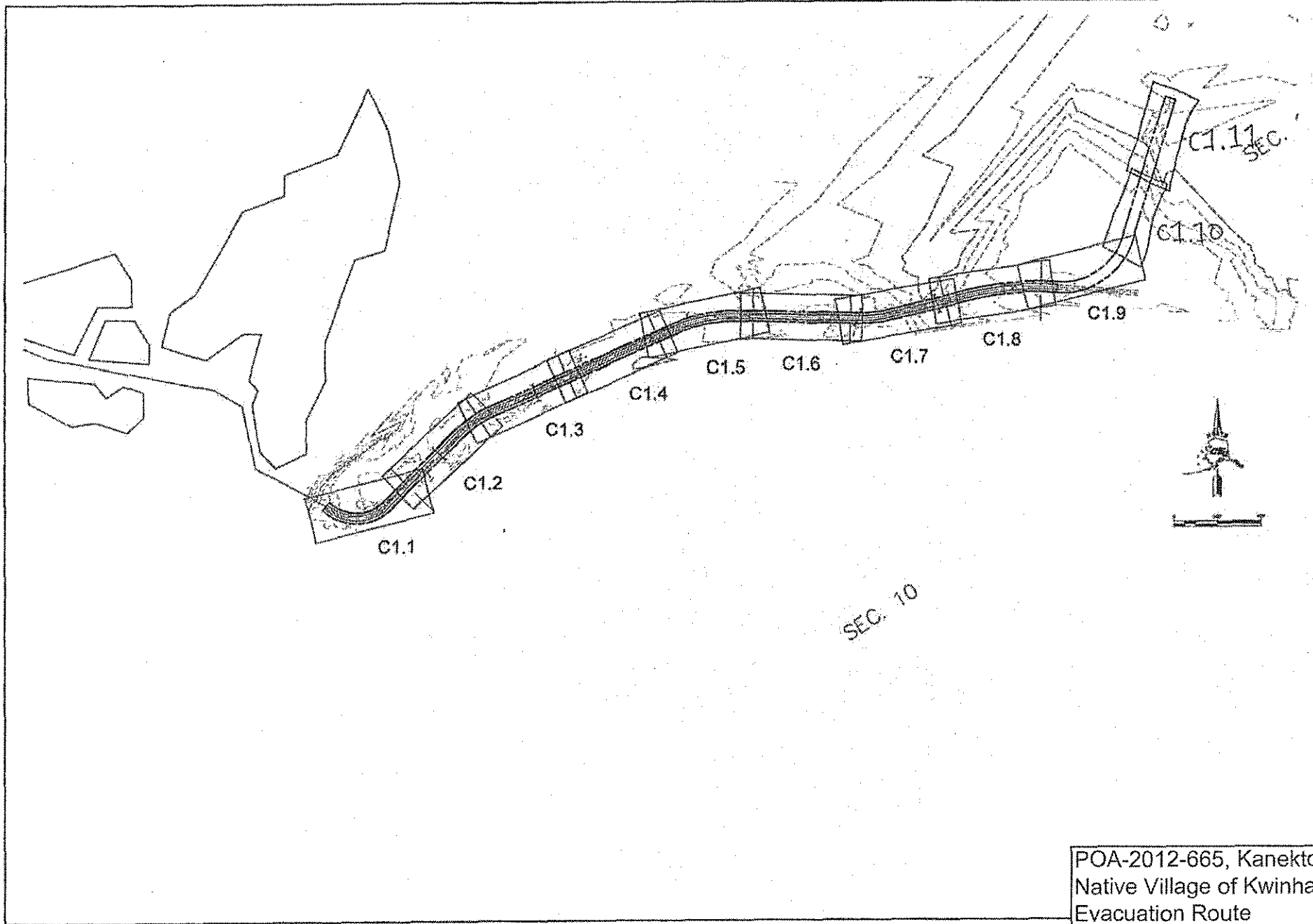
EXISTING WINTER TRAIL

QANIRTUUQ CORPORATION PROPERTY

QUINHAGAK AIRPORT
PROPERTY

APPLICANT NAME: VILLAGE OF KWINHAGAK

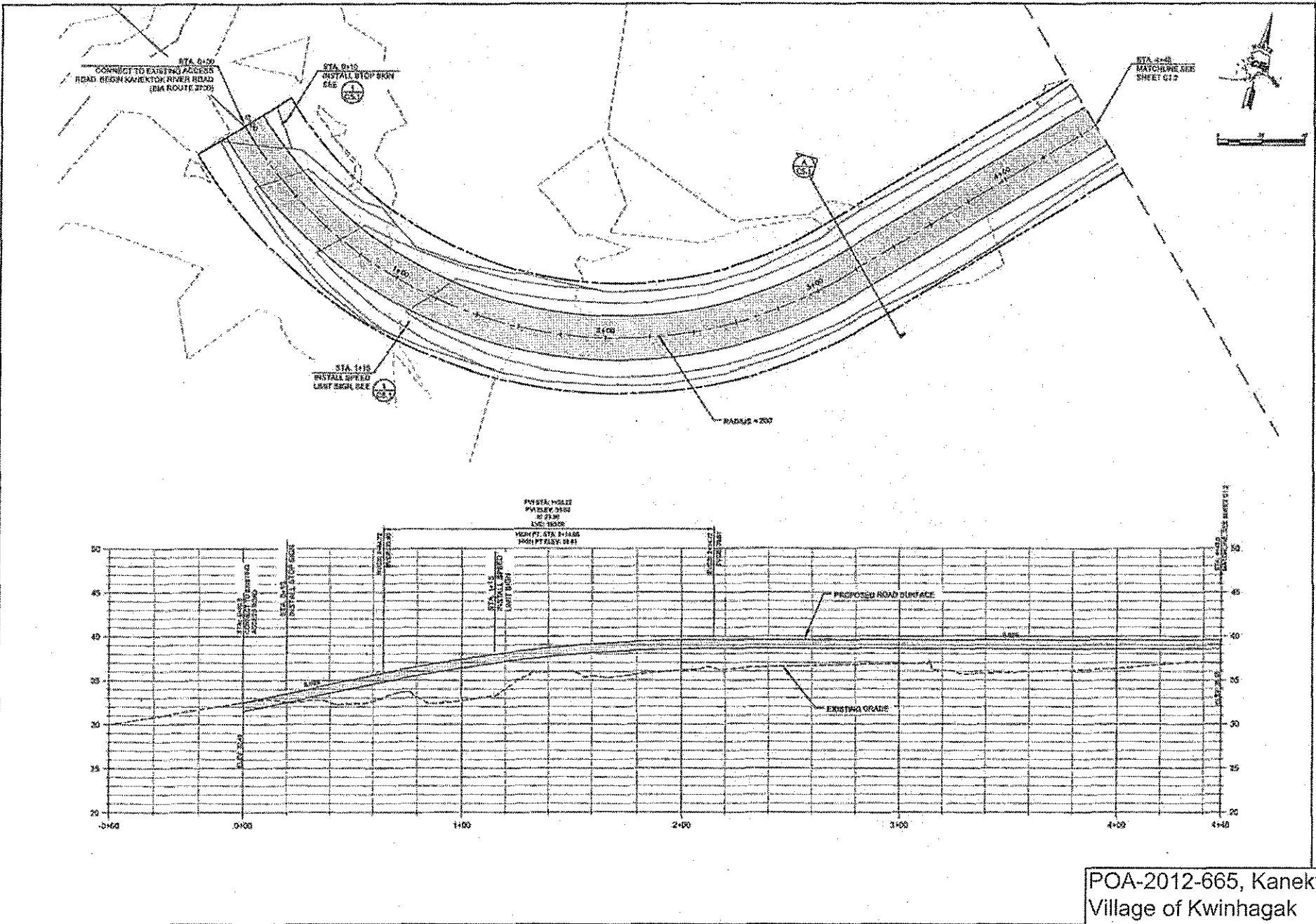
POA-2012-665, Kanektok River
Native Village of Kwinhagak
Evacuation Route
Drawings dated August 21, 2012
Sheet 2 of 18



POA-2012-665, Kanektok River
 Native Village of Kwinhagak
 Evacuation Route
 Drawings dated August 21, 2012
 Sheet 3 of 18

	THESE DIMENSIONS REFLECT AS CONSTRUCTED INFORMATION OBTAINED DURING CONSTRUCTION, INFORMATION PROVIDED HEREIN IS ACCURATE TO THE BEST OF MY KNOWLEDGE	
	DATE	BY
PROJECT INFORMATION PROJECT NAME: _____ SHEET NO.: _____ TOTAL SHEETS: _____ DRAWN BY: _____ CHECKED BY: _____ DATE: _____		
CIVIL SITE PLAN AND SHEET INDEX 		
KANAKTOK STATE ROAD CIVIL ENGINEER CEE ENGINEERS, INC. 1000 W. WILSON BLVD. SUITE 100 ANCHORAGE, ALASKA 99503		
NO.	DATE	DESCRIPTION

POA-2012-665, Kanektok River Road, Village of Kwinhagak, Alaska
 DRAWING NO. 2012-08-21-01, SHEET 4 OF 18
 DATE: 08/21/12
 PROJECT: POA-2012-665, Kanektok River Road, Village of Kwinhagak, Alaska
 DRAWING NO. 2012-08-21-01, SHEET 4 OF 18
 DATE: 08/21/12



PROJECT DESCRIPTION THESE DRAWINGS REFLECT RECOMMENDED INFORMATION OBTAINED THROUGH CONSTRUCTION OF THIS PROJECT AND ARE SUBJECT TO THE BEST OF MY KNOWLEDGE.	
SCALE AS SHOWN	CONTRACTOR'S NAME PROJECT NO. SHEET NO.
KANAKTOK RIVER ROAD VILLAGE OF KWINHAGAK PLAN AND PROFILE CUPRESSAIGN, ALASKA	
REVISION NO. DATE	DATE BY CHECKED APPROVED

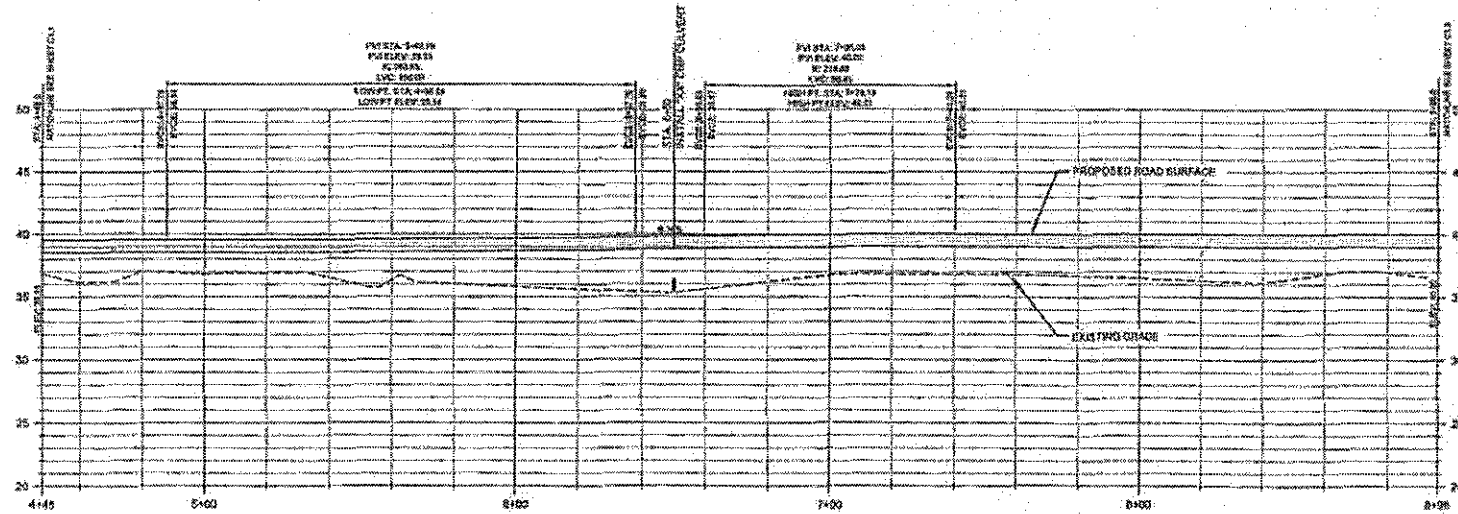
POA-2012-665, Kanektok River
 Village of Kwinhagak
 Evacuation Route
 Drawings dated August 21, 2012
 Sheet 4 of 18

POA-2012-665, Kanektok River Road, Village of Kwinhagak, Alaska. Project No. 12012-665-01. Date: 08/21/12. Scale: 1" = 100'. Prepared by: C&E2 Engineers, Inc.

STA 4+00
MATCHLINE SEE
SHEET 01.1

STA 8+50
RIGHT OF WAY
CULVERT ONE

STA 8+00
MATCHLINE SEE
SHEET 01.1



DESIGNED AND DRAWN BY: [Name]
CHECKED BY: [Name]
DATE: [Date]

NO.	DATE	DESCRIPTION



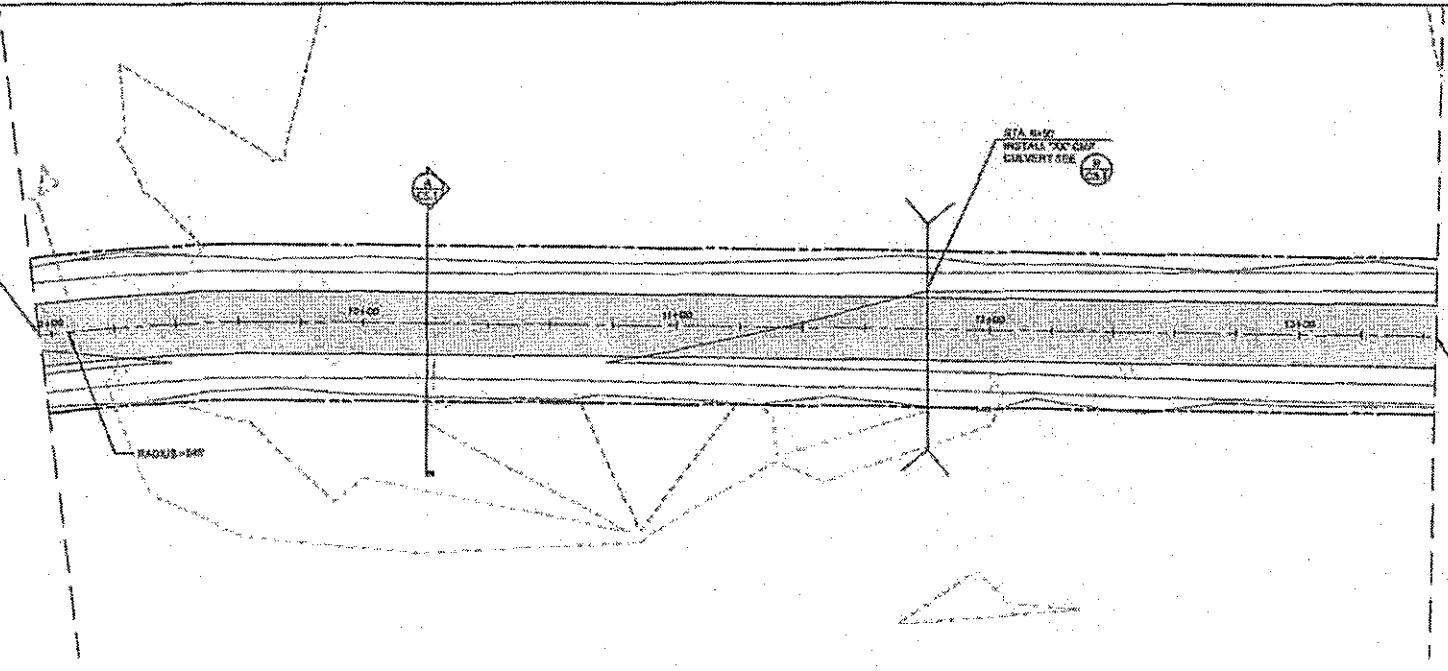
KANAKTOK RIVER ROAD
VILLAGE OF KWINHAGAK
ALASKA
PLAN AND PROFILE
QUIRRENDAL, ALASKA



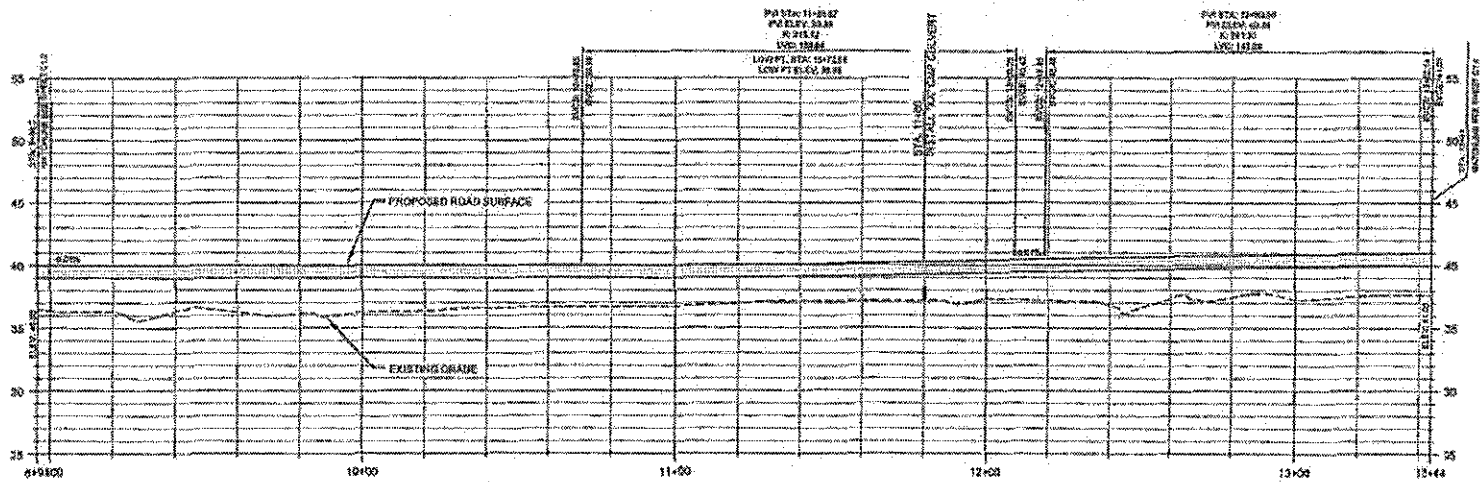
POA-2012-665, Kanektok River
Village of Kwinhagak
Evacuation Route
Drawings dated August 21, 2012
Sheet 5 of 18

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STA 9+00
MATCHLINE SEE
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STA 13+00
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SHEET C1.4

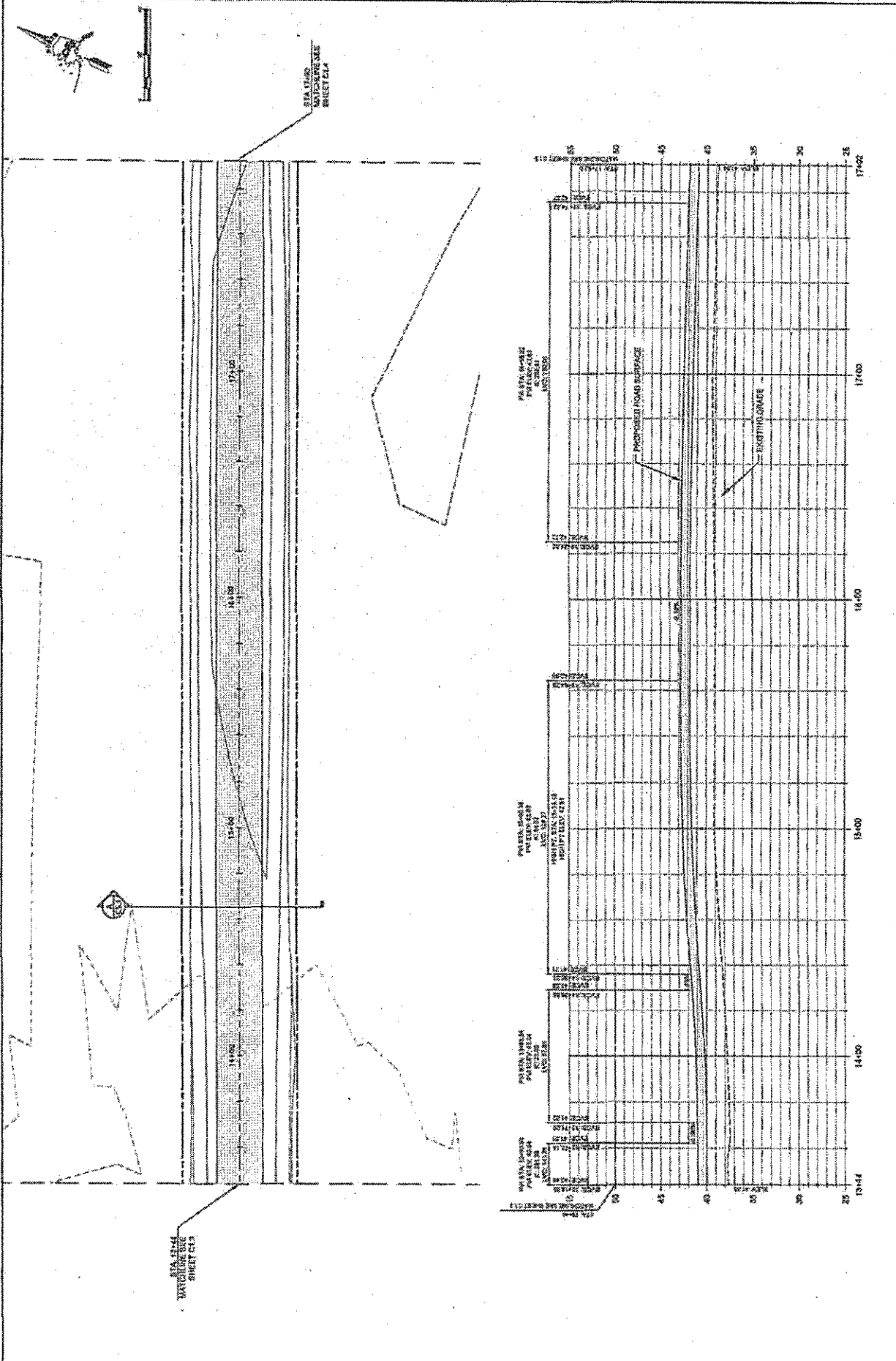


PREPARED (DESIGNED) DATE: 8/21/12 DRAWN (BY) DATE: 8/21/12 CHECKED (BY) DATE: 8/21/12 IN CHARGE (BY) DATE: 8/21/12 PROJECT NO.: POA-2012-665 SHEET NO.: 6 OF 18	
SCALE AS SHOWN	
CONSTRUCTION NOTES 1. THESE DRAWINGS REFLECT THE DESIGN AND INFORMATION PROVIDED BY THE CLIENT. 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND RIGHTS OF WAY. 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY EROSION CONTROL MEASURES. 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY UTILITY INFORMATION.	
KANAKTOK RIVER ROAD ELEVATION 2008 PLAN AND PROFILE GUPHAGAK, ALASKA	
REVISIONS NO. DATE 1 8/21/12 2 8/21/12 3 8/21/12 4 8/21/12 5 8/21/12	DRAWN BY: JAMES BP CASADORE CHECKED BY: JAMES BP CASADORE IN CHARGE BY: JAMES BP CASADORE PROJECT NO.: POA-2012-665 SHEET NO.: 6 OF 18

POA-2012-665, Kanektok River
Village of Kwinhagak
Evacuation Route
Drawings dated August 21, 2012
Sheet 6 of 18

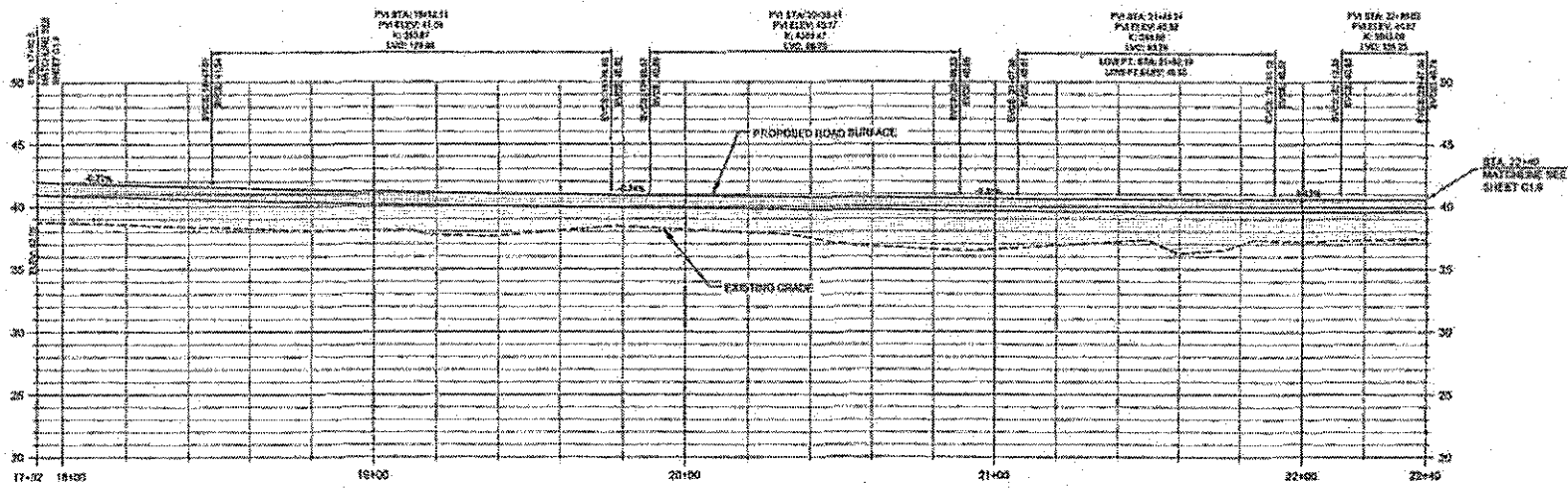
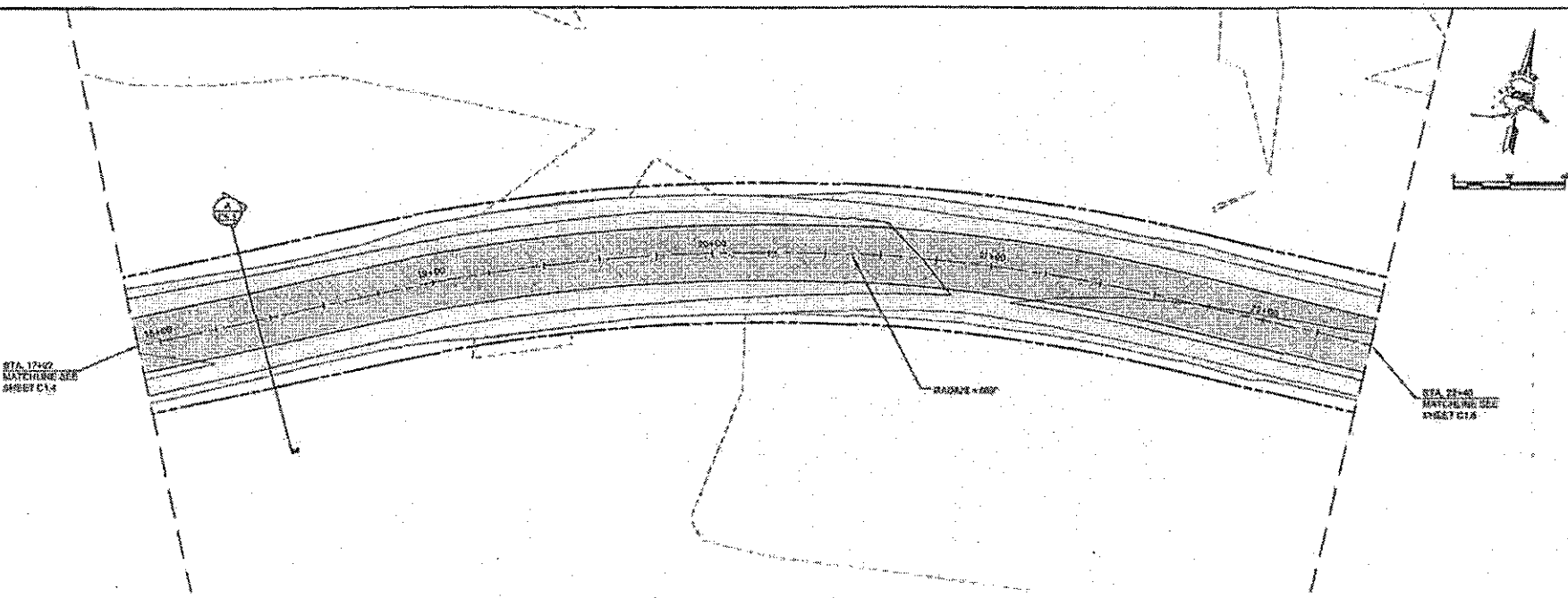
	PLAN AND PROFILE KANEKTOK RIVER ROAD PROJECT NO. 2012-001		SHEET NO. 7 TOTAL SHEETS 7
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POA-2012-665, Kanektok River
 Village of Kwinhagak
 Evacuation Route
 Drawings dated August 21, 2012
 Sheet 7 of 18



AREA SHOWN IN THIS SHEET IS TO BE CONSIDERED AS A PART OF THE PROJECT. ANY CHANGES TO THE PROJECT SHALL BE MADE BY THE ENGINEER. THE ENGINEER SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED IN THIS DRAWING. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED IN THIS DRAWING.

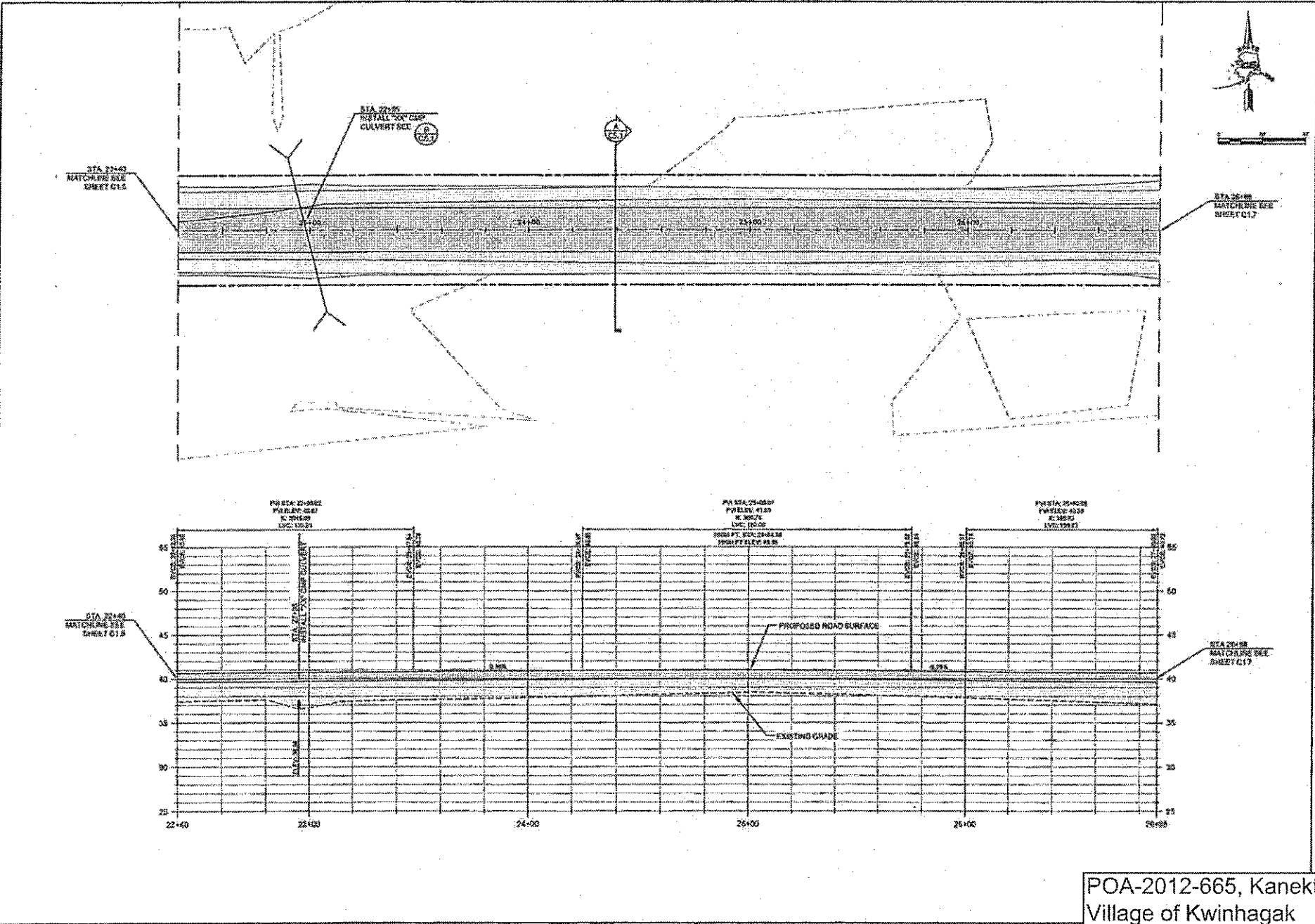
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SCALE: AS SHOWN DATE: 8/21/2012 DRAWN BY: J. [unreadable] CHECKED BY: [unreadable] APPROVED BY: [unreadable]	
KANAKTOK RIVER ROAD VILLAGE OF KWINHAGAK PLAN AND PROFILE QUINHAGAK, ALASKA	
 CFE ENGINEERS, INC. Professional Engineers and Surveyors for Alaska	
REVISION:	NO. DATE DESCRIPTION

POA-2012-665, Kanektok River Village of Kwinhagak Evacuation Route Drawings dated August 21, 2012 Sheet 8 of 18

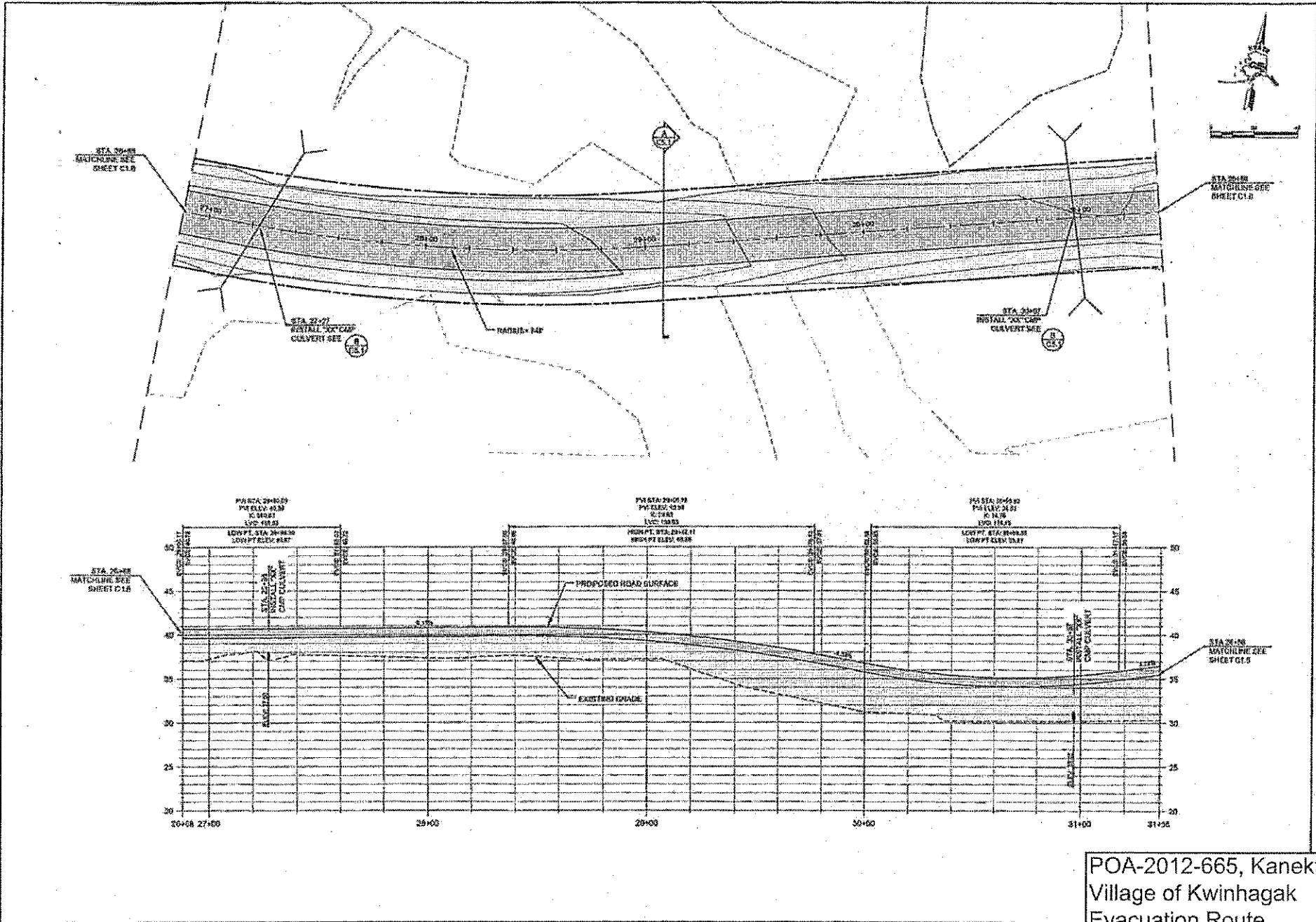
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REVISIONS NO. DATE BY DESCRIPTION	
PROJECT INFORMATION PROJECT NO. _____ DRAWING NO. _____ SHEET NO. _____ OF _____ CONTRACT NO. _____ DATE _____	
	
KANAKTOK RIVER ROAD VILLAGE OF KWINHAGAK EVACUATION ROUTE PLAN AND PROFILE GUSKAGWICK, ALASKA	
	
CE2 ENGINEERS, INC. 10100 W. ALASKA STREET, SUITE 100 ANCHORAGE, ALASKA 99515 PHONE: (907) 562-1111 FAX: (907) 562-1112 WWW: WWW.CE2ENGINEERS.COM	

POA-2012-665, Kanektok River
 Village of Kwinhagak
 Evacuation Route
 Drawings dated August 21, 2012
 Sheet 9 of 18

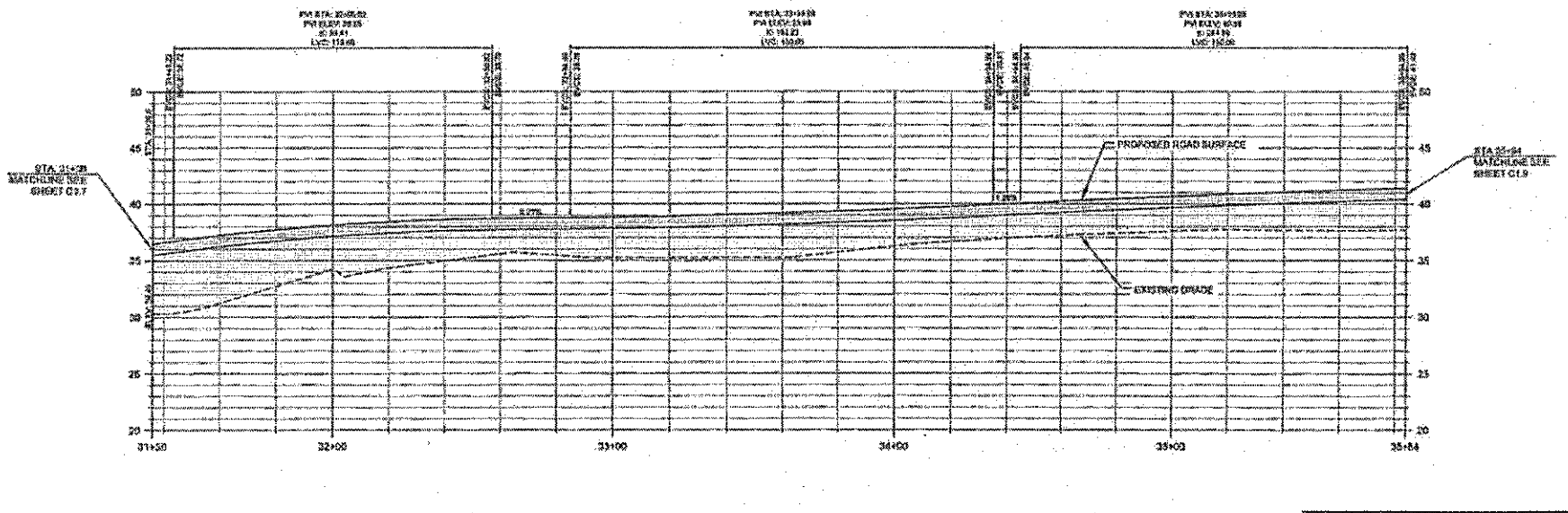
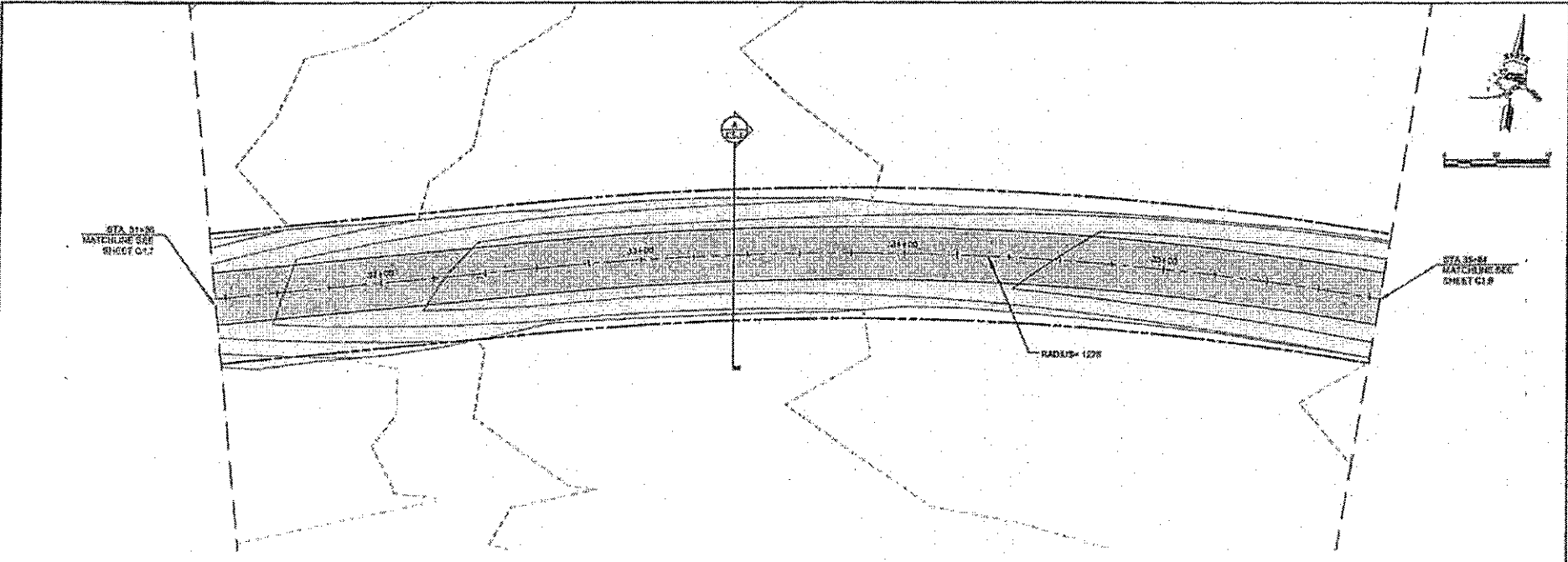
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POA-2012-665, Kanektok River
 Village of Kwinhagak
 Evacuation Route
 Drawings dated August 21, 2012
 Sheet 10 of 18

PROPOSED DESIGN ELEVATIONS STREET ELEVATIONS: 10.00 FT SIDEWALK ELEVATIONS: 10.00 FT CURB ELEVATIONS: 10.00 FT FINISHED GRADE ELEVATIONS: 10.00 FT FINISHED FLOOR ELEVATIONS: 10.00 FT	
SCALE: AS SHOWN	DATE: 11/21/12
DESIGNER: J. J. JONES	CHECKED: J. J. JONES
APPROVED: J. J. JONES	DATE: 11/21/12
PROJECT INFORMATION: PROJECT NO.: POA-2012-665 SHEET NO.: 10 OF 18 DRAWING TITLE: PLAN AND PROFILE	
CLIENT: KANAYUK RIVER BOARD 1111 S. 11th St. Anchorage, Alaska 99501	
ENGINEER: C.E.R. ENGINEERS, INC. 1111 S. 11th St. Anchorage, Alaska 99501	

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NECESSARY CHANGES TO THE DRAWING WILL BE MADE AS A RESULT OF THE INFORMATION PROVIDED TO THE CONTRACTOR. INFORMATION PROVIDED TO THE CONTRACTOR WILL BE SUBJECT TO THE BEST OF OUR KNOWLEDGE.

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CONSTRUCTION	AS SHOWN
PROPOSED	AS SHOWN
EXISTING	AS SHOWN
DATE	



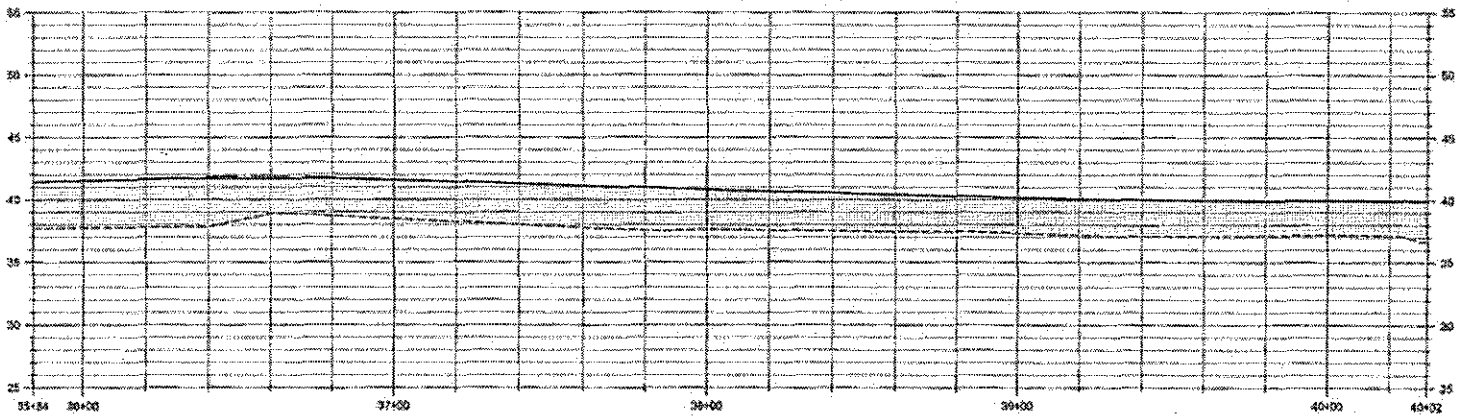
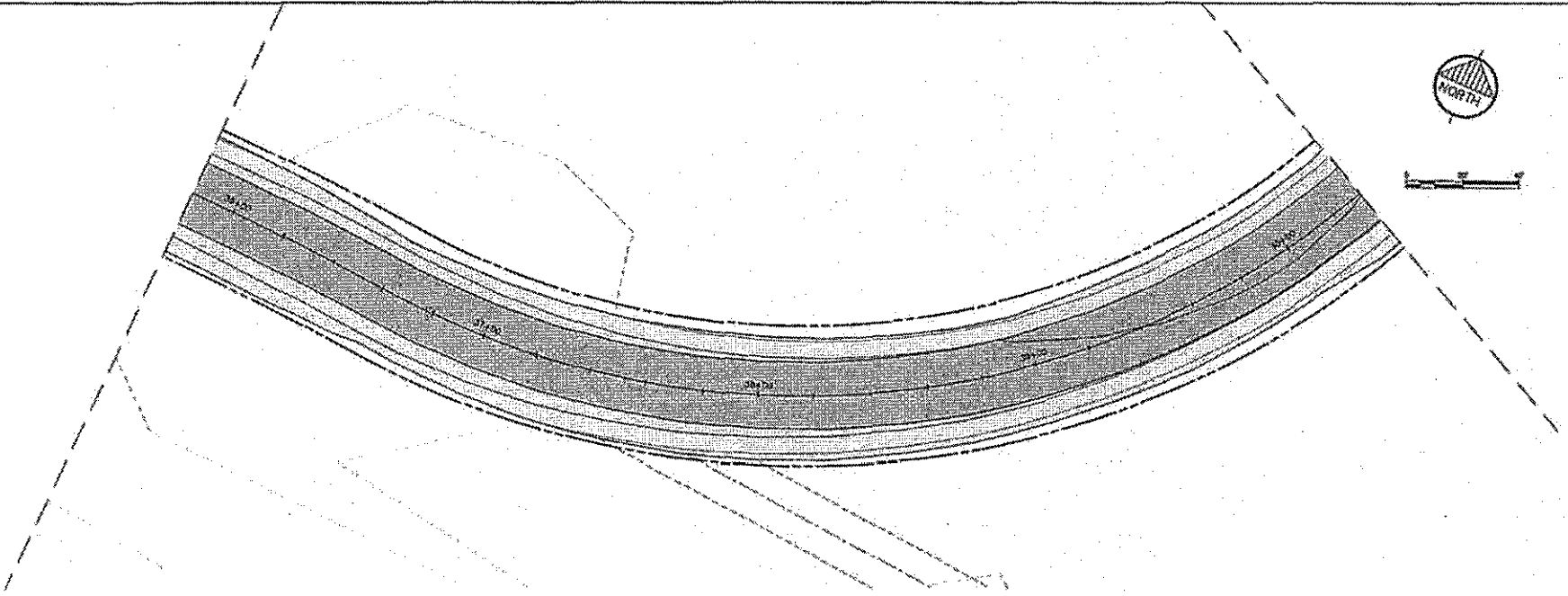
KALESTON ENGINEERING
 1000 UNIVERSITY BLVD
 ANCHORAGE, ALASKA 99501
 PLAN AND PROFILE
 QUINLAGAK, ALASKA



NO.	DATE	BY	DATE

POA-2012-665, Kanektok River Village of Kwinhagak Evacuation Route Drawings dated August 21, 2012 Sheet 11 of 18

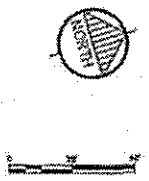
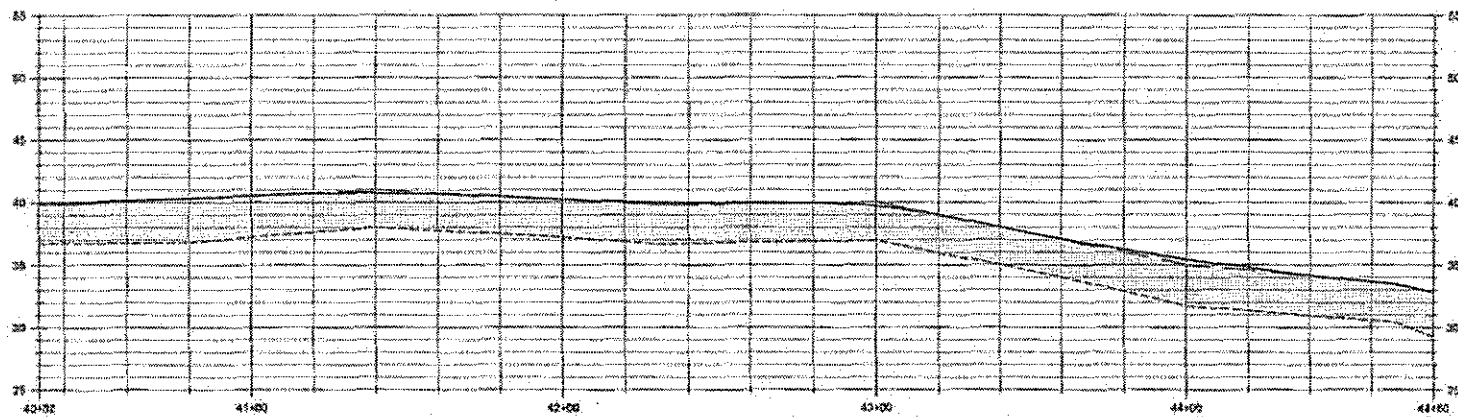
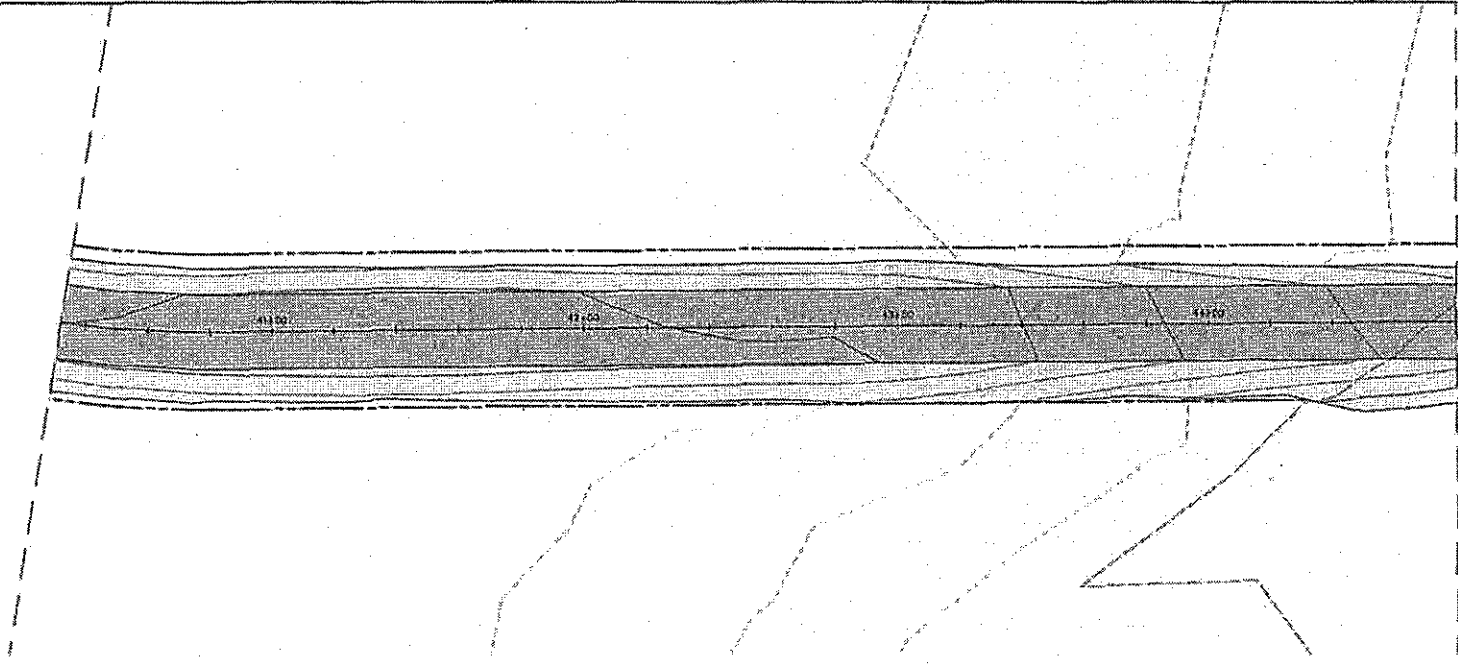
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<p>PROFESSIONAL CERTIFICATION THESE DRAWINGS BEARING THEREON OR ANY PART THEREOF, OR ANY INFORMATION CONTAINED THEREON, OR ANY INFORMATION WHICH RELATES THERETO, IS THE SOLE PROPERTY OF THE ENGINEER.</p>	
<p>SCALE AS SHOWN</p>	<p>DATE 08/21/2012</p>
<p>CONSTRUCTION PROJECT NAME LOCATION COUNTY STATE</p>	<p>PROJECT NO. 11g</p>
<p>KANAKTOK RIVER ROAD VIA ROUTE 270</p>	
<p>PLAN AND PROFILE SUBAREA 11g</p>	
<p>BY [Signature]</p>	<p>DATE 08/21/2012</p>
<p>PROJECT NO. 11g</p>	<p>DATE 08/21/2012</p>

POA-2012-665, Kanektok River
 Village of Kwinhagak
 Evacuation Route
 Drawings dated August 21, 2012
 Sheet 12 of 18

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DESIGN ORIGINATOR: CFE2 ENGINEERS, INC.
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SCALE:	AS SHOWN
CONSTRUCTION:	AS SHOWN
DATE:	AS SHOWN
PROJECT:	AS SHOWN
CLIENT:	AS SHOWN
DESIGNER:	AS SHOWN
CHECKER:	AS SHOWN
APPROVER:	AS SHOWN



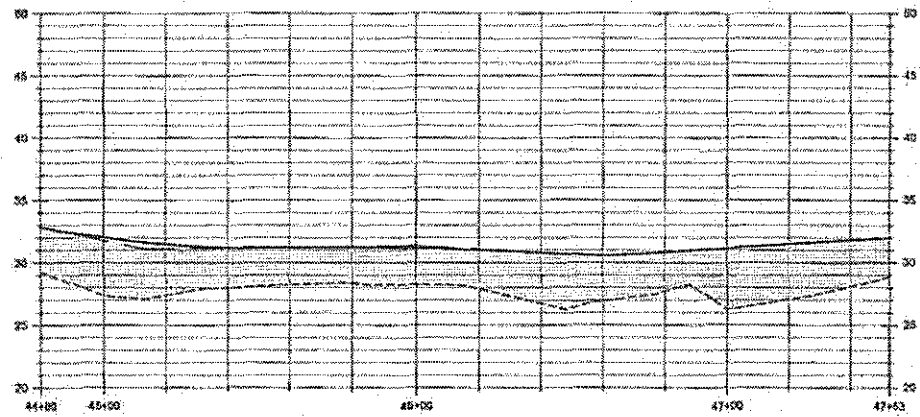
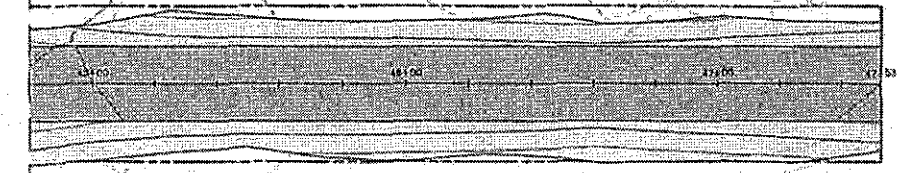
KANAKTOK RIVER ROAD
 VILLAGE OF KWINHAGAK
 PLAN AND PROFILE
 DUBUQUE, ALASKA



NO.	DATE	BY	CHKD.

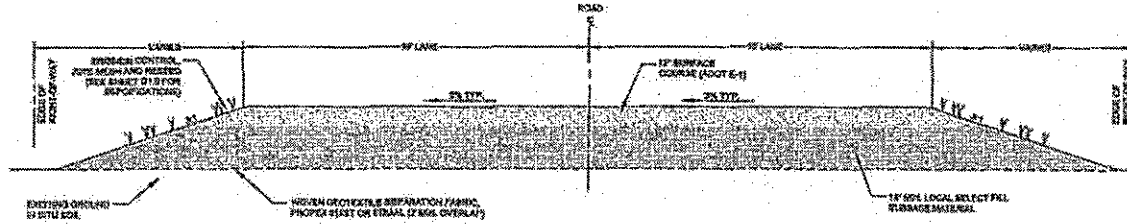
POA-2012-665, Kanektok River
 Village of Kwinhagak
 Evacuation Route
 Drawings dated August 21, 2012
 Sheet 13 of 18

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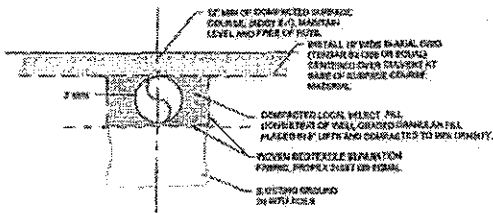


PROFESSIONAL ENGINEER STATE OF ALASKA LICENSE NO. 10000 JAMES W. HARRIS	
PROJECT NO. 1212 SHEET NO. 14 OF 18	
DATE: 8/21/12	
DRAWN BY: JKH CHECKED BY: JKH IN CHARGE: JKH	
PROJECT TITLE: KANAKTOK RIVER ROAD VILLAGE OF KWINHAGAK	
PLAN AND PROFILE	
STATE OF ALASKA	
ENGINEERS, INC. 1000 W. 10TH AVENUE, SUITE 100 ANCHORAGE, ALASKA 99501	

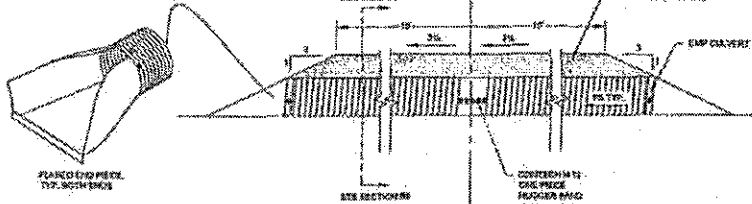
POA-2012-665, Kanektok River
 Village of Kwinhagak
 Evacuation Route
 Drawings dated August 21, 2012
 Sheet 14 of 18



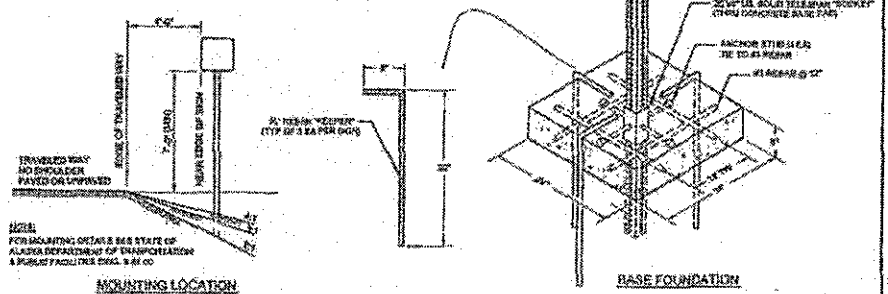
A
U.S. 1
TYPICAL ROAD SECTION



SECTION BB



B
U.S. 1
TYPICAL CULVERT SECTION



C
U.S. 1
SIGN DETAILS

CULVERT TABLE					
SHEET #	STATION	CULVERT LENGTH (FT)	CULVERT PIPIECES	MARKER POSTS	REMARKS

SIGN TABLE								
SHEET #	STATION	OFFSET*	TYPE	DESCRIPTION	SIZE	SIGN FACES	POST SIZE	STREET NAME

SEE SIGN DETAILS FOR MOUNTING LOCATION BASED ON STATE OF ALASKA DOT & E, DMS, 2-01-00 MOUNTING DETAILS. ALL SIGNS TO BE 4' FROM THE EDGE OF TRAVELER WAY, UNLESS NOTED OTHERWISE.

POA-2012-665, Kanektok River Village of Kwinhagak Evacuation Route Drawings dated August 21, 2012 Sheet 15 of 18

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS FOR HIGHWAYS, POA 1

DESIGNED BY: [blank]
CHECKED BY: [blank]
INCHES: [blank]
SCALE: AS SHOWN
DATE: [blank]

CONTRACT NO.: [blank]
PROJECT NO.: [blank]
SHEET NO.: [blank]



ENGINEER RICHARD S. KANOY
CULVERT ROAD AND TYPICAL ROAD AND CULVERT SECTIONS
RICHLAND, ALASKA



APPROVED BY: [blank]
DESIGNED BY: [blank]
CHECKED BY: [blank]
DATE: [blank]

ROAD DIMENSIONS AND MATERIAL QUANTITIES

KANEKTOK RIVER ROAD (BIA ROUTE 2700)

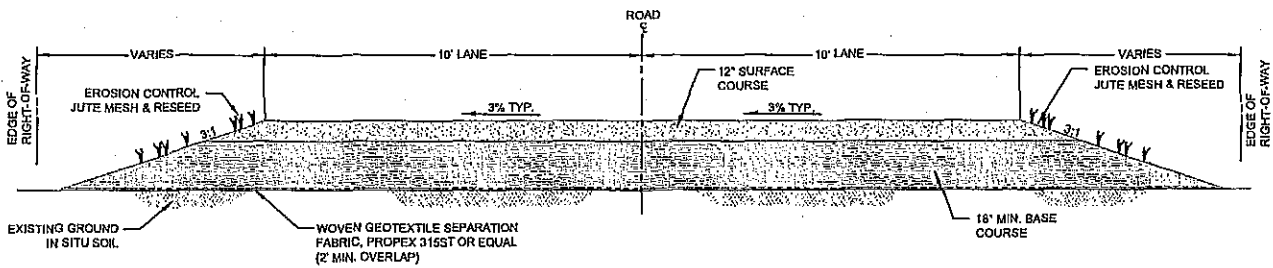
LENGTH: 3,660 LF
 TOP WIDTH: 20 FT
 MAX. FOOTPRINT: 3.70 AC
 SURFACE COURSE QUANTITY: 3,450 CY
 BASE COURSE QUANTITY: 15,700 CY

BORROW SITE ROAD (BIA ROUTE 3000)

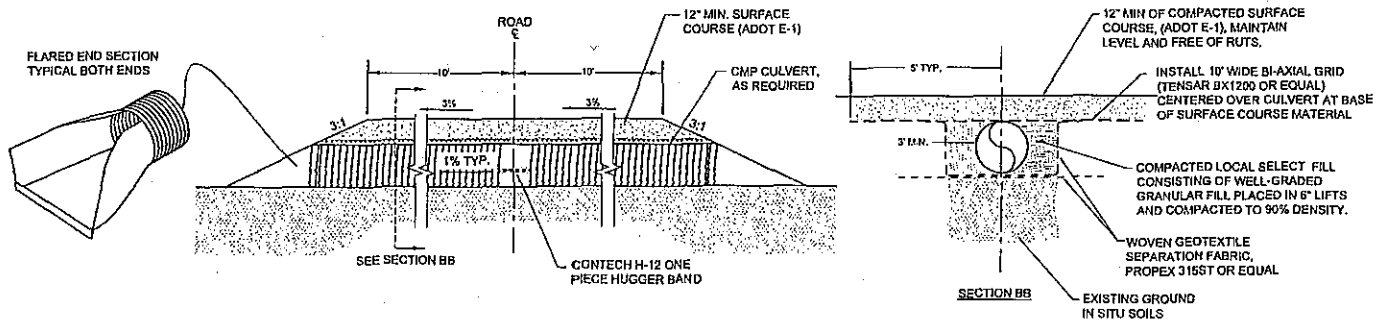
LENGTH: 1,092 LF
 TOP WIDTH: 20 FT
 MAX. FOOTPRINT: 1.10 AC
 SURFACE COURSE QUANTITY: 1,050 CY
 BASE COURSE QUANTITY: 4,700 CY

TOTAL

LENGTH: 4,752 LF
 TOP WIDTH: 20 FT
 MAX. FOOTPRINT: 4.8 AC
 SURFACE COURSE QUANTITY: 4,500 CY
 BASE COURSE QUANTITY: 20,400 CY



A TYPICAL ROAD SECTION
 SHT 3 HTS



B TYPICAL CULVERT SECTION
 SHT 3 HTS

APPLICANT NAME: VILLAGE OF KWINHAGAK

POA-2012-665, Kanektok River
 Village of Kwinhagak
 Evacuation Route
 Drawings dated August 21, 2012
 Sheet 16 of 18

KANEKTOK RIVER

SEC. 3



PREVIOUSLY USED BORROW SITE

EXISTING WINTER TRAIL

PREVIOUSLY USED BORROW SITE

PROPOSED GRAVEL BORROW SITE AND STOCKPILE AREA (APPROX. 1.4 AC)

C
SHT 5

PREVIOUSLY USED BORROW SITE

QANIRTUUG CORPORATION PROPERTY

EXISTING ACCESS ROAD

PROPOSED KANEKTOK RIVER ROAD (BIA ROUTE 2700). SEE SECTION A, SHEET 3 FOR DETAILS

JULIA WILLIAMS' NATIVE ALLOTMENT

QUINHAGAK AIRPORT PROPERTY

EXISTING WINTER TRAIL

APPLICANT NAME: VILLAGE OF KWINHAGAK

POA-2012-665, Kanektok River
Village of Kwinhagak

Evacuation Route

Drawings dated August 21, 2012

Sheet 17 of 18

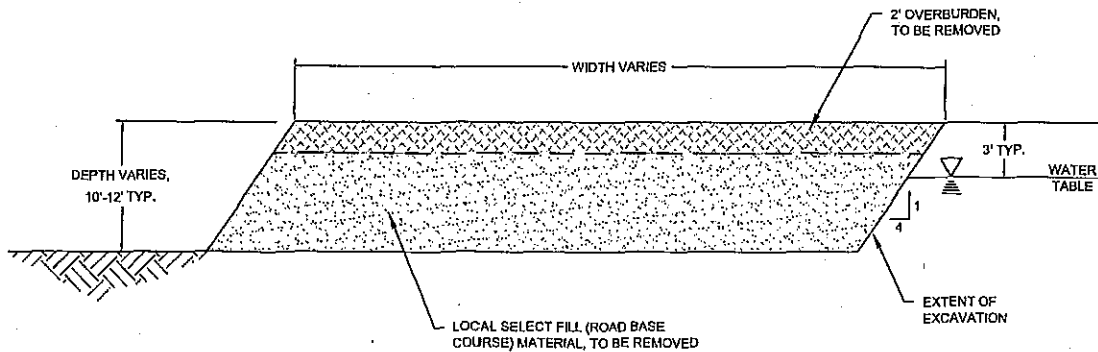
MATERIAL SOURCE ASSESSMENT AREA BY
DUANE MILLER ASSOCIATES, JUNE 2009

PROPOSED GRAVEL BORROW SITE DESIGN CRITERIA

SURFACE AREA: 60,900 SF (1.4 AC)
TOTAL VOLUME TO BE EXTRACTED: 27,070 CY
OVERBURDEN: 4,520 CY
NET USABLE VOLUME: 22,550 CY

RECLAMATION PLAN

1. REMOVE VEGETATION AND ORGANIC OVERBURDEN, APPROXIMATELY 2 FT, AND DEPOSIT IN ADJACENT BORROW SITES
2. EXCAVATE AND HAUL FILL MATERIAL, START ON NORTH SIDE AND MOVE SOUTH, EXCAVATE TO 10-12 FT DEPTH
3. SHAPE FINAL EXCAVATION SIDE WALLS TO 4:1 SLOPE



C PROPOSED GRAVEL BORROW SITE SECTION
SHT 5 SCALE: NTS

APPLICANT NAME: VILLAGE OF KWINHAGAK

POA-2012-665, Kanektok River
Village of Kwinhagak
Evacuation Route
Drawings dated August 21, 2012
Sheet 18 of 18