

U. S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION



PLANS FOR PROPOSED PROJECT DENALI COMMISSION STUDY **CHEFORNAK ATV TRAIL** VILLAGE OF CHEFORNAK ALASKA

INDEX TO SHEETS	
A. GENERAL INFORMATION	
A.1	TITLE SHEET
A.2	NOTES AND FINDINGS
B. SUMMARIES	
B.1	SUMMARY OF QUANTITIES
C. TYPICAL SECTION(S)	
C.1-2	TYPICAL SECTION OF POROUS PAVEMENT SYSTEMS
D. PROJECT VICINITY MAP	
D.1	CHEFORNAK VICINITY MAP
E. BRIDGES	
E.1	BRIDGE DETAIL



LENGTH 6.81 MILES

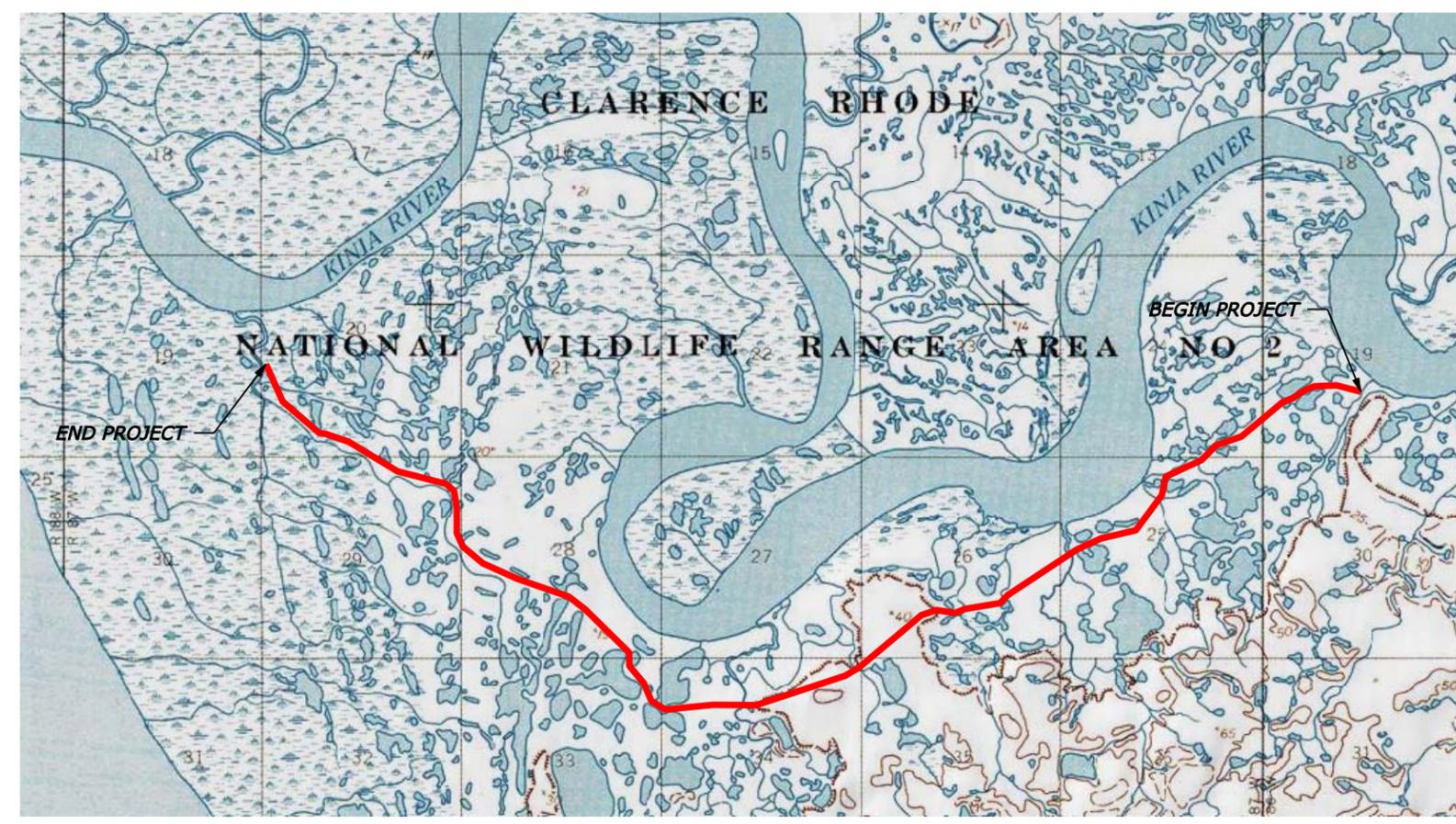
TYPE OF CONSTRUCTION:
ATV trail hardening

DESIGN DESIGNATION:
UNCLASSIFIED PIONEERED
TWO LANE TRAIL

**FOR PLANNING AND
SCOPING PURPOSES ONLY
NOT FOR CONSTRUCTION**



PLANS PREPARED BY
**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION**
WESTERN FEDERAL LANDS HIGHWAY DIVISION
VANCOUVER, WASHINGTON



Checked by: \$DATE\$
Designed by: \$PATH\$

PROJECT MANAGER
M. TRAFFALIS

STATE	PROJECT	SHEET NUMBER
AK	DEN 2008	A.2

DESIGN AND CONSTRUCTION

MATERIAL SOURCE:

All material for construction will need to be imported.

CONSTRUCTION RESOURCES:

General labor from the village is available for employment.

TRANSPORTATION:

The village can be accessed by water with landing boats or small boats.

The village can be accessed by air.

Local ground transportation is primarily ATVs.

RIGHT-OF-WAY

The proposed project crosses over Wildlife Refuge Lands and Corporation Lands. The project must be maintained and operated on public lands.

ENVIRONMENTAL COMPLIANCE

Projected NEPA Document Type:

Environmental Assessment

Projected Permits and Compliance Actions:

Section 404 Nationwide Permit
 Section 106 Cultural Consultation
 ESA Section 7 Consultation
 Coastal Zone Consistency

Projected Time to Complete Environmental Compliance:

18-24 months

**PROJECT NOTES
AND FINDINGS**

E:\GIS\GIS_Projects\Denali_Commission_recon\Chertformak\Plan_sheets\Sheets_A\Chertformak_S 8-Dec-2008 9:55 AM | Designed by: A. Designer | Checked by: D. Checker

SUMMARY OF QUANTITIES

STATE	PROJECT	SHEET NUMBER
AK		B.1

PLAN SHEET SECTION ----->>			Section C Typical Section	Section D Project Vicinity Map	Section E Bridges							ESTIMATED QUANTITY		ESTIMATED COST	
ITEM	DESCRIPTION	UNIT										PLAN	BID SCHEDULE	UNIT COST	AMOUNT
15101-0000	MOBILIZATION	LPSM										ALL	ALL	\$230,000.00	\$400,000.00
20703-3000	POROUS PAVEMENT SYSTEM, EXTREME SOFT SOIL SUPPORT	SQFT	144,546									144,546	144,546	\$5.36	\$774,766.56
20703-4000	POROUS PAVEMENT SYSTEM, LOW SOIL SUPPORT	SQFT	289,094									289,094	289,094	\$4.36	\$1,260,449.84
20703-5000	POROUS PAVEMENT SYSTEM, MODERATE SOIL SUPPORT	SQFT	48,182									48,182	48,182	\$3.36	\$161,891.52
55504-9999	PRE-FABRICATED STEEL BRIDGE	EACH			8							8	8	\$300,000.00	\$2,400,000.00

TOTAL BID ITEMS: \$4,997,107.92

35% CONTINGENCY: \$1,748,987.77

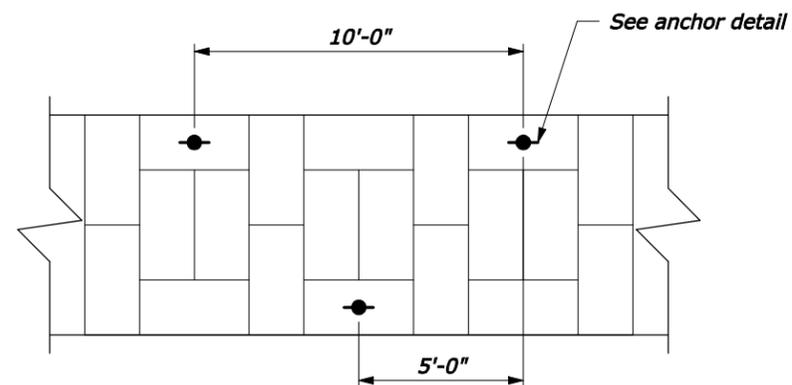
10% ENVIRONMENTAL MITIGATION: \$499,710.79

TOTAL CONSTRUCTION COST: \$7,245,806.48

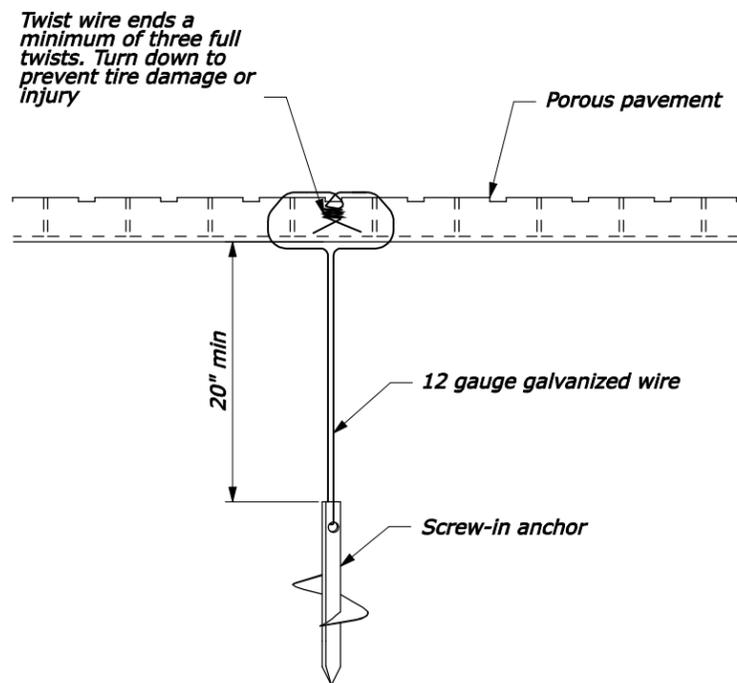
15% PE COST: \$1,086,870.97

10% CE COST: \$724,580.65

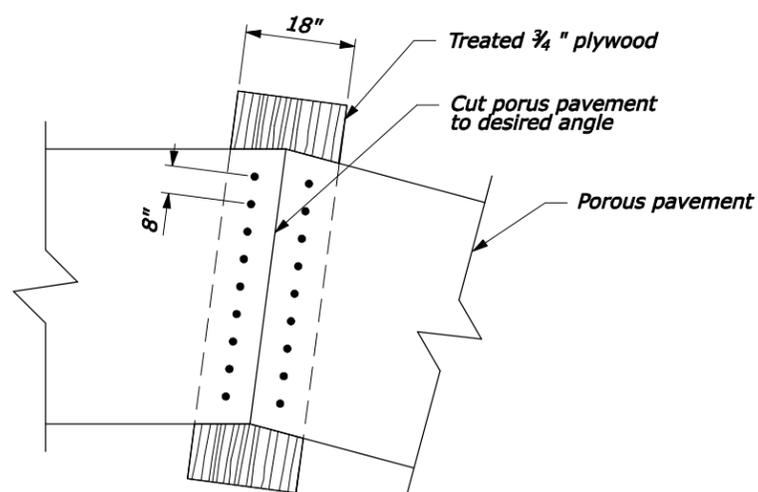
E:\GIS\GIS_Projects\Denali_Commission_recon\Chenformak\Plan_sheets\Sheets_B\Chenformak_E_14-Dec-2008 10:15
 A. Deslamer
 Checked by:
 D. Checker
 --/----



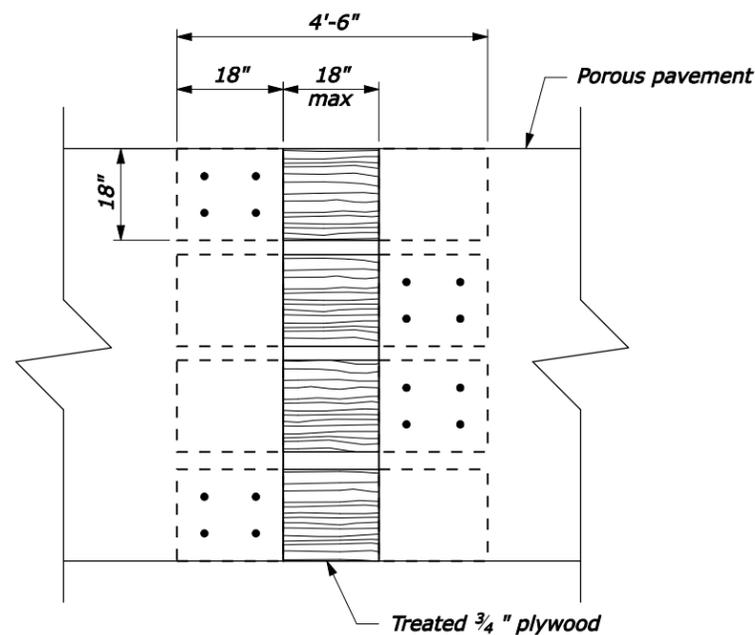
TYPICAL ANCHOR PATTERN



ANCHOR DETAIL



TURN DETAIL



EXPANSION JOINT DETAIL

NOTE:

1. Follow manufacturer's recommendation when installing porous pavement.
2. Plywood shall be commercially treated for ground contact

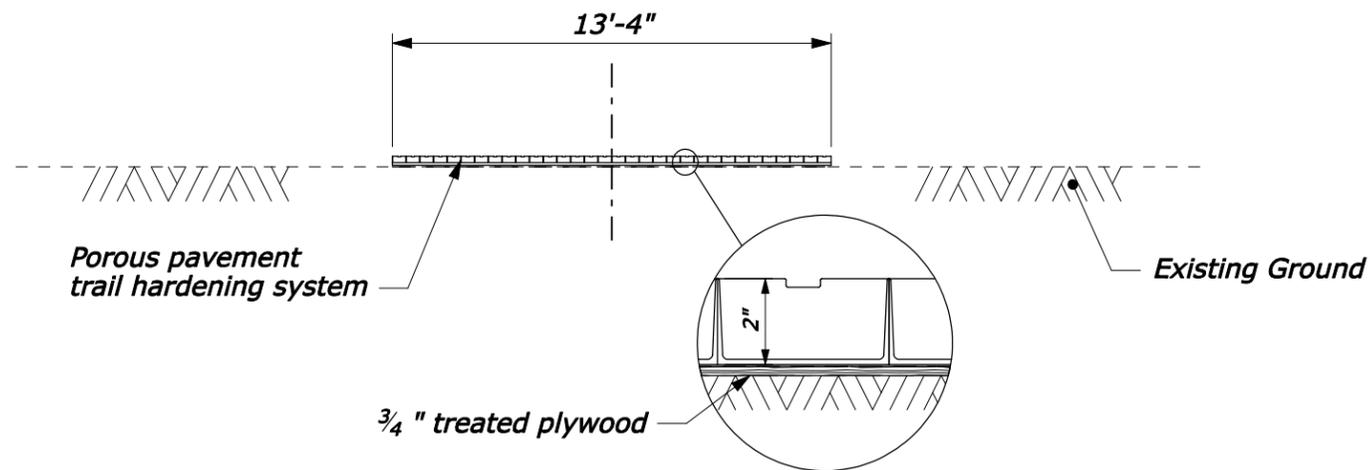
NO SCALE

**TYPICAL SECTION
POROUS PAVEMENT
SYSTEM DETAILS**

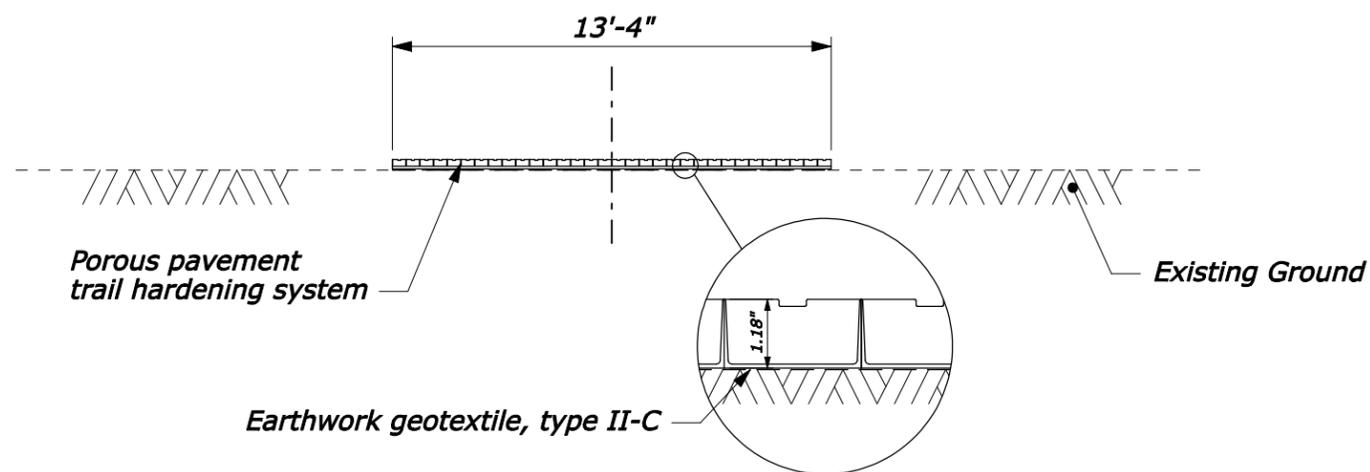
Checked by:

Designed by:

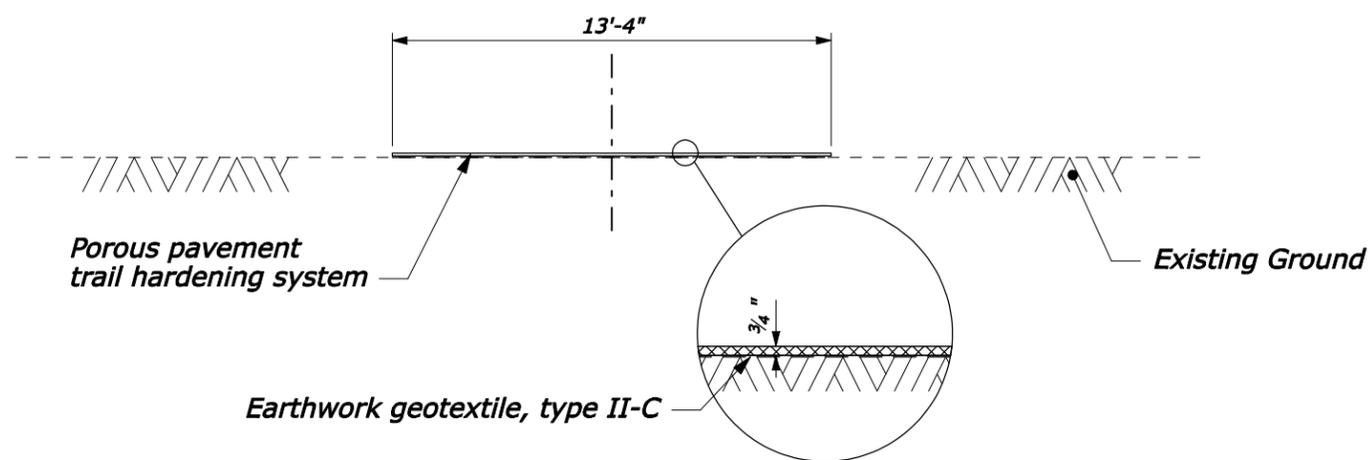
E:\GIS\Projects\Denail_Commission_recom\Chenformak\Plan_sheets\Sheets_C\Chenformak_Sheet_C2.dwg (10/25/2011)



**TYPICAL SECTION
EXTREME SOFT SOIL SUPPORT**



**TYPICAL SECTION
LOW SOIL SUPPORT**



**TYPICAL SECTION
MODERATE SOIL SUPPORT**

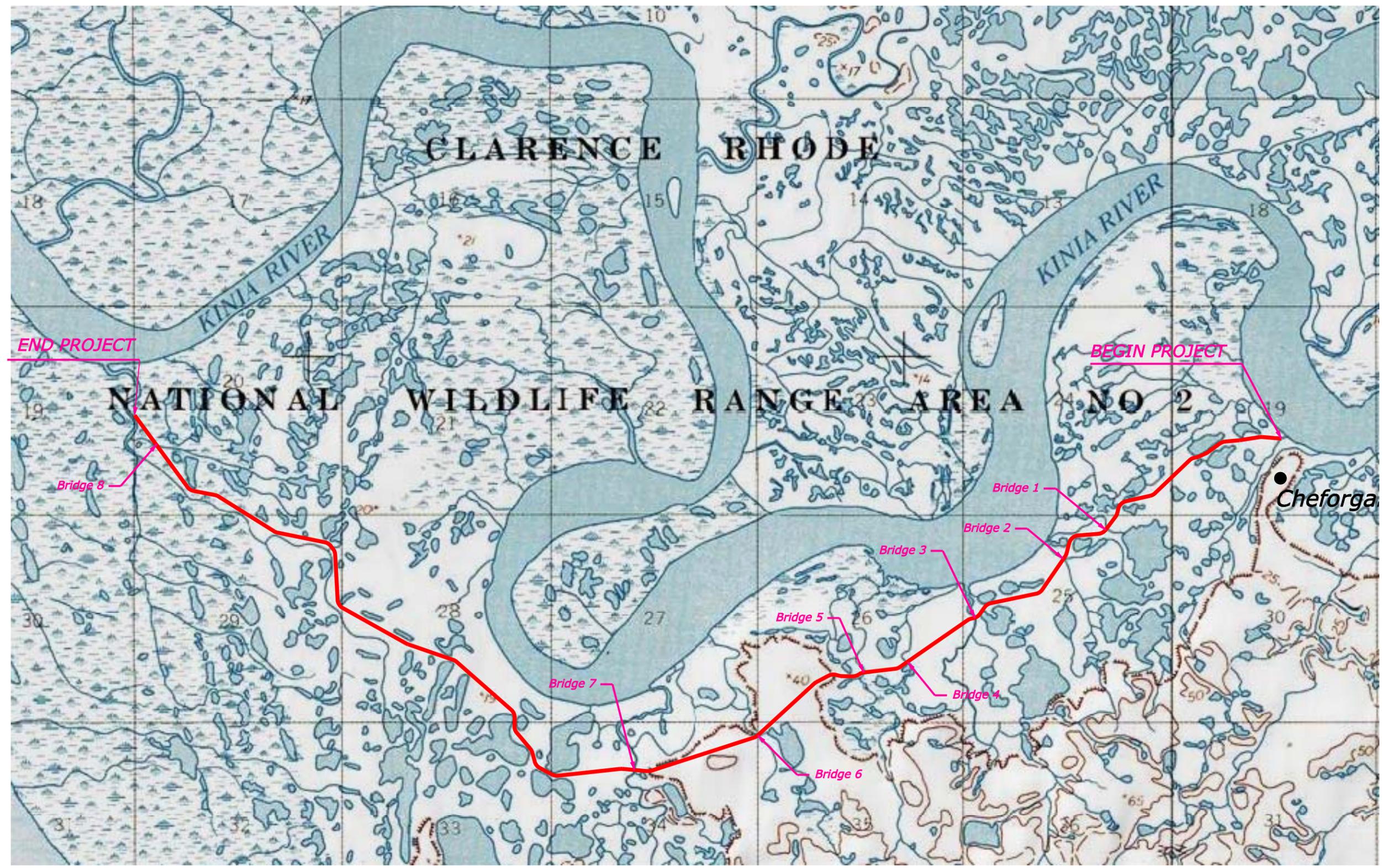
POROUS PAVEMENT SYSTEMS			
ITEM NUMBER	DESCRIPTION	PERCENT OF PROJECT	QUANTITY (SQFT)
20703-3000	Porous pavement system, extreme soft soil support	30%	144,546.3
20703-4000	Porous pavement system, low soil support	60%	289,093.7
20703-5000	Porous pavement system, moderate soil support	10%	48,182.1

Note:

1. Follow manufacturer's recommendation when installing porous pavement.
2. Plywood shall be commercially treated for ground contact.
3. Use of geotextile or plywood will be determine in the field with the approval of the CO.
4. As needed prior to placing porous pavement smooth out the existing ground by making ATV passes. Do not break through the roof mass.

**TYPICAL SECTION
POROUS PAVEMENT
SYSTEM DETAILS**

NO SCALE

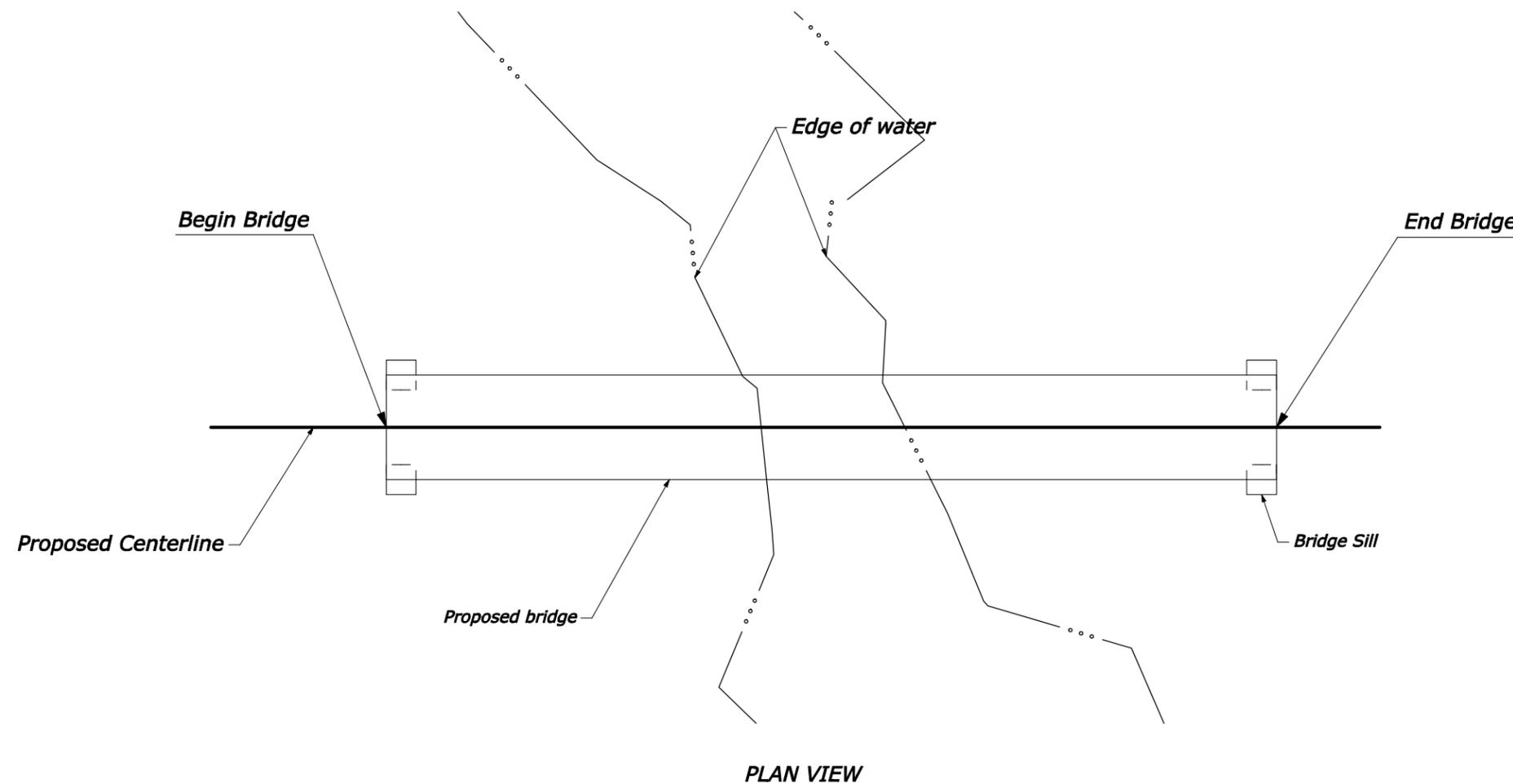


Scale in miles

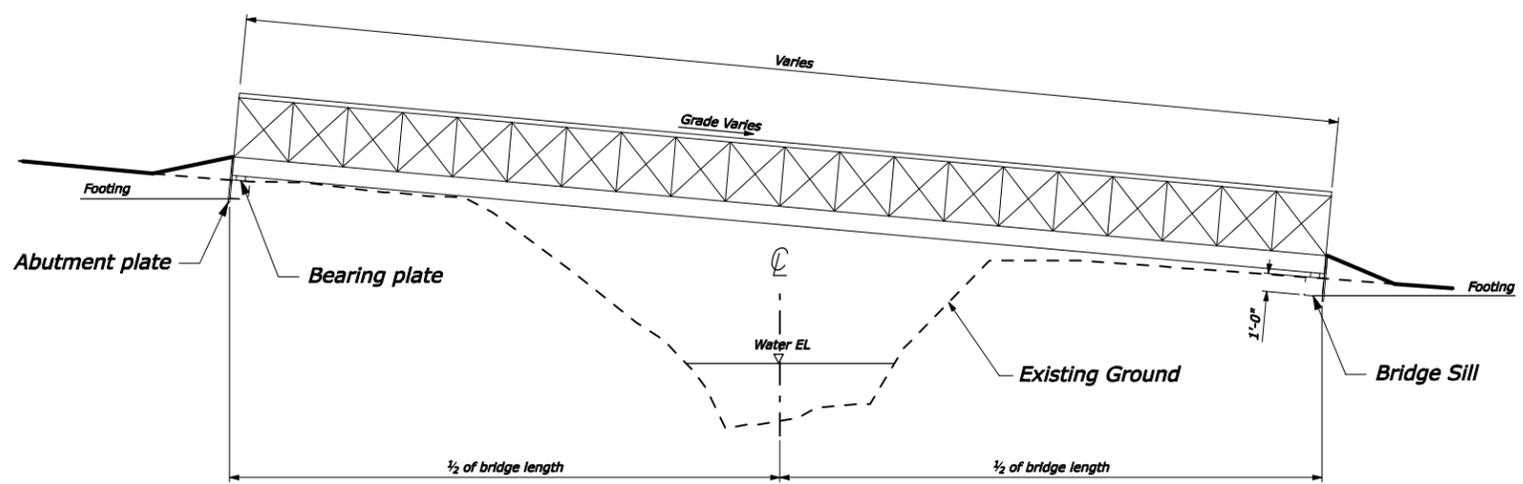


CHEFORNAK VICINITY MAP

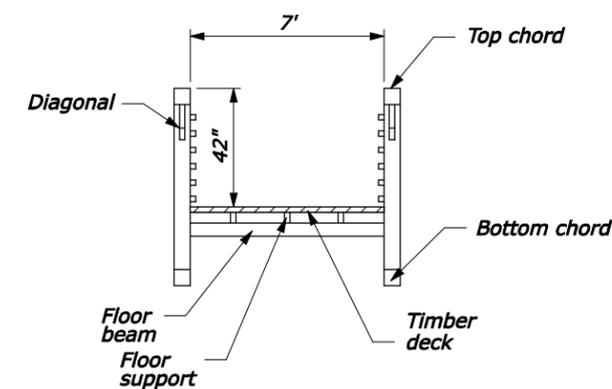
Checked by: _____
 Designed by: _____
 \$DATE\$
 \$PATH\$



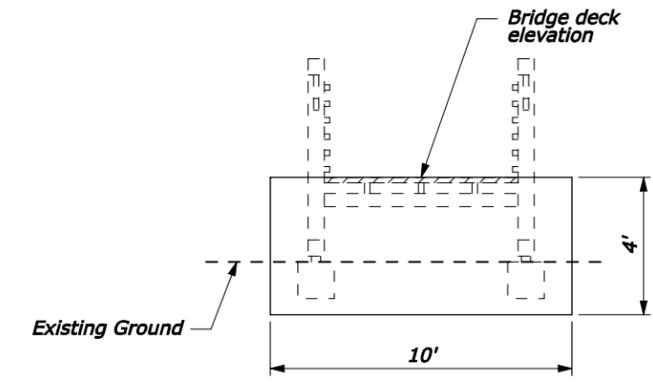
PLAN VIEW



PROFILE VIEW



BRIDGE SECTION
No Scale



ABUTMENT PLATE DETAIL
No Scale

ITEM 55504-9999 PRE-FABRICATED STEEL BRIDGE
QUANTITY (EACH)
8

- NOTE:
1. See sheet D.1 for locations
 2. Final bridge location will be field fit with the approval of the CO.

BRIDGE DETAIL

E:\GIS\Projects\Denail_Commission_recon\Chenformak\Plan_sheets\EBridge_Detail.dgn 2/28/2008 1:35PM Checked by: Designed by: