PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM

First Amendment to the Contract between the Nebraska Community Foundation, Inc. and EA Engineering, Science, and Technology, Inc. regarding the Nebraska Ground Water Recharge Feasibility Study

This First Amendment to the Contract between the Nebraska Community Foundation, Inc. ("Foundation") of Lincoln, Nebraska, representing all signatories to the Platte River Recovery Implementation Program ("Program"), and EA Engineering, Science, and Technology, Inc. ("Consultant"), a private consultant of Lincoln, Nebraska, is made and entered into effective on the date of signing below.

The purpose of this Amendment is to:

1. Increase the contract amount by $24,800, effective as of the date of this Amendment, so that total payment under the Contract shall not exceed $292,600.
2. Expand the Scope of Work to include the tasks as described in Attachment A.

All other terms of the original contract remain in effect as originally written in the Contract dated November 23, 2010.

The following parties agree to the terms of this Amendment and the original Contract.

For the Foundation:

_____ _____

Diane M. Wilson Date
Chief Financial and Administrative Officer
Nebraska Community Foundation, Inc.

For the Consultant:

_____ _____

Dale Schlautman, P.E. Date
Project Manager
EA Engineering, Science, & Technology, Inc.

Attachment A

Nebraska Ground Water Recharge Feasibility Study
First Amendment Scope of Work and Budget

EA Engineering, Science,
and Technology, Inc.

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Memorandum

DATE: 19 January 2011

TO: Beorn Courtney, P.E.
Headwaters Corporation
Platte River Recovery Implementation Program

FROM: Dale Schlautman
EA Engineering, Science, and Technology, Inc.

SUBJECT: Nebraska Ground Water Recharge Feasibility Study – Phase I
Amendment 1 - Ground Water and Surface Water Interaction

Overview:
EA Engineering, Science, and Technology, Inc. (EA) is contracted by the Platte River Recovery Implementation Program (Program) to conduct the Nebraska Ground Water Recharge Feasibility Study – Phase I to evaluate the feasibility of groundwater recharge in central Nebraska. Phase I of this project includes planning and collection of field data to refine understanding of site conditions and design of a pilot-scale recharge project.

During the review of the Technical Memorandum – Data Gaps and Fieldwork Plan by the Technical Work Group, it was identified that additional information related the drains downgradient of the proposed Phelps Site would be valuable information for the project and also provide improved understanding of the interaction of ground water and surface water.

The purpose of this memorandum is to provide the Program with a recommendation for additional data collection and data processing activities related to the interaction of ground water and surface water. This memorandum includes an estimated schedule and cost for the additional work. The approach for conducting the additional work will be incorporated into the Fieldwork Plan and reviewed by the ED Office and the Technical Work Group for the Nebraska Ground Water Recharge Feasibility Study. The results of the additional activities will be included in the Technical Memorandum – Fieldwork Summary Report that will be prepared upon completion of the field activities.

Scope of Work:
EA will provide the following services under this Scope of Work.

- EA will work with the ED Office and the Technical Work Group to develop the approach for the additional field activities, and incorporate the approach into the Fieldwork Plan.
- EA will provide and install three additional water level recorders. Two of the recorders will be installed in monitoring wells, and one will be installed in a drain. The additional water level recorders will be downloaded on the same schedule as described in the existing contract.
- EA will install staff gauges in the drains at four locations. The staff gauges will allow for visual observation and recording of water levels and one of the locations will be co-located with a water level recorder. The staff gauges will be surveyed into standard datum using RTK GPS survey equipment. Cross-sections of the drain at each location will also be surveyed.

- Flow velocity will be measured at each of the four drain locations to determine flow rate. Two flow velocity measurement events will be conducted, one prior to the irrigation season and one during the irrigation season.
- EA will be conducted four additional water level measurement events. The four events will occur in conjunction with the four scheduled events for downloading and maintaining the water level recorders as described in the existing contract. During each event the following water levels will be recorded:
    - Water level in the six new monitoring wells using a water level tape.
    - Water level in up to six existing wells using a water level tape.
    - Water level at the four drain staff gauges.
- EA will incorporate the approach into the existing Protocol and submit a draft to the ED office for review. The ED office will collect and forward all comments on the Protocol to EA. It is assumed that one round of comments will be collected.
- EA will process the additional data and incorporate the information into the following deliverables described in the existing contract:
    - Technical Memorandum – Hydrologic Setting of Phelps Recharge Site
    - Technical Memorandum – Fieldwork Summary Report.
- It is understood that the Program will be responsible for obtaining the necessary permission and access from land owners.
- The cost included for the three additional water level recorders is based on the 2010 pricing quote from In-Situ Inc. EA anticipates that we can get the 2010 pricing; however, if we cannot, the 2011 pricing is about 5% higher.

Schedule:
The additional work will be completed in conjunction with the exiting schedule for the planning, execution and reporting for the existing contract.

Cost:
The following project price and/or rates apply to the services provided by EA Engineering, Science, and Technology, Inc. and our team members for the scope of work referenced above.

EA proposes to perform the requested services as outlined on a time and materials basis with a not-to-exceed limit **of $24,800.00**. This amount will not be exceeded unless authorized in writing by the Program.

TOTAL COST SUMMARY

PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
NEBRASKA GROUND WATER RECHARGE FEASIBILITY STUDY
AMENDMENT 1 - GROUNDWATER AND SURFACE WATER INTERACTION

	Labor Hours	Labor Cost	Subcontractor	ODC's	Travel	TOTAL	ROUNDED TOTAL
Task 6.1 - Equipment for 3 Additional Water Level	0	$0.00	$0.00	$6,342.60	$0.00	$6,342.60	$6,300
Task 6.2 - Installation of Additional WL Recorders in MWs	16	$1,340.00	$0.00	$0.00	$0.00	$1,340.00	$1,300
Task 6.3 - Data Collection for Drains	61	$5,335.00	$0.00	$874.50	$0.00	$6,209.50	$6,200
Task 6.4 - Water Level Measurements During Downloads	18	$1,490.00	$0.00	$284.24	$541.20	$2,315.44	$2,300
Task 6.5 - Additional Planning and Reporting	46	$4,260.00	$4,400.00	$0.00	$0.00	$8,660.00	$8,700
TOTALS	**141**	**$12,425.00**	**$4,400.00**	**$7,501.34**	**$541.20**	**$24,867.54**	**$24,800**

PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
NEBRASKA GROUND WATER RECHARGE FEASIBILITY STUDY
AMENDMENT 1 - GROUNDWATER AND SURFACE WATER INTERACTION
TABLE B - SUMMARY OF ESTIMATED COSTS

(1) Direct Labor	Class Code	Hours	Rate	Cost	
Principal-in-Charge		0	$160.00	$0.00	
Senior Technical Review		0	$150.00	$0.00	
Project Manager		12	$145.00	$1,740.00	
Senior Engineer		4	$140.00	$560.00	
Mid-level Engineer		0	$100.00	$0.00	
Junior Engineer		75	$75.00	$5,625.00	
Engineering Technician		0	$35.00	$0.00	
Contracts Manager		0	$80.00	$0.00	
Industrial Hygienist (Certified)		0	$150.00	$0.00	
Senior Geologist		0	$140.00	$0.00	
Mid-level Geologist		0	$90.00	$0.00	
Junior Geologist		0	$60.00	$0.00	
Senior Scientist		0	$140.00	$0.00	
Mid-level Scientist		50	$90.00	$4,500.00	
Junior Scientist		0	$60.00	$0.00	
CADD/GIS		0	$75.00	$0.00	
Drafter		0	$50.00	$0.00	
Administrative Assistant		0	$45.00	$0.00	
Clerical Support		0	$45.00	$0.00	
Subtotal Direct Labor		141		$12,425.00	
Subtotal Direct Labor and Multipliers					$12,425.00

(3) Subcontractors	Units	No. of Units	Rate	Cost	
DBS&A	LS	4000	$1.00	$4,000.00	
H2O Options Engineering	LS	0	$1.00	$0.00	
Geoprobe Subcontractor	LS	0	$1.00	$0.00	
Driller Subcontractor	LS	0	$1.00	$0.00	
Subtotal Subcontractors		4000		$4,000.00	
G & A @ 10.00%				$400.00	
Subtotal Subcontractors and G & A					$4,400.00

(3) Usage and Other Costs	Units	No. of Units	Rate	Cost	
Bond/Vellum Plots/Copies - B&W	sq ft	0	$0.27	$0.00	
Bond/Vellum Plots/Copies - Color	sq ft	0	$2.12	$0.00	
Mylar Plots/Copies - B&W	sq ft	0	$2.12	$0.00	
Photo Quality Plots/Copies - Color	sq ft	0	$3.18	$0.00	
Report Preparation Materials	inch	0	$20.78	$0.00	
Level, Tripod, Rod	day	0	$27.13	$0.00	
Magellan/Garmin Handheld GPS	day	0	$26.52	$0.00	
Magellan/Garmin Handheld GPS	week	0	$106.08	$0.00	
Trimble GPS	day	0	$106.09	$0.00	
Trimble GPS	week	0	$424.36	$0.00	
Vehicle Usage (1/2 Ton Pickup)	day	7	$59.00	$413.00	
Vehicle Usage (1/2 Ton Pickup)	week	0	$236.00	$0.00	
Vehicle Usage (1/2 Ton Pickup)	month	0	$708.00	$0.00	
Vehicle Usage (Pickup)	mile	680	$0.28	$190.40	
Supplies	each	450	$1.00	$450.00	
Water Level Recorders (purchase)	LS	3	$1,922.00	$5,766.00	
Backhoe	LS	0	$1,072.00	$0.00	
Water Level Meter	day	0	$26.52	$0.00	
YSI-556	day	0	$75.00	$0.00	
Generator	day	0	$47.74	$0.00	
Shipping	each	0	$1.00	$0.00	
Water Truck	LS	0	$750.00	$0.00	
[Blank]	day	0	$0.00	$0.00	
[Blank]	day	0	$0.00	$0.00	
[Blank]	day	0	$0.00	$0.00	
Other	day	0	$0.00	$0.00	
Subtotal Usage and Other Costs		1140		$6,819.40	
G & A @ 10.00%				$681.94	
Subtotal ODC's and G & A					$7,501.34

(4) Travel	Units	No. of Units	Rate	Cost	
Airfare	R/T	0	$1.00	$0.00	
Per Diem	day	4	$123.00	$492.00	
Rental Car	day	0	$1.00	$0.00	
Mileage (POV)	mile	0	$0.50	$0.00	
Subtotal Travel		4		$492.00	
G & A @ 10.00%				$49.20	
Subtotal Travel and G & A					$541.20

TOTAL ESTIMATED PROJECT COSTS **$24,867.54**