REQUEST FOR PROPOSALS (RFP)

Surveying, Engineering, and Permitting for North Platte Flood Proofing Projects

PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
Office of the Executive Director
4111 4th Avenue, Suite 6
Kearney, Nebraska 68845

June 28, 2012

Contents

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SUBJECT:	Surveying, Engineering, and Permitting for North Platte Flood-Proofing Projects
REQUEST DATE:	June 29, 2012
PRE-PROPOSAL MEETING:	July 12, 2012
CLOSING DATE:	July 19, 2012
POINT OF CONTACT:	Steve Smith
	Headwaters Corporation
	(720) 524-6115
	smiths@headwaterscorp.com

I. OVERVIEW

The Platte River Recovery Implementation Program ("Program" or "PRRIP") was initiated on January 1, 2007 between Nebraska, Wyoming, Colorado, and the Department of the Interior to address threatened and endangered species issues in the central and lower Platte River basin. The species considered in the Program, referred to as "target species", are the whooping crane, piping plover, interior least tern, and pallid sturgeon.

A Governance Committee (GC) reviews, directs, and provides oversight for Program activities. The GC is comprised of one representative from each of the three states, three water user representatives, two representatives from environmental groups, and two members representing federal agencies. The GC has named Dr. Jerry Kenny to serve as the Program Executive Director (ED). Dr. Kenny established Headwaters Corporation as the staffing mechanism for the Program. Program staff is located in Nebraska and Colorado and are responsible for assisting in carrying out Program-related activities.

Program target flows and short-duration high flow releases (SDHF) rely on the Program's ability to fully utilize water stored in an Environmental Account (EA) in Lake McConaughy. Full utilization of EA water is based on 3,000 cfs hydraulic capacity at National Weather Service (NWS) minor flood stage for the North Platte River at North Platte gage. Hydraulic capacity flood stage has decreased over time, likely because of a combination of sediment aggradation, low flushing flows, and vegetation encroachment within the North Platte River. Current capacity at 6.0-foot minor flood stage is approximately 1,560 cfs.

The Program has collaboratively worked with the City of North Platte and Lincoln County to conceive three flood-proofing projects that are intended to reduce flooding impacts in the flood-prone area near Highway 83 and North River Road in North Platte. These projects would generally reduce flooding by a) channeling surface water flow towards the North Platte River and away from the flood-prone area, and b) draining high ground water levels away from the flood-prone area. Design-level survey, engineering, and permitting are needed to move these projects towards construction.

The GC submits this Request for Proposals (RFP) to solicit proposals from Consultants to complete surveying, engineering, and permitting for three flood-proofing projects along the North Platte River in North Platte, Nebraska. The term Consultant shall be used throughout this document to describe both the RFP Respondent providing the proposal and the Consultant (the successful Respondent) who would be performing the work upon award of the project.

II. PROJECT DESCRIPTION & SCOPE OF WORK

The Consultant will complete surveying, engineering, and permitting for three flood-proofing projects along the North Platte River just north of the City of North Platte near the Highway 83 Bridge. A brief description of each of the three projects is provided below, and tasks to be completed for each of the projects are identified. There shall be no site visits during proposal preparation because of land access issues. A virtual site tour will be provided during the pre-proposal meeting described in **Section VI**.

Re-Activation of the State Channel

The 'State Channel' was created by the Nebraska Department of Roads (NDOR) around 1970 to direct flow in the 'North River Road Channel' into the 'State Channel' and towards the North Platte River (Figure 1). A berm along the east side of the channel was created to direct flow into the State Channel. A 1993 aerial photo shows a sandy area at the head of the State Channel (red box in Figure 1), suggesting that the berm was breached at this location in the early 1990s. Breaching the berm effectively cut off the State Channel, and resulted in flow continuing east in the North River Road Channel towards the flood-prone properites along North River Road.

Re-activation of the State Channel would direct high flows from the North River Road Channel into the State Channel, reducing flood impacts to properties along North River Road. Partial re-activation of the State Channel was achieved in May 2012 through disking at the head of the State Channel, with flow naturally clearing disked material and diverting into the State Channel. Flow distribution between the State Channel and the North River Road Channel could be controlled with installation of a check structure and small culvert. The culvert would allow a small amount of flow to continue east in the North River Road channel without flooding North River Road properties, and high flows could be diverted back to the North Platte River via the State Channel.

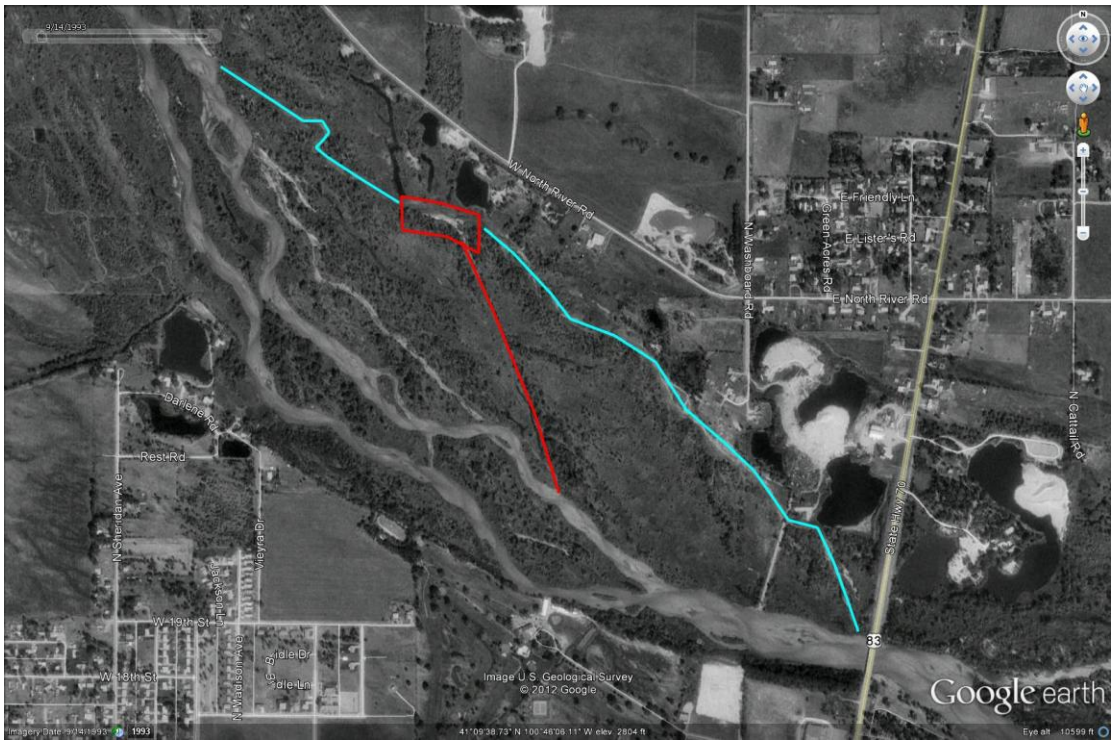

Figure 1. September 1993 Aerial Photo Showing State Channel (red) and North River Road Channel (blue)

The following tasks will be completed for the State Channel re-activation flood-proofing project:

- Survey approximately 2,500 feet of the State Channel. Slope of the channel will be surveyed. Additionally, 3 cross-sections will be surveyed: 1 near the head of the channel, 1 about midway between down the channel, and 1 near the mouth of the channel.
- Survey the area at the head of the State Channel to provide enough data to supplement existing Program LiDAR data to design a low-flow control structure in the existing North River Road Channel, and a flow diversion to the State Channel. Objective will be to divert most of the flow to the State Channel, and allow a small flow to continue down the North River Road Channel. Four cross-sections will be completed at the head of the State Channel.
- Survey will be completed using a survey-grade, real-time, kinematic, Global Positioning System (RTK-GPS) with signal referenced to the North American Datum of 1983 (NAD 1983) and vertically to the North American Vertical Datum of 1988 (NAVD 1988).
- Coordinate survey site access with all potentially affected property owners prior to completing survey.
- Based on flow criteria to be provided by ED Office staff, Consultant will design flow control and check structures intended to allow a small amount of flow to continue in its current path to the North River Road Channel, and the majority of flow to be diverted to the existing State Channel.
- Design will include earthwork calculations, with the objective of a balanced cut and fill project.
- Determine flow characteristics at the range of flows for the State Channel. Determine flow depth, slope, width, and velocity for the State Channel at a variety of flows to be provided by the EDO Office based on the existing Program 1D hydraulic model.
- Based on flow characteristics from previous bullet point, Consultant will provide recommendations on any necessary modifications to the State Channel and existing berm.
- Provide design-level plans and specifications, and design-level engineer's cost estimate for re-activation of State Channel.
- Identify preliminary construction easements locations and dimensions.
- Complete State Channel Re-Activation design memo, to include survey data and cross-section plots, design drawings for flow control and check structures, earthwork quantities including cut and fill amounts, and detailed cost estimates.

Gravel Pond Outlet

Effective use of an existing natural drainage near North River Road (yellow line in Figure 2) could reduce flooding from high ground water levels. The drainage slopes to the east, crosses under Highway 83 via an existing culvert, and flows to a gravel pond east of Highway 83. There is no existing outlet on the gravel pond, and a new outlet would prevent flooding problems from simply being shifted from the North River Road area to the gravel pond.

The location of the outlet would be chosen based on a) optimal pond water surface elevation to prevent flooding at the gravel pond, and b) ability to drain water towards the North Platte River. The outlet would include a check (e.g., flap gate) to prevent North Platte River water from flowing into the gravel pond during high river stage. A pump may also be needed near the outlet, which would be used to lower the pond water surface during high river stage when the outlet may not be effective. A potential outlet location is shown as the orange line in Figure 2, and was based on a field reconnaissance by the ED Office.

Figure 2. 2010 Aerial Photo with Proposed Gravel Pond Outlet/Pump (orange) and Existing Drainage (yellow)

The following tasks will be completed for the Gravel Pond Outlet flood-proofing project:

- Survey approximately 1,500 feet of the potential outlet area to determine accurate slope. Additionally, 3 cross-sections will be surveyed at the southern end of the ponds to determine an appropriate location for an outlet.
- Survey will be completed using a survey-grade, real-time, kinematic, Global Positioning System (RTK-GPS) with signal referenced to the North American Datum of 1983 (NAD 1983) and vertically to the North American Vertical Datum of 1988 (NAVD 1988).
- Coordinate site access with all potentially affected property owners prior to completing survey.
- Design flowrate into pond by inlet culvert.
- Design culvert capable of maintaining maximum pond water surface elevation (WSE) (to be provided by ED Office), while not allowing flow from the river back to the pond.
- Determine potential need for pond water pump based on range of river stage and maximum pond WSE (to be provided by ED Office).
- Design will include earthwork calculations, with the objective of a balanced cut and fill project.
- Provide design-level plans and specifications, and design-level engineer's cost estimate for gravel pond outlet and/or pump
- Identify preliminary easements locations and dimensions.
- Provide design-level plans and specifications, and design-level engineer's cost estimate for Gravel Pond Outlet.

- Complete Gravel Pond Outlet design memo, to include survey data and cross-section plots, design drawings, and detailed cost estimates.

Whitehorse Creek Drainage

The effectiveness of an existing road ditch along the north side of North River Road and East Hall School Road has been minimized as a result of about 12 driveways west of Highway 83. Culverts were not installed under the driveways, and as a result high ground water is trapped behind the driveways and cannot drain effectively to the east via the existing road ditch.

The objective of the Whitehorse Creek Drainage alternative would be to drain high ground water to the east via the existing road ditch and east to the North Platte River via Whitehorse Creek. The 0.25-mile of road ditch west of Highway 83 and the 1.5-mile of road ditch east of Highway 83 may also need to be cleaned of debris (orange line in Figure 3). There may be a high point along the road ditch delineating the drainage boundary between the Whitehorse Creek and North Platte River basins. As a result, the existing road ditch will be surveyed and limited road ditch excavation and/or installation of a small pipe may be needed to optimize ditch flow to the east.

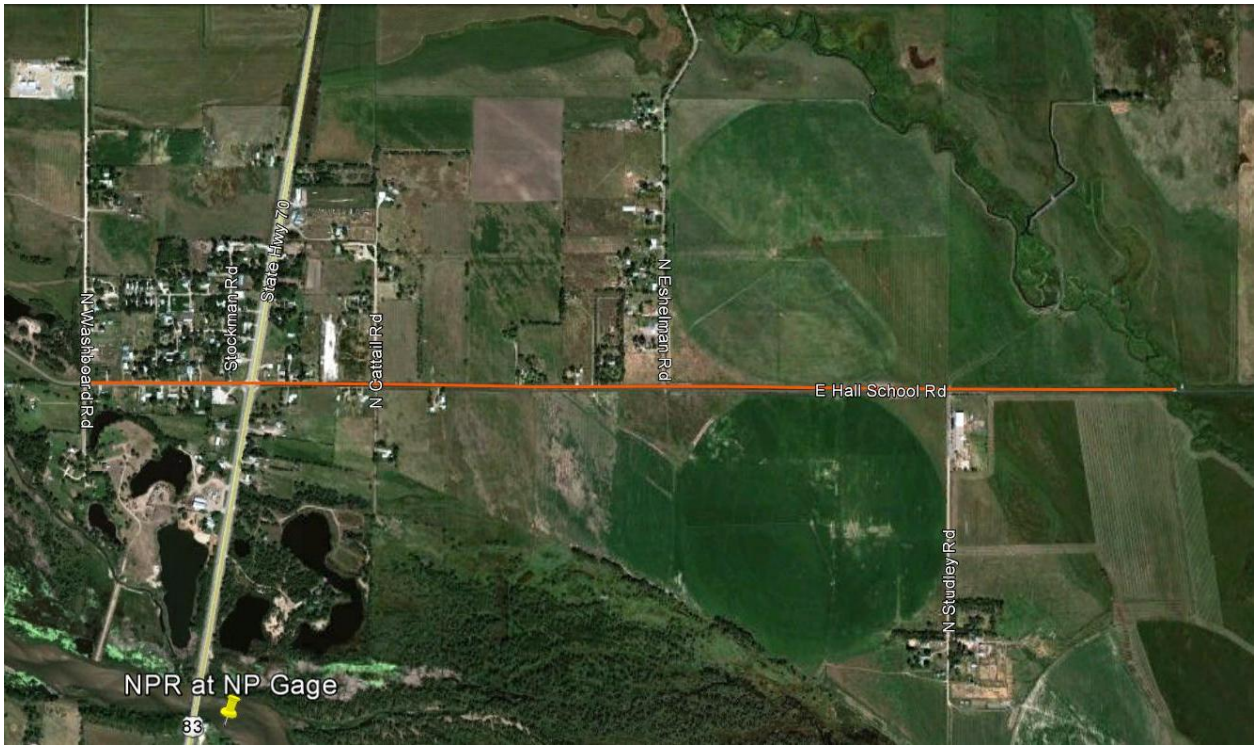

Figure 3. Whitehorse Creek Drainage

The following tasks will be completed for the Whitehorse Creek Drainage flood-proofing project:

- Survey approximately 10,000 feet of the road ditch along north side of North River Road and East Hall School Road from about 1,500 feet west of Highway 83 to about 8,500 feet east of Highway 83 to Whitehorse Creek.

- Survey will be completed using a survey-grade, real-time, kinematic, Global Positioning System (RTK-GPS) with signal referenced to the North American Datum of 1983 (NAD 1983) and vertically to the North American Vertical Datum of 1988 (NAVD 1988).
- Coordinate site access with all potentially affected property owners prior to completing survey.
- Design culverts for approximately 10 driveways along the north side of North River Road between Washboard Road and Highway 83.
- Determine need for additional culverts and/or rehab of existing road ditch along north side of Hall School Road between Highway 83 and Whitehorse Creek.
- Calculate flow rate for final Whitehorse Creek Drainage based on culvert design, ditch slope, and recommended ditch rehab (if necessary).
- Provide design-level plans and specifications, and design-level engineer's cost estimate for Whitehorse Creek drainage.
- Identify preliminary easements locations and dimensions.
- Provide design-level plans and specifications, and design-level engineer's cost estimate for Whitehorse Creek Drainage.
- Complete Whitehorse Creek Drainage design memo, to include survey data and cross-section plots, design drawings, and detailed cost estimates.

Permitting of Flood-Proofing Projects

The following tasks will be completed for each of the three flood-proofing projects described above:

- Determine which permits will be needed to complete each flood-proofing project. May include: 404 permit from Corps of Engineers, and City and County permits required for working in the floodplain.
- Complete wetlands inventories as necessary for permitting of the three flood-proofing projects.
- Coordinate necessary meetings with agencies responsible for issuing required permits.
- Attend public meeting for permitting (if needed).
- Complete permit applications, and make revisions as necessary according to agency and public comments.

III. PROJECT BUDGET

An estimated project budget should be submitted in the proposal, on a not-to-exceed time and expense basis for the work to be completed. A final budget will be established as part of the Project Scoping and Kickoff and will depend upon the budget estimate provided in the proposal for the selected Consultant.

Proposals will be evaluated on criteria described in **Section VI** below, including understanding of the objectives of the project, qualifications of the team members, and clarity/content of project schedule, scope, and budget. **The work will not be awarded based solely on a lowest cost basis.**

IV. FIELD AND OFFICE EQUIPMENT

Potential Consultants will own or acquire all field and office equipment and software required to complete the work described in this RFP.

V. CONTRACT TERMS

The selected Consultant will be retained by: Nebraska Community Foundation
PO Box 83107
Lincoln, NE 68501

Proposal should indicate whether the Consultant agrees to the contract terms, as outlined in the attached Program's Consultant Contract (Attachment B), or provides a clear description of any exceptions to the terms and conditions.

The term of the contract will be for a period beginning in July 2012 and terminating in December 2013. Contracted services will be performed on a time and material not to exceed basis. Under the final contract, written Notice to Proceed from the ED will be required before works begins. All work will be contingent on availability of Program funding.

VI. SUBMISSION REQUIREMENTS

All interested parties having experience providing the services listed in this RFP are requested to submit a proposal.

Instructions for Submitting Proposals

One electronic copy of your proposal must be submitted in PDF format to Steve Smith at *smiths@headwaterscorp.com* *no later than 12:00 p.m. (noon) Central time on Thursday, July 19, 2012.* Maximum allowable proposal PDF size is 8MB, and proposals are to be limited to a total of 50 pages or less. A proposal is late if received any time after 12:00 p.m. Central time and will not be eligible for consideration.

Questions regarding the information contained in this RFP should be submitted to Steve Smith at *smiths@headwaterscorp.com*. A list of compiled Consultant questions and responses will be maintained on the Program web site (*www.PlatteRiverProgram.org*) in the same location as this RFP solicitation.

RFP Schedule

The ED Office expects to complete the selection process and award the work by approximately August 2, 2012. The following table represents the RFP schedule (**note that all times are Central Standard Time**):

Description	Date	Time (Central)
Issue RFP	June 29, 2012	NA
Pre-proposal meeting (mandatory)	July 10, 2012	2:30 PM
Last day for respondents to submit questions regarding the RFP	July 16, 2012	12:00 PM
Proposals due from respondents	July 19, 2012	12:00 PM
Evaluation of proposals	July 20 to July 30, 2012	
Award of Work	On or before August 2, 2012	
Start of Work	Approximately August 3, 2012	
Completion of Work	Approximately December 31, 2013	

Pre-Proposal Meeting

A mandatory pre-proposal meeting of interested parties will be held on July 10, 2012 from 2:30 to 3:30 p.m. Central Time in North Platte for the purpose of familiarizing the respondents with the scope of work and requirements included herein before submitting a response to this RFP. Please email Steve Smith (smiths@headwaterscorp.com) for the meeting information along with a list of people from your party expected to join the meeting by 12:00 p.m. Central time on July 5, 2012.

The meeting will include a brief overview by the ED Office regarding the objectives of the project, the scope of services, and the timeline. A virtual tour of the site conditions will be given in order to provide the Consultant information for proposal preparation. The virtual site tour is in lieu of an actual site visit, and there shall be no actual site visits because of land access issues. It is the Consultant's responsibility, while at the pre-proposal meeting, to ask questions necessary to understand the RFP so the respondent can submit a proposal that is complete and in accordance with RFP requirements. There shall be no conference call dial-in information or meeting minutes distributed by the ED Office.

Proposal Content

Proposals should respond to the following general topics:

1) **Executive summary** that presents a brief firm overview that condenses and highlights the contents of the proposal in such a way as to provide a broad understanding of the Consultant's qualifications and proposal.

2) **Project understanding** that demonstrates the Consultant understands project goals and objectives and identifies issues critical to project success.

3) **Project approach** that documents how the Consultant would organize and execute the scope of work detailed in this RFP and provides project team organization, resumes, and responsibilities and specifies which team members will work on each specific task.

4) **Qualifications and project experience** relevant to this project including the involvement/role of the proposed team in those projects. Be clear which team members will work on specific tasks outlined in the Project Approach and focus on those team members' qualifications specific to assigned task.

5) **Schedule** for completing the tasks identified in the project approach. Include potential constraints or challenges based on the tasks described above.

6) **Compensation** for services to complete the project for the term of the contract (i.e., 4 years of monitoring, data analysis, and reporting) – see Section III above for additional details. Assumptions used must be clearly stated and a total estimated cost must be included. Consultant must specify the estimated number of labor hours for each team member, billable rate and estimated direct expenses (e.g., travel), and total project cost to complete the each task/subtask detailed herein and Consultant's other recommended or optional tasks.

7) **Conflict of interest statement** addressing whether or not any potential conflict of interest exists between this project and other past or on-going projects, including any projects currently being conducted for the Program.

8) **Description of insurance** shall be provided with the proposal. Proof of insurance will be required before a contract is issued. Minimum insurance requirements are described in the attached Program's Consultant Contract (Attachment B).

9) **Acceptance of the terms and conditions** as outlined in the attached Program's Consultant Contract, or clear description of any exceptions to the terms and conditions.

Criteria for Evaluating Proposals

The GC will appoint a Proposal Selection Panel that will evaluate all proposals and select a Consultant based on the following principal considerations:

1. Understanding of the overall objectives of the project and approach to meeting those objectives and addressing critical project tasks and issues.

2. Consultant's project budget (**Section III**) to complete the scope of work described in **Section II**. Although cost will be a selection criterion, the work will not be awarded solely on a lowest cost basis.

3. Qualifications and the relevant experience of the proposed project team members.

4. Clarity and content of the project schedule, scope, and budget.

Award Notice

After completing the evaluation of all proposals and, if deemed necessary, interviews, the Proposal Selection Panel will select a Consultant. That firm will negotiate with the ED Office to establish a fair and equitable contract. If an agreement cannot be reached, a second firm will be invited to negotiate and so on. If the Program is unable to negotiate a mutually satisfactory contract with a Consultant, it may, at its sole discretion, cancel and reissue a new RFP.

Program Perspective

The Program GC has the sole discretion and reserves the right to reject any and all proposals received in response to this RFP and to cancel this solicitation if it is deemed in the best interest of the Program to do so. Issuance of this RFP in no way constitutes a commitment by the Program to award a contract, or to pay Consultant's costs incurred either in the preparation of a response to his RFP or during negotiations, if any, of a contract for services. The Program also reserves the right to make amendments to this RFP by giving written notice to Consultants, and to request clarification, supplements, and additions to the information provided by a Consultant.

By submitting a proposal in response to this solicitation, Consultants understand and agree that any selection of a Consultant or any decision to reject any or all responses or to establish no contracts shall be at the sole discretion of the Program. To the extent authorized by law, the Consultant shall indemnify, save, and hold harmless the Nebraska Community Foundation, the states of Colorado, Wyoming, and Nebraska, the Department of the Interior, members of the GC, and the ED Office, their employees, employers, and agents, against any and all claims, damages, liability, and court awards including costs, expenses, and attorney fees incurred as a result of any act or omission by the Consultant or its employees, agents, sub-Consultants, or assignees pursuant to the terms of this project. Additionally, by submitting a proposal, Consultants agree that they waive any claim for the recovery of any costs or expenses incurred in preparing and submitting a proposal.