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Kim K. Kock, P.E.

JN 12 008 01  
Date April 23, 2014

Pueblo Conservancy District  
c/o Kidd Engineering, Inc.  
1001 East Evans Avenue  
Pueblo, CO 81004

Attn: Rick Kidd, P.E., District Administrator and Conservancy District Board Members

Re: Engineering Design Services, Permitting, and Regulatory Approvals for 2.8 miles of the Arkansas River Levee (between the Wildhorse Creek Confluence and Runyon Lake). This Proposal is an extension of the November 20, 2013 Contract between NorthStar and the Pueblo Conservancy District for Preliminary Data Acquisition. The Services of his Proposal are intended to convert all preliminary data acquired into Final Design Documents for Option 2 Improvements (as Defined in the "Development of Assessment – Phase II, Final Report" dated September 25, 2012). These Final Design Documents will then be routed and processed to obtain required Project Permits and Approvals. The Final Design Documents will also be formalized for Bidding and Construction purposes. Fees stated here-in are in addition to the Task A through Task C total fees detailed in the referenced November 20, 2013 Contract.

We are pleased to present this Proposal for performing professional engineering services with regard to the above referenced project. Please find a list below of the services that are to be provided:

**TASK D: ENGINEERING DESIGN SERVICES, PERMITTING, AND REGULATORY APPROVALS, to include:**

1. Based on preliminary information developed or obtained during performance of the November 20, 2013 Contract services including: "As-constructed" Survey (Task A), Visual Conditional Assessment /Evaluation (Task B), and Geotechnical Investigations (Task C), make a determination regarding removal, repair, or re-use of each existing lower half (Option 2) concrete slope-paved panel ("panel"). Details will be provided as to which panels can remain in place without any improvement, which panels can remain with improvements, and which panels must be replaced. This process will also detail what improvements are required to leave existing panels in place and what upstream and downstream improvements are required to insure stability of those existing panels left in place. This process will also include the following services:
  - a. Embankment and foundation stability analysis evaluating expected seepage during base flood loading conditions, including flooding depth, duration, penetrations, and other seepage and stability factors.

- e. Preparation of subgrade improvement details covering a range of anticipated conditions which may be encountered when the lower concrete panels are removed for replacement. These options may include, but not be limited to, granular fills, recycled concrete fills, flowable fills, pressure grout, etc.
  - f. Preparation of details for new foundation system for new concrete panels in those areas where existing conditions require a new panel foundation system or new panel edge treatment.
  - g. Preparation of final panel details including reinforcing, ties to existing panels, closures between panels where required, sealing of panel joints, finishing of panels, etc.
  - h. Preparation of final details for appurtenant improvements such as penetration closures, interior drainage system, utility crossings, maintenance access, etc.
5. All documents prepared for Task D.1 through D.4 shall be completed as required for submittal and accreditation by the Federal Emergency Management Agency (FEMA). Requirements of 44 CFR 65.10, FEMA's "Guidelines and Specifications for Flood Hazard Mapping Partners", and various United States Army Corps of Engineers levee reference standards will be met during the design process. The final design documents, along with an Operations and Maintenance Plan and Potential Risk Notification Checklist will be submitted to FEMA for review and comment. Any comments received will be incorporated into the final Construction Documents of Task D.6 below. Final Levee Certification ~~by~~ <sup>for</sup> FEMA will not occur until all proposed construction improvements are completed. The documents prepared herein will serve as the basis for the Final Levee Certification submittal package. Final FEMA accreditation will not occur until "as-built" drawings are certified and submitted after construction of improvements are completed.
- a. NorthStar will review the City's/Conservancy District's/Corps current Operation and Maintenance Plans, if they exist, to identify maintenance deficiencies. NorthStar will also prepare draft and final Operation and Maintenance Plans to develop tasks needed for levee certifications and to meet FEMA minimum requirements.
  - b. NorthStar will prepare draft and final letters of potential risk notification to all residential and commercial property owners within potential flood zones (shaded and zoned) for Conservancy District review and approval. NorthStar will also prepare a list of residential and commercial properties protected by the Arkansas River levee system.
6. Submit design documents complete with required application forms to the following agencies to obtain project required permits or approvals prior to the commencement of construction operations:
- a. United States Army Corps of Engineers.
  - b. State of Colorado Division of Parks and Wildlife.
  - c. United States Bureau of Reclamation.
  - d. Colorado Department of Transportation.
  - e. Colorado Water Conservation Board.
  - f. Historical Arkansas Riverwalk Project (HARP).
  - g. All railroad ownership adjacent to the levee embankment.

that month. Should you require a different submittal date, please so advise. Payment not received by NorthStar by the 25<sup>th</sup> will cause all work to stop on the project, and an assessment of two percent monthly.

NorthStar agrees to assign to the District all intellectual property rights in all data gathered, analysis made and work product of Providers concerning this project.

NorthStar agrees that the District may use as the District deems necessary or desirable all information provided to the District by NorthStar which shall become the exclusive property of the District.

This Contract however shall not be construed to give to NorthStar any right beyond the rights set forth in this Contract and should District choose to use third parties for additional services relative to completing the project, the District shall have the right to do so.

NorthStar agrees to comply with all applicable local, State and Federal laws concerning NorthStar's services to Conservancy.

This Agreement may not be assigned by NorthStar without the written consent of Conservancy.

In the event the client wishes to terminate the services of NorthStar, the client shall pay NorthStar time and materials rates up to the date of termination.

NorthStar and the District each agree to indemnify and hold the others harmless, and their respective officers, employees, agents, and representatives from and against liability for all claims, losses, damages, and expenses, including reasonable attorneys' fees, to the extent such claims, losses, damages, or expenses are caused by the indemnifying party's negligent acts, errors, or omissions.

Please review this proposal carefully, for it represents a binding contract when signed. If this proposal is acceptable, please have a duly authorized representative sign on the space provided below and return the original to us as notice of authorization to proceed. We appreciate the opportunity to be of service to you.

NorthStar Engineering and Surveying, Inc.



Kim Kock, P.E.  
President/Principal

Accepted By: 

Title: President

Date: 4-23-2014