

Agenda Item: 10.

MEMORANDUM

TO: Programs, Projects and Operations Sub-Committee
SUBJECT: Request from Olsson Associates for Additional Engineering Fees for Pigeon/Jones Site 15 Construction Administration and Observation
DATE: April 2, 2012
BY: Terry Schumacher, Land & Water Programs Coordinator

At their September, 2007, meeting, the P-MRNRD Board of Directors approved a contract with Olsson Associates for the Pigeon/Jones Site 15 Final Design in the amount of \$534,573. The contract, for Phase I, is for the design of the dam, design of the County road improvements, design of the downstream levees and the off-line storage area. In March of 2009, the Phase I contract was amended to include an additional \$51,300. The Phase II Amendment to the contract was approved in July of 2009, an additional \$513,000. Phase III, Upstream Structures, was approved in October 2010 for \$114,150. The total contract cost approved by the Board is \$1,213,103.00.

Olsson Associates is requesting an amendment, Phase IV, to the contract for additional services necessary to provide construction administration and observation services during the construction of the Dam Site 15 project near Hubbard, NE. These services would include project management, field and land rights survey, geotechnical observation and analysis, field observation and documentation and archeology observation and documentation.

The Pigeon/Jones 15 Project has been advertised for bids with a Site Showing scheduled for April 18, 2012 and a Bid Opening scheduled for April 25, 2012 at 10:00 am at the Natural Resources Center.

Attached is a letter from Olsson Associated that explains in detail their request for additional professional services in the not to exceed amount of \$340,980. If approved, it would increase the contract to a not to exceed amount of \$1,554,083.00.

Management recommends that the Subcommittee recommend to the Board of Directors that the General Manager be authorized to execute the proposed amendment to the professional services contract with Olsson Associates for the Pigeon Jones Site 15 Project, increasing the maximum, not to exceed amount to \$1,554,083.00, subject to changes deemed necessary by the General Manager and approval as to form by District Legal Counsel.



March 30, 2012

Mr. Terry Schumacher
Papio-Missouri River NRD
8901 S. 154th Street
Omaha, NE 68138-3621

Re: Pigeon-Jones Creek Dam Site 15 Additional Services
OA Project No. 007-1658

Dear Mr. Schumacher:

The purpose of this letter is to request an amendment to the referenced project for additional services necessary to provide construction administration and observation services during the construction of the Dam Site 15 project near Hubbard, NE. The preliminary and final design of this project has been completed in several phases which correspond to work currently under contract as summarized below.

Work Currently Under Contract

Phase I Design and Planning – Oct 2007:	\$534,573.00
Phase I Design Amendment – Mar 2009:	\$ 51,380.00
Phase II Amendment – July 2009:	\$513,000.00
Phase III Upstream Structures – Oct 2010:	\$114,150.00
Total Contract Cost:	\$1,213,103.00

As of the February invoice, Olsson has billed and received \$1,119,811.01, leaving approximately \$93,000 of available budget. However, the majority of these funds are already dedicated to the completion of the design of the recreation area and three upstream grade control structures to be completed as part of the Community-Based Watershed Management Plan. A fourth phase is necessary to provide professional construction administration and observation, testing and monitoring, and survey for construction of the dam, lake, county roadways and Pigeon Creek levees. Future construction services will be needed for the recreation area infrastructure and upstream grade control structures.

Olsson is proposing to provide the following professional services necessary to complete the construction process:

1. Project Management and Administration
2. Field and Land Rights Survey
3. Geotechnical Testing and Observation
4. Field Observation and Documentation
5. Archeology Observation and Documentation

The following paragraphs provide a short description for each of these services along with their respective costs. We respectfully request that you consider a total contract increase of **\$340,980** to accomplish all of these activities and move the project forward.

1. Project Management (add \$35,750) – Olsson will oversee the administration of the construction contract and provide technical interpretation of plans and specifications as necessary. This shall include the administration and review of all change orders, shop drawings, material orders, and testing. Written responses will be prepared and recorded for all pertinent decisions. Project management will also cover environmental reviews or compliance as needed. The estimated cost for this task is based on the following assumptions: approximately \$2,750 will be needed each month for 13 months (an additional month beyond construction completion for final administration).
2. Field and Land Rights Survey (add \$65,250) – Olsson will conduct field surveys to establish horizontal and vertical control for construction, provide initial construction staking, and layout limits of construction, fencing, and seeding. This estimated cost is based on the following assumptions: an initial cost of \$15,750 will be needed for setting control and staking, around \$31,900 will be necessary to provide monthly survey thereafter on an as needed basis (\$2,900 per month for up to 11 months), and a cost of \$17,600 will be needed to layout land rights and seeding.
 - a. Construction survey shall generally include the following tasks:
 - i. Establish a horizontal and vertical control network
 - ii. Sediment and erosion control layout
 - iii. Layout grading for dam embankment and principal spillway
 - iv. Stake foundation drains
 - v. Stake riser structures
 - vi. Stake basin structure
 - vii. Layout and monitor piezometer, movement marker, and inclinometer locations
 - viii. Perform grade verification checks
 - ix. Layout grading for fishery enhancements
 - x. Layout fishing pier
 - xi. Layout boat ramp
 - xii. Stake roadway grading
 - xiii. Guard rail layout
 - xiv. Stake pipe and box culverts
 - xv. Layout inlet structures
 - xvi. Locate temporary construction easements
 - xvii. Layout grading for levees
3. Geotechnical Observation and Analysis (add \$18,600) – Olsson will provide engineering review of geotechnical data and documentation gathered during construction. Specifically, instrumentation will be used to monitor settlement and movement during construction of the earthen dam and roadways. Analysis of this monitoring data is necessary to document when settlement has reached its maximum and final grading can be completed. This is especially important for the dam as large settlement areas and potential cracking must be inspected by a

geotechnical engineer. Assumptions made for this cost estimate include: up to eight site visits at \$1,600 each and approximately \$5,800 to complete analysis and recommendations.

4. Field Observation and Documentation (add \$217,000) – Olsson associates will provide daily construction observation and documentation using experienced staff out of its South Sioux City office. Olsson shall furnish a Resident Project Representative (RPR), assistants and other field staff to assist in observing performance of the construction. The RPR will document on-site observations of the work in progress and field checks of materials and equipment by the RPR to protect against defects and deficiencies in the work of contractor; but, the furnishing of such services will not make Olsson responsible for or give Olsson control over construction means, methods, techniques, sequences or procedures or for safety precautions or programs, or responsibility for the contractor's failure to perform the work in accordance with Contract Documents. A copy of the Responsibilities of the RPR is attached for reference. The estimated cost for this task is based on the following assumptions: approximately \$19,200 will be needed per month for 9 months, another \$14,700 per month will be needed for 3 months during non-peak construction.
5. Archeology Observation and Documentation (add \$4,380) – As required by the 404 Permit Special Conditions, a qualified archeologist familiar with State and Federal historic preservation laws must be onsite to monitor construction to ensure no impacts to unknown historic or archeological remains. To comply with this requirement, Olsson will subcontract with Mr. Stan Parks to be present during initial grading activities which may disturb the top three to five feet of existing soil. Mr. Parks with Cultural Resources Consulting was the archeologist who performed the original cultural resources investigation for the project in February 2006. It is assumed that Mr. Parks's services will be needed at least fourteen to twenty days during the construction period. Please find attached his proposed budget summary for this scope.

All cost estimates are based on an assumed 12 month construction schedule. If approved, the increase of \$340,980 would bring the total contract amount to **\$1,554,083.00**.

Thank you for your consideration of our proposal. As always, feel free to contact me with any questions you may have.

Sincerely,



Paul W. Woodward, P.E., CFM
Omaha Water Resources Group Leader

Enclosures

SUGGESTED FORMAT
(for use with E-582, 2004 Edition)

This is **EXHIBIT K**, consisting of 1 pages, referred to in
and part of the **Agreement between Owner and Program
Manager** dated October 4, 2007.

Amendment to Owner-Program Manager Agreement

1. Background Data:

- a. Effective Date of Owner-Program Manager Agreement: October 4, 2007
- b. Owner: Papio-Missouri River NRD
- c. Program Manager: Olsson Associates
- d. Program: PMRNRD Pigeon/Jones Creek Watershed Site 15 Final Design

2. Nature of Amendment [Check those that are applicable and delete those that are inapplicable.]

- ☒ Additional Services to be performed by Program Manager
☐ Modifications to Services of Program Manager
☐ Modifications to Responsibilities of Owner
☐ Modifications to Payment to Program Manager
☐ Modifications to Time(s) for rendering Services
☐ Modifications to other terms and conditions of the Agreement

3. Description of Modifications

Attached letter and enclosures to Terry Schumacher dated March 30, 2012 detailing the nature of the requested additional services.

Owner and Program Manager hereby agree to modify the above-referenced Agreement as set forth in this Amendment. All provisions of the Agreement not modified by this or previous Amendments remain in effect. The Effective Date of this Amendment is April 13, 2012.

OWNER:

PROGRAM MANAGER:

By: John Winkler

By: Michael Piernicky

Title: General Manager

Title: Omaha Office Manager

Date Signed: _____

Date Signed: _____

**A LISTING OF THE DUTIES, RESPONSIBILITIES
AND LIMITATIONS OF AUTHORITY OF THE
RESIDENT PROJECT REPRESENTATIVE**

ENGINEER shall furnish a Resident Project Representative (RPR), assistants and other field staff to assist ENGINEER in observing performance of the work of CONTRACTOR.

Through more extensive on-site observations of the work in progress and field checks of materials and equipment by the RPR and assistants, ENGINEER shall endeavor to provide further protection for OWNER against defects and deficiencies in the work of CONTRACTOR; but, the furnishing of such services will not make ENGINEER responsible for or give ENGINEER control over construction means, methods, techniques, sequences or procedures or for safety precautions or programs, or responsibility for CONTRACTOR's failure to perform the Work in accordance with Contract Documents and in particular the specific limitations set forth in the Agreement as applicable.

The duties and responsibilities of the RPR are limited to those of ENGINEER in ENGINEER's agreement with the OWNER and in the construction Contract Documents, and are further limited and described as follows:

A. General

RPR is ENGINEER's agent at the site, will act as directed by and under the supervision of ENGINEER, and will confer with ENGINEER regarding RPR's actions. RPR's dealing in matters pertaining to the on-site work shall in general be with ENGINEER and CONTRACTOR keeping OWNER advised as necessary. RPR's dealing with subcontractor shall only be through or with the full knowledge and approval of CONTRACTOR. RPR shall generally communicate with OWNER with the knowledge of and under the direction of ENGINEER.

B. Duties and Responsibilities of RPR

1. Schedules: Review the progress schedule, schedule of Shop Drawing submittals and schedule of values prepared by CONTRACTOR and consult with ENGINEER concerning acceptability.
2. Conferences and Meetings: Attend meeting with CONTRACTOR, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.
3. Liaison:
 - a. Serve as ENGINEER's liaison with CONTRACTOR, working principally through CONTRACTOR's superintendent and assist in understanding the intent of the Contract Documents; and assist the ENGINEER in serving as OWNER's liaison with CONTRACTOR when CONTRACTOR's operations affect OWNER's on-site operations.
4. Shop Drawings and Samples:
 - a. Record date of receipt of Shop Drawings and samples.
 - b. Receive samples which are furnished at the site by CONTRACTOR, and notify ENGINEER of availability of samples for examination.
 - c. Advise ENGINEER and CONTRACTOR of the commencement of any Work requiring a Shop Drawing or sample if the submittal has not been approved by ENGINEER.

5. Review of Work, Rejection of Defective Work, Inspections and Tests:
 - a. Conduct on-site observations of the Work in progress to assist ENGINEER in determining if the Work is in general proceeding in accordance with the Contract Documents.
 - b. Report to ENGINEER whenever RPR believes that any Work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise ENGINEER of Work that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.
 - c. Verify that tests, equipment and systems startups and operating and maintenance training are conducted in the presence of appropriate personnel, and that CONTRACTOR maintains adequate records thereof; and observe, record and report to ENGINEER appropriate details relative to the test procedures and startups.
 - d. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections and report to ENGINEER.
6. Interpretation of Contract Documents: Report to ENGINEER when clarifications and interpretations of the Contract Documents are needed and transmit to CONTRACTOR clarifications and interpretations as issued by ENGINEER.
7. Modifications: Consider and evaluate CONTRACTOR's suggestions for modifications in Drawings and Specifications and report with RPR's recommendations to ENGINEER. Transmit to CONTRACTOR decisions as issued by ENGINEER.
8. Records:
 - a. Maintain at the job site orderly files for correspondence, reports of job conferences, Shop Drawings and samples, reproductions of original Contract documents including all Work Directive Changes, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, ENGINEER's clarifications and interpretations of the Contract Documents, progress reports, and other Project related documents.
 - b. Keep a diary or log book, recording CONTRACTOR hours on the job site, weather conditions, data relative to questions of Work Directive Changes, Change Orders or changed conditions, list of job site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to ENGINEER.
9. Reports:
 - a. Furnish ENGINEER periodic reports as required of progress of the Work and of CONTRACTOR's compliance with the progress schedule and schedule of Shop Drawing and sample submittals.
 - b. Consult with ENGINEER in advance of scheduled major tests, inspections or start of important phases of the Work.
 - c. Draft proposed Change Orders and Work Directive Changes, obtaining backup material from CONTRACTOR and recommend to ENGINEER Change Orders, Work Directive Changes, and Field Orders.
 - d. Report immediately to ENGINEER and OWNER upon the occurrence of any accident.
10. Payment Requests: Review applications for payment with CONTRACTOR for compliance with the established procedure for their submission and forward with recommendations to ENGINEER, noting particularly the relationship of the payment requested to the schedule of values, Work completed and materials and equipment delivered at the site but not incorporated in the Work.

11. Certificates, Maintenance and Operation Manuals: During the course of the Work, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by CONTRACTOR are applicable to the items actually installed and in accordance with the Contract Documents, and have this material delivered to ENGINEER for review and forwarding to OWNER prior to final payment for the Work.
12. Completion:
 - a. Before ENGINEER issues a Certificate of Substantial Completion, submit to CONTRACTOR a list of observed items requiring completion or correction.
 - b. Conduct final inspection in the company of ENGINEER, OWNER, and CONTRACTOR and prepare a final list of items to be completed or corrected.
 - c. Observe that all items on final list have been completed or corrected and make recommendations to ENGINEER concerning acceptance.

C. Limitations of Authority

Resident Project Representative:

1. Shall not authorize any deviation from the Contract Documents or substitution of materials or equipment, unless authorized by ENGINEER.
2. Shall not exceed limitations of ENGINEER's authority as set forth in the Agreement or the Contract Documents.
3. Shall not undertake any of the responsibilities of CONTRACTOR, subcontractors or CONTRACTOR's superintendent.
4. Shall not advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction unless such advice or directions are specifically required by the Contract Documents.
5. Shall not advise on, issue directions regarding or assume control over safety precautions and programs in connection with the Work.
6. Shall not accept Shop Drawing or sample submittals from anyone other than CONTRACTOR.
7. Shall not authorize OWNER to occupy the Project in whole or in part.
8. Shall not participate in specialized field or laboratory tests or inspections conducted by others except as specifically authorized by ENGINEER.

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Proposed Budget:

Jones Creek Dam Structure, Dakota County, Nebraska

Fieldwork Monitoring During Grading of Surface Soils in Area of Dam and Spillway

5 days including travel time	\$1,300.00/
4 days Lodging / 5 days Per-Diem	\$450.00/
Mileage – 360	\$180.00/
Expendable supplies (at cost)	\$100.00/
Sub-Total	(\$2,030.00)

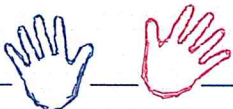
Project Progress Monitoring

5 days including travel time	\$1,300.00/
2 days Lodging / 2 days Per-Diem	\$200.00/
Mileage – 1,750	\$850.00/
Sub-Total	(\$2,350.00)

ESTIMATED TOTAL PROJECT COSTS \$4,380.00

Estimated project cost completed by Cultural Resource Consulting
March 29, 2012

Stanley M Parks



Pigeon/Jones Creek Dam Site 15 Construction

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