In September 2015, the Board approved an amendment to the existing Interlocal Agreement with the City of Omaha for Papio Dam Site 15A (DS15A). This amendment allowed the City to request additional features be designed and/or constructed along with the project as originally planned.

The City of Omaha has requested the District consider constructing additional and larger sewer line on the east side of the DS15A project. The original project allowed for construction of a line through the dam embankment to ensure the dam was not disturbed. However, the City of Omaha opened the area surrounding DS15A to the Present Development Zone (PDZ) in August 2015. Installation of the additional sewer line will require additional design, permitting, and construction observation services.

In addition to the additional sewer work, the City is requesting that the District coordinate with the neighboring development to build HWS Cleveland Boulevard to its ultimate design rather than the access road designed for the original project. In addition to HWS Cleveland Boulevard, the neighboring development is proposing a publicly-accessible pier in the lake. This pier would require additional analysis by HDR to ensure that it will not impact the operation and maintenance of the dam and reservoir.

HDR has provided an estimate of the time required to complete the additional services required as a result of the changes requested by the City. Their hourly not-to-exceed estimate is $94,797. This cost also includes some additional material quality assurance testing of riprap to be placed on-site and proper abandonment of a well found during construction activities. Of the total amendment amount, $84,166 would be paid by the City of Omaha. A summary of the proposed costs is shown below.

<table>
<thead>
<tr>
<th>TASK</th>
<th>COST</th>
<th>RESPONSIBLE PARTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanitary Sewer Extension</td>
<td>$60,756</td>
<td>City of Omaha</td>
</tr>
<tr>
<td>HWS Cleveland Blvd.</td>
<td>$16,402</td>
<td>City of Omaha</td>
</tr>
<tr>
<td>Lakeview Pointe Development</td>
<td>$7,008</td>
<td>City of Omaha</td>
</tr>
<tr>
<td>HWS Cleveland Blvd Coordination/</td>
<td>$10,631</td>
<td>P-MRNRD</td>
</tr>
<tr>
<td>Additional QA Testing/Well Abandonment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Management recommends that the Subcommittee recommend to the Board of Directors that the General Manager be authorized to execute for and on behalf of the District contract Amendment 5 to HDR’s Professional Service Contract for the Papio Dam Site 15A project in the amount of $94,797 bringing the total not-to-exceed contract amount to $3,805,549 in the form as presented to this meeting, subject to changes deemed necessary by the General Manager and approved as to form by District Legal Counsel.
November 4, 2015

John Winkler
General Manager
Papio-Missouri River Natural Resources District
8901 S. 154th Street
Omaha, NE 68138-3621

RE: Dam Site 15A
    Phase III - Construction Administration Services. Additional Design and Construction
    Coordination - Amendment No. 5

Dear John:

HDR Engineering, Inc. is pleased to submit the attached Amendment No. 5 to our Agreement to provide additional design and construction coordination and environmental permitting at the Dam Site 15A project. This includes the design and construction coordination on a sanitary sewer extension, HWS Cleveland Boulevard re-design, and an adjacent property owner’s plan for development. The amended agreement is not to exceed the original Agreement (dated January 14, 2010) in the amount of $94,797.

Please print two copies of the Agreement, sign both copies, retain one copy for your records and return the other signed copy for our files. Our receipt of your signed acceptance will constitute our Notice to Proceed.

We look forward to continue working with you on this very important project with the P-MRNRD. If you have any questions, please contact me at 402-399-1078 at your convenience.

Very truly yours,

HDR ENGINEERING, INC.

Laurie Carrette Zook, P.E.
Project Manager
Enclosures
This is EXHIBIT K, consisting of 2 pages, referred to in and part of the Agreement between Owner and Engineer for Professional Services dated January 14, 2010.

AMENDMENT TO OWNER-ENGINEER AGREEMENT
Amendment No. 5

1. **Background Data:**

   a. Effective Date of Owner-Engineer Agreement: January 14, 2010
   
   b. Owner: Papio-Missouri River Natural Resources District (P-MRNRD)
   
   c. Engineer: HDR Engineering, Inc. (HDR)
   
   d. Project: Dam Site 15A and Associated Improvements

2. **Description of Modifications:**

   a. The Scope of Services currently authorized to be performed by Engineer in accordance with the Agreement and previous amendments, if any, is modified as follows:

      1) Exhibit A, “Engineer’s Services”, shall be amended to include Exhibit A5, “Engineer’s Services for Amendment No. 5” and Enclosure A, Subconsultant Proposals.

      2) Exhibit C, “Payments to Engineer for Services and Reimbursable Expenses”, Appendix 1, shall be amended to include Attachment C5, “Engineer’s Fee Estimate”.

   b. For the Engineer’s Services set forth above, Owner shall pay Engineer the following additional compensation:

      1) An amount equal to Engineer’s Direct Labor Costs times a factor of 3.15 for the services of Engineer’s employees engaged on the Project, plus Reimbursable Expenses, provided however, and notwithstanding anything to the contrary contained in this Agreement, the total amount of money due to ENGINEER for such services and for Reimbursable Expenses and Engineer’s Consultant’s charges shall not exceed the amount of $94,797 under this Amendment for Phase III services.
3. Agreement Summary (Reference only)
   a. Original Agreement amount: (Phase I) $ 620,300
   b. Amendment No. 1 (Phase I) $ 102,579
   c. Amendment No. 2 (Phase II) $ 1,274,762
   d. Amendment No. 3 (No Cost Change) $ 0
   e. Amendment No. 4 (Phase III) $ 1,713,111
   f. This Amendment No. 5 (Phase III) $ 94,797

g. Adjusted Agreement amount: $ 3,805,549

The foregoing Agreement Summary is for reference only and does not alter the terms of the Agreement, including those set forth in Exhibit C.

Owner and Engineer 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 ____________.

OWNER: Papio-Missouri River Natural Resources District

ENGINEER: HDR Engineering, Inc.

By: ____________________________
Print name: John Winkler
Title: General Manager
Date Signed: ____________________

By: ____________________________
Print name: Timothy Crockett, P.E.
Title: Senior Vice President
Date Signed: 11/04/15
Engineer’s Services

AMENDMENT NO. 5

Dam Site 15A
for Papio-Missouri River Natural Resources District
Douglas County, NE

ENGINEERING PROPOSAL – PHASE III CONSTRUCTION CONTRACT
ADMINISTRATION SERVICES, ADDITIONAL DESIGN AND
CONSTRUCTION COORDINATION

BACKGROUND AND BASIS OF PROPOSAL

HDR Engineering, Inc. was requested to additional design and construction coordination for the Dam Site 15A Project. This includes the construction coordination on a sanitary sewer extension, HWS Cleveland Boulevard re-design, and an adjacent property owner’s plan for development.

In support of the extension of the City of Omaha (City) sanitary sewer line within the construction limits of DamSite 15A, HDR was requested to assess the impacts on the sewer line on Waters of the U.S. and document its findings. This documentation would be used to support a Section 404 Nationwide Permit.

SCOPE OF SERVICES – ADDITIONAL DESIGN AND CONSTRUCTION COORDINATION

HDR will perform design and construction coordination into the following three (3) task series:
Task Series 100 – Design and Construction Coordination
Task Series 200 – Environmental Permitting
Task Series 300 – Well Abandonment and Material QA Testing

TASK SERIES 100 DESIGN AND CONSTRUCTION COORDINATION

Task Objectives: Coordinate with P-MRNRD and City of Omaha on development issues.

HDR Activities: Task 110 Sanitary Sewer Coordination. The City desires to have the sanitary sewer extended to serve future developments.
Task 110.1 Coordination Completed. During the development of the sanitary sewer extension, HDR met with the City, City’s Engineer, and P-MRNRD to discuss the alignment and coordinate the construction. HDR coordinated with McArdle to obtain a cost estimate to construction the sanitary sewer with several different material types. A total of $23,094 has been expended as of October 17, 2015.
Task 110.2 Design Coordination. Coordinate with City’s Engineer on the impacts of the sanitary sewer to the trail and Ida Street roadway. Drawing to be modified to construct the pavements. Amend the existing SWPPP permit to include the BMPs designed by the City’s Engineer.

Task 110.3 Construction Coordination. HDR to coordinate with the City’s Engineer on the documentation of the sanitary sewer in Project Tracker Coordination System (PTCS) including submittals, change requests (request for information (RFI), change proposal requests (CPRs), change orders (CO), field orders (FO)), and payment applications. HDR to conduct the SWPPP monitoring inspections.

Task 120 HWS Cleveland Blvd Coordination. HWS was designed as the access road to the South Access area as a two-lane rural road section. As part of the adjacent development, HWS will be designed by the developer’s engineer as a two-lane urban boulevard section with storm sewer, curb and gutter.

Task 120.1 Coordination Completed. During the development of the redesign of HWS, HDR met with the developer’s engineer and P-MRNRD to discuss the alignment. A total of $2,851 has been expended as of October 17, 2015.

Task 120.2 Design Coordination. Coordinate with developers’ engineer on the impacts of the new roadway on the entrance road to the South Access Area and trail. Re-design access road and trail to accommodate HWS realignment.

Task 120.3 Construction Coordination. HDR to coordinate with the developer’s designer on the documentation of the HWS construction in PTCS including submittals, change requests and payment applications. HDR to conduct the SWPPP monitoring inspections.

Task 130 Lakeview Pointe Development Coordination. HDR to attend meetings and provide comments on development features that will impact the Main Dam and reservoir. This effort is limited to 40 hours of engineering time.

Task Deliverables:

- Email of Review Comments

Key Understandings:

- E&A Consulting Group, under contract with the City of Omaha, will design, permit (NDEQ and design SWPPP BMPs), and provide construction contract support for the sanitary sewer extension including: maintaining field records, submittal reviews, contract document clarifications, design changes, change order negotiations, construction observation, survey verification, material QA testing and as-built drawing preparation.
- HDR will provide environmental permitting support for the sanitary sewer extension. Permitting is described in Task Series 200.
- It is assumed that the construction for the sanitary sewer extension will be 8 weeks and construction administration coordination is limited to 10 hours/week.
- LRA, under contract with Lakeview Pointe, is working with the developer in creating a mix-use development and designing HWS Cleveland Blvd. LRA to provide construction contract support for redesign of HWS Cleveland Blvd.
including: maintaining field records, submittal reviews, contract document
clarifications, design changes, change order negotiations, construction
observation, survey verification, material QA testing and as-built drawing
preparation.

- It is assumed that the construction of HWS Cleveland will be 8 weeks and
construction administration coordination is limited to 5 hours/week.

**TASK SERIES 200 ENVIRONMENTAL PERMITTING**

This task would include the delineation of wetlands and other waters of the U.S. to comply with Section
404 permitting requirements. The delineations performed for DamSite 15A were performed in July of 2010
and expired after 5 years.

**Task Objectives:** Comply with Section 404 permitting requirements and Migratory Bird Treaty Act.

**HDR Activities:**

**Task 210. Waters of the US Identification.** Identify, delineate and prepare a
delineation report summarizing the project’s impact to waters of the US.

210.1 **Data Collection.** Assemble existing data related to the potential location
of waters of the U.S. Use of geographic information systems (GIS) will be
the primary method of desktop preliminary investigation. GIS data will
include NWI, NHD, and hydric soils, and other ancillary data.

210.2 **Wetland Delineation.** Wetland areas will be delineated in accordance
with the Corps’ 1987 wetland delineation manual and Midwest Regional
Supplement. The location of other waters of the U.S. (non-wetland areas
such as creeks, streams, rivers, and lakes) will also be identified. Each
waters of the U.S. will be photo documented. The amount of delineated
waters of the U.S. will be quantified (wetland area will be reported in
acres, non-wetland areas in linear feet).

210.3 **Wetland Delineation Report.** The delineation report will consist of
applicable narrative, tables, figures, and photos. Narrative discussing
applied methods and findings will be included. Waters of the U.S. will be
located on aerial photographs and described in narrative. Photo
documentation shall include photo, photo orientation, photo date, and a
brief descriptive caption. Wetland and Waters of the U.S. data forms will
be provided as an attachment to the delineation report.

**Task 220. Section 404 Nationwide Permit Documentation.** Prepare a technical
memorandum summarizing the results of the wetland delineation and its
applicability to the Nationwide permit.

**Task 230. Migratory Bird Survey.** Perform pre-construction nest survey for active
migratory bird nests in the Project Area requiring tree removal. If an active nest is
identified, return nest surveys would be required to determine when the nest
becomes inactive. Daily field report will be provided after each survey.

**Task Deliverables:**

- Draft and Final Waters of the US Identification
- Daily field report on migratory bird nest survey
Key Understandings:

- The Project Area is limited to the location of the extension of the sanitary sewer line.
- It is assumed that Papio-Missouri River NRD will provide access to the Project Study Area.
- The City shall provide design information for the Project.
- The CWA Section 404 authorization for this Project is assumed to qualify for a Nationwide Permit #12, Utility Line Crossings. Based on the preliminary location of the sanitary sewer line, it is assumed that USACE pre-construction notification would not be required.
- It is assumed that the Project will not impact forested wetlands. Location of the Project in emergent wetlands area assumed to involve temporary impacts only, thus not necessitating the need for emergent wetland mitigation.
- It is assumed that no field surveys for threatened and endangered species habitat will be required.
- Up to three (3) bird nest field surveys are assumed.

TASK SERIES 300 WELL ABANDONMENT AND MATERIAL QA TESTING

Task Objectives: To decommission domestic water well, conduct miscellaneous earthwork testing, and conduct riprap testing.

HDR Activities: **Task 310 Supplemental Material QA Testing.** During construction, an inactive domestic water well was found, requiring proper decommissioning in accordance with state requirements. Qualified HDR field representatives are able to conduct earthwork QA testing, but when they are unavailable, a qualified testing laboratory performs the required tests. QA testing on riprap was not included in Amendment 4, but during construction it was required to verify that the material met the specifications. See Enclosure A for description of the material testing work and well decommissioning.

Task Deliverables:

- NDEQ well decommissioning documentation
- Material testing reports

Key Understandings:

- Thiele Geotech, as a subconsultant to HDR, will perform the well decommissioning and the QA testing.
### COST ESTIMATE

#### Dam Site 15A

<table>
<thead>
<tr>
<th>Description</th>
<th>Estimated Quantity</th>
<th>Unit Rate</th>
<th>Estimated Cost</th>
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</thead>
<tbody>
<tr>
<td><strong>Well Decommissioning</strong></td>
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<td><strong>AASHTO T103 (Modified) Freeze Thaw Loss</strong></td>
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### Other Services

Any item or category not listed will be billed at our normal Fee Schedule rate in effect at the time of service.
## AMENDMENT 5 - ATTACHMENT C5

### PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT

### ADDITIONAL DESIGN COORDINATION AND CONSTRUCTION CONTRACT ADMINISTRATION SERVICES

### FEE ESTIMATE - NOVEMBER 4, 2016

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<th>HDR Engineering, Inc.</th>
<th>Estimated Hours/ Costs</th>
<th>HDR</th>
<th>1st-Consultant Estimated Cost</th>
<th>Est. Total Cost</th>
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<tr>
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<td>Project Manager</td>
<td>Specialist</td>
<td>Senior Staff</td>
<td>Resource Specialist</td>
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<tr>
<td>TASK SERIES 100 DESIGN AND CONSTRUCTION COORDINATION</td>
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<td>227.00</td>
<td>205.50</td>
<td>163.50</td>
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<td>Task 110.1</td>
<td>Bankhead Bowser Coordination</td>
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<td>227.00</td>
<td>205.50</td>
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</table>

### Estimated Task Hours/Estimated Task Cost

| Estimated Task Hours Summary | 2 | 0 | 0 | 2 | 68.40 | 0 | 4 | 2 | 4 | 92.80 | 0 | 0 | 0 | 0 | 0 | 0 |

### Estimated Task Cost Summary

| Estimated Task Cost Summary | 2 | 0 | 0 | 2 | 68.80 | 0 | 4 | 2 | 4 | 92.80 | 0 | 0 | 0 | 0 | 0 | 0 |

### Task Series 200 ENVIRONMENTAL PERMITTING

<table>
<thead>
<tr>
<th>Task 210</th>
<th>Waters of the US Identification</th>
</tr>
</thead>
</table>

### Task Series 201 | Site Evaluation |

### Task Series 202 | Well Abandonment and Material QA Testing |

### Notes

1. Includes administrative fee for expenses (except travel, fuel) of 10%