RESOLUTION AUTHORIZING CHAIRMAN TO SIGN WORK ORDER #R151556.01 UNDER JEO CONSULTING GROUP MASTER AGREEMENT FOR PROFESSIONAL SERVICES FOR SARPY COUNTY PROJECT, 225TH STREET, HARRISON STREET TO CENTENNIAL ROAD, AND CENTENNIAL ROAD FROM 225TH STREET TO 222ND STREET, AND 222ND STREET FROM CENTENNIAL ROAD TO LINCOLN ROAD IN SARPY COUNTY

WHEREAS, pursuant to Neb. Rev. Stat. 23-104(6), the County has the power to do all acts in relation to the concerns of the County necessary to the exercise of its corporate powers; and,

WHEREAS, pursuant to Neb. Rev. Stat. 23-103, the powers of the County as a body are exercised by the County Board; and,

WHEREAS, the County and JEO Consulting Group, Inc. have previously executed an Engineering Agreement via Resolution 2014-90, for providing on-call/as-needed engineering services to Sarpy County, and,

WHEREAS, County and JEO Consulting Group, Inc. wish to enter into Work Order #R151556.01 which outlines modifications and/or additional duties for professional services related to improvements for 225th Street: Harrison Street to Centennial Road (Project No. C-77(05-2)), and Centennial Road from 225th Street to 222nd Street and 222nd Street from Centennial Road to Lincoln Road (Project No. C-77(05-3)) in Sarpy County, Nebraska.

NOW THEREFORE, BE IT RESOLVED by the Sarpy County Board of Commissioners that pursuant to the statutory authority set forth above, the Work Order #R151556.01 with JEO Consulting Group, Inc. for Professional services for the improvements to 225th Street: from Harrison Street to Centennial Road (Project C-77(05-2)), and Centennial Road from 225th Street to 222nd Street and 222nd Street from Centennial Road to Lincoln Road (Project C-77(05-3)) in Sarpy County, Nebraska, a copy of which is attached hereto, is hereby approved.

BE IT FURTHER RESOLVED that the Chair and the Clerk are hereby authorized to execute said agreement on behalf of Sarpy County, Nebraska.

The above Resolution was approved by a vote of the Sarpy County Board of Commissioners at a public meeting duly held in accordance with the applicable law on the 14th day of June, 2016.

Attest

[Signature]
Sarpy County Board Chairman

[Signature]
County Clerk
MEMORANDUM

To: Sarpy County Board of Commissioners
From: Dennis L. Wilson, County Engineer
Subject: JEO Consulting Group Work Order #R151556.01 to Master Agreement
Date: June 8, 2015

I recommend approval of the Task Order #R151556.01 to the Master Agreement with JEO Consulting Group for Professional Services for Sarpy County Project 225th Street: from Harrison Street to Centennial Road, and Centennial Road: from 225th Street to 222nd Street, and 222nd Street: from Centennial Road to Lincoln Road. For a total not to exceed cost of $214,000.00.

DLW/bjh
In accordance with the Master Services Agreement between Owner and Engineer for Professional Services dated March 31, 2014 ("Agreement"), Owner and Engineer agree as follows:

Specific Project Data

A. Title: 225th Street, Harrison Street to Centennial Road, Project No. C-77(05-2) and Centennial Road, 225th St. to 222nd St and 222nd Street from Centennial Road to Lincoln Road, Project No. C-77(05-3).

B. Description: Professional Engineering Services as described in Attachment "A" related to the above referenced projects including topographic and boundary surveys, wetland delineation, geotechnical engineering, roadway design (including right-of-way design) and permitting assistance.

1. Services of Engineer

Engineer shall provide, or cause to be provided, the services set forth herein and in Attachment "A".

2. Owner’s Responsibilities

Exhibit "A" from the Master Services Agreement between Owner and Engineer for Professional Services as referenced above is modified as follows: None

3. Times for Rendering Services

Schedule for completion of the work is as follows.

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assumed Notice to Proceed (NTP)</td>
<td>June 1, 2016</td>
</tr>
<tr>
<td>Survey Complete</td>
<td>July 29, 2016</td>
</tr>
<tr>
<td>Concepts/Relaxation Request Documents</td>
<td>August 31, 2016</td>
</tr>
<tr>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td>30% (Plan-in-Hand):</td>
<td>October 20, 2016</td>
</tr>
<tr>
<td>60% Submittal</td>
<td>November 30, 2016</td>
</tr>
<tr>
<td>90% Submittal</td>
<td>January 20, 2016</td>
</tr>
<tr>
<td>Final Submittal (pending comments)</td>
<td>Two weeks after receiving comments.</td>
</tr>
</tbody>
</table>

4. Payments to Engineer

The total compensation for services identified under paragraph 1 of the Task Order is estimated to be $214,000.00 based on the following distribution.

- Survey and ROW acquisition plats: $50,000.00
- Environmental: $4,500.00
- Geotechnical: $9,000.00
- Roadway Design: $147,000.00
- Permitting Assistance: $3,500.00

Engineer may alter the distribution of compensation between individual phases noted herein to be consistent with services actually rendered, but shall not exceed the total Lump Sum amount unless approved by the Owner.

5. Other Modifications to Master Agreement: None
Approval and Acceptance: Approval and Acceptance of this Task Order, including the attachments listed above, shall incorporate this document as part of the Agreement. Engineer is authorized to begin performance upon its receipt of a copy of this Task Order signed by Owner.

The Effective Date of this Task Order is 6/14/116.

Engineer: JEO Consulting Group, Inc.

Signature: [Signature]
Date: 4/18/2016

Eric S. Dixon
Name

Project Manager
Title

Designated Representative for Task Order:

Eric S. Dixon
Name

Project Manager
Title

2700 Fletcher Ave., Lincoln, NE 68504
Address

edixon@jeo.com
E-Mail Address

402.474.8779
Phone

402.435.4110
Fax

Owner:

Signature: [Signature]
Date: 6/14/116

Don Kelly
Name

Chairman
Title

Designated Representative for Task Order:

Bill Herr
Name

Project Administrator
Title

1210 Golden Gate Dr., Papillion, NE 68046
Address

bherr@sarpy.com
E-Mail Address

402.537.6906
Phone

402.537.6855
Fax

Approved as to form:

[Signature]

Sarpy County Attorney
Scope of Services

Project Description: The project is approximately 2.8 miles long and is located along three segments of existing gravel roads. The segments are 222\textsuperscript{nd} Street from Lincoln Road to Centennial Road, Centennial Road from 222\textsuperscript{nd} to 225\textsuperscript{th} and 225\textsuperscript{th} Street from Centennial Road to Harrison Street. The ultimate rural roadway section will include two 12'x9'' concrete paved lanes with 4' turf shoulders (pavement depth to be verified/determined by Geotech). Driveways will be paved to the end of radii returns. Initial surfacing will consist of crushed rock surface course on top of a stabilized oil base. The project will include grading to meet current 50 mph design criteria. In order to minimize right-of-way impacts, a relaxation in the design speed will be requested to the Nebraska Board of Classifications and Standards in the vicinity of the 225\textsuperscript{th} & Centennial intersection. The intersection at 222\textsuperscript{nd} and Centennial will be converted from a tight radius curve to a square intersection. The design will accommodate a three lane section from Lincoln Road to the north along 222\textsuperscript{nd} Street approximately 500' in order to provide a potential left turn lane into the soccer facility. Culverts will be designed for a 50 year storm. Segments of the roadways will be closed to through traffic during construction. The Contractor will be required to maintain access to properties at all times.

The plans are to reflect the proposed ultimate concrete pavement section, however, the initial construction project will not include the concrete paving and associated items (such as earth shouldering, seeding of shoulders and pavement markings).

JEO will provide professional services related to surveying, roadway design, right-of-way design and environmental permitting assistance. Our sub-consultant, Thiele Geotech, Inc. will perform the geotechnical services. The following is the detailed scope of services:

1. Preliminary Field Work and Studies
   1.1. Topographic Survey:
      1.1.1. Conduct a topographic survey of the proposed roadway corridor. Unless otherwise directed by the County, the survey will be performed in reference to NAD 83, Nebraska State Plane Coordinate System and the NAVD88 vertical datum. Using GPS survey equipment and the Sieler VRS Network. The coordinates would be modified to use the local Nebraska Department of Roads Ground Scale Factor (DAF). All survey control would be established using GPS equipment and the VRS Network. It is assumed that differential leveling would not be required.
      1.1.1.1. Topography shall include 125 feet each side of the center of intersection with Lincoln Road.
      1.1.1.2. Topography shall include 125 feet of each side of the center of intersection with Harrison Street.
      1.1.1.3. Topography shall include 100 feet each side of the proposed alignment.
      1.1.2. Locate existing culverts. Measure size of pipes and shoot inlet and outlet flowlines.
1.1.3. Utility locate requests will be made with the Nebraska One Call system and utilities surveyed as marked by locators.
1.1.4. Process topography using CAD software to create base drawings.

1.2. Boundary Survey:
1.2.1. Locate and survey Section and Property Corners. Estimate 15 Section and approximately 40 property corners to be located.
1.2.2. Perform On-Line research and obtain copies of existing plats, deeds and easements recorded with the Sarpy County Register of Deeds. Deliverables for this task do not include title reports, title commitments or title abstracts.
1.2.3. Draw boundary information using CAD software to create base drawings. Estimate approximately 45 parcels along the project.
1.2.4. Prepare ROW plats per parcel as needed.

1.3. Project Kick-Off:
1.3.1. Organize and attend the project kick-off meeting.
1.3.1.1. Prepare concepts for 222nd & Centennial intersection for discussion at the meeting.
1.3.1.2. Coordinate with County to determine strategy for development of design relaxation request.
1.3.1.3. Prepare design relaxation request and supporting documents.

1.4. Wetland Delineation and Threatened and Endangered Species Survey:
1.4.1. Wetland Delineation fieldwork and report.
1.4.1.1. Perform field work within the project limits.
1.4.1.1.1. Preparation of Wetland/WOUS delineations using guidance of the US Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual and appropriate Regional Supplemental Delineation Manual. This includes investigation and sample point collection of site hydrology, vegetation, and soil.
1.4.1.1.2. Accurate mapping of delineated wetland boundaries with post-processed sub-meter accuracy using a Trimble GeoXH hand-held GPS

1.4.2.1. Produce a wetland delineation report which may be used in the preparation of permitting documents and will include the following:
1.4.2.2. Project Site Location Summary of “desktop review”
1.4.2.3. Identification and mapping of the boundaries of all wetlands and WOUS
1.4.2.4. Calculation of wetland and WOUS acreages (nearest 0.01 acres)
1.4.2.5. Identification of the types of wetlands and WOUS present
1.4.2.6. Photographs of each site and wetland
1.4.2.7. USACE Wetland Determination Data Forms (Midwest)
1.4.2.8. Import wetland information using CAD software to create base drawings.

1.4.3. Perform threatened and endangered species habitat analysis survey within project limits. Compose memorandum summarizing the findings.
1.5. Geotechnical Soils Investigation and Pavement Design (by our subconsultant Thiele Geotech):
Geotechnical exploration will consist of test borings to obtain geologic information and samples of the site soils, laboratory tests to determine the relevant engineering properties of the various soil strata, and a report of geotechnical engineering recommendations.

With the anticipated soil conditions, we propose to conduct a total of 16 test borings. The borings will be spaced across the site and at strategic locations, with nine (9) borings along 225th Street, two (2) borings along Centennial Road, and five (5) borings along 222nd Street. Borings are spaced between 800 to 1000 feet apart. Based on boring depths of 10 to 20 feet, a total drilling footage of up to 250 lineal feet is proposed. The borings will be sampled at intervals of 5 feet or less and a descriptive log of the test borings will be prepared.

Based on the results of the test borings, a laboratory testing program will be established to evaluate the engineering properties of the various soil strata. Laboratory testing may include moisture content and density determinations to characterize the state and uniformity of the deposits, unconfined compression tests to determine shear strength parameters, one-dimensional consolidation tests to evaluate compressibility, and index property tests for classification.

The geotechnical report will discuss the general soil and ground water conditions underlying the site; present the relevant engineering properties of the existing soils; provide earthwork and site preparation recommendations; and recommend design criteria and parameters for the initial wearing surface, pavements, and other earth supported improvements.

The proposed scope of services does not include an evaluation of potential contamination on or near the site. If the environmental condition of the property is a concern, an environmental site assessment can be provided as an additional service.

2. Roadway Design Services:
2.1. Review existing data and information provided by the County.
2.2. Prepare 30 percent (Plan-In-Hand) plans including a cover sheet, typical sections, drainage, horizontal and vertical alignment, limits of construction, cross sections and existing right of way.
2.3. Prepare 30% design level opinion of probable construction cost.
2.4. Furnish public and private utilities (gas, telephone, cable tv, etc.) 30 percent plans.
2.5. Plan-in-Hand. Review preliminary plans with the County and visit the project site. Document any proposed changes to the preliminary design in a Plan-in-Hand memorandum and submit to the County.
2.6. Public Information Meeting.
   2.6.1. Prepare large exhibits and handouts for the meeting.
   2.6.2. Attend meeting and discuss project with public.
   2.6.3. Summarize comments and responses from meeting and submit to County.
2.7. Preparation of 60% plans that include the following sections:
   2.7.1. Cover Sheet
   2.7.2. Typical Sections
   2.7.3. Summary of Quantities
2.7.4. Wetlands/Aerials  
2.7.5. Horizontal Alignment & Orientation  
2.7.6. General Information  
2.7.7. Drainage  
2.7.8. Construction & Removals  
2.7.9. Plan and Profile Sheets  
2.7.10. Drainage Structure Cross Sections  
2.7.11. Cross Sections  
2.7.12. Prepare 60% design level opinion of probable construction cost.  

2.8. Preparation of 90%/Final plans. NOTE: 90% plans will be signed and sealed. Final plans will include any revised signed and sealed sheets pursuant to County’s review comments:  
2.8.1. Cover Sheet  
2.8.2. Typical Sections  
2.8.3. Summary of Quantities  
2.8.4. Wetlands/Aerials  
2.8.5. Horizontal Alignment & Orientation  
2.8.6. General Information  
2.8.7. Geometrics  
2.8.8. Joints and Grades  
2.8.9. Drainage  
2.8.10. Construction & Removals  
2.8.11. Erosion and Sediment Control  
2.8.12. Plan and Profile Sheets  
2.8.13. Permanent Traffic Signage Plan  
2.8.14. Pavement Marking Plan  
2.8.15. Drainage Structure Cross Sections  
2.8.16. Special Plans  
2.8.17. Right of Way Sheets  
2.8.18. Cross Sections  

2.9. Prepare special provisions.  
2.9.1. County will assemble bid documents.  

2.10. Prepare list of bid items and estimated quantities for the County to use to compile the bid proposal.  

2.11. Prepare final opinion of probable construction cost.  

2.12. Prepare legal descriptions and easements of tracts to be acquired for right-of-way and easements.  

2.13. Project progress meeting with County (assume 2 progress meetings).  


3. Permitting Assistance:  
3.1. Assist the County with obtaining the following permits:  
3.1.1. Prepare the National Pollution Discharge Elimination System Construction Storm Water Notice of Intent form. Form will be submitted by the County.  
3.1.2. Prepare the Papillion Creek Watershed Partnership Grading Permit forms. Forms will be submitted by JEO.  
3.1.3. Prepare Section 404 Pre-Construction Notification package. Package will be submitted by the County.
3.1.3.1. Assume that this project will be authorized by a Section 404 Nationwide Permit. Additional services will be required if the project requires a Section 404 Individual Permit.

3.1.3.2. Task does not include services required for compensatory mitigation that may be required by the United States Army Corp of Engineers, including but not limited to design, construction of compensatory mitigation, and monitoring of compensatory mitigation.

3.1.3.3. The Pre-Construction Notification package will be composed of the following items:

- 3.1.3.3.1. Wetland Delineation Report
- 3.1.3.3.2. Engineering Form 4345
- 3.1.3.3.3. Project description and methods of dredging or excavating, disposal site, sediment control, and waste disposal.
- 3.1.3.3.4. Project site location and impact maps.
- 3.1.3.3.5. Project photographs
- 3.1.3.3.6. Project site location and mapping of proposed impacts

4. **Services Not Included:**

- 4.1. Documentation of historic properties and cultural resources.
- 4.2. Traffic studies, traffic counts, and traffic signal warrant analysis.
- 4.3. Traffic signal design.
- 4.4. Lighting design.
- 4.5. Noise study.
- 4.6. District creation.
- 4.7. Structural design and plan production for retaining wall(s), bridge(s) and box culvert(s). These services could be provided by supplemental agreement if needed.
- 4.8. Land acquisition appraisals and land acquisition negotiation services.
- 4.9. Construction permit(s) (except for limited assistance with obtaining permits listed in task 3).
- 4.11. Bidding letting and contractor negotiation.
- 4.12. Post bid letting services including, but not limited to construction administration, construction observation, construction staking, materials testing, shop drawing review, and responses to requests for information. These services could be provided by supplemental agreement if needed.
- 4.13. USACE Individual Permit activities or approval - this scope assumes all project activities can be permitted under nationwide or general permits and without multiple revisions or submittals.
- 4.14. Wetland mitigation design, construction, monitoring, or seeding of temporary impact areas
- 4.15. Any compensatory wetland mitigation requirements by USACE
- 4.16. Other biological surveys or compliance with other agency requests
- 4.17. Delineation of wetlands or other WOUS outside of identified project or environmental review area

5. **County to Provide**

- 5.1. Section corner locations and ties (if not available on the County Website).
- 5.2. Timely reviews of plans and or requests for information.
- 5.3. Assemblage of bid document.