



City of Grand Island

Tuesday, October 9, 2018

Council Session - Updated

Item G-3

#2018-291 - Approving Agreement with Olsson Associates for Preliminary Engineering Services for Five Points Intersection in Grand Island

Staff Contact: John Collins, P.E. - Public Works Director

Council Agenda Memo

From: Keith Kurz PE, Assistant Public Works Director

Meeting: October 9, 2018

Subject: Approving Agreement with Olsson Associates for Preliminary Engineering Services for Five Points Intersection in Grand Island

Presenter(s): John Collins PE, Public Works Director

Background

On February 14, 2017, via Resolution No. 2017-34, City Council approved an agreement with Olsson Associates of Lincoln, Nebraska, in the amount of \$72,550.00 for engineering services related to Five Points Signal and Geometric Improvements. This project was for the improvement of the 5 Points intersection in areas of both lane use and traffic signal operation. The existing cable span signals were to be replaced with new mast arm signals, improvement of existing roadway geometrics, evaluation of existing lane configurations for operation, and installation of signing improvements to meet 2009 MUTCD requirements in the area of this intersection.

During the course of Olsson Associates engineering services work on this project it was recommended that a study of the entire area surrounding the 5 Points intersection be considered. Further study would allow examination of the Five Points intersection to aid in specifically reducing the incidence of crashes; reducing vehicle delay, improving the mobility of the traveling pedestrians and correcting roadway geometric deficiencies.

Public Works applied for Nebraska Department of Transportation (NDOT) safety funds to help with costs of the 5 Points intersection improvements. The project was selected as a NDOT safety project, with Federal-aid funding available through NDOT. The federal share payable on any portion of a local federal-aid project is a maximum of 80% of the eligible participating costs, while the Local Public Agency (LPA) is responsible for the remaining 20% as well as all other nonparticipating or ineligible costs of the project. The current estimate of this project is \$2,265,300.00, with the LPA share being \$565,300.00 at this time, and the Federal share payable capped at \$1,700,000.00 currently.

Such project would consist of geometric improvements, new traffic signal or multi-lane roundabout and will right size the lane configuration to optimize safety and efficiency, and meet the Federal Highway Administration (FHWA) safety program requirements.

Discussion

Olsson Associates, Inc. of Grand Island, Nebraska was selected to perform Preliminary Engineering Services based on qualifications detailed in the firm's on-call proposal to NDOT for these services, their experience with Federal-aid Transportation projects, and their familiarity with the Five Points Intersection project. Public Works Engineering staff conducted negotiations to determine the appropriate scope and fee to satisfy NDOT requirements and to ensure quality construction inspection and project management.

Olsson Associates, Inc. will be paid actual costs, for an amount not to exceed \$361,475.00.

Alternatives

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

Recommendation

City Administration recommends that the Council approve the agreement with Olsson Associates, Inc. of Grand Island, Nebraska to perform engineering services for Five Points Intersection project.

Sample Motion

Move to approve authorization for the Mayor to sign the agreement.

Task Order Agreement No.	BK1842
Master Agreement No.	BK1743
Effective (NTP) Date	
Task Order Amount	C+FF \$361,475.00

**ON-CALL PROFESSIONAL SERVICES
TASK ORDER AGREEMENT
LPA PROJECTS**

CITY OF GRAND ISLAND
OLSSON ASSOCIATES, INC.
PROJECT NO. HSIP-5409(3)
CONTROL NO. 42863
FIVE POINT INTERSECTION IN GRAND ISLAND

THIS AGREEMENT, is between the City of Grand Island ("LPA") and Olsson Associates, Inc. ("Consultant"), and collectively referred to as the "Parties".

WHEREAS, Consultant entered into an On-Call Professional Services Master Agreement, No. BK1743 ("Master Agreement"), with the Nebraska Department of Transportation ("State") wherein Consultant agreed to provide preliminary engineering ("Services") for future Federal-aid transportation projects, when selected by LPA or State, and

WHEREAS, LPA, or State on LPA's behalf, selected Consultant to provide professional services for the project identified as Project No. HSIP-5409(3), and

WHEREAS, the Parties wish to enter into a task order agreement ("Task Order"), to provide for the completion of the Services for the project for which Consultant has been selected, and

WHEREAS, Consultant and LPA intend that the Services provided by Consultant comply with all applicable federal-aid transportation project related program requirements so that Consultant's costs under this Task Order will be eligible for federal reimbursement, and

WHEREAS, the LPA and Consultant intend that this Task Order be completed in accordance with the terms and conditions of the Nebraska LPA Guidelines Manual for Federal Aid Projects; hereinafter referred to as LPA Manual (See definition in Section 1), and

WHEREAS, Consultants primary contact for LPA's project is LPA's Responsible Charge when LPA is managing the project, and

WHEREAS, Consultant's primary contact for LPA's project is State's Project Coordinator when State is managing the project on behalf of LPA, and

WHEREAS, Consultant's primary contact for State's project is State's Project Coordinator.

WHEREAS, the Parties understand that State is involved in this federal-aid project on behalf of the FHWA only for issues related to the eligibility of the project for reimbursement of project costs with federal-aid funds.

NOW THEREFORE, in consideration of these facts, Consultant and LPA agree as follows:

SECTION 1. CONTACT INFORMATION

Contact information, for the convenience of the Parties, is as follows:

1.1 Consultant Project Manager

Firm Name	Olsson Associates, Inc.
Address	601 P Street, Lincoln, NE
Project Manager's Name	Shane King
Project Manager's Phone	402-458-5011

1.3 State Project Coordinator

Name	Taylor Eman
Phone Number	402-479-3607

1.4 LPA PL

Name	Tim Golka
Phone Number	308-385-5444

1.5 State Agreements Specialist

Name	Dawn Knott
Phone Number	402-479-4414

SECTION 2. DURATION OF THE AGREEMENT

- 2.1 **Effective Date** --This Agreement is effective upon the earlier of the date (1) LPA, or State on LPA's behalf, issued the Notice to Proceed, or (2) the Parties executed this Agreement.
- 2.2 **Renewal, Extension or Amendment** --The Agreement may be renewed, extended or amended by mutual agreement or as otherwise provided herein.
- 2.3 **Identifying Date** – For convenience, the Agreement's identifying date will be the date LPA signed the agreement.
- 2.4 **Duration** – LPA, or State on LPA's behalf, will treat the Agreement as completed or inactive upon the happening of either (1) the final completion of an audit review by State or its authorized representative and the resolution of all issues identified in the audit report, or (2) the waiver of an audit review.
- 2.5 **Termination** -- Further, LPA, or State on LPA's behalf, reserves the right to terminate the agreement as provided herein.

SECTION 3. TASK ORDER SCOPE OF SERVICES

- 3.1 Consultant agrees that the entire Scope of Services for this Task Order includes SECTION 5. SCOPE OF SERVICES of the Master Agreement, and the Scope of Services as set out in Exhibit "A", attached and incorporated herein by this reference. This Task Order Scope of Services will govern over any contrary language in the Scope of Services of the Master Agreement.
- 3.2 Upon receiving a written notice to proceed from LPA, or State on LPA's behalf, Consultant shall complete the Services required under this Task Order and in accordance with the terms of the Master Agreement.

SECTION 4. NOTICE TO PROCEED AND COMPLETION

- 4.1 LPA, or State on LPA's behalf, will issue Consultant a written Notice-to-Proceed upon 1) full execution of this Agreement, 2) State's determination on LPA's behalf, that federal funding approval has been obtained for the project and 3) State's concurrence that the form of this Agreement is acceptable for federal funding eligibility. Any Services performed by Consultant on the project prior to the date specified in the written Notice-to-Proceed will not be eligible for reimbursement.
- 4.2 Consultant shall complete all the Services according to the schedule in attached Exhibit "A" and shall complete all Services required under this Task Order in a satisfactory manner by September 30, 2021. Any costs incurred after the completion

date will not eligible for reimbursement unless LPA, or State on LPA's behalf, has provided a written extension of time.

- 4.3 The completion date will not be extended because of any avoidable delay attributed to Consultant, but delays attributable to LPA or State may constitute a basis for an extension of time.

SECTION 5. STAFFING PLAN (PE)

- 5.1 Consultant has provided LPA and State with a Staffing Plan, described in Exhibit "A", attached and incorporated herein by this reference. The Staffing Plan identifies the employees of Consultant who are anticipated to provide services under this Agreement. Consultant understands that LPA and State are relying on key personnel from Consultant's Staffing Plan to be primarily responsible for completing the Services under this Agreement. LPA and State consider the Principals, Senior level staff, Project Managers, Team Leaders or other similar classifications, to be the key personnel for the services provided. While providing Services under this Agreement, Consultant may make occasional temporary changes to the key personnel. However, any permanent change to key personnel will require prior written approval from LPA and State.
- 5.2 Personnel who are added to the Staffing Plan as replacements must be persons of comparable training and experience. Personnel added to the Staffing Plan as new personnel and not replacements must be qualified to perform the intended services. Failure on the part of Consultant to provide acceptable replacement personnel or qualified new personnel to keep the services on schedule will be cause for termination of this Task Order, with settlement to be made as provided in Exhibit "B" attached and incorporated herein by this reference.

SECTION 6. NEW EMPLOYEE WORK ELIGIBILITY STATUS

- 6.1 Consultant agrees to use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska. Consultant hereby agrees to contractually require any subconsultants to use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska. A federal immigration verification system means the electronic verification of the work authorization program authorized by the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, 8 U.S.C. 1324a, known as the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of a newly hired employee.
- 6.2 The undersigned duly authorized representative of Consultant, by signing this Agreement, hereby attests to the truth of the following certifications, and agrees as follows:
- Neb.Rev.Stat. § 4-114. I certify compliance with the provisions of Section 4-114 and, hereby certify that this Consultant shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska. I agree to require all Subconsultants, by contractual agreement, to require the same registration and verification process.
- 6.3 If Consultant is an individual or sole proprietorship, the following applies:

- a. Consultant must complete the United States Citizenship Attestation form and attach it to this agreement. This form is available on the Department of Transportation website at <http://dot.nebraska.gov/media/2802/dr289.pdf>.
- b. If Consultant indicates on such Attestation form that he or she is a qualified alien, Consultant agrees to provide the US Citizenship and Immigration Services documentation required to verify Consultant lawful presence in the United States using the Systematic Alien Verification for Entitlements (SAVE) Program.
- c. Consultant understands and agrees that lawful presence in the United States is required and Consultant may be disqualified or the contract terminated if such lawful presence cannot be verified as required by Neb. Rev. Stat. §4-108.

SECTION 7. FEES AND PAYMENTS

- 7.1 Consultant's fee proposal is attached as Exhibit "A", attached and incorporated herein by this reference.
- 7.2 The general provisions concerning payment under this Task Order are set out on Exhibit "B".

SECTION 8. SUSPENSION OR TERMINATION (Unique)

8.1 Suspension or Termination

LPA, or State on LPA's behalf, has the absolute and exclusive right to suspend the work, or terminate this Task Order at any time and for any reason and such action on its part will in no event be deemed a breach of this Task Order by LPA, or State on LPA's behalf. Without limiting the rights set out in this section, the following is a non-exclusive list of the examples of the circumstances under which this Task Order may be suspended or terminated:

- a. A loss, elimination, decrease, or re-allocation of funds that, in the sole discretion of LPA, or State on LPA's behalf, make it difficult, unlikely or impossible to have sufficient funding for the Services or the project;
- b. LPA, or State on LPA's behalf, abandons the Services or the project for any reason;
- c. Funding priorities of LPA, or State on LPA's behalf, have changed;
- d. LPA, or State on LPA's behalf, determines, in its sole discretion, that the interests of LPA, or State on LPA's behalf, are best protected by suspension or termination of this Task Order;
- e. Consultant fails to meet the schedule, milestones, or deadlines established in this Task Order or agreed to in writing by the Parties;
- f. Consultant fails to provide acceptable replacement personnel or qualified new personnel as determined by LPA, or State on LPA's behalf;
- g. Consultant has not made sufficient progress to assure that the Services are completed in accordance with the schedule in attached Exhibit "A" or in a timely manner;
- h. Consultant fails to meet the standard of care applicable to the Services;
- i. Consultant fails to meet the performance requirements of this Task Order;
- j. Consultant's breach of a provision of this Task Order or failure to meet a condition of this Task Order;

- k. Consultant's unlawful, dishonest, or fraudulent conduct in Consultant's professional capacity;
- l. Consultant fails to complete the project design in a form that is ready for letting a contract for construction according to the approved contract documents, including, but not limited to, project plans and specifications;

8.2 Suspension

- a. Suspension for Convenience. LPA, or State on LPA's behalf, may suspend for convenience by giving Consultant notice of the date of suspension, which date will be no fewer than three (3) business days after notice is given. Such notice will provide the reason(s) for such suspension. Consultant will not be compensated for any Services completed or costs incurred after the date of suspension. Consultant shall provide LPA, or State on LPA's behalf, a detailed summary of the current status of the Services completed and an invoice of all costs incurred up to and including the date of suspension.
- b. Suspension for Cause. If LPA, or State on LPA's behalf, suspends Consultant's work for cause or for issues related to performance, responsiveness or quality that must be corrected by Consultant, LPA, or State on LPA's behalf, will give Consultant notice of the date of suspension, which date will be no fewer than three (3) business days after notice is given. LPA's notice of suspension, or State's notice of suspension on LPA's behalf, will provide Consultant with the reason(s) for the suspension, a timeframe for Consultant to correct the deficiencies, and when applicable, and a description of the actions that must be taken for LPA, or State on LPA's behalf, to rescind the suspension. Consultant's right to incur any additional costs will be suspended at the end of the day of suspension and will continue until all remedial action is completed to the satisfaction of LPA, or State on LPA's behalf. Failure to correct the deficiencies identified in a suspension will be grounds for termination of this Task Order.

8.3 Termination

If LPA, or State on LPA's behalf, terminates this Task Order, LPA, or State on LPA's behalf, shall give Consultant notice of the date of termination, which shall be no fewer than three (3) business days after notice is given. Notice of termination from LPA, or State on LPA's behalf, shall provide Consultant with a description of the reason(s) for the termination. Notice from LPA, or State on LPA's behalf, must specify when this Task Order will be terminated along with the requirements for completion of the work under this Task Order. Consultant's right to incur any additional costs shall cease at the end of the day of termination or as otherwise provided by LPA, or State on LPA's behalf.

8.4 Compensation upon suspension or termination

If LPA, or State on LPA's behalf, suspends the work or terminates this Task Order, Consultant must be compensated in accordance with the provisions set out in Exhibit "B", provided however, that in the case of suspension or termination for cause or for Consultant's breach of this Task Order, LPA, or State on LPA's behalf, will have the power to suspend payments, pending Consultant's compliance with the provisions of this Task Order. In the event of termination of this Task Order for cause, LPA, or State on LPA's behalf, may make the compensation adjustments set out in Exhibit "B".

SECTION 9. SECTIONS INCORPORATED BY REFERENCE

For the convenience of the parties, for consistency for funding review, and in an effort to reduce the length of this Task Order, the LPA and Consultant agree to be bound by and hereby incorporate by this reference as if fully set forth herein, Sections 11 through 13, and 15 through 28 of the Master Agreement for preliminary engineering, for LPA projects BK1743 between State and Consultant, dated July 23, 2017, with one recurring change:

The LPA and Consultant agree to meet the requirements of all incorporated provisions and represent that by signing this Task Order, they expressly certify to any required certifications contained in those provisions. Although some of the provisions of the Master Agreement are incorporated herein by reference, it is understood that the State is not a party to this Task Order and shall have no obligations or duties under this Task Order.

SECTION 10. CONSULTANT CERTIFICATIONS

10.1 The undersigned duly authorized representative of Consultant, by signing this Task Order, hereby reaffirms, under penalty of law, to the best of my knowledge and belief, the truth of the certifications set out in SECTION 29. CONSULTANT CERTIFICATIONS of the Master Agreement, with one change:

“LPA, or State on LPA’s behalf” should be substituted in for any reference in that section of the Master Agreement to “State” unless the context would otherwise require.

10.2 Neb. Rev. Stat. § 81-1715(1). I certify compliance with the provisions of Section 81-1715 and, to the extent that this Task Order is a lump sum, specific rates of compensation, or actual cost-plus-a-fixed fee professional service agreement, I hereby certify that wage rates and other factual unit costs supporting the fees in this Task Order are accurate, complete, and current as of the date of this Task Order. I agree that this Task Order price and any additions thereto shall be adjusted to exclude any significant sums by which the LPA determines the agreement price had been increased due to inaccurate, incomplete, or noncurrent wage rates and other factual unit costs.

SECTION 11. LPA CERTIFICATION

11.1 By signing this Task Order, I do hereby certify that, to the best of my knowledge, Consultant or its representative has not been required, directly or indirectly as an express or implied condition in connection with obtaining or carrying out this Task Order to:

- (a) employ or retain, or agree to employ or retain, any firm or person, or
- (b) pay or agree to pay to any firm, person, or organization, any fee, contribution, donation, or consideration of any kind.

11.2 I acknowledge that this certification is to be furnished to the FHWA, upon their request, in connection with this Task Order involving participation of Federal-Aid highway funds and is subject to applicable state and federal laws, both criminal and civil.

SECTION 12. ENTIRE AGREEMENT

The Master Agreement, all supplements thereto, and this Task Order constitute the entire agreement ("The Task Order") between the Parties. The Task Order supersedes previous communications, representations, or other understandings, either oral or written; and all terms and conditions of the Master Agreement and supplements thereto remain in full force and effect, and are incorporated herein.

EXHIBIT "A"

Scope of Services

Project Name: Five Points Intersection in Grand Island

Project No. HSIP-5409(3)

CN: 42863

Engineering Design Services

PROJECT DESCRIPTION

The scope of services for this project involves engineering design services required to produce final construction plans and specifications for the following:

Project description: The Five Points Intersection is a span wire signalized intersection located in the north-central part of Grand Island. This is a five way intersection with Broadwell Avenue (north/south legs), State Street (east/west legs) and Eddy Street (southeast leg). State Street is a two (2) lane roadway and has exclusive left turn lanes on the east and west legs. Broadwell Avenue is a five (5) lane section north of the intersection and three (3) lane section south of the intersection. Eddy Street is three (3) lane section to the southeast. All five (5) legs have an urban cross section with curb and gutter. Proposed improvement consist of constructing a multi-lane roundabout. Reconstruction could include 1,100 feet of Broadwell Avenue, 1,000 feet of State Street and 600 feet of Eddy Street. Grand Island Fire Station is located 700 feet south of this intersection on Broadwell Avenue. It is anticipated eleven (11) tracts of and will be impacted and two (2) residential relocation will be required.

The project will include the following: survey, right-of-way survey, ~~final bridge design,~~ ~~final box culvert design,~~ roadway design, right-of-way design plans and opinion of probable cost.

TASKS AND TASK ASSIGNMENTS

Projects located in the jurisdictional area of the Metropolitan Area Planning Agency, Omaha (MAPA) and a Responsible Charge (RC) who is an employee of the respective Local Pubic Agency will manage the jurisdictional area of Lincoln City Lancaster County (LCLC). Projects located outside of MAPA and a RC who is an employee of the Nebraska Department of Transportation (NDOT) will manage the project.

It is anticipated the project will require the following major tasks:

- a. Environmental Documents and coordination (Design Consultant/NEPA Consultant)
- b. Project Management and Quality Control
- c. Preliminary Field Survey
- d. Roadway Design (including Right-of-Way Design)
- e. Hydrology and Hydraulic Design

- f. Erosion control plans will be designed by the Design Consultant. NDOT's Roadside Stabilization Unit will submit the Notice of Intent, NPDES permit and the SWPPP.
- g. PS&E Submittals
- h. Project Meetings (Kick off meeting, Progress, Plan in Hand (PIH) meeting and Utility meeting)
- i. Public Involvement
- j. Geological Studies

APPLICABLE PUBLICATIONS

Overview: Work shall be done in accordance with the most current version of the following materials. The most current versions of the NDOT materials can be obtained from the NDOT Website.

- 1) LPA Guidelines Manual for Federal-Aid Projects. NDOT April 2009
- 2) A Policy on Geometric Design of Highways and Streets 2011 (AASHTO)
- 3) Federal Emergency Management Agency (F.E.M.A.) National Flood Insurance, Flood Boundary and Floodway Map, and Flood Insurance Study (FIS)
- 4) Manual on Uniform Traffic Control Devices (FHWA), 2009 Edition
- 5) MUTCD - Nebraska 2011 Supplement to the MUTCD
- 6) Nebraska Minimum Design Standards – Counties, Municipalities, State - 2016 (or most current) (Nebraska Administrative Code Title 428; Rules and Regulations of the Board of Public Roads Classifications and Standards
- 7) Nebraska State Plane Coordinate System Datum Adjustment Computations Lambert Conformal System Manual
- 8) Roadside Design Guide, 2011 (AASHTO)
- 9) Standard Specifications for Highway Construction 2017 (or latest edition) (NDOT)
- 10) NDOT Hydraulic Analysis Guidelines for Consultant
- 11) NDOT Roadway Design Manual & Drainage Design and Erosion Control Manual
- 12) Bridge Office Policies and Procedures Manual
- 13) Uniform Relocation Assistance and Real Property Acquisition Act (the Uniform Act)
- 14) The NDOT Right-of-Way Manual.
- 15) Evidencing Nebraska Land Titles (Nebraska Land Title Association)
- 16) So you Want Access to the Highway (March 2008)

SOFTWARE AND EQUIPMENT REQUIREMENTS

- 1. The Consultant's design and drafting software and design files must be compatible with NDOT's design and drafting software. Information on NDOT's design

protocol can be found on NDOT's website on the Roadway Design page;

<http://roads.nebraska.gov/business-center/design-consultant/>.

2. The Consultant's design must be accomplished using the design software GEOPAK version SS4 or later but no later than that in use by NDOT. The consultant's design must follow NDOT's drafting procedures, guidelines, and file naming convention using the appropriate version of MicroStation CAD software. Consultant's use of an earlier version of GEOPAK OpenRoads may be approved for specific activities with written permission of NDOT and at NDOT's sole discretion.
3. In many cases, projects will require that a 3D model be generated using GEOPAK OpenRoads technology.
4. Reports and documents must be submitted in a form compatible with Microsoft Office products unless otherwise directed.
5. The Consultant will provide all software and computer equipment required to complete the work including any analysis software required to perform the bridge design work.
6. The Consultant is required to complete work (CAD/Geopak files) within the ProjectWise environment. All project document submittals (non CAD/Geopak) are to be uploaded into OnBase. Modeling files to be located within ProjectWise.

EXPECTATIONS FOR THE DELIVERABLES

1. The consultant shall provide to NDOT acceptable final plans, specifications and estimates (PS&E) for use in a bid letting and construction of the project. The Consultant shall seal and sign the final plans and applicable deliverables in accordance with the Nebraska Engineers and Architects Regulation Act. Consultant shall also provide to NDOT all applicable supporting documentation and reports as described in the Task Order.
2. Plans and special provisions shall be developed in compliance with the manuals, guidelines and specifications as listed in the Qualifications, Knowledge and Experience section, paragraph B.
3. Consultant shall submit to the NDOT roadway design plans at the following stages, when applicable: before the plan-in-hand field inspection, before public meetings, at 90% completion stage, and final PS&E package. Deliverables must be completed and submitted in accordance with the schedule set out in the Task Order.
4. Deliverables must be submitted in hard copy and electronic form as outlined in the Task Order.
5. Submittals will be reviewed and approved by NDOT. Consultant shall address all issues raised by NDOT's review and make all necessary changes to the work.

DESIGN PLAN PREPARATION AND ASSEMBLY

Overview. These tasks are to develop design plans and assembly of design plans of items not shown in the Roadway Design section. Items to be included, but not limited to, can be found in the NDOT Roadway Design Manual under Highway Plans Assembly. These are the plans which will be let to contract, therefore, plans should be thoroughly

checked for completeness, accuracy, and formatting by the design technician, the roadway designer and other contributing parties.

Drafting Procedures. Consultants using MicroStation will follow the State's CADD drafting procedures and guidelines in preparing plans. File names must follow the State's CADD naming convention. Line weights, line styles, text size and leveling must follow the State's guidelines.

Format of Project Plans

1. The Consultant shall prepare plan and profile plan sheets on a scale of 1" = 20' and "2L" (enlarged detail) sheets on a scale of 1" = 50' (rural) or 1" = 20' (urban).
2. All full-sized plan sheets must be approximately 24" x 36". The border sheet information is on NDOT's website. All half-size plan sheets must be on 11" x 17" paper.
3. Any materials submitted to the State by the Consultant must be on equivalent to white bond.
4. Any material which does not produce an acceptable reproduction will be returned to the Consultant for rectification.
5. The Consultants shall follow the State's CADD Drafting procedures and guidelines in preparing the project plans.
 - a. Sheets must be set up according to the State's procedures.
 - b. File names must follow the State's CADD naming convention.
 - c. Line weights, line styles, text size and leveling must follow the State's guidelines.
6. The CADD files must also conform to the following standards and conventions:
 - (a) Working units must be:
 1. Master Units = Survey Feet (sf)
 2. Sub Units = inches (in)
 3. Resolution = 1000 per survey foot
 4. Accuracy = 0.1234
 5. Working Area = 813.442402 miles
 - (b) The Consultant s shall tie the project into the State Plane Coordinate System using NAD 1983 for horizontal control. Consultant shall coordinate with the Geodetic Survey office for the Project Datum Adjustment Factor (DAF). Prepare all topography information in a MicroStation dgn format. Line weights, line styles, text sizes and leveling will follow NDOT's guidelines.

Format of cross-sections

1. Plot all cross-sections. This includes labeling stations on the right side of the sheet, labeling existing and design centerline elevations at centerline and labeling offset distances every 5 or 10 feet at the bottom of each sheet.
2. Plot cross-sections on standard size sheets (same size as project plan sheets) according to the State's standards.

3. Stamp or plot in the upper right corner of each sheet the control number, horizontal and vertical scale. Plot the roadway cross-sections at the scale of 1" = 10' H & V, or 1" = 20' H & V.
4. Plot cross-sections with stations progressing upward from the bottom to the top of the sheet.
5. Plot the cross-sections so that there is room for the improvement cross-section. Do not overlap cross-sections.
6. Cut cross-sections at 100 foot intervals (maximum) and at other locations as needed.
7. Plot a cross-section at each location when there may be a drainage structure needed and at driveways, intersections or other unusual features.
8. Plot drainage structure cross-sections and keep them separate from roadway cross-sections.
9. Plot drainage structure cross-sections at the following scales:
 - (a) Storm Sewer 1" = 10' H & V.
 - (b) Roadway Culverts 1" = 10' H & V.
10. Plot computer roadway cross-sections in the following manner:
 - (a) Plot original ground with a dashed line.
 - (b) Plot design template with a solid line.
11. Plan Sheets. The consultant will refer to NDOT Roadway Design Manual for a complete list of plans sheets to be included in the plan set. The Consultant will develop special plans. Standard plans are not included with the plan set, but a current up to date list of Standard Plans used for the project will be included to be placed on the Title Sheet.

The State/LPA Shall Provide:

PRELIMINARY ITEMS

1. As-built or design plans of the existing and adjacent roadways (if available).
2. Existing work already completed including traffic study, geotechnical report, and survey.
3. Any drainage studies completed in the area (if available).
4. Names of known utilities, addresses and permits listing use and occupancy permit data along the project.
5. Electronic files of current aerial photographs (if available).
6. Existing cadastral maps, plat maps, etc. electronic right-of-way files of the project area (if available).
7. Traffic count information. (NDOT)
8. Crash history for study corridor. (NDOT)
9. Detour route.
10. Section Corner Ties to corner monuments.
11. Existing benchmark information.
12. ROW negotiations and acquisitions.
13. Permit to occupy ROW (NDOT Form 19)
14. Local Public Agency (LPA) Project Programming Request (NDOT Form 530)
15. Probable Class of NEPA Action (NDOT 53) Form.

Consultant Shall Provide:

PROJECT MANAGEMENT AND QUALITY CONTROL

Coordination of Design Professional and Scheduling. The Consultant Project Manager will serve as point of contact, maintain project schedule and coordinate work of sub-Consultants

1. **Project Management.** This task includes activities to initiate and monitor project schedules, workload assignments and internal cost controls throughout the project. Also included are efforts to prepare and process invoices, prepare monthly progress reports and prepare project correspondence with the Responsible Charge (RC) and to NDOT and maintain project records.
2. **Project Description/ Purpose and Need:** NDOT will develop the Project Description and Purpose and Need statements for the project (NDOT Form 530). The Consultant shall work with the NDOT and the NEPA Consultant when updates or corrections are needed.
3. **Quality Assurance/Quality Control.** The Consultant will perform QA/QC checks at various stages of the project including prior to any official submittal. The Consultant will provide a copy of their QA/QC plan to the RC at the start of the project. The Consultant will submit in writing that this plan has been used during the project at each

submittal with the name of the person responsible for performing the QA/QC the review.

MEETINGS

1. **Owner Meetings.** Consultant will meet with County/City Representatives, one kick-off meeting, three preliminary review meetings, and one final drawing meetings.
2. **Plan-In-Hand Meeting/Report.** The Consultant will schedule and attend a plan-in-hand meeting to review the thirty (30) percent roadway design plans. Consultant to prepare plan-in-hand report. (On-site meeting).
3. **LPA/NDOT Coordination Meetings** the Consultant will meet with the LPA and NDOT to discuss the status of plan development and coordinate design activities. The consultant should anticipate 2 meetings. The Consultant will be responsible for distributing meeting invitations, coordinating meeting locations, and preparing meeting minutes.
4. **Meetings with Utilities.** 6 Utility review meetings will be scheduled. Effort is also included for coordination via the phone and up to 6 total one-on-one meetings with affected utilities.
5. **Public Involvement Planning Meetings.** See section on Public Involvement.
6. **Key Stakeholder Outreach.** See section on Public Involvement.
7. **City Council/County Board** At the request of the RC/PL, the Consultant will attend 0 pre-council/board meetings and 1 council/board meetings to report on project progress and answer council/board member questions.
8. **Open Houses.** See section on Public Involvement.
9. **One-on-One, Small Group Meetings** See section on Public Involvement.

SURVEY

- 1) **Preliminary Field Survey.** The topographic survey will be completed by the design consultant for the project corridor in accordance with current NDOT survey specifications. The design consultant will perform the necessary topographical ground survey including the existing centerline, intersecting streets, and drives, tying the location of land monuments to the existing centerline, cross-sections and profiles. A topographical survey will be performed using GPS and electronic "Total Station" technology in MicroStation dgn. Format. Copies of field book records and electronic records will be submitted to the RC at the completion of final design. Natural topographic features and man-made features, will be recorded by coordinates to the nearest one-tenth (0.1) of a foot. All such topographic features, which are pertinent to the design or

are necessary to properly show the effect of the proposed work upon the adjoining property and/or improvements, will be recorded. The topographical survey will not include an exact and detailed tree count. The consultant will complete a site visit after LOC's are created noting the size, type and location of trees to be removed. Station and offset will be noted on the plans. Unless otherwise noted the limits of the survey are to be at least 60 feet on each side of the existing centerline or to corners of structures on tracts, and must include enough information to build the proposed typical cross-section and show the limits of construction. The survey limits will extend 200 feet before the start of the project and 200 feet beyond the end of the project. The topographic survey will extend along intersecting streets a minimum distance of 200 feet from roadway centerline.

- 2) **Digital Terrain Model.** A Digital Terrain Model will be provided for use in cross-section creation. Natural topographic features and man-made features above ground (including existing adjacent building limits) will be recorded. All above and below ground utilities will be located once Digger's Hotline marks them. Sanitary and storm sewer manholes will have rim and flow line elevations surveyed.
- 3) **Base Map Preparation.** Consultant will create the base maps using the topographic survey data.
- 4) **Horizontal and Vertical Control.** The design consultant will establish control points along the project corridor at regular intervals and provide control "reference" point ties to topographic features of permanent nature.
 - a) Horizontal control points will be established and referenced to existing section corners. The control points will be permanent in nature and tied to Nebraska State Plane Coordinate system.
 - b) Vertical control points will be established and referenced to USGS NAVD88 datum. There will be a minimum of three permanent benchmarks established with additional temporary benchmarks set along the project corridor at intervals not to exceed 500 feet.
- 5) **Section/Property Corners.** The consultant will locate necessary section corners, quarter section and property corners for use in drafting existing right-of-way and property lines. The Consultant will work with the County Surveyor on any corners not found to be set by the County Surveyor.
- 6) **Existing Utilities.** The consultant will call in a One-Call utility locate ticket. Utilities will be shown based on visible, above ground, evident in the field and utility locator's markings. The project liaison will assist in providing utility locations and contact information.
- 7) **Note Reduction/Preliminary Plotting.** This task will include the effort for gathering data to create the existing topography file to use for preliminary design.

Placing station offsets for all topographic items.

8. **PIH Staking the Right of Way.** For the PIH field visit the Consultant will stake new and existing right of way, assume 0 tract(s):

9. **Negotiations Staking the Right of Way.** During the negotiations, the Consultant will stake new and existing right of way, assume 11 tract(s).

ROW staking should be done to clearly and accurately represent on the ground the information that is illustrated on the ROW plans. When a tract requires ROW staking the following items should be staked:

1. Existing ROW
2. Existing Control of Access.
3. Existing Control of Access Breaks.
4. Existing Permanent Easements (except utility easements are generally not staked).
5. New ROW
6. New Permanent Easements
7. New Temporary Easements.
8. New Control of Access Breaks

For each line the ROW staking should at a minimum include the staking of points at the following;

1. The ends of each line.
2. Their intersection with a property line.
3. Their intersection with lot lines, section, quarter section line, etc.
4. Any deflection points within the line (turn points).
5. If a line involves a long straight run interim stakes along the line should be placed as needed to clearly denote the line in the field.
6. Any critical points along a line such as the portion coming close to a significant feature such as a structure, center-pivot, well, etc.
7. The stakes should be clearly visible in the field and denote the type of line(s) it is representing. Information to be included on the stakes include.
8. A color identification (surveyors tape and/or paint) unique to the type of line. Generally Orange for ROW and Yellow - Green for easements.
9. The line designation (ROW, PE, TE, CA, etc.)
10. The distance to Centerline.
11. The Station

See NDOT's Construction Manual for additional ROW staking information

PRELIMINARY ROADWAY DESIGN (PIH/30%)

Overview. The following task will be used to accomplish Roadway Design and in the development of design plans. This task includes roadway design services during the Plan-in-Hand phase.

The Design shall be in conformance to "Nebraska Minimum Design Standards" for New and Reconstructed Projects, 3R Standards (Resurfacing, Restoration and Rehabilitation) and the "NDOT, Standard Specifications for Highway Construction". Reference to local standard plans and specifications is not allowed, those plans and specifications must be included within the PS&E package as special plan sheets or special provisions.

The consultant is to make every effort to use NDOT standard items, standard plans and products from the NDOT approved product list in the design of the project. Items unique to the project, not on the standard item list will need a special provision stating the method of construction, the unit of measure and method of payment. Specialty items not on the approved product list will require the consultant to provide a list of 3 or more products/suppliers and an "or approved equal statement". Approval by both NDOT and FHWA is needed before the item may be incorporated in the project.

1. **Complete Form DR-76.** Roadway Design – Principal Controlling Design Criteria. After Form DR-76 has been completed send a copy to Local Projects Section (LPS) of NDOT with a request any design exceptions or relaxations that may be needed.
2. **Data Collection and Review.** For gathering, reviewing and organizing data for the project. Determining design criteria will also be included with this task.
3. **Roadway Horizontal Alignment.** This task includes the design and drafting of the horizontal alignments(s). Task includes creation of the Control Point/PI/Curve Data 2-H sheet(s); the Consultant will create 2-H Horizontal Alignment and Orientation on any design alignments.
4. **Roadway Vertical Alignment.** This task includes the design and drafting of the vertical alignment(s) and/or adjustment of vertical alignment(s).
5. **Template Roadway Cross Sections.** Develop the design templates necessary to template the cross sections, including design of special ditches.
6. **Limits of Construction.** This task includes efforts to create LOCs for the project. The Consultant will define and draft the limits of construction on the plan sheets. These limits are to be used to determine environmental impacts and right-of-way requirements.
7. **Earthwork.** Determine earthwork balance factor. Process the earthwork for each alignment, including any extra earthwork due to large driveways, guardrail and any other cause for earthwork. Calculate earthwork quantities and produce earthwork summary and plan notes.
8. **Roadway Geometric Design.** This task includes the geometric design of all Roadway alignments, intersections, driveways, parking lot reconstruction, sidewalks, and pavement transitions, which includes setting up all the geometric sheets for the project

and labeling.

9. **Storm Sewer and Drainage:** This task includes hydrologic and hydraulic analysis for design of the new storm sewer system for the new and reconstruction portion of the project. This would include hydrologic review to determine drainage areas and discharges to the roadways for multiple storm events; development of a hydraulic model; identification of outlet storm sewers or drainage ways; and required improvements to outlet storm sewers or drainage ways necessary to drain the reconstructed highway. The storm sewer design will review the 10-year storm event to determine if a reasonable and practical storm sewer system can be provided to meet the current criteria. If it is determined that it is not practical to meet a 10-year storm event, a practical design approach will be used to determine a reasonable design that meets or exceeds the capacity required to convey a 2-year design storm. The design of the storm sewer will be developed in a manner to accommodate phased construction of the project that will maintain existing roadway drainage while providing outlets for the new storm sewer being constructed. This work also includes of drainage plans and storm sewer profiles. Storm sewer design will be based upon the new and reconstruction urban segment.
- ~~10. **Roadway and Driveway Culverts.** This task is for roadway and driveway culverts and includes the preparation of a drainage map outlining all drainage areas and completion of the following for each area. NDOT's Pipe Policy will be followed.~~
 - ~~a. Compute area size and Q.~~
 - ~~b. Determine allowable H.W.~~
 - ~~c. Size culvert and compute H.W.~~
 - ~~d. Using design cross sections, determine length of culvert.~~
 - ~~e. For each culvert, show the Station, D.A., Q., H.W., Size and Length.~~
 - ~~f. Determine location of new/existing culverts with special ditch locations~~
 - ~~g. Draft culvert build notes~~
11. **Construction and Removal.** Development of Construction and Removal notes detailing construction and removal items not specifically identified elsewhere in this scope. NDOT CAD standards and construction/removal notes/tabs are to be used.
12. **Utility Coordination/Verification.** The Consultant will draft utilities on the plans that were not included in the preliminary plotting and for limited coordination with the utilities, to verify the location and type of utility. In addition, the Consultant will coordinate and schedule a Utilities meeting to identify and work through potential conflicts identified in the preliminary 30% Plan-In-Hand plans and prepare NDOT Standard Utility contracts and pole tab sheets. (LPA is responsible to coordinate utility agreement negotiations with utilities).
13. **Construction Phasing/Detour Route/Temporary Roads.** The Consultant shall develop traffic phasing concepts to allow for reasonable access during construction for highway and local traffic that may include detours and staging of construction. The Consultant shall prepare a written description of the Construction Phasing, noting detour

routes if applicable. This phasing plan shall be submitted at the time of the first submittal. This scope assumes total closure of the intersection.

14. **Erosion Control.** This task includes effort required to design and draft erosion control measures for the project. The consultant will submit the erosion control plans to the LPS of NDOT for review and concurrence by NDOT Roadside Stabilization Unit.
15. **Quantities/Estimates.** Develop and tabulate all of the preliminary quantities. Computation sheets will be submitted with all Quantities to the RC and or the LPS of NDOT for all submittals; including Pre/Post Plan-in-Hand and Final Plans, using NDOT standard bid items, NDOT Project Information sheet (DR Form 342), and NDOT quantities forms (DR Form 343 and DR Form 355). In additions to these submittals, opinion of probable cost will be updated and submitted yearly (January 31) throughout the preliminary engineering and final design phases. Estimate of probable cost will be prepared by the Consultant using recent bid tabulations and other available information. If there is railroad involvement and it is determined that a theoretical opinion of probable cost is needed, this task will be added as a supplement to the agreement.
16. **Typical Sections.** This includes design and drafting the typical cross sections and other details as needed for the project.
17. **2W/2A Sheets.** This task includes developing the aerial plan sheets from existing GIS information. This task will include effort to illustrate wetlands, restricted areas, channels, alignments, impacted areas, reference files, and other wetland features. Sheet based on GIS information provided by NDOT.
- ~~18. **Guardrail.** This task includes effort to analyze potential guardrail locations and design new guardrail at locations that do not meet current standards or are affected by other elements of the project. Guardrail will be designed to meet current NDOT standards unless justified by an accepted design as governed by the current Roadside Design Guide.~~
19. **Floodplain Permitting Identification.** This task includes the following:

Determine if the project will have construction occurring in a floodplain, whether crossing or parallel. The Consultant determines if the project crosses or occurs within a mapped floodplain, or in the case of parallel floodplains determines and quantifies the highway embankment work that will encroach into the area mapped as a floodplain.
- ~~20. **Floodplain Permit** if a Floodplain Permit is required, the Design Consultant will prepare a Floodplain Certification Package. The package is to include a memo describing the project and it is impacts on the floodplain, a location map showing the boundary of the project, FIRMette maps with floodplains and structures identified and a certification form signed, sealed and dated by a professional engineer certifying compliance with floodplain and floodway regulations. A FIRMette is a legal to scale copy of a portion of a Flood Insurance Rate Map (FIRM). FIRMette can per printed in either letter legal or~~

~~leger-size paper and found at the following website, <http://msc.fema.gov>. The LPA with assistance from the Consultant is to apply for the permit.~~

21. **Plan-In-Hand Meeting/Report.** Schedule and attend a plan-in-hand meeting with the key stakeholders to review the thirty (30) percent roadway design plans. The Consultant will prepare and submit a draft Plan-in-Hand report within two (2) weeks of the meeting summarizing the findings and decisions made regarding the project design. The draft PIH report will be submitted and routed for review and comments. The consultant will address the comments (within 2 weeks) and submit the final PIH report.
22. **Working Day Calculations.** Working Days for construction activities will be calculated at the (30) percent plan stage and incorporated into the draft PIH report and updated at the (90) percent plan stage.
23. **Pavement Determination.** The Consultant shall provide complete documentation of the structural pavement design analysis used for the project. The pavement analysis must be a nationally recognized method, such as AASHTO, AIM, PCA, etc. The Pavement Determination Data Sheet (supplied by NDOT) shall be completed by the Consultant and included as part of the documentation

Deliverables

- a. Meeting Minutes for all meetings to be summarized and delivered/emailed to the Client, NDOT and applicable stakeholders within (2) days of meetings.
- b. Hydraulic Report and Data Sheet
- c. Deliverables for the Plan-in-Hand Phase include:
- d. Preliminary Waterway Permit Data Sheet, DR Form 290
- e. Erosion Control Plan-in-Hand Checklist, Exhibit G of the NDOT Roadway Design Process Outline(DPO), if applicable
- f. FAA Form 7460-1 when applicable
- g. Two half-size set Plan-in-Hand Plans and corresponding electronic files
- h. Project Information Sheet, DR Form 342
- i. Project Quantity Sheet, DR Form 343E
- j. Draft Plan-in-Hand Report (pdf format and paper copy)
- k. Plan-in-Hand plans with comments consolidated on one set
- l. Final Plan-in-Hand Report (pdf format and paper copy)
- m. Plans/display showing project in relation to mapped floodplains/floodways, if applicable
- n. Opinion of Probable Construction Cost
- o. Construction and working day estimates

Below is a list of plans to be included, but not limited to, in the Plan-In-Hand plan set and the order the plans are to be arranged in the plan set:

- a) Title Sheet
- b) Typical Section Sheet
- c) 2A – Aerial Sheet
- d) Centerline Control
- e) 2P – Preliminary Phasing
- f) 2L – Construction / Geometrics
- g) 2L – Removal Plans
- h) 2L – Storm Sewer/Culvert
- i) P & P sheets
- j) Special Plans – Wall P&P Sheets, etc.
- k) Cross Sections
- l) Right-of-Way Ownership Plans

FUNCTIONAL PLANS (60%)

1. **Functional plans** incorporate review comments needing revisions identified during the plan in hand and serves as a mid-point check of the design (60% complete).
2. **Quantity estimates** the Consultant shall prepare quantity estimates, (DR-342, 343E) for all construction and removal items on the plans and submit them to the RC. After the review of the functional plans, the LPD Project Coordinator and

approval of the environmental documentation by NDOT and FHWA the Project Coordinator will issue a notice to proceed with final design.

3. **Joints and Grades** this task includes developing design for surfacing elevations and paving joints. This includes the development of the 2-L joints and grades sheets.
4. **ADA** This task includes effort to design ADA curb ramps, if applicable. The project is estimated to have 10 ramps.
5. **Street Lighting Design.** This task includes the design of street lighting, lighting construction plan sheets, locate power supply, lighting calculations, and electrical detail.
6. **Pavement Marking & Signing.** This task includes the design of pavement marking and signing plan sheets.
7. **Sixty percent plan submittal** the following plans with the limits of construction are to be submitted to the LPD Project Coordinator at the completion of the functional design. Below is the order the plans are to be arranged in the plan set.

One half-size set. Plans sets shall have the following applicable sheets:

- a. Preliminary Title Sheet (by Consultant)
- b. Title Sheet (Prepared by NDOT PS&E)
- c. Typical Cross-Section Sheets (2-T)
- d. Summary of Quantities Sheet (Prepared by NDOT PS&E)
- e. Summary Of Soil and Materials Information (2K)
- f. ~~Wetland Sheets (2W)~~
- g. Aerial Photo Sheets (2A)
- h. Horizontal/Vertical Control Sheets (2H)
- i. General Notes Sheet (2N)
- j. Construction Phasing Plans (2P)
- k. Geometric Sheets (2L)
- l. Joints and Grades Sheets (2L)
- m. Storm Drainage Plan and Profile Sheets (2L)
- n. Construction Sheets (2L)
- o. Removal Sheets (2L)
- p. Sediment and Erosion Control Sheets (2L)
- q. Roadway Plan and Profile Sheets (Start with sheet 3)
- r. Traffic Control Sheets
- s. Pavement Marking & Signing Sheets
- t. Lighting Plan Sheets
- u. ~~Landscaping Plan Sheets~~
- v. Earthwork Data Sheets
- w. ~~Culvert/Channel Cross Section Sheets~~

- ~~x. Bridge (SP-)~~
- y. Detail Sheets (SP-)
- ~~z. Retaining Wall Plan and Profile Sheets (SP-)~~
- ~~aa. Retaining Wall Details (SP-)~~
- bb. Wastewater Plan and Profile Sheets (SP-)
- cc. Water Main Plan and Profile Sheets (SP-)
- ~~dd. Traffic Signal Plan Sheets (SP-)~~
- ee. Right of Way Title Sheet (R-1)
- ff. Right of Way Summary Sheet (R-2)
- gg. Right-of-Way Plans (R-)
- hh. Roadway Cross-Section Sheets (X-)

Upon completion of the LPD Project Coordinator's review and the ROW Division's Project Coordinator's review of the ROW plans. The LPD Project Coordinator will issue notice to proceed with development of the draft PS&E package.

DRAFT PS&E SUBMITTAL (90%) PLAN REVIEW

Overview, upon receipt of the 90% plans on projects NDOT has assumed the duties of the Responsible Charge (typically projects located outside of MAPA and LCLC) the NDOT's Right of Way Division will prepare the ROW Cost Estimate.

1. **Incorporate review comments** the Consultant will address and incorporate review comments from the 60% review.
2. **Opinion of probable construction cost** the consultant is to prepare an updated opinion of probable cost the consultant shall prepare an updated total estimate of quantities and opinion of probable cost (DR-342, and 343E) for all construction and removal items on the plans.
3. **Draft PS&E package submittal** the Consultant shall submit a draft PS&E package, to the Project Liaison and NDOT Project Coordinator for final review. The package will include the plan set, special provisions, and total project quantities. The 90% submittal shall include the following. Below is the order the plans are to be arranged in the plan set:

One half-size set. Plans sets shall have the following applicable sheets:

- a) Preliminary Title Sheet (by Consultant)
- b) Title Sheet (Prepared by NDOT PS&E)
- c) Typical Cross-Section Sheets (2-T)
- d) Summary of Quantities Sheet (Prepared by NDOT PS&E)
- e) Summary Of Soil and Materials Information (2K)
- ~~f) Wetland Sheets (2W)~~
- g) Aerial Photo Sheets (2A)
- h) Horizontal/Vertical Control Sheets (2H)

- i) General Notes Sheet (2N)
- j) Construction Phasing Plans (2P)
- k) Geometric Sheets (2L)
- l) Joints and Grades Sheets (2L)
- m) Storm Drainage Plan and Profile Sheets (2L)
- n) Construction Sheets (2L)
- o) Removal Sheets (2L)
- p) Sediment and Erosion Control Sheets (2L)
- q) Roadway Plan and Profile Sheets (Start with sheet 3)
- r) Traffic Control Sheets
- s) Pavement Marking & Signing Sheets
- t) Lighting Plan Sheets
- ~~u) Landscaping Plan Sheets~~
- v) Earthwork Data Sheets
- ~~w) Culvert/Channel Cross-Section Sheets~~
- ~~x) Bridge (SP)~~
- y) Detail Sheets (SP-)
- ~~z) Retaining Wall Plan and Profile Sheets (SP)~~
- ~~aa) Retaining Wall Details (SP)~~
- bb) Wastewater Plan and Profile Sheets (SP-)
- cc) Water Main Plan and Profile Sheets (SP-)
- ~~dd) Traffic Signal Plan Sheets (SP)~~
- ee) Right of Way Title Sheet (R-1)
- ff) Right of Way Summary Sheet (R-2)
- gg) Right-of-Way Plans (R-)
- hh) Roadway Cross-Section Sheets (X-)
- ii) Project Information Sheet, DR Form 342
- jj) Project Quantity Sheet, DR Form 343E
- kk) Summary of Quantity Sheets, DR Form 355
- ~~ll) Guardrail Summary, DR Form 195~~
- ~~mm) Summary of Quantities and Locations of Surfaced Driveways/Intersections~~
- nn) Table of Drainage Summary Items, "Horse blankets"
- oo) Length Sheet, DR Form 415
- pp) PS&E Required Sheet, DR Form 263
- qq) Grading Item Summary, DR Form 64E
- rr) Special provisions
- ss) Standard Plan listing
- tt) Special Plan listing
- uu) Opinion of Probable Construction Cost
- vv) Right of Way Cost Estimate
- ww) Environmental re-evaluation
- ~~xx) Certification of Compliance, BR Form 366~~
- ~~yy) Floodplain Certification and Permit (If applicable)~~
- zz) Construction and working day estimates

~~Railroad insurance If applicable for insurance purposes, the consultant will calculate the percentage of work being performed within railroad right of way is within 50 feet of any railroad track will need to be estimated by the Consultant. The Consultant shall also estimate work being performed outside the 50 foot line but within the railroad right of way. Work within the 50 foot line will require the construction contractor to carry railroad protective insurance and the work outside the 50 foot line but within railroad right of way will require the Contractor to carry regular Contractor's Public Liability and Property Damage Insurance.~~

The 90% plans represent the final design of the project. **The only revisions to the 90% plans would be modifications resulting from right of way negotiations, design modifications due to unknown utility conflicts or revisions requested by an affected railroad.**

FINAL PS&E SUBMITTAL / BLUE LINE CORRECTIONS

1. **Final PS&E Submittal.** Upon incorporating review comments into the plan set and special provisions, the Consultant shall prepare and submit all drawings, special provisions, and an estimate of quantities to the NDOT Project Coordinator for the final PS&E review. The completed PS&E plans to be submitted by the Consultant shall include the following:
 - a. Electronic Plan Data for the Contractor:
 - b. Slope staking information at locations where grading is to be completed to flatten slopes, construct guardrail and mailbox turnouts, and construct new erosion control curb and flumes. The Consultant shall provide the State with samples of these items for approval of the formats and information. Final construction information to be submitted as directed by the NDOT Project Coordinator.
 - c. Subgrade and finish grade information for new construction (previously blue tops and paving grades).
2. **Address comments or questions** during PS&E Review this includes the effort of addressing any questions or comments that arise during the PS&E review. And making corrections per PS&E Comments (not to include errors or omissions), this includes corrections based on PS&E comments that make the plans biddable.
3. **Electronic CADD files** after PS&E corrections, the Consultant shall upload all electronic CADD files and a DVD. The following should also be included:
 - a. Documentation File (metadata about the files provided, descriptions, etc.)
 - b. CADD Files (*.DGN format)
 - 1) Alignment File(s), GPK file
 - 2) Roadway Design Feature File(s)
 - 3) ROW Feature File, if applicable
 - 4) Wetlands Feature File

- 5) Topography Cross Sections (when available)
 - 6) 3D Design Break-line file
 - c. Alignment Data
 - 1) LandXML Format
 - d. Machine Control Surface Model files (LandXML format)
 - 1) Existing Ground
 - 2) Proposed Finished Grade
 - 3) Proposed Grading Surface
 - e. Super-elevation Transition Diagrams
 - 1) Super Diagram or Word Document
4. **Temporary erosion control** after PS&E corrections are complete, the Consultant shall produce temporary erosion control worksheets and submit them in electronic form and as half-sized plan sheets, along with the signed and dated plans. The temporary erosion control sheets must include the following items:
- a. Topography
 - b. New Design (does not include temporary erosion control design)
 - c. New Drainage
 - d. Wetlands and Legend
 - e. Ditches with slopes and arrows
 - f. Limits of Construction lines
 - g. Restricted Areas
 - h. Contours (Attach the contour file with a "c1" logical name) (Only show contours if there are design contours. This would occur on reconstruction projects, not overlays)
 - i. ROW. (If possible) (legend cell: tempeclegend – change the legend to match the ROW lines used on your project)
5. **Printing** this includes effort to print and resubmit any sheets that change based on PS&E comments (not to include errors or omissions).
6. **SWPPP** When required by the NPDES Construction Stormwater Permit, the Consultant shall provide a Stormwater Pollution Prevention Plan (SWPPP) for the project. The SWPPP must be developed using NDOT's SWPPP template that will be provided by the Roadside Stabilization Unit. The Roadside Stabilization Unit will complete a redline review of the SWPPP and Erosion Control Plans. The Consultant shall incorporate comments received from the Roadside Stabilization Unit prior to delivery of the final documents.
7. **QA/QC** This includes an internal review by the consultant of any sheets resubmitted to NDOT.
8. **Letting Task**
- a. Answering questions received from Contractors during Letting Phase
 - b. Supplying Information to NDOT for preparing addendums
 - c. Shop drawing review/approvals

DELIVERABLES FOR FINAL PLANS (PS&E) PHASE INCLUDE

- a. Revised Waterway Permit Data Sheet, DR Form 290
- ~~b. Floodplain Certification Package~~
- ~~c. Concrete Box Culvert Request Sheet, DR Form 67~~
- d. Opinion of Probable Construction Cost
- e. Two half-size set and one full-size set of Final Plans and corresponding electronic files (stamped and signed and preliminary stamp removed). Plans sets shall have the following applicable sheets. Below is the order the plans are to be arranged in the plan set.
Preliminary Title Sheet (by Consultant)
- f. Title Sheet (Prepared by NDOT PS&E)
- g. Typical Cross-Section Sheets (2-T)
- h. Summary of Quantities Sheet (Prepared by NDOT PS&E)
- i. Summary Of Soil and Materials Information (2K)
- ~~j. Wetland Sheets (2W)~~
- k. Aerial Photo Sheets (2A)
- l. Horizontal/Vertical Control Sheets (2H)
- m. General Notes Sheet (2N)
- n. Construction Phasing Plans (2P)
- o. Geometric Sheets (2L)
- p. Joints and Grades Sheets (2L)
- q. Storm Drainage Plan and Profile Sheets (2L)
- r. Construction Sheets (2L)
- s. Removal Sheets (2L)
- t. Sediment and Erosion Control Sheets (2L)
- u. Roadway Plan and Profile Sheets (Start with sheet 3)
- v. Traffic Control Sheets
- w. Pavement Marking & Signing Sheets
- x. Lighting Plan Sheets
- ~~y. Landscaping Plan Sheets~~
- z. Earthwork Data Sheets
- ~~aa. Culvert/Channel Cross Section Sheets~~
- ~~bb. Bridge (SP-)~~
- cc. Detail Sheets (SP-)
- ~~dd. Retaining Wall Plan and Profile Sheets (SP-)~~
- ~~ee. Retaining Wall Details (SP-)~~
- ff. Wastewater Plan and Profile Sheets (SP-)
- gg. Water Main Plan and Profile Sheets (SP-)
- ~~hh. Traffic Signal Plan Sheets (SP-)~~
- ii. Right of Way Title Sheet (R-1)
- jj. Right of Way Summary Sheet (R-2)
- kk. Right-of-Way Plans (R-)
- ll. Roadway Cross-Section Sheets (X-)
- mm. Project Information Sheet, DR Form 342
- nn. Project Quantity Sheet, DR Form 343E

- ~~ee. Summary of Quantity Sheets, DR Form 355~~
- ~~pp. Guardrail Summary, DR Form 195~~
- qq. Summary of Quantities and Locations of Surfaced Driveways/Intersections
- rr. Table of Drainage Summary Items, "Horse blankets"
- ss. Length Sheet, DR Form 415
- tt. PS&E Required Sheet, DR Form 263
- uu. Grading Item Summary, DR Form 64E
- vv. Special provisions
- ww. Standard Plan listing
- xx. Special Plan listing
- yy. Opinion of Probable Construction Cost
- ~~zz. Certification of Compliance, BR Form 366~~
- ~~aaa. Floodplain Certification and Permit (If applicable)~~
- bbb. Construction and working day estimates

~~Railroad insurance If applicable for insurance purposes, the consultant will calculate the percentage of work being performed within railroad right of way is within 50 feet of any railroad track will need to be estimated by the Consultant. The Consultant shall also estimate work being performed outside the 50 foot line but within the railroad right of way. Work within the 50 foot line will require the construction contractor to carry railroad protective insurance and the work outside the 50 foot line but within railroad right of way will require the Contractor to carry regular Contractor's Public Liability and Property Damage Insurance.~~

UTILITIES

1. **Assistance** this includes effort to assist the LPA with engaging the existing utility owners.
2. **Utility Location/Verification** the Consultant will review the utility locations shown on the plans and verify these locations during field inspections. After the survey is complete, plans will be printed and distributed to the Utility Companies for verification of ownership, type, size, location, and cased or uncased.

The Consultant will request that the Utility Companies return to the Consultant marked up plans with utility verification. The Consultant will incorporate the information into the topography. All utilities identified in the topographic survey and verified by the individual utility will be incorporated into the plans.

Identification and verification by the Utility Companies of major utility conflicts such as fiber optic lines, gas pipelines, crude oil pipelines, high-pressure waterlines, transmission lines, etc., will be accomplished at the earliest possible time. The Consultant and the RC will discuss major conflicts and attempt to avoid them. If avoidance is not possible, the Consultant will then request the Utility Company to verify the conflict and provide a preliminary estimate of reimbursable costs associated with the utility relocation.

3. **Utility Plan Submittals** With each plan, submittal to the LPA the Consultant will distribute plans to public and private utilities within the project limits for review and comment.
4. **Utility Permits** the consultant will assist the LPA in permitting private utilities.

RIGHT-OF-WAY DESIGN

Overview: The following tasks will be completed to establish the existing Right-of-Way and to design the proposed Right-of-Way. The consultant will complete and submit title research, legal description and ROW plans.

Qualifications, Knowledge and Experience.

All ROW Design tasks must be performed by or under the direct supervision of a Professional Civil Engineer or Registered Land Surveyor registered in Nebraska. All Title research services must be completed by, or under the direct supervision of a registered abstractor who is qualified and in good standing to complete the Services in Nebraska. All ROW Survey must be performed by a Registered Land Surveyor registered in Nebraska.

Software, Equipment, and Submission Requirements.

Consultant will be responsible for providing all necessary equipment, supplies, materials and software to complete the Services. The Certificate of Title reports shall be signed, converted to an electronic file and submitted to State in readable electronic form. Supporting documents shall be submitted in electronic form. Acceptable electronic forms are either pdf, jpeg or tiff format. All deliverables shall be uploaded to either the consultant's or state's ftp site. All documents shall be submitted using State's specified file naming convention.

Format of Right-of-Way plans The Consultant shall submit all Right-of-Way plans as half-size plans plotted at the appropriate scale. They must measure the standard 11"x17" paper that is used in any normal Xerox machine. The margins must measure as follows: left margin must be approx. 1 inch, right margin must be approx. 5/16 inch, and the top and bottom margins must be approx. 3/8 inch. The border used must be the one supplied with the ROW cell file. It measures approximately 15 5/8 inches x 10 3/8 inches when plotted at 1" = 200' scale. The scale of the ROW. plan sheets will match the scale of the roadway plan sheets. Any materials submitted to the State by the Consultant must be on or equivalent to white bond. Any material, which does not produce an acceptable reproduction, will be returned to the Consultant for rectification. The Consultant shall follow the State's "CADD Drafting procedures and guidelines" in preparing the project plans. Sheets must be set up according to the State's procedures. File names must follow the State's CADD naming convention. Line weights, line styles, text size and leveling must follow the State's guidelines. The CADD files must conform to the following standards and conventions:

Graphic elements must be placed in accordance with the State MicroStation Right-of-Way element attributes standards. Working units must be:

1. Master Units = Ft
2. Sub Units = 1000 TH
3. Position Units = 1

File names must use State CADD naming convention.

Data Transfer It shall be the Consultant's responsibility to obtain the necessary software to translate to and from the specified format for all electronic files supplied by the State and for all electronic files prepared by the Consultant and supplied to the LPA/State. The State and the Consultant shall transfer all Graphic files in a MicroStation dgn. Format. A data sheet must accompany all electronic file submittals listing the file names and detailing the method of placement so the State will know how to restore the data in our system. All computer files shall be provided on either compact disk (CD), or loaded to State's FTP site unless otherwise specified. The State will provide instructions and password for FTP site with final contract documents.

- 1) **Existing Right-of-Way Base.** This task involves certified title research including: collecting the Plat drawings, reviewing property titles, reviewing survey data, and other necessary information to establish the existing Right-of-Way, including easements, for the properties abutting the project. Title Searches to be completed by a certified abstractor. Ownership plans will be developed from this information and the consultant will have this task completed prior to the plan-in-hand meeting.
- 2) **Proposed Right-of-Way.** The Consultant will determine the easements (temporary and permanent) and right-of-way required to construct the project. It is estimated that there will be up to 11 tracts associated with this project.
- 3) **Right-of-Way Plan Sheets.** The Consultant will prepare right-of-way plan sheets to include in the plan set. The sheets will include existing property lines and all proposed right-of-way ownerships, easements and takings will be tabulated and shown on the sheets. Tract Maps with all legal description will be provided by the Consultant.
- 4) **Title Research.** All title research services will be completed in compliance with the Uniform Relocation Assistance and Real Property Acquisition Act (the Uniform Act) and with the NDOT Right-of-Way Manual. The Services must be completed by, or under the direct supervision of a registered abstractor who is qualified and in good standing to complete the Services in Nebraska. Consultant must be knowledgeable and have substantial experience completing Services of this type. The State will provide instructions and password for FTP site with final contract documents. Consultant will be responsible for providing all necessary equipment, supplies, materials and software to complete the Services. The Certificate of Title reports shall be signed, converted to pdf format and submitted to State in readable electronic form. Supporting documents shall be submitted in pdf, jpeg or tiff format. All deliverables shall be uploaded to an ftp site specified by State using State's file naming convention.
- ~~5) **Permit to occupy right of way** Projects encroaching on NDOT right of way (utilities, drainage structures, grading, etc.) need to be permitted by the NDOT District Construction office. At the 30 percent design stage, NDOT will assist the LPA/LPA's~~

~~with contacting the District Engineer or Permits Officer to determine if a permit or permits are needed.~~

~~All requests for a permit for an access shall first be submitted to the District Engineer in whose District such access lies. Requests must be submitted on standard access permit application form available from the Department (NDOT Form 19). The consultant shall provide the following items to the RC for evaluation of encroachments or an access application or the construction of an access:~~

- ~~1. Highway and access plan and profile.~~
- ~~2. Complete drainage plan of the site showing impact to the highway right of way.~~
- ~~3. Map and letters detailing the utility locations before and after development in and along the highway.~~
- ~~4. Subdivision zoning and development plan. These should be coordinated with the local officials and their comments should be included with the application.~~
- ~~5. Property map indicating other accesses and abutting public roads and streets, including those on the opposite side of the highway.~~
- ~~6. Proposed access design details, such as, ADA requirements, or wetlands.~~
- ~~7. A Traffic Impact Study, if required.~~

~~The District Engineer will make appropriate comments and forward the application together with the plans and other supporting data to the LPD PC/RC will coordinate with the Right of Way Division for issuance of the permit.~~

ROW Deliverables at the 60% Design Stage.

- a) The title researcher shall review the title research study area ("Study Area") and search the County real estate records to identify each separate parcel of land located within the Study Area. A separate parcel of land is all contiguous land owned by the same owner, and held in the same title (e.g. sole owner, joint tenants, tenants in common, etc.).
- b) The title researcher shall provide a copy of the title-vesting document for the current owner of each parcel of land in the Study Area.
- c) The title researcher shall list all owners of record of the parcel within the preceding 5-years, and include a copy of each additional instrument conveying title to each owner identified.
- d) Title researcher shall provide a Certificate of Title Report for each parcel within the study area. This Title Report shall be on the State's approved Certificate of Title Report form (or a preapproved form) to report such information. Each Title Report shall also include the following information:
 - i) The name of the current parcel owner(s) and how the title is held, exactly as shown on the title vesting document(s).
 - ii) The owner's mailing address as shown in the County Assessor or Treasurer's records.

- iii) If the owner of record is known to be deceased, the Case Number of the Deceased's Probate along with the name(s) of court appointed Personal Representative(s) if available.
- iv) Active Mortgages, Deeds of Trusts, and other financing documents, and any assignments of such documents.
- v) Active liens, agreements, conditions, limitations, restrictions or covenants affecting title.
- vi) Easements such as private water, sewer, ingress/egress (access), cell towers, flood, and irrigation or others that encumber or restrict the use of the land. Consultant should not provide easements for public utilities (water, sanitary sewer, power, gas, cable, telephone and telegraph).
- vii) All recorded leases except oil and gas leases.
- viii) List the document recording information for each record listed in the title report to include the date of record and instrument number.
- ix) The legal description for the subject parcel of land.
- x) Comments the abstractor believes are necessary for a full understanding of the information reviewed for the parcel.
- xi) Name, signature, and license number of abstractor and title effective date.
- e) Provide copies of all supporting documentation (deeds, easements, etc.) that are listed in the title report in an electronic format type using the document naming convention as specified. Consultant should not provide copies of the active mortgages, deeds of trust or assignments that are listed on the Title Report.
- f) If applicable, Consultant shall provide copies of subdivision plats and surveys of irregular tracts and tax lots with metes and bounds field notes.
- g) Provide copies of deeds, easements, dedications, plats, etc., for any property acquired by or conveyed to governmental entities.
- h) Provide copies of County Cadastral Maps in counties that do not have a GIS website.

Title Report and Supporting Document Naming Convention. For each parcel - two separate electronic files must be submitted as detailed below:

- 1. For each parcel - One electronic file containing the Title Report
- 2. For each parcel - One electronic file containing all supporting documents. This file should include all documents as specified under the above ROW Deliverables at the 60% Design Stage.
- 3. For each electronic file - file names should be simple, easy, and logical. File names should include last name of private owner or first name of company.

Examples of File Names

Vesting Owner	Title Report File Name	Documents File Name
Joe Smith	Smith TR	Smith Documents
Lincoln Methodist Church	Methodist Church TR	Methodist Church Documents

MSD LLC	MSD TR	MSD Documents
Sam Jones and Doug Peters	Jones TR	Jones Documents
AJ Brown Auto Body	Brown TR	Brown Documents

The Consultant is to submit a geographically oriented base file in MicroStation dgn format showing the following information for the entire project. Files may be submitted in one file or in reference files, all necessary reference files need to be in the submittal.

- Surveyed Topography
- All construction items (feature file)
- Limits of construction.
- ROW Survey (section corners, lot corners, etc.)
- Ownership information (property lines, owner names, lot numbers, lot lines, tract numbers, etc.)
- ROW Design (new ROW, PE's and TE's)
- ROW patterning (if placed in the base file)
- Air photo if used

On Projects the NDOT is acquiring the ROW, the consultant shall submit a kmz file.

RIGHT OF WAY COST ESTIMATE

Overview NDOT will prepare the ROW Cost Estimate on projects located outside of the Metropolitan Planning Organizations (MPO) of Metropolitan Area Planning Agency, Omaha (MAPA) and of Lincoln City Lancaster County (LCLC).

~~Right of Way Cost Estimates will be prepared by the LPA on projects located in the jurisdictional area of the Metropolitan Area Planning Agency, Omaha (MAPA) and of Lincoln City Lancaster County (LCLC).~~

~~If a LPA in MAPA or LCLC elects to outsource preparation of the ROW Cost Estimate they may do so provided ROW Cost Estimate is prepared by a real estate professional knowledgeable of land values in the area of the project and the ROW Cost Estimate is prepared using the following criterial.~~

~~**ROW Cost Estimates** The notice to proceed with preparing the ROW cost estimate is to be issued by the RC/PC upon review and approval of the ROW Design by the ROW Project Coordinator. Are to be prepared by a real estate professional knowledgeable of land values in the area of the subject property and have adequate experience to enable them to determine the effects of the acquisition. The ROW Cost Estimate is an estimate of the Federal Funds to be obligated for the right of way phase of the project. The federal obligation may be revised to reflect the appraised tract costs of the needed ROW. Upon the completion of the acquisitions of the ROW, the federal obligation may be revised.~~

~~ROW Cost Estimates should include an estimate of the current value of the takings, any damage costs, incidental costs (such as appraisal fees, negotiator fees, title fees, etc.), relocation expenses, possible condemnation costs, and demolition fees, (ROW Cost Estimate form PA-4). The estimate provides the LPA and their ROW Consultant with a tract by tract valuation, which assists them in determining the type of valuation forms that will need to be prepared.~~

~~Upon completion of the review and approval of the ROW plans, the NDOT PC will issue the notice to proceed with preparing the ROW Cost estimate.~~

~~The ROW Consultant is to prepare a Right of Way Cost Estimate; the following items are required in the estimate:~~

- ~~1. *Land Value* The land value for all fee takings and easements shall be calculated on a square foot cost basis in urban areas and by the acre in rural areas. Each tract shall be evaluated as to zoning and type of use, such as business, residential, and public use. Not all tracts will be valued at the same square foot price.~~
- ~~2. *Damage Costs* Damage costs must be determined for each tract. These will include cost to cure items and damages to the remainder of the property.~~
- ~~3. *Relocation Costs* Any residential properties or businesses that will be acquired, as part of the project needs to be included in the ROW Estimate. The estimated value of the home or business and the additional relocation costs (relocation payments to the owner, tenant, and Consultant fees) for each tract will be identified on the Estimate as Relocation Costs.~~
- ~~4. *Administrative Costs and Incidental Expenses* These costs will include the fees for the Appraisal, Appraisal Review, and Consultant negotiation fees. An incidental cost should be included for each tract on the project if the LPA is hiring ROW Consultants.~~
- ~~5. *Demolition Contracts* should also include any costs associated with hazardous materials removal.~~
- ~~6. *Advertising Sign Cost* if applicable~~
- ~~7. *Condemnation Costs/Administrative Settlements* indicate the anticipated percent of parcels affected by either condemnation costs or administrative settlements.~~

~~The ROW Cost Estimate includes the cost to research and acquire the right of way for the project, including easements. It includes the right of way costs for storm water management, wetland mitigation, and other work outside of the roadway prism. Contractual obligations with property owners to relocate fencing, reconstruct gates, relocate sprinkler systems, etc. are a ROW cost and are not to be a construction item.~~

~~The cost to repair sprinkler systems on public right of way is ineligible for federal participation. However, Local Public Agency policies may provide local funding to repair underground sprinkler systems located in the public ROW and damaged by a public project.~~

~~The cost to repair sprinkler systems on public property is ineligible for federal participation. However, Local Public Agency policies may provide for local funding to repair underground sprinkler systems located in the public ROW and damaged by a public project. The ROW Cost Estimate is to note if local funding is available and the estimated cost of repair of the system in the public right of way.~~

~~If the extent of the right of way acquisition is not known, then a contingency should be added based upon historical settlements and awards for condemnation cases, which must include costs for attorneys, engineering research, witness research, survey, and staff time. The right of way acquisition schedule needs to be considered. Right of way acquisition costs will increase quickly in rapidly developing areas. Costs must include relocation assistance and benefits for displaced individuals, families, businesses, governments, and nonprofit organizations. Special acquisitions, such as those from government sites can be time consuming and costly. The LPA recognizes right of way estimates are dependent upon the accuracy and reliability of information concerning the locations of the right of way limits on a project. A small change in the locations of the right of way line, or a change in access control or drainage retentions placement, particularly in commercial areas, can affect the right of way cost estimate by millions of dollars because of required damage payments such as severance or business damages.~~

~~It is anticipated a ROW Cost Estimated is needed for _____ tracks.~~

Deliverables: ROW Cost Estimate form PA-4.

ENVIRONMENTAL SERVICES AND COORDINATION

Environmental coordination requires the Design Consultant to work with the NEPA Consultant to ensure environmental commitments are met. The RC is responsible for coordinating these efforts.

- 1) **Review of NEPA documents and commitments.** The Design Consultant shall review the NEPA Documents for any commitments made that must be addressed during the design. The Project Sponsor or NEPA Consultant, on the Project Sponsor's behalf, will perform a re-evaluation of the proposed design:

After the review and approval of the Right of Way design by NDOT's ROW Division and prior to the initial request for obligation of Right of Way funds (based on the ROW Cost Estimate). The NEPA Consultant is to re-evaluate the project to determine whether the scope of the project and environmental documentation remain valid under current policies and regulations. The NEPA Consultant is to submit a "Re-evaluation Approval Request" for approval by the NDOT, LPA Environmental Coordinator.

Review of NEPA documents and commitments after ROW Acquisition. Modifications to the final design may have been made during the acquisition of the right of way needed to construct this project. The NEPA Consultant is to re-evaluate the project to determine whether the scope of the project and environmental documentation remain valid under current policies and regulations. The NEPA Consultant is to submit a "Re-evaluation Approval Request" for approval by the NDOT, LPA Environmental Coordinator.

- 2) **NEPA exhibits.** The Design Consultant will provide the NDOT with exhibits as needed for the development of Public Involvement.
- 3) **Preliminary Waterway Permit Data Sheet.** The Design Consultant will complete form DR-290 for the project.
- 4) **Wetlands Impacts.** The Design Consultant will provide limits of construction to the Environmental Consultant for calculation of impacts to wetland areas delineated. This information shall be provided in the final plans on the 2-W Sheet.
- 5) **Permits.** The Design Consultant shall prepare and submit on behalf of the LPA the following permits, certifications, and forms. The Consultant shall copy the RC (NDOT) on all applications submitted.
 - a. ~~Floodplain Permit (Design Consultant) Army Corps of Engineers 404 permit (NEPA Consultant)~~
 - b. National Pollution Discharge Elimination System, Storm-water Pollution Prevention Plan & Notice of Intent (NPDES, SWPPP & NOI) (NDOT)
 - c. Activity Checklists (NEPA Consultant)
 - d. NEPA Coordination (Green Sheets).

- e. Wetland Impact calculations form DR290 Waterway Permit Data Sheet
(To be calculated by PE consultant)
- f. Nebraska Department of Environmental Quality (NDEQ), (NEPA
Consultant)
- g. City/County Health Department Permits (NEPA Consultant)
- h. The need or potential need for a FAA Form 7460-1 should be noted in the
plan-in-hand report and added as a special provision in the PS&E
package by the design consultant.

Scope Items Pertaining this project (checked boxes indicate the sections of this scope that apply to the project):

SOS Sec	Scope Items	Tasks
1	Categorical Exclusion (CE)	<input checked="" type="checkbox"/>
2	Farmland	<input type="checkbox"/>
3	Section 106 request letter	<input checked="" type="checkbox"/>
4	Section 4(f)	<input checked="" type="checkbox"/>
5	Section 6(f)	<input checked="" type="checkbox"/>
6	Floodplain Review	<input checked="" type="checkbox"/>
7	Water Quality Review	<input type="checkbox"/>
8	Threatened & Endangered Species Review	<input checked="" type="checkbox"/>
9	Hazardous Materials Review (HMR)	<input checked="" type="checkbox"/>
10	Noise Analysis and Report	<input type="checkbox"/>
11	Wetland & Stream Delineation	<input checked="" type="checkbox"/>
	Delineation Project Size	<input checked="" type="checkbox"/> Small <input type="checkbox"/> Med <input type="checkbox"/> Large
12	404 Nationwide Permit Application	<input type="checkbox"/>
13	404 Individual Permit Application	<input type="checkbox"/>
14	Mitigation Plan	<input type="checkbox"/>
15	Public Involvement Materials	<input checked="" type="checkbox"/>
15	Green Sheet	<input checked="" type="checkbox"/>
16	Project Management	<input checked="" type="checkbox"/>
17	Travel Time	<input checked="" type="checkbox"/>

LPA OR STATE, ON LPA'S BEHALF, TO PROVIDE (to the extent that the items listed are available or needed for the scope checklist above):

Project description, location information, Program documents (DR-530, DR-53), purpose and need statement (if applicable – Level 3 Categorical Exclusion (CE)), Threatened and Endangered species (T&E) Activity Checklist, general project location map, PQS (Professionally Qualified Staff) Memos (Wetlands, HMR, EJ/LEP, T&E Species, Section 106). When appropriate, detour route information will be provided (including a list of property owners along the project and detour route).

If available, electronic files of current aerial photographs with Project alignment and preliminary design, existing and new rights-of-way (ROW) and easements, topographic survey, utilities data, and Limits of Construction (LOC), if available.

Roadway Feature File, Alignment File, Feature Codes and SMD (Simple Method Description) File (downloadable from State’s website).

County-wide plat (ownership) or TAM (occupancy) maps for Consultant’s use if landowner notification is needed. A notification letter, on LPA’s letterhead for the consultant's use in landowner contact and site access will also be provided.

Waterway Permit Data Sheet and 2W plan Sheets from design consultant, if permitting services are required.

Wetland Delineation Data Sheets and Photographs (if already available and not part of this scope of work).

Environmental Justice/Limited English Proficiency Memo (provided by State if available).

Section 106 documentation and Professionally Qualified Staff (PQS) Memo (provided by State if available).

HMR PQS Memo (provided by the State if available).

Threatened and Endangered Species PQS Memo (provided by State if available).

Wetlands PQS Memo.

APPLICABLE PUBLICATIONS:

Work shall be done in accordance with the most current version of the following materials:

Instructions and Guidance for Completing the Nebraska Categorical Exclusion Determination Form for Federal-Aid Projects, June 2, 2015.

NDOT National Historic Preservation Act Section 106 Guidelines, 2015.

Nebraska Biological Evaluation Process, Prepared in Support of the Programmatic Agreement that was developed between FHWA, State, USFWS and NGPC, January 20, 2012.

Certified NEPA consulting firms and requirements. NDOT, July, 2015.

Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1.
Environmental Laboratory, Department of the Army Waterways Experiment Station, US Army Corps of Engineers, Vicksburg, Mississippi, 1987.

Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region, ERDC/EL TR-08-27. Wetlands Regulatory Assistance Program, US Army Engineer Research and Development Center, Vicksburg, Mississippi, 2010.

Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region, ERDC/EL TR-08-12. Wetlands Regulatory Assistance Program, US Army Engineer Research and Development Center, Vicksburg, Mississippi, 2010.

Regulatory Guidance Letter No. 05-05: Ordinary High Water Mark Identification. US Army Corps of Engineers, 2005.

Cowardin et al. Classification of Wetlands and Deepwater Habitats of the United States, FWS/OBS 79/31. Biological Services Program, Fish and Wildlife Service, US Department of the Interior, 1979.

Nebraska Wetland Subclasses (Attachment K, Wetland Mitigation Banking, Standard Operating Procedures in Nebraska).

Nebraska Department of Roads. Hazardous Materials Review Guidance manual
(August 2015).

Nebraska Department of Roads. Procedure: Wetland and Water Resource Delineation and Water Conveyance Structure Investigation, (January 2013 DRAFT).

Nebraska Department of Roads. Nebraska Public Involvement Procedure (September, 2015).

Nebraska Department of Roads. Standard Delineation Report (Draft In Preparation).

Guidance for Completing the Section 4(f) Review Process in Nebraska for Federal-Aid Projects (May 28, 2015).

Programmatic Categorical Exclusion Agreement between the Federal Highway Administration and the Nebraska Department of Roads (April, 2015).

CONSULTANT SHALL PROVIDE TO LPA OR STATE, ON LPA'S BEHALF:

CE DOCUMENT AND RESOURCE REVIEWS

Project Description and Purpose & Need (when applicable). Consultant will determine if the provided project description meets the NDOT guidance for project descriptions and revise as necessary for use in the CE document, consultation letters, and public involvement materials. If a Purpose & Need statement is required (applicable for Level 3 CEs) the consultant will determine if the original Purpose & Need meets the NDOT guidance requirements and if necessary, draft a revised Purpose & Need statement for inclusion in the CE document.

CE Determination Form for Federal-Aid Projects. When the Consultant determines whether the Project will qualify as a Level 1, 2 or 3 CE under the existing CE Programmatic Agreement, they will notify the Project's assigned State NEPA Environmental Project Manager (PM) and complete the appropriate Level (1,2,3) of the CE Form. Consultant will notify the State NEPA Environmental PM if a threshold has been crossed which elevates the level of CE documentation. Consultant will obtain or produce supplemental information, figures and resource maps to attach to the NEPA Form or to be placed into the Project file as back-up reference material for the document. Figures and resource maps are required to be attached to the NEPA Form (as per the CE guidance manual). If not required as an attachment, Consultant shall produce them for the NEPA project file. Consultant's effort shall also include up to three progress meetings as needed, with LPA and/or State by telephone. If a Project on-site meeting or meeting at State is needed, it would be considered an out-of-scope item and would be negotiated as a Supplement to this Agreement.

Consultant will prepare a Project Vicinity map on a 7.5 Minute Quadrangle Topographic Map base (1: 24,000 scale), showing the Project location with insert showing the county and its position in Nebraska. The Project Location Aerial Figure shall be shown on an aerial photograph as the background, with the overall Environmental Study Area mapped (minimum ¼ mile from centerline, right and left), the Project start and end points plotted, and pertinent constraints such as Limits of Construction depicted, if known.

Documentation and Revisions. Consultant will submit the completed CE Determination Form for Federal-Aid Projects (including attachments) to the LPA, State and FHWA (if Level 3) for review and approval (assume 2 rounds of comments from NDOT and 2 rounds of comments from FHWA if Level 3).

CE Quality Control. The consultant shall submit to LPA and State evidence that the CE document has had a quality control review by the Consultant's Principal NEPA Author or Project Manager (as identified in the firm's current, approved NEPA Certification submittal - Category 101A), other than the document author. The submittal shall accompany both draft and final NEPA documents and may be in the form of a transmittal letter with the name, date and signature of the QC reviewer, on the Consultant's internal review process form, on NDOT's QC review form, or when the electronic CE Form allows, provide evidence of QC review in the appropriate position on the CE form.

CE Comment Tracking Table: The consultant shall maintain a summary table of all review comments and resolution of comments made by LPA, State and FHWA during document review and revision processing. Comments shall be organized by the CE Form's subject title and question number. The comment tracking table shall be submitted to LPA, State or FHWA, as appropriate, along with the revised draft and final documents.

FARMLAND

~~Farmland Conversion Form. If there is farmland located in the Project Environmental Study Area and its use may be converted to other purposes as part of the Project, Consultant will prepare a Natural Resource Conservation Service (NRCS) Farmland Conversion Form CP-106 and perform coordination with NRCS, if necessary.~~

SECTION 106 STATE HISTORIC PRESERVATION OFFICE/TRIBAL HISTORIC PRESERVATION OFFICE (SHPO/THPO)

Section 106 Review Request Letter. NDOT will complete Section 106 reviews for LPA projects located outside the Omaha, Metropolitan Area Planning Agency (MAPA) and the Lincoln City and Lancaster County (LCLC) metropolitan planning area.

Section 106 cultural resource surveys are to be completed by an individual meeting or exceeding qualifications set forth by the US Secretary of the Interior. The individual in charge of the Section 106 cultural resources survey for the Consultant are to have submitted their resume to the State's Section 106 Professionally Qualified Staff (PQS) for review and approval prior to execution of this agreement.

Consultant will complete a Section 106 Review Request Letter and submit it as a PDF to the State's Section 106 PQS, a copy the LPA's Project Coordinator and the NEPA Environmental PM. The Section 106 Review Request Letter shall include a Vicinity Map and a Location Figure, showing the project's start and end-points.

The State will act as the lead federal agency, and complete all outside consultation, SHPO, tribal, etc.

SECTION 4(F) EXCEPTION OR DE MINIMIS DETERMINATION

Section 4(f) Initial Assessment Form. Consultant will determine if adjacent Section 4(f) properties such as public parks, recreation areas, and wildlife/waterfowl refuges, or

historic sites of local, state or national significance are present, as part of the resource review. Consultant will prepare the Section 4(f) Initial Assessment Form and submit to State NEPA Environmental PM for review and approval. The approved Section 4(f) Initial Assessment Form will be sent to the Consultant for inclusion in the CE appendices.

Section 4(f) Documentation. If a Section 4(f) property is identified within the Project area, the project or undertaking must determine a 'use' of land from that property within the meaning of Section 4(f). If it is determined that there is a 'use' of the land then coordination with State must occur and one or more of the following documents will be prepared by the Consultant:

Section 4(f) De Minimis Form

Coordinate with the Official with Jurisdiction for the Section 4(f) resource, to obtain concurrence that the impact will/will not adversely affect the resource. If more than one Section 4(f) property has a 'use' determined, analysis and document preparation for the additional properties would be considered out of scope and the additional effort would be negotiated as a Supplement to this Agreement.

Individual Section 4(f) Evaluation. If needed, an Individual Section 4(f) Evaluation and documentation would be considered out-of-scope and the additional effort would be negotiated as a Supplement to this Agreement.

SECTION 6(F) ANALYSIS DOCUMENTATION

Consultant will research and document whether Section 6(f) resources are present. If yes, then Consultant will contact the Nebraska Game and Parks Commission to determine if Section 6(f) resources are present. If Section 6(f) resources are present, the Consultant will determine if a conversion will occur. If replacement land is needed, coordination with the jurisdictional agencies would be required, as well as additional Section 6(f) documentation. This additional Section 6(f) coordination and documentation as a result of a conversion would be considered out-of-scope and additional hours will be negotiated as a Supplement to this Agreement.

FLOODPLAIN REVIEW

The consultant will research and document whether the project is located within a Zone A floodplain. The consultant is to determine if the project will have construction occurring in a floodplain, whether crossing or parallel. The Consultant determines if the project crosses or occurs within a mapped floodplain, or in the case of parallel floodplains determines and quantifies the highway embankment work that will encroach into the area mapped as a floodplain.

If a Floodplain Permit is required, the Design Consultant will prepare a Floodplain Certification Package. The package is to include a memo describing the project and its impacts on the floodplain, a location map showing the boundary of the project, FIRMette maps with floodplains and structures identified and a certification form signed, sealed and dated by a professional engineer certifying compliance with floodplain and floodway regulations. A FIRMette is a legal to scale copy of a portion of a Flood Insurance Rate Map (FIRM). FIRMette can be printed in either letter legal or ledger size paper and found

at the following website, <http://msc.fema.gov>. The LPA with assistance from the Consultant is to apply for the permit.

~~WATER QUALITY REVIEW~~

- ~~a. Consultant will research and document whether impaired waters (303d list) are located within the Environmental Study Area.~~
- ~~b. If impacts to the impairment of the water resource will be affected by the project, Consultant will coordinate with NDEQ.~~
- ~~c. When the LPA is / has an RC the LPA is responsible for the NPDES and the SWPPP. The PE consultant is to develop the erosion control plans and assist with the application for the Floodplain Permit. The Consultant is to issue the Notice of Intent, permit for the NPDES and the SWPPP.~~

~~NDOT's Roadside Stabilization Unit (Ron Poe) will review the NPDES and the SWPPP for concurrence. The permit close out will be performed by the LPA~~

- ~~d. When NDOT is the Responsible Charge (RC) the NDOT's Roadside Stabilization Unit will prepare the National Pollutant Discharge Elimination System (NPDES) permit and the Storm Water Pollution Prevention Plan/SWPPP. The erosion control plans will be designed by the Design Consultant. NDOT's Roadside Stabilization Unit will submit the Notice of Intent, NPDES permit and the SWPPP.~~

THREATENED AND ENDANGERED SPECIES (T&E) REVIEW

Biological Evaluation (BE) Review Request Letter. Consultant will complete the BE Review Request Letter and submit it as a PDF to the State's LPA T&E PQS and NEPA Environmental PM. Consultant will revise it in response to State comments as needed. This letter will include the wetland delineation as an attachment. The NDOT T&E PQS Memo will be cited and summarized in the CE document, and included in the CE appendices.

Field Review. A field review may be needed and would be conducted by the Consultant's qualified biologist in conjunction with the wetland delineation site visit. If a wetland delineation is not required for the project and a site visit for T&E Species is needed, a qualified biologist would perform a site visit and conduct the field review.

HAZARDOUS MATERIALS REVIEW (HMR)

Hazardous Materials Review. Consultant will complete a HMR within the HMR Study Area (which encompasses the Environmental Study Area and is defined in the 2015 HMR Guidance manual) that are known to be, or may potentially be, contaminated with hazardous materials. Conditions that indicate an existing release, a past release, or a material threat of a release, of any hazardous substances or petroleum products into structures, on the property or into the soils, groundwater, or surface water should be evaluated and assessed for potential impacts on the Project, and discussed in the HMR technical report. The Consultant shall:

Conduct and review local, state and federal environmental database records, searching for regulated sites within the HMR Study Area;

Conduct an on-site visual site reconnaissance survey (after coordination with the NDOT Hazardous Materials PQS). If it is determined the project will be processed as a Level 1 CE, then this survey will not be required;

Complete the HMR Visual Reconnaissance Form and photo log;

If warranted and in consultation with the NDOT Hazardous Materials PQS, the scope of the HMR may include conducting additional analysis per the HMR guidance. Additional analysis may include.

- (1) Conducting a regulatory file review (NDEQ, SFM, etc.)
- (2) Reviewing readily available historical record sources (aerial photographs, topographic maps, Sanborn Fire Insurance maps, etc.) and/or
- (3) Conducting interviews with local agencies and regulators.

If a subsurface investigation is determined to be necessary, a Supplement to this Agreement would be required.

Prepare a written Hazardous Materials Review Report. The Report will be submitted by the Consultant to the State for inclusion in the Project file. The NDOT Hazardous Materials PQS will summarize the results of the Report into a PQS Memo, which will be sent to the Consultant for inclusion in the CE appendices. The findings and mitigation measures stated on the PQS Memo shall be summarized in the CE document. Quality Control. The Consultant shall perform thorough QC by a NDOT-defined Environmental Professional prior to any official HMR submittal to the State.

NOISE STUDY AND REPORT

- ~~a. Consultant shall review the Noise Analysis and Abatement Policy to determine if a noise study is required (definition of a Type I project). The NDOT PQS will verify that a noise study is needed. When no noise analysis is required, the NDOT Noise PQS and/or NDOT NEPA Environmental PM will forward the Noise PQS memo to the Consultant. Consultant shall cite the date of the Noise PQS Memo in the appropriate block of the CE Form and attach it to the document.~~
- ~~b. When a noise study is required, Consultant shall follow the NDOT Noise Analysis and Abatement Policy and provide a Noise Study Report including, but not limited to the following:~~
 - ~~a) General information regarding the nature of noise and measurement of sound, 23 CFR Part 772 Standards, noise abatement criteria and noise prediction method used;~~
 - ~~b) Project Description;~~
 - ~~c) Table showing existing and future (20+ years from date of construction) traffic counts (Average Daily Traffic and Design Hourly Volume) as well as medium and heavy truck percentages, all to be used in conjunction with FHWA's Traffic Noise Model (TNM);~~

- d) ~~Field noise measurements are required; Consultant shall prepare a table to include such items as location, distance from Project centerline, noise levels, and other appropriate information;~~
- e) ~~Information about land use adjacent to Project;~~
- f) ~~Table showing the following:~~
 - i) ~~receptor ID (home address or business name if possible);~~
 - ii) ~~distance from Project centerline;~~
 - iii) ~~modeled existing noise level (TNM results);~~
 - iv) ~~predicted future no build noise level (TNM results);~~
 - v) ~~predicted future build noise level (TNM results);~~
 - vi) ~~Leq noise abatement criteria (66 or 71 dBA);~~
 - vii) ~~Specify if build situation approaches or exceeds Leq criteria (if substantial noise increase > 15dBA) (yes or no).~~
- g) ~~Analyze noise abatement for feasibility and reasonableness if necessary (determined by noise impacts).~~
- h) ~~Detour information (lane closures, how many will remain open).~~
- i) ~~Address construction noise.~~
- j) ~~Provide setback recommendations to local officials.~~
- k) ~~Consultant will provide conclusions stating findings (how many impacted receptors in existing, no build and build situations, noise abatement results).~~
- l) ~~List references.~~
- m) ~~Prepare diagram using aerials or topographic map identifying:~~
 - i) ~~Receivers adjacent to project;~~
 - ii) ~~Areas for possible noise abatement;~~
 - iii) ~~66 and 71 dBA noise contour lines;~~

WETLAND AND STREAM DELINEATION SERVICES

Site Visit. The Consultant shall visit the Project site to determine if waters of the United States (US), including wetlands, are present within the Project Delineation Limits as described below. The site visit will be conducted by a qualified wetland scientist and during the recognized growing season unless otherwise approved by the State Environmental Permits Unit (EPU) Project Manager. Delineation methods shall be in accordance with the 1987 US Army Corps of Engineers (USACE) Wetland Delineation Manual; appropriate USACE Regional Supplement (Midwest or Great Plains); and the "NDOT Procedure: Wetland and Water Resource Delineation and Water Conveyance Investigation" (January 2013 DRAFT).

Review Existing Resources/Databases. Consultant will review existing resources prior to field delineation (January 2013 DRAFT). For projects requiring new Right of Way (ROW) beyond existing, into agricultural land, the State shall be contacted for direction. In some cases, at State's direction, delineation of agricultural wetlands may be needed. The consultant shall follow the Natural Resources Conservation Service (NRCS) standard method for agricultural wetlands delineation.

Farm Service Agency (FSA) Wetland Review. In some cases, a review of FSA historic aerial photography with recorded wetland determinations may be required for permitting.

This type of review is not included as part of this Scope of Services. If such a review is appropriate for the permitting of the wetland resources, additional scope and fee, appropriate to the length of the Project, shall be negotiated as a supplement to this Agreement.

Delineation Limits: For purpose of scope and fee development, the Consultant shall assume the following study area for a Full Delineation. Along the project alignment, the study area extends 50 feet beyond LOCs or within ROW whichever is farther from the roadway centerline. At bridge-sized culverts and bridges along the project alignment, the study area extends 150 feet beyond designed LOCs or 150 feet beyond ROW, whichever is farther from the roadway centerline. A full delineation shall be performed for known construction access, staging, stockpiling, or waste disposal areas.

At bridge-sized culverts and bridges along the project alignment, a Full Delineation (including delineation of the Ordinary High Water Mark (OHWM) if present, and adjacent wetlands) shall be provided for the area 150 feet outside of the LOCs or ROW, whichever is farthest from the centerline.

Estimated Delineation Project Size. ~~(See Table on pg. 1 for Project Size)~~

Small Delineation – Can be accomplished with 1 day or less of field activities

~~**Medium Delineation** – Can be accomplished with 1-3 days of field activities~~

~~**Large Delineation** – Can be accomplished with up to 5 days of field activities~~

Plot Boundaries. Consultant shall plot the data on aerial photographs. Data plotted on aerial photographs will include project environmental study area boundaries and project delineation limits, roadway alignment and stationing when available. Data will include wetland boundaries, wetland types, OHWM and location of data collection points, photographs, and wetland acres. Map scale must be drawn to a scale of 1-inch = 200-feet.

Documentation of Findings. Consultant shall prepare documents according to State procedures (January 2013 DRAFT).

Quality Control. **The Consultant shall perform thorough QC checks prior to any official submittal to State.** Reports and associated data sheets shall be scrutinized for accuracy and completeness. The consultant shall submit to State evidence that the wetlands documents have had a quality control review by a Qualified Wetland Scientist or Project Manager (as defined in the firm's current, approved NEPA Certification submittal - Category 101A), other than the document author. The submittal shall accompany both draft and final documents and may be in the form of a transmittal letter with the name, date and signature of the QC reviewer. Inadequate delineation reports and/or geospatial data will be returned to the Consultant for correction.

Electronic Files and Transmittal Letter or Email. Consultant shall submit the delineation materials to State in electronic format as described in Section F. All geospatial data shall be post-processed to correct GPS data inaccuracies, compile all required information in the State geodatabase attribute tables, and checked for completeness, accuracy, and conformance to State data standards (see Section F). Geospatial data shall provide an accurate representation of field observations. If contract includes permitting services, Consultant shall submit the wetland delineation to the LPA design consultant to assess impacts of the road improvements on wetlands and other waters of the U.S. A Waterway Permit Data Sheet Form will then be completed by the LPA's design consultant and the design consultant or LPA, shall forward to Consultant for use in completing the Section 404 permit application. Files shall be accompanied by a transmittal letter or email.

SECTION 404 NATIONWIDE PERMITTING SERVICES

~~Pre-Application Meeting. Consultant shall discuss with the State the necessity of a pre-application meeting. If required, the Consultant shall arrange for, attend and conduct a pre-application meeting with the USACE, State, the LPA and their design consultant, and other interested resource agencies to discuss the wetland delineation and other issues relating to fill and disturbance impacts. Consultant shall prepare and distribute minutes. This activity would be considered in-scope, however Consultant must obtain written approval from the LPA or State when acting on the LPA's behalf, to attend and conduct the meeting. With LPA or State approval, Consultant will be able to use the estimated hours for the meeting attendance and documentation.~~

~~404 Nationwide Permit Application Package. Consultant shall prepare a 1st Draft of the 404 Permit Application Package consisting of the 404 Permit Application and Wetland Delineation Report, and the Waterway Permit Data Sheet from the design consultant (this is needed for NDOT review of whether all culverts and other items are included). The package shall include a complete project description, documentation of impacts to all wetlands and waters of the US, and wetland and stream channel mitigation. Electronic files of the documents will be submitted to State for review and approval. The Consultant shall revise materials per State comments and resubmit a subsequent draft to State for review and approval.~~

~~Jurisdictional Determination (JD) from the USACE. In some cases, at State's direction, the Consultant shall request the USACE to make a Preliminary and/or Final JD decision. The JD request would consist of the Consultant's submittal of either a preliminary wetland determination or a final delineation, along with a cover letter requesting the JD. If the JD request would require additional supporting documentation beyond that specified above, at State's direction additional scope would be defined and a supplement to this Agreement would be negotiated.~~

~~Agency Coordination. Consultant shall correspond with the USACE, whether in writing or personal contact documented in a telephone memo or meeting notes. Consultants are expected to be available to provide additional information, answer questions, respond to public comments, and attend and conduct a meeting, if necessary. This activity would be considered in-scope, however Consultant must obtain written approval~~

~~from the LPA, or State on LPA's behalf, to attend and conduct the meeting. With written approval from LPA, or State on LPA's behalf, Consultant will be able to use the hours for the meeting attendance and documentation. Any correspondence with the USACE, if necessary, shall be submitted to the State in draft form for approval from LPA, or State on LPA's behalf, at least 10 days before final submittal. If needed, Consultant shall coordinate with NDEQ and obtain a letter of 401 Water Quality Certification. If wetlands are non-jurisdictional, Consultant shall obtain a Letter of Opinion from NDEQ, stating compliance with the non-degradation clause of Title 117 Nebraska Surface Water Quality Standards.~~

~~Final Deliverables. Consultant shall prepare and submit to LPA, or State on LPA's behalf, the electronic files and hard copies of all materials. For the final package, the Consultant will submit one bound copy to LPA and electronic files to State on NDOT's ftp site. The Consultant shall submit a hard copy of the 404 permit application package to the USACE and NDEQ (when required) unless otherwise directed by LPA, or State on LPA's behalf.~~

SECTION 404 INDIVIDUAL PERMIT APPLICATION

~~Alternatives Analysis and Sequencing Demonstration. If required, all tasks specified above for Nationwide permits, also apply to Individual Permits with the following additional tasks: Consultant shall prepare an Alternatives Analysis and Sequencing Demonstration for inclusion with the Individual Permit Application. For LPA projects, this will involve incorporating materials provided by the LPA's design consultant. The Consultant will also handle coordination activities with the USACE and other regulatory and resource agencies, as needed.~~

MITIGATION PLAN

~~Mitigation Documentation. If required, the Consultant shall prepare materials for submittal of a conceptual mitigation plan and the associated 12 components of Mitigation documentation for submittal to the USACE. This will involve incorporating materials provided by the roadway or bridge design consultant into a single document to identify mitigation locations, types of wetlands to potentially develop, and buffer areas associated with the mitigation areas. If a Mitigation Plan is needed and not originally contracted, additional scope and fee shall be negotiated as a supplement to this Agreement.~~

PUBLIC INVOLVEMENT

The Consultant shall serve as the agent for the Client, representing the Client in all matters related to public involvement services for this project, with the exception of:

1. Civil Rights Analysis
2. Preparation of a distribution list of stakeholders and contiguous property owners
3. Preparation and dissemination of a press release in regards to public involvement
4. Ordering and posting temporary public meeting highway signs (if needed)
5. If applicable, cover any costs associated with securing or using meeting venue(s)

6. Templates for standard reports, legal notices, handouts, comment response letters, etc. for materials being developed for the Client.

It is anticipated that the project will require the following major tasks:

1. Project Management and QA/QC
2. Public Information Meetings (PIM)
3. Stakeholder Outreach
4. Public Involvement Documentation
5. Final Public Involvement Report

APPLICABLE PUBLICATIONS:

Work shall be done in accordance with the most current version of the following materials. The most current versions of the NDOT materials can be obtained from the NDOT website.

NDOT Public Involvement Procedure

<http://dot.nebraska.gov/media/3964/ndor-public-involvement-procedure.pdf>

CONSULTANT SHALL PROVIDE THE FOLLOWING SERVICES:

Consultant will work with the Client to develop a Public Involvement Plan to address public notification, develop a database of project stakeholders and plan for the PIM, one-on-one meetings, or agency meetings that might be necessary. Consultant will assist the Client in conducting a Public Information Meeting (PIM) including setup, facilitation and teardown. Consultant will:

1. **Identify Venue** and arrange for booking. Provide a meeting venue floor plan including identification of ADA compliant access routes, location of display and presentation materials, and seating arrangement, if applicable;
2. **Prepare a Legal Notice** of meeting to include project location, purpose and need, planned construction, state if additional right of way or easements will be needed to construction the project, additional impacts and construction schedule
3. **Public Notice Publication**, verify local newspaper distribution schedule and critical dates and submittal information related to legal advertisements. Client will place advertising for the public notice in one local (Nebraska Press Association (NPA) certified paper at least 15 days prior to event with two affidavits of publication.
4. **Postal Outreach**, Prepare and distribute invitations to property owners directly adjacent to the project and other project stakeholders from a list provided by the

Client, anticipate 30 invitations sent through the U.S. Postal Service.

5. **4f Informational Poster**, 1 posters showing publicly owned park and recreation areas that are open to the general public, publicly owned wildlife and waterfowl refuges, and public or privately owned historic sites. The term historic sites include prehistoric and historic districts, sites, buildings, structures or objects listed in, or eligible for, the National Register of Historic Places, if applicable;
6. **Prepare aerials** with proposed alternatives and potential impacts;
7. **Posters**, anticipate 1 other informational posters, note types of posters.
8. **Develop Advertising** for public meetings 0 radio adds, City of Grand Island website.
9. **Provide Interpreter (Spanish) and Translate Materials** for public information meeting and for public meeting anticipate 6 documents (if needed).
10. **Prepare a Fact Sheet** suitable for a mailer or handout at the PIM; The Fact Sheet will be similar to the legal notice and include the project location, purpose and need, scope of work, traffic volumes, construction schedule, accommodations of traffic, ROW, potential impacts, additional costs, location map/detour map and appropriate logos (FHWA, NDOT, Clients logo, Preliminary Plan Stamp – NO consultant logos / branding);
11. **Prepare for and Attend the Public Meeting** meet approximately 15 minutes before the actual public meeting for the project team to review key facts/information and to go over any potential issues and to provide suggestions on how to approach questions and/or conflicts.
12. **Prepare a matrix** summarizing general comments and concerns from the public meeting and written comments. The Client will identify those comments which warrant a response. The Consultant will prepare 10 draft responses and revise them as needed based on the Clients review comments. The approved responses will be mailed by U.S. Postal Service. The Consultant is to anticipate 10 responses.
13. **Summary Memo**, the Summary Memo is summary of what done to involve and inform the public of the proposed improvements and to solicit the public's comments and concerns.
14. **Public Involvement Report**, (which will include a summary of the outreach performed [tools used, information about the distribution list, legal notice publication dates, specified comment period date, etc.], a table of summarized comment/responses, and attachments that consist of what the public received in

their project information packet, the comments received, and the final signed responses to the comments. The public involvement report/summary memo and attachments shall be attached to the CE. [Additional deliverables shall be inserted for various levels of public outreach.]

15. **Public Information Packet.** Consultant will assist the Client in the development of a Public Information Packet, as described by NDOT's PI Reports outline. Consultant will:

- Prepare Cover Letter
- Develop Comment Form
- Include the **Legal Notice**
- Include the **Fact Sheet** in the packet

16. **Packet Distribution.** Consultant will coordinate the mailing of the Public Information Packet, using a distribution list provided by the Client. The Client will coordinate hand delivery of packets to the businesses and property owners adjacent to the project.

17. **Meetings**

Meetings anticipated:

- 1 PI Planning meeting
- 1 Project Status meeting(s)
- 1 Comment review meeting(s)
- 6 One-on-one Stakeholder meeting(s)

OTHER. (Additional project specific tasks may be added here).

DIRECT COST ITEMS

- Venue;
- Nametags, Sign-In Sheets, comment forms;
- Informational posters
- Translation
- Postage / distribution

ENVIRONMENTAL RE-EVALUATION, AFTER ROW DESIGN

After the review and approval of the Right of Way design by NDOT's ROW Division the Consultant is to re-evaluate the project to determine whether the scope of the project and environmental documentation remain valid under current policies and regulations. The consultant is to submit a "Re-evaluation Approval Request" for approval by the NDOT, LPA Environmental Coordinator.

REVIEW OF NEPA DOCUMENTS AND COMMITMENTS AFTER ROW ACQUISITION

Modifications to the final design may have been made during the acquisition of the right of way needed to construct this project. The Consultant is to re-evaluate the project to determine whether the scope of the project and environmental documentation remain valid under current policies and regulations. The consultant is to submit a "Re-evaluation Approval Request" for approval by the NDOT, LPA Environmental Coordinator.

GREEN SHEETS

NEPA Coordination (Green Sheets) The Project Sponsor or consultant, on the Project Sponsor's behalf, will submit the Green Sheet to the NDOT NEPA Specialist and Local Projects Section for review. The Green Sheet must be submitted in a word document format with the attachments in a PDF format. And developed using guidance from the NDOT LPA Green Sheet Guidance document

<http://dot.nebraska.gov/media/7789/lpa-greensheet-guidelines.pdf>.

DELIVERABLES:

1. Project Schedule
2. Monthly Invoices and Progress Reports
3. Meeting Minutes
4. Public Information Meeting Documents and Maps
5. Public Involvement Summary Memo of entire public involvement process, public comments and responses to written comments
6. Public Involvement Report
7. Stakeholder letters addressing Comments

PROJECT MANAGEMENT

This task includes activities to initiate and monitor project schedules, workload assignments and internal cost controls throughout the project. Also included are efforts to prepare and process invoices, prepare project correspondence with the LPA or State on LPA's behalf; and maintain project records. Monthly Progress Reports shall be prepared and submitted according to the schedule provided by LPA, which may or may not coincide with Consultant's invoicing schedule.

This task includes preparing a detailed project schedule documenting project milestones and critical paths. The schedule will be updated and submitted to LPA, NDOT, and FHWA on a quarterly basis.

TRAVEL TIME

Site Visits. Consultant will (as needed) conduct up to 1 site visit for wetlands and stream review.

DELIVERABLES (IDENTIFIED IN "SCOPE ITEMS TABLE" AND "CONSULTANT SHALL PROVIDE (SECTION D") ABOVE:

Final Deliverables. Consultant will prepare final deliverables and submit to LPA the electronic files and hard copies of all materials.

(Send all Deliverables to the LPA and State when acting on LPA's behalf, for review prior to submittal to the State and FHWA.

Monthly Invoices with Progress Reports per LPA's scheduled delivery dates

Meeting Minutes (if meetings are held)

The Appropriate Level of CE Document (Level 1, 2, 3) and supporting attachments and file data

NRCS Form CPA-106 for Corridor Type Projects, if needed

Hazardous Materials Review (HMR) report, if needed

Section 4(f) Initial Assessment Form and exception/deminimus documentation (if required)

Section 6(f) Documentation

Wetland and Stream Delineation Report - For Full Delineation, USACE Wetland Determination Data Sheets (Midwest or Great Plains Regional Supplements) and Wetland Delineation Report including Plot(s) showing Wetland Boundaries, Wetland Types, OHWM, Waters of US and Location of Data Collection Points and Photos, and associated geospatial data (See section F data transfer below)

404 Permit Application (Nationwide or Individual) - 404 Permit Application Package consisting of 404 Permit Application, Water Way Permit Data Sheet, and Wetland Delineation Report. For Individual Permits, includes Alternatives Analysis and Sequencing Demonstration (Hard Copy and Electronic Files)

Mitigation Plan (if required)

Section 404 Authorization Letter, and if required, NDEQ 401 Water Quality Certification or Letter of Opinion regarding compliance with Title 117

A current Jurisdictional Determination from the USACE (if required)

Threatened and Endangered Species BE Review Request Letter

Public Involvement Plan

Official Legal Notice

Project Information Packet

Public Involvement Report

Quality Control documentation

PDF copies of all materials and final electronic files (i.e. geodatabases for wetland delineations) as stated above. All supporting information shall be submitted to the State for their Project File.

DATA TRANSFER

It shall be the Consultant's responsibility to obtain the necessary software to translate to and from the specified format for all electronic files supplied by the LPA or State and for all electronic files prepared by the Consultant and supplied to the LPA or State.

For wetland delineations - plot(s) showing wetland boundaries, environmental study area boundaries, wetland types, acres, waters of US and location of data collection points and photo points, will be submitted in GIS Geodatabase (.mdb or .gdb). Coordinate system projections for all submittals shall be: NAD 1983 State Plane Nebraska FIPS 2600 (Feet). The submittal will include a completed attribute table with relevant information, such as wetland name and type, for each feature, as described in State's (2013) procedure.

WATERLINE / SANITARY SEWER RELOCATION / RECONSTRUCTION

The Consultant shall identify existing water mains or sanitary sewers that are in conflict with project improvements. Project improvements are to be designed around existing water mains and sanitary sewer lines; however, in some situations relocating the water main or sanitary line will produce an improved engineering design. Engineering judgment shall be used to determine when to relocate a public utility. This task involves minor reconstruction or relocation involving a public utility due to a roadway improvement and not a project initiated by the utility. Sometimes it is beneficial for municipalities (LPAs) to upgrade existing facilities concurrently with a transportation construction project. Federal aid Highway Transportation funds may not be used for betterments to water or wastewater systems. Only portions of the system directly impacted by improvements to the roadway may receive Federal-aid Highway Transportation funds. The pay items for improvements to the water and waste water systems will need to be separated out from the pay items for which Federal participation is allowed.

1. **Wastewater Reconstruction Plan Sheets.** The design of the wastewater collection system shall comply with the requirements of the Federal and State Clean Water Acts. Design and construction of facilities for the City's the design of the system shall generally follow the Recommended Standards for Sewage Works, a Report of the Committee of the Great Lakes-Upper Mississippi River Board of State Public Health and Environmental Managers (10- State Standards). Details of construction shall conform to the LPA's Standard Specifications for Municipal Construction and Standard Plans if applicable. All plans for construction of wastewater system improvements shall be reviewed and approved by the LPA's Public Works and Utilities Department and the State of Nebraska Department of Environmental Quality prior to construction.

- Horizontal Alignment

- Vertical Alignment
- Detail Drawings
- Utility Conflict Verification and Resolution
- Assume 1 manhole removal and 2 manhole reconstructions

2. **Water Main Reconstruction**, Plan Sheets (SP-). The design of water mains, water distribution systems, valves, backflow preventers, fire hydrants, etc. shall comply with the Federal and State Safe Drinking Water Acts. The design of the system shall generally follow the standards of the American Water Works Association (AWWA) and the Recommended Standards for Water Works, a Report of the Committee of the Great Lakes-Upper Mississippi River Board of State Public Health and Environmental Managers (10-State Standards). The design and construction of the improvement shall comply with LPA's Standard Specifications for Construction and Standard Plans if applicable. Fire flow requirements shall generally follow those in the Fire Suppression Rating Schedule published by the Insurance Services Office. All plans for the construction of water system improvements shall be reviewed and approved by the LPA's Public Works and Utilities Department, the Local Fire Department and if applicable the State of Nebraska Department of Health and Human Services, prior to construction. The Nebraska Safe Drinking Water Act and regulations require plans and specifications for all major construction related to public water systems be prepared by a registered professional engineer and be approved by the Department of Health and Human Services before construction costs are committed by the system owner. The law defines major construction as structural changes that affect the source of supply, treatment processes, or transmission of water to service areas, but it does not include the extension of service mains within an established service area.

- Horizontal Alignment
- Vertical Alignment
- Detail Drawings
- Utility Conflict Verification and Resolution
- Assume 4 potential conflicts requiring water main reconstruction

GEOTECHNICAL EVALUATION

Geotechnical Investigations the Consultant will provide geotechnical investigations of the subgrade on areas to be surfaced roadways, ~~parking lots, trails~~ with borings every 500 feet unless otherwise directed by the engineer and will prepare the pavement determination.

1. Data Research

Based upon current site topography, the site grading is expected to be minor, with cuts and fills sloped at 3H:1V or flatter. Five soil test borings will be completed with the project. The fee associated with these borings assumes the project site is easily accessible for truck-mounted drilling equipment and rights of access can be obtained from adjacent owners. The fees associated with traffic control were not included in this scope of work and it is assumed the City of Grand Island will provide traffic control. These test borings will be in accordance with schedules located in the most recent NDOT Geotechnical Policy and Procedures Manual. The field exploration program consists of the following:

Number of Borings	Boring Depth (feet bgs)	Planned Location
5	10	Each leg of intersection

2. Design Recommendations

The Consultant shall prepare geotechnical recommendations for the primary purpose of developing geotechnical design criteria for use in subgrade preparation and the design of full-depth pavement for the project.

3. Geotechnical Report

The Consultant shall prepare and submit three (3) copies of a geotechnical report to the RC for review which will include laboratory test results, a summary of the subsurface findings, and recommendations in regard to pavement design.

Misc. Items

- 1) **Retaining Wall Design.** Retaining Wall design is not included in this scope of services. The Consultant can provide these services through a Supplemental Agreement if it is determined that retaining walls are needed.
- 2) **Extended Preliminary Engineering Services** the Consultant may provide extended PE services through a supplement to this agreement.
- 3) **Construction Engineering Services.** The Consultant may provide Construction Engineering Services through a separate agreement.
- 4) **Right-of-Way Acquisition.** Right-of-Way Acquisition Services are not included in this agreement. For example Tract Maps needed for condemnation hearings.
- 5) **Performance Checks.** The Consultant will evaluate performance checks as outlined in NCHRP Report 672, including Fastest Paths, Truck Turning Templates, and Intersection Sight Distance.

Schedule

Project Timeline. The Consultant shall prepare a schedule for project milestone dates and the schedule will be updated quarterly or if dates change. The consultant will show old dates with the updated schedule dates. The schedule will be printed on a separate document as well as included in the agreement. The document will include the project name, the project number, project control number consultant firm name, project manager and date.

Notice to Proceed for PE	October 15, 2018
Public Open House	
Alternatives Analysis Completed	
Submit 30% Plans with LOC's and existing ROW	January 2019
Plan in Hand Meeting	March 2019
Start NEPA	March 2019
Public Open House	July 2019
Complete NEPA	January 2020
Start Right-of-Way Design	January 2020
Submit 60% Plans	September 2020
Submit Draft PS&E (90%) plans	November 2020
Prepare ROW Cost Estimate	December 2020
Complete ROW Negotiations and Acquisitions	March 2021
PS&E Turn in	April 2021
Let Project	September 2021

Preliminary and Final Design

Consultant Estimate of Hours

Project Name: Five Points Intersection in Grand Island
 Project Number: HSIP-5409(3)
 Control Number: 42863
 Location (City, County): Grand Island, Hall
 Firm Name: Olsson Associates
 Consultant Project Manager: Shane King
 Phone/Email: 402-458-5011 / sking@olssonassociates.com
 County Project Liaison: Tim Golka
 Phone/Email: 308-385-5444 / timg@grand-island.com
 NDOT RC: Taylor Eman
 Phone/Email: 402-479-3607 / taylor.eman@nebraska.gov
 Date: September 13, 2018

TASKS	PERSONNEL CLASSIFICATIONS**											Total
	PR	PM	SES	PES	ENGS	AEWG	TECH	RLS	PI	ADMIN	SRVY	
For Engineering Services:												
Project Management and Quality Control												
	40	140	40	24								244
1 Project Management		136		20								156
2 Project Description / Purpose and Need		4		4								8
3 Quality Assurance / Quality Control	40		40									80
Meetings												
	41	14	37	16	32	6						146
1 Owner Meetings		25	6	25	16	16						88
2 Plan-In-Hand Meeting (see Preliminary Roadway Design)												
3 LP/NDOT Coordination Meetings		8		4		4						16
4 Meetings with Utilities			8			12						20
5 Public Involvement Planning Meetings (see Public Involvement)												
6 Key Stakeholder Outreach (see Public Involvement)												
7 City Council/County Board		8		8			6					22
8 Open Houses (see Public Involvement)												
9 One-on-One, Small Group Meetings (see Public Involvement)												
Survey												
				1	2		12					159
1 Preliminary Field Survey											36	41
2 Digital Terrain Model				1	2		2				14	16
3 Base Map Preparation							2				14	16
4 Horizontal and Vertical Control							1				10	11
5 Section / Property Corners							1				12	13
6 Existing Utilities							1				12	13
7 Note Reduction / Preliminary Plotting											6	6
8 PIH Staking the Right of Way							2				20	22
9 Negotiations Staking the Right of Way							1				20	21
Preliminary Roadway Design (PIH30%)												
	30	2	140	112	186	138						608
1 Complete Form DR-75		1		4								5
2 Data Collection and Review		2	2	4		4						12
3 Roadway Horizontal Alignment		1		24	12	12	16					65
4 Roadway Vertical Alignment		1		4	12	12	16					45
5 Template Roadway Cross Sections				36	48	48						132
6 Limits of Construction				2	8							8
7 Earthwork				2		8	2					12
8 Roadway Geometric Design		2		12	20	16	24					74
9 Storm Sewer and Drainage				4	4	20	30					58
10 Roadway and Driveway Culverts												
11 Construction and Removal		1		4		8	16					29
12 Utility Coordination/Verification		2			2		2					6
13 Construction Phasing/Detour Route/Temporary Roads		4		12		16						32
14 Erosion Control				2		4	4					10
15 Quantities/Estimates		2		4		12	12					30
16 Typical Sections				2	8		8					18
17 2W/2A Sheets						2	8					10
18 Guardrail												
19 Floodplain Identification												
20 Floodplain Permitting				2								
21 Plan-in Hand Meeting/Report		12		16		24						52
22 Working Day Calculations		2		6								8
23 Pavement Determination (see Geotech)												
Functional Plans (60%)												
	24	16	52	60	84	156						392
1 Functional plans		4		36	18	18	36					112
2 Quantity estimates		2		8			8					18
3 Joints and Grades				4	6		16					26
4 ADA				2		2	8					12
5 Street Lighting							36					88
6 Pavement Marking & Signing		16					56					108
7 Sixty Percent Plan Submittal		2		2			8	16				28
Draft PS&E Submittal (50%) Plan Review												
	14		36		22	40						112
1 Incorporate review comments		4		18		18	24					64
2 Opinion of probable cost		2		2		4						8
3 Draft PS&E package submittal		8		16		4	12					40
Final PS&E Submittal / Blue Line Corrections												
	8		24		2	16						50
1 Final PS&E Submittal		2		4		2						8
2 Address comments or questions		2		6								8
3 Electronic CADD files				2		2	4					8
4 Temporary erosion control				1			4					5
5 Printing				1			4					5
6 SWPPP				4								4
7 QA/QC		2		2								4
8 Letting Task		2		4			2					8
Utilities												
	2	22				108						132
1 Assistance		2		12		40						54
2 Utility Location/Verification				4		40						44
3 Utility Plan Submittals				2		20						22
4 Utility Permits				4		8						12
Right-of-Way Design												
				2		138	60					200
1 Existing Right-of-Way Base							40	12				52
2 Proposed Right-of-Way							54	22				76
3 Right-of-Way Plan Sheets				2			44	24				70
4 Title Research								2				2
5 Permit-to-occupy right-of-way												
Right of Way Cost Estimate												
4 Right of Way Cost Estimate												
Environmental Services and Coordination												
	24	60	148	100		28						350
1 Review of NEPA documents and coordination												

Preliminary and Final Design

Consultant Estimate of Hours

Project Name:	Five Points Intersection in Grand Island
Project Number:	HSIP-5409(3)
Control Number:	42863
Location (City, County):	Grand Island, Hall
Firm Name:	Olsson Associates
Consultant Project Manager:	Shane King
Phone/Email:	402-458-5011 / sking@olssonassociates.com
County Project Liaison:	Tim Golka
Phone/Email:	308-385-5444 / timg@grand-island.com
NDOT RC:	Taylor Eman
Phone/Email:	402-479-3607 / taylor.eman@nebraska.gov
Date:	September 13, 2018

TASKS	PERSONNEL CLASSIFICATIONS**											
	PR	PM	SES	PES	ENGS	AENG	TECH	RLS	PI	ADMN	SRVY	Total
For Engineering Services:												
5 Permits												
5a Floodplain Permit and Army Corps of Engineers 404 Permit												
5b NPDES, SWPPP & NOI				12								12
5c Activity Checklists				1								1
5d NEPA Coordination												
5e Wetland Impact calculations		20	60	120	100		24			4		328
5f Nebraska Department of Environmental Quality				1								1
5g City/County Health Department Permits				1								1
5h FAA Form 7460-1				2								2
				2			1					3
Public Involvement												
1 Identify venue		50	28	38			8		104			228
2 Prepare a legal notice									4			4
3 Public Notice publication		1							2			3
4 Postal Outreach		1							2			3
5 4f Informational Poster									4			4
6 Prepare Aerials									2			2
7 Posters				2			8					10
8 Develop advertising				2					2			4
9 Provide interpreter / translate									4			4
10 Prepare Fact Sheet									4			4
11 Prepare for and attend the Public Meeting		1		4					4			9
12 Prepare a matrix		12	6	8					12			38
13 Summary Memo		2	6	4					6			18
14 Public Involvement Report				2					6			8
15 Public Information Packet		1		2					8			11
16 Packet Distribution				2					16			18
17 Meetings									4			4
		32	16	12					24			84
Water Line / Sanitary Sewer Relocation/Reconstruction												
1 Water Line			16			34						100
2 Sanitary Sewer			12			60						72
			4			24						28
Geotechnical Evaluation												
1 Data Research			6			39			42			87
2 Design Recommendations			1			5			8			14
3 Geotechnical Report			2			10			24			36
			3			24			10			37
Misc. Items												
1-2-3-4				8	4							12
5 Performance Checks - Fastest Paths, Truck Turning Templates and Intersection Sight Distance.				8	4							12
Total Hours												
Total Days (8 hrs)												
	40	333	204	510	294	557	531	72	104	46	144	2,835
	5.0	41.6	25.5	63.8	36.8	69.6	66.4	9.0	13.0	5.8	18.0	354.4

CLASSIFICATIONS*:

PR = Principal
PM = Project Manager
SES = Senior Engineer / Scientist
PES = Project Engineer / Scientist

ENGS = Engineer / Scientist
AENG = Assistant Engineer
TECH = Technician
RLS = Registered Land Surveyor

PI = PI Coordinator
ADMN = Administrative
SRVY = Surveyor

* For Project Manager, use one of the technical classifications

** For User-Defined Classifications, you will need to edit the Classifications Legend located above. To enter a new classification, replace "UD1" with its abbreviation (ex. GRA) and replace "User Defined 1" with the corresponding

Preliminary and Final Design
Labor Rates

Project Name:	Five Points Intersection in Grand Island
Project Number:	HSIP-5409(3)
Control Number:	42863
Location (City, County):	Grand Island, Hall
Firm Name:	Olsson Associates
Consultant Project Manager:	Shane King
Phone/Email:	402-458-5011 / sking@olssonassociates.com
County Project Liaison:	Tim Golka
Phone/Email:	308-385-5444 / timg@grand-island.com
NDOT RC:	Taylor Eman
Phone/Email:	402-479-3607 / taylor.eman@nebraska.gov
Date:	9/13/2018

Labor Costs:		Hours	Blended Rate	Amount
Code	Classification Title			
PR	Principal	40	\$75.96	\$3,038.40
PM	Project Manager	333	\$50.48	\$16,809.84
SES	Senior Engineer / Scientist	204	\$58.97	\$12,029.88
ENGS	Engineer / Scientist	510	\$55.78	\$28,447.80
SENG	Senior Engineer	294	\$36.84	\$10,830.96
AENG	Assistant Engineer	557	\$28.65	\$15,958.05
TECH	Technician	531	\$26.46	\$14,050.26
PES	Project Engineer / Scientist	72	\$44.83	\$3,227.76
PI	PI Coordinator	104	\$26.44	\$2,749.76
ADMN	Administrative	46	\$17.08	\$785.68
SRVY	Surveyor	144	\$28.64	\$4,124.16
TOTALS		3129		\$112,052.55

Overhead Rate:	176.53%	Fixed Fee:	12.95%
FCCM (if applicable)			
CLASSIFICATIONS:			
PR = Principal	ENGS = Engineer / Scientist	PI = PI Coordinator	
PM = Project Manager	AENG = Assistant Engineer	ADMN = Administrative	
SES = Senior Engineer / Scientist	TECH = Technician	SRVY = Surveyor	
PES = Project Engineer / Scientist	RLS = Registered Land Surveyor		

Blended Rates Worksheet

STAFFING PLAN			
EMPLOYEE NAME	CLASSIFICATION ¹	SALARY RATE	% ASSIGNED ²
Principal			
Tom Leikam	Senior Project Manager	\$75.96	100.00%
		Blended Rate:	\$75.96
Project Manager			
Shane King	Technical Leader	\$50.48	100.00%
		Blended Rate:	\$50.48
Senior Engineer / Scientist			
Brian Osborne	Team Leader	\$55.77	25.00%
Matt Rief	Team Leader	\$60.58	60.00%
Frank Egelhoff	Senior Engineer	\$63.94	10.00%
Thomas Kettler	Team Leader	\$45.67	5.00%
		Blended Rate:	\$58.97
Project Engineer / Scientist			
Jason Byler	Technical Leader	\$48.08	10.00%
Tony Baumert	Technical Leader	\$55.00	30.00%
Jon Olsen	Technical Leader	\$57.45	60.00%
		Blended Rate:	\$55.78
Engineer / Scientist			
Mike Golka	Project Engineer	\$36.30	15.00%
Brian Jelinek	Project Engineer	\$39.42	25.00%
Amy Cherko	Project Scientist	\$33.65	25.00%
Jason Martins	Design Manager	\$36.54	25.00%
Becky Zoubek	Design Technical Manager	\$39.90	10.00%
		Blended Rate:	\$36.84
Assistant Engineer			
John Diediker	Associate Engineer	\$29.69	25.00%
Nick Menefee	Assistant Engineer	\$28.61	10.00%
Reese Meyer	Assistant Engineer	\$26.32	40.00%
Zach Loomis	Design Associate	\$31.35	25.00%
		Blended Rate:	\$28.65
Technician			
Ed Klein	Senior Technician	\$23.25	5.00%
Tony Reid	Senior Technician	\$23.50	25.00%
Mark Lambertus	Senior Technician	\$29.00	35.00%
Jeremy Vesely	Senior Technician	\$26.50	35.00%
		Blended Rate:	\$26.46
Registered Land Surveyor			
Tom Bruggeman	Team Leader	\$45.43	50.00%
Jai Andrist	Team Leader	\$44.23	50.00%
		Blended Rate:	\$44.83
PI Coordinator			
Stacey Roach	Economic Development Coordinator	\$26.44	100.00%
		Blended Rate:	\$26.44
Administrative			
Lucinda Bugbee	Senior Team Coordinator	\$22.25	10.00%
Nathan Lau	Lab Technician	\$16.50	45.00%
Dillon Sandman	Lab Technician	\$16.50	45.00%
		Blended Rate:	\$17.08
Surveyor			
Jesse Hurt	Senior Surveyor	\$33.65	45.00%
Jaden Hurt	Associate Surveyor	\$24.00	40.00%
Stacey Fryc	Surveyor	\$26.00	15.00%
		Blended Rate:	\$28.64

¹ Input actual employee classification as designated by firm

Preliminary and Final Design

Direct Expenses

Project Name:	Five Points Intersection in Grand Island
Project Number:	HSIP-5409(3)
Control Number:	42863
Location (City, County):	Grand Island, Hall
Firm Name:	Olsson Associates
Consultant Project Manager:	Shane King
Phone/Email:	402-458-5011 / sking@olssonassociates.com
County Project Liaison:	Tim Golka
Phone/Email:	308-385-5444 / timg@grand-island.com
NDOR RC:	Taylor Eman
Phone/Email:	402-479-3607 / taylor.eman@nebraska.gov
Date:	9/13/2018

Subconsultants:			
Title research	Quantity	Unit Cost	Amount
Translation	1	\$1,500.00	\$1,500.00
	1	\$600.00	\$600.00
Subtotal			\$2,100.00

Printing and Reproduction:			
Half Size Plots (each)	Quantity	Unit Cost	Amount
Full Size Plots (each)	7500	\$0.30	\$2,250.00
Color Plots (Sq. Ft.)	500	\$1.20	\$600.00
PI Materials / Postage / Misc	150	\$2.90	\$435.00
	1	\$1,014.35	\$1,014.35
Subtotal			\$4,299.35

Mileage/Travel:			
Mileage	Quantity	Unit Cost	Amount
	4000	\$0.535	\$2,140.00
Subtotal			\$2,140.00

Lodging/Meals:			
Breakfast	Quantity	Unit Cost	Amount
Dinner	10	\$11.00	\$110.00
	10	\$23.00	\$230.00
Subtotal			\$340.00

Other Miscellaneous Costs:			
Misc. Survey costs	Quantity	Unit Cost	Amount
Drilling Mobilization	1	\$250.000	\$250.00
Drilling Lineal Footage	1	\$1,400.000	\$1,400.00
	50	\$26.000	\$1,300.00
Subtotal			\$2,950.00
TOTAL DIRECT EXPENSES			\$11,489.35

Per Diem Rates: <http://www.qsa.gov/portal/category/104711>
Mileage Rates: <http://www.qsa.gov/portal/category/104715>

2011 Standard Rates*	
Type	Rate
Black and White Copies	Actual reasonable cost
Color Copies	Actual reasonable cost
Miscellaneous Postage, Mailing, Deliveries Etc.	Actual reasonable cost
Equipment	Actual reasonable cost
Privately Owned Vehicle	Actual reimbursement amount to employee, not to exceed rates for company vehicles outlined above
Automobile Rental	Actual reasonable cost
Air fare	Actual reasonable cost, giving the State all discounts
Statewide Omaha/Douglas County	
Breakfast	
Lunch	
Dinner	
Incidentals	
Totals	

* A full list of rates can be found at the following website: www.qsa.gov/perdiem

Preliminary and Final Design

Project Cost

Project Name:	Five Points Intersection in Grand Island
Project Number:	HSIP-5409(3)
Control Number:	42863
Location (City, County):	Grand Island, Hall
Firm Name:	Olsson Associates
Consultant Project Manager:	Shane King
Phone/Email:	402-458-5011 / sking@olssonassociates.com
LPA Responsible Charge:	Tim Golka
Phone/Email:	308-385-5444 / timg@grand-island.com
NDOR Project Coordinator:	Taylor Eman
Phone/Email:	402-479-3607 / taylor.eman@nebraska.gov
Date:	September 13, 2018

Direct Labor Costs:			
Personnel Classification	Hours	Rate	Amount
Principal	40	\$75.96	\$3,038.40
Project Manager	333	\$50.48	\$16,809.84
Senior Engineer / Scientist	204	\$58.97	\$12,029.88
Engineer / Scientist	510	\$55.78	\$28,447.80
Senior Engineer	294	\$36.84	\$10,830.96
Assistant Engineer	557	\$28.65	\$15,958.05
Technician	531	\$26.46	\$14,050.26
Project Engineer / Scientist	72	\$44.83	\$3,227.76
PI Coordinator	104	\$26.44	\$2,749.76
Administrative	46	\$17.08	\$785.68
Surveyor	144	\$28.64	\$4,124.16
TOTALS	2835		\$112,052.55

Direct Expenses:		Amount
Subconsultants		\$2,100.00
Printing and Reproduction Costs		\$4,299.35
Mileage/Travel		\$2,140.00
Lodging/ Meals		\$340.00
Other Miscellaneous Costs		\$340.00
TOTALS		\$2,950.00
		\$12,169.35

Total Project Costs:		Amount
Direct Labor Costs		\$112,052.55
Overhead @ 176.53%		\$197,806.37
Total Labor Costs		\$309,858.92
Fixed Fee @ 12.95%		\$40,126.73
Facility Capital Cost of Money (FCCM) @ (direct labor cost x FCCM%)		
Direct Expenses		\$11,489.35
PROJECT COST		\$361,475.00

1. PAYMENT METHOD

Payments under this Agreement will be made based on a Cost Plus Fixed Fee for Profit (CPFF) payment method. Consultant will be paid for acceptable actual services performed plus a fixed fee for profit in accordance with Section 4. PAYMENTS.

2. TOTAL AGREEMENT AMOUNTS

For completion of the services as outlined in this Agreement, Consultant will be paid no more than the following amounts:

- \$ 112,052.55 for actual direct labor costs
- \$ 209,295.72 for indirect labor costs and direct expenses
- \$ 40,126.73 for a fixed fee for profit
- \$ 361,475.00 total agreement amount. Consultant's total compensation shall not exceed this maximum amount without prior written approval of State.

3. FIXED FEE FOR PROFIT

The fixed fee for profit is computed upon the negotiated direct labor and overhead costs. The fixed fee for profit is not allowable upon direct non-labor costs. For each invoicing period, the fixed fee for profit is calculated by multiplying the sum of the actual direct labor and overhead costs invoiced by the negotiated fee for profit rate of 12.95%. Upon completion of the services outlined in this Agreement, the Consultant may invoice the State any remaining fixed fee for profit not previously invoiced. The total fixed fee for profit eligible to be paid to consultant does not vary with actual costs, but may be increased or decreased as a result of scope changes in the agreement. If all of the services under this agreement are not completed for any reason, the fixed fee for profit may be adjusted based on the State's determination of the actual percentage of services completed.

4. ALLOWABLE COSTS

Payment for Services under this Agreement will be made based on the payment method identified in Section 1. PAYMENT METHOD, up to the maximum amount identified in Section 2. TOTAL AGREEMENT AMOUNT. Allowable costs include direct labor costs, Subconsultant costs and other direct non-labor costs, and overhead costs.

A. Direct Labor Costs are the earnings that individuals receive for the time they are working directly on the project.

- 1) Hourly Rates: For hourly employees, the hourly earnings rate shall be the employee's straight time hourly rate for the pay period in which the work was performed. If overtime hours are worked on this project, the premium pay portion of those hours is not allowable as a direct labor cost.

For salaried employees, the hourly earnings rate shall be their actual hourly rate as recorded in the Consultant's accounting books of record.

- 2) Time reports: The hours charged to the project must be supported by adequate time distribution records that clearly indicate the distribution of hours to all projects/activities on a daily basis for the entire pay period. Time reports must provide a clear identifying link to the projects: such as project description, project number, pertinent work phase, dates of service, and the individual's name and position. There must be an adequate system of internal controls in place to ensure that time charges are correct and have the appropriate supervisory approval.

B. Indirect Labor Costs (Overhead) include indirect labor costs, indirect non-labor costs, and direct labor additives that are allowable in accordance with Federal Acquisition Regulations [48 CFR 31 \(Contract Cost Principles and Procedures\)](#). Overhead costs are to be allocated to the project as a percentage of direct labor costs. The Consultant will be allowed to charge the project using its actual allowable overhead rate. Overhead rate increases that occur during the project period will not be cause for an increase in the maximum amount established in this agreement.

C. Direct Non-Labor Costs (Direct Expenses): These costs include all necessary, actual, properly documented, and allowable costs related to the Consultant completing the Services. All costs must be supported by detailed receipts or invoices. Direct non-labor costs include, but are not limited to, the following:

Transportation, mileage, lodging, and meals, subject to limitations specified below; Communication costs; Reproduction and printing costs; Special equipment and materials required for the project and approved by LPA, or State on LPA's behalf; Special insurance premiums if required solely for this Agreement; Subconsultant costs (includes Subconsultant's wages and direct non-labor costs); Such other allowable items as approved by LPA, or State on LPA's behalf.

- 1) A non-labor cost charged as a direct cost cannot be included in Consultant's overhead rate. If for reasons of practicality, Consultant is treating a direct non-labor cost category, in its entirety, as an overhead cost, then costs from that category are not eligible to be billed to this project as a direct expense.
- 2) Subconsultant costs may not exceed the costs shown on the attached Consultant's Fee Proposal for each Subconsultant unless agreed upon by the Consultant and LPA, or State on LPA's behalf. Subconsultant costs (labor and direct non-labor costs) must have the same level of documentation as required for Consultant.
- 3) The following direct non-labor costs will be reimbursed at actual costs, not to exceed the rates as shown below.
 - a) **TRANSPORTATION** – Automobile rentals, air fares, and taxi/shuttle transportation will be actual reasonable cost and if discounts are applicable, the Consultant shall give LPA the benefit of all discounts. Receipts must be submitted with invoices.
 - b) **MILEAGE** – The reimbursement for mileage associated with the use of company owned vehicles will be the prevailing standard rate as established by the Internal Revenue Service (IRS) through its Revenue Procedures. Reimbursement for mileage associated with the use of a privately owned vehicle (POV), is limited to the lesser of:
 - (i) The mileage rate that the Consultant reimbursed to the person who submitted the claim for POV use, or
 - (ii) The prevailing standard rate as established by the IRS.
 - c) **LODGING** – The reimbursement for lodging rates will be limited to the prevailing standard rate as indicated on the U.S. General Services Administration's (GSA) website at <http://www.gsa.gov/portal/category/100120>. Consultant shall give State the benefit of all lodging discounts. Receipts must be submitted with invoices.
 - d) **MEALS** – The reimbursement for meals will be limited to the prevailing standard rate as indicated on the GSA website noted above. Expenses for alcoholic

beverages are not allowed. Consultant shall give State the benefit of all meal discounts.

- (i) For Consultant and its employees to be eligible for the meal allowance, the following criteria must be met.

Breakfast:

- Employee is required to depart at or before 6:30 a.m., or
- Employee is on overnight travel.

Lunch:

- Employee must be on overnight travel. No reimbursement for same day travel.
- Employee is required to leave for overnight travel at or before 11:00 a.m., or
- Employee returns from overnight travel at or after 2:00 p.m.

Dinner:

- Employee leaves for overnight travel at or before 5:00 p.m. or
- Employee returns from overnight travel or work location at or after 7:00 p.m., or
- Employee is on overnight travel.

- (ii) Meals are not eligible for reimbursement if the employee eats within 20 miles of the headquarters town of the employee.
- (iii) Meal receipts must itemize all food and drink purchased. A credit card receipt alone is not sufficient documentation.
- (iv) Reimbursement for meal gratuities/tips will be whatever is usual, or customary, but will not exceed 20 percent.

5. INVOICES AND PROGRESS REPORTS

- A. Documents submitted to State, including invoices, supporting documentation, and other information are subject to disclosure by State under the Nebraska Public Records Act found at Neb.Rev.Stat. § 84-712 et.seq. Accordingly, Consultant shall redact or not submit to State information that is confidential, including, but not limited to, financial information such as social security numbers, tax ID numbers, or bank account numbers. Consultant understands that State does not have sufficient resources to review and redact confidential information submitted by Consultant. If such confidential information is submitted, Consultant shall have no right of action of any kind against State for the disclosure of such information.
- B. Consultant shall promptly submit invoices to LPA, or State on *LPA's behalf*, no more frequently than monthly. Invoices must present actual direct labor, Subconsultant costs and other direct non-labor costs, and actual overhead, as well as the Fee for Profit based upon the actual direct labor and overhead costs billed for that period. State law may prohibit the payment of an invoice that includes charges for services rendered more than two (2) years prior to State's receipt of the invoice.
- C. Consultant must submit an invoice for all services rendered even if the total agreement amount will be, or has been, exceeded.
- D. Content of Invoice Package
- 1) Consultant's Invoice:
- i. The first page of an invoice must identify the company name and address, invoice number, invoice date, invoicing period (beginning date and ending date of services), and agreement or task order number.

- ii. The invoice or accompanying supporting documentation must identify each employee by name and classification, the hours worked, and the actual labor cost for each employee.
 - iii. Direct non-labor expenses:
 - 1. Direct non-labor expenses, other than travel-related expenses, must be itemized and provide a complete description of each item billed with supporting receipts or invoices.
 - 2. Travel-related expenses must be summarized and submitted on NDOT Form 163 (see below). Supporting receipts must be submitted with NDOT Form 163 when invoicing for these expenses.
 - 3. All supporting receipts must be kept as required in Section 17
CONSULTANT COST RECORD RETENTION.
 - iv. Subconsultant Services: Consultant shall require subconsultants to provide the same supporting documentation, invoices, and receipts as Consultant is required to retain and submit.
- 2) Cost Breakdown Form: Each invoice package must include a completed "Cost Breakdown Form" (NDOT Form 162). This form is available on State's website at <http://dot.nebraska.gov/business-center/consultant/>.
- 3) Travel Log: If invoice contains any travel-related expenses, a completed "Invoice Travel Log" (NDOT Form 163) must be submitted with the invoice package. This form is also available on State's website. Upon approval by State, Consultant may use a substitute Invoice Travel Log provided it documents substantially the same information as NDOT Form 163. The Travel Log must document the employee name, locations traveled, date/time of departure to the project, date/time of return to the headquarters town, and expenses for transportation, meals, and lodging.
- 4) Progress Report: A Progress Report must accompany the invoice package and document Consultant's work during the service period. If an invoice is not submitted monthly, a Progress Report must be submitted at least quarterly, either with an invoice or, if Consultant does not submit an invoice, via email to LPA and State's Project Coordinator. Progress Report must include, but is not limited to, the following:
- i. A description of the Services completed for the service period to substantiate the invoiced amount.
 - ii. A description of the Services anticipated for the next service period
 - iii. Listing of information Consultant determines is needed from LPA, or State on *LPA's behalf*.
 - iv. Percent of Services completed to date
- E. All invoice packages (invoice, progress report, required NDOT Forms, supporting material) must be submitted electronically through State's invoice workflow system OnBase, for review, approval, and payment. The user guide for the OnBase system along with training videos can be found at <http://dot.nebraska.gov/business-center/consultant/onbase-help/>.

6. PROGRESS PAYMENTS

State, on LPA's behalf will pay Consultant upon receipt of Consultant's invoice and determination by LPA and State that the invoice and progress report adequately substantiate the Services provided, and the Services were completed in accordance with this Agreement. Payments will not be made if the progress report does not provide adequate substantiation for the Services or LPA or State determines that the Services have not been properly completed. State, on LPA's behalf, will make a reasonable effort to pay Consultant within 30 days of receipt of Consultant's invoices.

7. PROMPT PAYMENT CLAUSE

Consultant shall include a "Prompt Payment Clause" as a part of every subcontract (including second tier subcontracts) for work. The "Prompt Payment Clause" will require payment to all subconsultants for all work completed, within twenty (20) calendar days of receipt of progress payments from the State for said work. The "Prompt Payment Clause" will also stipulate the return of retainage within thirty (30) calendar days after the subconsultants achieves the specified work as verified by payment from the State. Failure by Consultant to carry out the requirements of the "Prompt Payment Clause" and/or timely return of any retainage, without just cause, is a material breach of this Agreement, which may result in the State withholding payment from Consultant until all delinquent payments have been made (no interest will be paid for the period that payment was withheld), termination of this Agreement, or other such remedy as the State deems appropriate.

Consultant may withhold payment only for just cause and must notify the State, in writing, of its intent to withhold payment prior to actually withholding payment. Consultant shall not withhold, delay or postpone payment without first receiving written approval from the State.

8. SUSPENSION OF PAYMENTS

When work is suspended on this project, payments shall be suspended until the work resumes or this Agreement is terminated. Consultant shall not be compensated for any work completed or costs incurred on the project after the date of suspension. When work is suspended for convenience, Consultant shall be compensated for work completed or costs incurred prior to the date of suspension. When work is suspended for cause, payments shall be withheld until all remedial action is completed by Consultant to the satisfaction of LPA and State, at Consultant's sole cost.

9. FINAL INVOICE AND PAYMENT

Upon completion of the Services under this Agreement, Consultant shall submit their final invoice. Consultant shall review the overhead costs billed to-date to determine if the overhead rates used on the progress billings match the actual allowable rate applicable to the time period that the labor was incurred. If cost adjustments are necessary, it should be reflected on the final invoice. If a particular year's actual overhead has not yet been computed or approved by State, the most recent year's accepted rate should be applied. Upon receipt of final invoice and determination by LPA and State that the invoice and Progress Report adequately substantiate the Services provided and the Services were completed in accordance with this Agreement, State, on LPA's behalf, will pay Consultant. The acceptance by Consultant of the final payment will constitute and operate as a release to LPA and State for all claims and liability to Consultant, its representatives, and assigns,

for any and all things done, furnished, or relating to the Services rendered by or in connection with this Agreement or any part thereof.

10. AGREEMENT CLOSE-OUT

Upon submitting its final invoice, the Consultant must complete and submit to the LPA, or State on LPA's behalf, a Notification of Completion Form (NDOT Form 39). The form is available on State's website at <http://dot.nebraska.gov/business-center/consultant/> and must be submitted electronically in accordance with the instructions on the form.

11. INELIGIBLE COSTS

LPA is not responsible for costs incurred prior to the Notice to Proceed date or after the completion deadline date set out in the NOTICE TO PROCEED AND COMPLETION SCHEDULE section of this Agreement or as approved in writing by LPA, or State on LPA's behalf.

12. FEDERAL COST PRINCIPLES

LPA will not make payments directly to Consultant for services performed under this agreement. Instead, the State will serve as a paying agent for LPA, and will pay Consultant directly for properly submitted and approved invoices using both LPA and Federal funds based on the applicable project federal cost participation percentage. The following process shall apply whenever the LPA, the State or the FHWA determines that certain costs, previously paid to Consultant, should not have been paid with federal funds by the State to Consultant. Consultant shall immediately repay the State the federal share of the previously paid amount and may invoice LPA for the costs repaid to the State. LPA shall promptly pay the full amount of the invoice from its own funds unless LPA, in good faith, disputes whether the Consultant is entitled to the payment under the agreement or the amount of the invoice. In the event of a dispute between LPA and Consultant, the dispute resolution process outlined shall be used by the parties. For performance of Services as specified in this Agreement, State, on LPA's behalf, will pay Consultant subject to the terms of this Agreement and all requirements and limitations of the federal cost principles contained in the Federal Acquisition Regulations [48 CFR 31 \(Contract Cost Principles and Procedures\)](#).

13. SUBCONSULTANT OVER-RUNS AND UNDER-RUNS

Consultant shall require any subconsultant to notify Consultant if at any time the subconsultant determines that its costs will exceed its negotiated fee estimate (over-run). Consultant shall not allow any subconsultant costs to over-run without prior written approval of the LPA, or State on LPA's behalf. Consultant understands that the amount of any subconsultant cost under-run will be subtracted from the total compensation to be paid to Consultant under this Agreement, unless prior written approval is obtained from LPA, or State on LPA's behalf, and, when applicable, Federal Highway Administration (FHWA).

14. OUT-OF-SCOPE SERVICES AND CONSULTANT WORK ORDERS

LPA, or State on LPA's behalf, may request that Consultant provide services that, in the opinion of Consultant, are in addition to or different from those set out in the Scope of Services. When LPA, or State on LPA's behalf, decides that these out-of-scope services may require an adjustment in costs, Consultant shall provide in writing:

A. A description of the out-of-scope services,

- B. An explanation of why Consultant believes that the out-of-scope services are not within the original Scope of Services and additional work effort is required,
- C. An estimate of the cost to complete the out-of-scope services. Consultant must receive written approval from LPA, or State on LPA's behalf, before proceeding with the out-of-scope services. Before written approval will be given by LPA, or State on LPA's behalf, LPA or State must determine that the situation meets the following criteria:
 - 1) The out-of-scope services are not within the original Scope of Services and additional work effort is required;
 - 2) The out-of-scope services are within the basic scope of services under which Consultant was selected and Agreement entered into; and
 - 3) It is in the best interest of State that the out-of-scope services be performed under this Agreement.

Once the need for a modification to the Agreement has been established, the State, on LPA's behalf, will prepare a supplemental agreement. If the additional work requires the Consultant to incur costs prior to execution of a supplemental agreement, the LPA, or State on LPA's behalf, may issue a written notice to proceed prior to completing the supplemental agreement (for non-Federal aid projects) or shall use the process set out below (for Federal aid PE projects):

The Consultant Work Order (CWO) – NDOT Form 251 shall be used to describe and provide necessary justification for the additional scope of services, effort, the deliverables, modification of schedule, and to document the cost of additional services. The CWO form is available on State's website at <http://dot.nebraska.gov/business-center/consultant/>. The CWO must be executed to provide authorization for the additional work and to specify when that work may begin. The agreement will be supplemented after one or more CWOs have been authorized and approved for funding.

15. TERMINATION COST ADJUSTMENT

If the Agreement is terminated prior to project completion, LPA and State will compare the percentage of work actually completed by Consultant, to the total amount of work contemplated by this Agreement. This comparison will result in a payment by the State, on behalf of LPA, for any underpayment, no adjustment, or a billing to Consultant for overpayment. The State's final audit may result in an additional cost adjustment.

16. AUDIT AND FINAL COST ADJUSTMENT

Upon LPA's and State's determination that Consultant has completed Services under this Agreement, State, or its authorized representative, may complete an audit review of the payments made under this Agreement. The Parties understand that the audit may require an adjustment of the payments made under this Agreement. Consultant agrees to reimburse State for any overpayments identified in the audit review, and State agrees to pay Consultant for any identified underpayments.

17. CONSULTANT COST RECORD RETENTION

Consultant shall maintain all books, documents, papers, detailed receipts, accounting records, and other evidence pertaining to costs incurred and shall make such material available for examination at its office at all reasonable times during the agreement period

and for three (3) years from the date of final cost settlement by FHWA and project closeout by the State. Such materials must be available for inspection by the State, FHWA, or any authorized representative of the federal government, and when requested, Consultant shall furnish copies.

RESOLUTION 2018-291

WHEREAS, the City of Grand Island (City) and State entered into an LPA Program Agreement for State to assist City in the development and construction of an LPA Federal-aid transportation project; and

WHEREAS, City wishes to hire a consultant for the design or construction of LPA's project; and

WHEREAS, the LPA Program Agreement specifies that consultants be selected using the State's consultant selection process; and

WHEREAS, the consultant selection process was used to selection Olsson Associates, Inc. of Lincoln, Nebraska to provide engineering services for LPA's Federal-aid project; and

WHEREAS, this resolution is to authorize the Mayor to sign an agreement between City and Olsson Associates, Inc..

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the Mayor, Jeremy Jensen, is hereby authorized to sign the attached LPA Consultant Professional Service Agreement between City of Grand Island, Nebraska and Olsson Associates, Inc.

NDOR Project No.: HSIP-5409(3)

NDOR Control No.: 42863

NDOR Project Name: Five Point Intersection

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Adopted by the City Council of the City of Grand Island, Nebraska, October 9, 2018.

The City Council of the City of Grand Island

Vaughn Minton
Mark Stelk
Linna Dee Donaldson
Mike Paulick
Michelle Fitzke

Jeremy Jones
Roger Steele
Julie Hehnke
Mitch Nickerson
Chuck Haase

Council Member _____ moved the adoption of said resolution;
Council Member _____ seconded the motion

Roll Call: ____ Yes ____ No ____ Abstained ____ Absent

Resolution adopted, signed and billed as adopted

Jeremy L. Jensen, Mayor

Attest:

RaNae Edwards, City Clerk

Approved as to Form	☐ _____
October 8, 2018	☐ City Attorney