

REVIEWED

LEGAL COUNSEL

For Recording Stamp Only

**DOCUMENT NO. 2024-436
AMENDING DESCHUTES COUNTY CONTRACT NO. 2023-068 (AMENDMENT NO. 1)
ENGINEERING SERVICES FOR NW LOWER BRIDGE WAY/NW 43RD ST INTERSECTION IMPROVEMENT**

THAT CERTAIN AGREEMENT, Deschutes County Contract No. 2023-068 dated May 25, 2023, by and between DESCHUTES COUNTY, a political subdivision of the State of Oregon (“County”) and HARPER HOUF PETERSON RIGHELLIS INC. (“Contractor”), is amended, effective upon signing of all parties, as set forth below. Except as provided herein, all other provisions of the contract remain the same and in full force.

County’s performance hereunder is conditioned upon Contractor’s compliance with provisions of ORS 279B.220, 279B.225, 279B.230, and 279B.235, which are hereby incorporated by reference. In addition Standard Contract Provisions contained in Deschutes County Code Section 2.37.150 are hereby incorporated by reference. Contractor certifies that the representations, warranties and certifications contained in the original Contract are true and correct as of the effective date of this Amendment and with the same effect as though made at the time of this Amendment.

The above listed contract is amended as follows:

Contractor shall perform the following work:

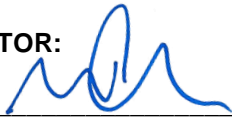
In addition to the services identified in the Original Contract, Contractor shall perform engineering and related services for the NW Lower Bridge Way/NW 43rd Street Intersection Improvement project as described in the Statement of Work attached hereto as Exhibit “A”

Consideration and Maximum Compensation

In addition to the consideration identified in the Original Contract, County shall pay the Contractor on a fee-for-service basis at the rates given in the Breakdown of Costs attached hereto as Exhibit “B”. The additional maximum compensation under this Amendment No. 1 is \$457,430.30. The total maximum compensation under the Contract, including this Amendment No. 1, is \$627,240.30.

(SIGNATURE PAGE TO FOLLOW)

CONTRACTOR:



Authorized Signature

Nicolas Speros

Name (Please Print)

Dated this 16th of May, 2024.

Associate Principal

Title

COUNTY:

Dated this _____ of _____, 20__

BOARD OF COUNTY COMMISSIONERS

PATTI ADAIR, CHAIR

ANTHONY DeBONE, VICE CHAIR

ATTEST:

Recording Secretary

PHIL CHANG, COMMISSIONER

NW Lower Bridge Way / NW 43rd Street: Intersection Improvement Deschutes County, Oregon

Statement of Work and Summary of Estimate for Engineering Consultant Services

Phase II Amendment

May 16, 2024

Project Description

The Phase I scope of work focused primarily on the alternatives analysis and determined that the preferred intersection improvement concept would be a single lane roundabout.

The Phase II scope of work will advance the roundabout concept through location selection, final design, and construction.

Summary of Tasks

- Phase II – Engineering design services, Right-of-Way acquisition support, Surveying services, and Construction Support services

Consultant shall provide the following engineering and related services for this Project:

Phase II

- Project Management
- Graphical Support for County Meetings and Outreach
- Concept Development / Siting of Roundabout
- Survey and Base Mapping
- BLM ROW Acquisition Support
- Utility Coordination (PGE, PP&L and BPA).
- Illumination Design
- Preliminary and Final Engineering
- Prepare Project Plans and Special Provisions to Agency Specifications
- Prepare Construction Cost Estimates and Schedules
- Bid Support
- Post Construction Survey and Monumentation
- Construction Support

County will:

- Review Consultant's progress reports and process invoices
- Participate in Project meetings and open house/public outreach
- Review and sign Project permits to permitting agencies and tribes
- Provide existing relevant Project data
- Perform internal County communication and Project coordination
- Provide access to County ROW

- Review and provide comments on concept plans and PS&E submittals
- Prepare Project bidding documents
- Advertise the Project for bids
- Distribute bid documents to bidders and maintain plan holders list
- Evaluate bids and award construction contract

STANDARDS AND GENERAL REQUIREMENTS

The following standards and general requirements shall apply to this Contract:

1. Software Requirements

Consultant shall perform services using AutoCAD design software, and provide deliverables in a form suitable to these programs. Special provisions must be submitted in Microsoft Office compatible format.

2. Design Criteria and Project Assumptions/Conditions

County will designate the basic premises and criteria for the design of County roads using County and AASHTO standards. The design must utilize the most recent State and County design standards and standard drawings in effect at the initiation of this Contract. All specifications for the Project must be in compliance with the current version of the Oregon Standard Specifications for Construction and modified by the special provisions, as necessary.

Consultant shall make such minor changes, modifications, or revisions in the details of the work as may be approved by Agency consistent with the progression of the development of the work as defined in the detailed Project schedule submitted by Consultant. When alternatives are considered, County will have the right of selections.

County reserves the right to initiate conferences within this scope of services with Consultant to review the work in progress.

Consultant shall perform all work in compliance with the design standards, guidelines, requirements, and methodologies as set forth above and the editions of the design documents listed in this section that are current at the initiation of this Contract. The list is not intended to be exhaustive.

General and Administrative

- Oregon Standard Specifications for Highway Construction, ODOT current version
- Deschutes County Code, Title 17, Chapter 48
- Oregon Standard Drawings

Environmental

- Environmental Guide Book, U.S. Department of Transportation, Federal Highway Administration, current version
- Wetland Delineation Manual, COE/EPA current version

Stormwater

- Central Oregon Stormwater Manual

Roadway

- AASHTO A Policy on Geometric Design of Streets and Highways, current version
- ODOT Pavement Design Guide, current version
- AASHTO Roadside Design Guide

Traffic

- MUTCD Manual on Traffic Control Devices
- Traffic Line Manual

Task 1 – Project Management

1.1 Project Management and Administration

The Consultant shall provide monthly project updates, invoices, and coordination with County staff to ensure that the Consultant is meeting the project objectives and requirements of the County. The Consultant shall provide coordination and project team management by communicating with sub-consultants and staff, maintaining files, preparing correspondence, preparing deliverables, and providing guidance to the team. This task includes review of sub-consultant deliverables. The Consultant shall prepare and update a schedule of tasks and Contract deliverables. The Consultant shall prepare summary of work updates that include documented resolved items, and team and County action item lists. For the purpose of this scope, the duration of this phase of work is anticipated to be twenty (20) months.

1.2 Project Meetings

The Consultant shall attend project meetings as outlined below. Meetings will be scheduled and facilitated by the Consultant unless requested otherwise by the County. Meetings are assumed to be two hours in duration. Project team meetings will be held at the County offices, or virtually, and include travel to and from the meetings.

- Project Kickoff Meeting
- Project Team Meetings (Up to 8 meetings)

Task 1 Deliverables:

- Task and Deliverables Schedule – Within 30 days of notice to proceed.
- Up to twenty (20) schedule updates to County as part of each project invoice.
- Up to twenty (20) summary of work updates as part of each project invoice.
- Up to twenty (20) monthly progress reports and invoices.
- Meeting minutes for all meetings

Task 2 - Public Involvement Support

The Consultant shall assist the County in the engagement of the public regarding the proposed improvements. The process is anticipated to include the following elements.

2.1 Graphics

The Consultant shall prepare up to two (2) project graphics, such as mailers, to assist the County with public outreach efforts. Graphics will be delivered in PDF format.

Task 2 Deliverables:

- Graphics in PDF format

Task 3 – Concept Alternatives / Siting of Roundabout

The Consultant shall provide concept alternatives of the roundabout improvements and supporting memo to determine the preferred location of the roundabout. This task shall include the following elements.

3.1 Concept Development

Concept Development and Summary Memo

The Consultant shall develop up to three (3) layout alternatives for a roundabout improvement of the existing intersection.. Elements to consider may include traffic operations, BLM impacts, utility impacts, stormwater, staging, schedule, and construction cost.

Consultant shall summarize the results of the analysis with a recommendation and concept graphics in a brief memo.

Consultant shall develop truck turning movement diagrams for the preferred layout alternative and exhibits to identify turn movement requirements. The primary design vehicle is assumed to be a WB-50 with accommodation for a WB-67 and double trailer vehicles, such as a WB-109D. The County will confirm or clarify this assumption and provide any other accommodations vehicles to be considered.

Task 3 Assumptions:

- Earthwork quantities and associated cost will be evaluated based on the limited topographic survey collected in Phase I and utilize assumptions and available data for the NW and SW quadrants, such as relative elevation differences according to Google Earth.

Task 3 Deliverables:

- Concept graphics in PDF format
- Summary memo and recommendation in PDF format
- Truck turning templates in PDF format

Task 4 - Survey and Base Mapping

4.1 Topographic Survey and Base Map

Consultant shall complete a full topographic survey of the project area utilizing conventional survey methods.

The limits of the topographic survey shall generally include the existing right of way approximately 700 feet in all directions from the intersection as well as additional areas outside of the existing roadway as needed to facilitate the roundabout design location.

The topographic survey data will include terrain and all man-made physical features within the specified limits and must have three-dimensional coordinates associated with each feature. Features to be shown include trees that are 6 inches or more in diameter (DBH), known utilities as disclosed by a standard utility locate request or utility-provided as-built, walls, fences, utility poles, culverts, driveways, pavement, traffic and other permanent signs, geotechnical investigation sites, and structures (as accessible to surveyors).

Consultant shall request utility locate markings and record maps from all affected utility companies using standard public utility locate request. Consultant shall combine utility locate markings and record map information with field ties to visible structures in order to map utilities, including utility access holes, drain inlets, utility valves, culverts, utility poles, and underground utility lines

(alignment, size, invert elevations, and depths based on visible structures, pipe inverts and as-built record drawings). Other underground features such as fuel tanks, wells, septic tanks, and drain fields, if applicable, shall be shown by extrapolating from surface features and information from the public jurisdictions involved. No private utility locates are assumed to be necessary.

Consultant shall incorporate the field topographic data into the project base map and prepare an AutoCAD Civil 3D digital terrain model ("DTM"). Basemap must have all features drafted in close conformance to ODOT standards in AutoCAD format. Consultant shall create a DTM that meets County's criteria for surface triangulation. Consultant shall collect confidence points in the field and generate a confidence point report. Consultant shall generate one (1) foot minor contours and five (5) foot major contours throughout the DTM. DTM points must not exceed a fifty (50) foot spacing to show the terrain.

Consultant shall coordinate with the County for work within roadways that will require flagging and a traffic control plan. Flagging shall be provided by the Consultant and it is assumed up to two (2) days of flagging may be required.

Task 4.2 Legal Descriptions and Exhibits

Consultant shall prepare legal descriptions and ROW sketch maps, as needed, for the alignment of Lower Bridge Way and 43rd Street and any BLM ROW or easement acquisitions. Consultant shall prepare ROW sketch map(s) to support each legal description. It is assumed that up to three (3) legal descriptions and ROW/easement sketch maps will be prepared.

Final ROW Description and Sketch Maps are due within two (2) weeks of Agency comment resolution.

Task 4.3 Right-of Way Staking

Consultant shall field stake the approximate proposed ROW or easement line in coordination with Task 3.2

Task 4.4 Right-of Way Monumentation and Survey

Consultant shall monument all new ROW pursuant to ORS 209 and ORS 368. A draft right-of-way map showing existing right-of-way and new right right-of-way shall be submitted for review to the County Surveyor's Office. After review, a final version incorporating County Surveyor's comments shall be filed with the County Surveyor's office. Once filed the Consultant shall provide the County with a digital file (Civil3D ver. 2024) of the right-of-way map, in COCS datum.

Task 4 Assumptions:

- The topographic survey will be completed after the location of the roundabout is selected.

Task 4 Deliverables:

- Existing ROW base map.
- ASCII file containing the following information: Point number, Northing, Easting, Elevation, description/feature code.
- An AutoCAD Civil 3D drawing in ".dwg" format, containing all topographic data with an attached DTM.

- An “.xml” file containing all points, DTM and alignments.
- File Control, Recovery and Retracement Record of Survey with resolved centerline and ROW lines for the roadway and side streets.
- An AutoCAD Civil 3D drawing in “.dwg” format, containing all new and existing ROW data.
- Legal Descriptions and ROW Sketch Maps
- Post-Construction Record of Survey and Monumentation

Task 5 – BLM ROW Acquisition Support

The Consultant shall provide NEPA Environmental Assessment (EA) support to assist the County with acquiring new ROW from BLM to accommodate the proposed intersection improvements. This task shall include the following elements.

5.1 Biological Resources EA Support

- A. Coordination, Accumulation, and Review of Information - Consultant shall obtain and review existing project background information including intersection improvement alternatives. Consultant shall coordinate with County and BLM to obtain basic background data on the project and EA such as: purpose and need, existing survey and design information, extent of the NEPA study area, and applicable BLM NEPA regulations.

Consultant shall consult with agencies and other groups including, but not limited to BLM, U.S. Fish and Wildlife Service, the Oregon Department of Fish and Wildlife, and Oregon Biodiversity Information Center to obtain the most current information on the presence of all Interagency Special Status and Sensitive Species within the vicinity of the project.

- B. Site Reconnaissance – Consultant shall conduct a field reconnaissance of the NEPA study area to assess general conditions for wetland/waters, wildlife, fisheries, and botanical resources based on initial findings from Task 5.1.A. Consultant shall review the study area to make general inferences of likely project effects on biological resources. While on site, Consultant shall photograph the study area for inclusion in the Biological Resources Technical Memorandum described in Task 5.1.C
- C. Biological Resources Technical Memorandum - The County’s acquisition of right-of-way (ROW) from BLM to complete the proposed intersection improvements constitutes a NEPA federal nexus for the project. The existence of this federal permit nexus requires compliance with BLM’s NEPA analysis and documentation rules.

ROW acquisition and land use changes within the acquired area could result in direct or indirect or effects on biological resources if they occur in the project area. Consultant shall review project information, County development and environmental regulations and proposed intersection improvement design alternatives to assess the project’s environmental consequences on biological resource in the study area to confirm the project will result in a NEPA Finding of No Significant Impact on biological resources.

Consultant shall prepare a Biological Resources Technical Memorandum (Biological Resources Memo) that describes biological resources within and near the study and evaluates environmental consequences from up to three design alternatives, including the preferred

alternative, and the no action alternative on the assessed resources. The Biological Resources Memo will be used to support the EA prepared by the County and BLM's NEPA decision.

Consultant shall provide the draft Biological Resources Memo to the County for review. Consultant shall revise the draft Biological Resources Memo per review comments and prepare a final document for use in the final EA.

5.2 Cultural Resources EA Support

- A. Consultant shall complete a report detailing the results of fieldwork that will fulfill the requirements of the NEPA technical memo/report. It will include a project description, a context section that includes an overview of environmental and cultural backgrounds, a literature review of previous archaeological work, a description of fieldwork results, and project recommendations. If an archaeological resource is identified, an Oregon State Historic Preservation Office (SHPO) site form will be completed and appended to the report. The culvert and PGE transmission line will be documented on Section 106 clearance forms. The report will be submitted to the County along with the necessary SHPO GoDigital submittal materials, and the Consultant will submit the report to SHPO. Consultant shall coordinate as needed with appropriate tribal organizations in advance of the field survey. In addition, Consultant shall also provide notification to tribal organizations that a separate biological survey will be conducted, that is only visual.

Task 5.1 Assumptions:

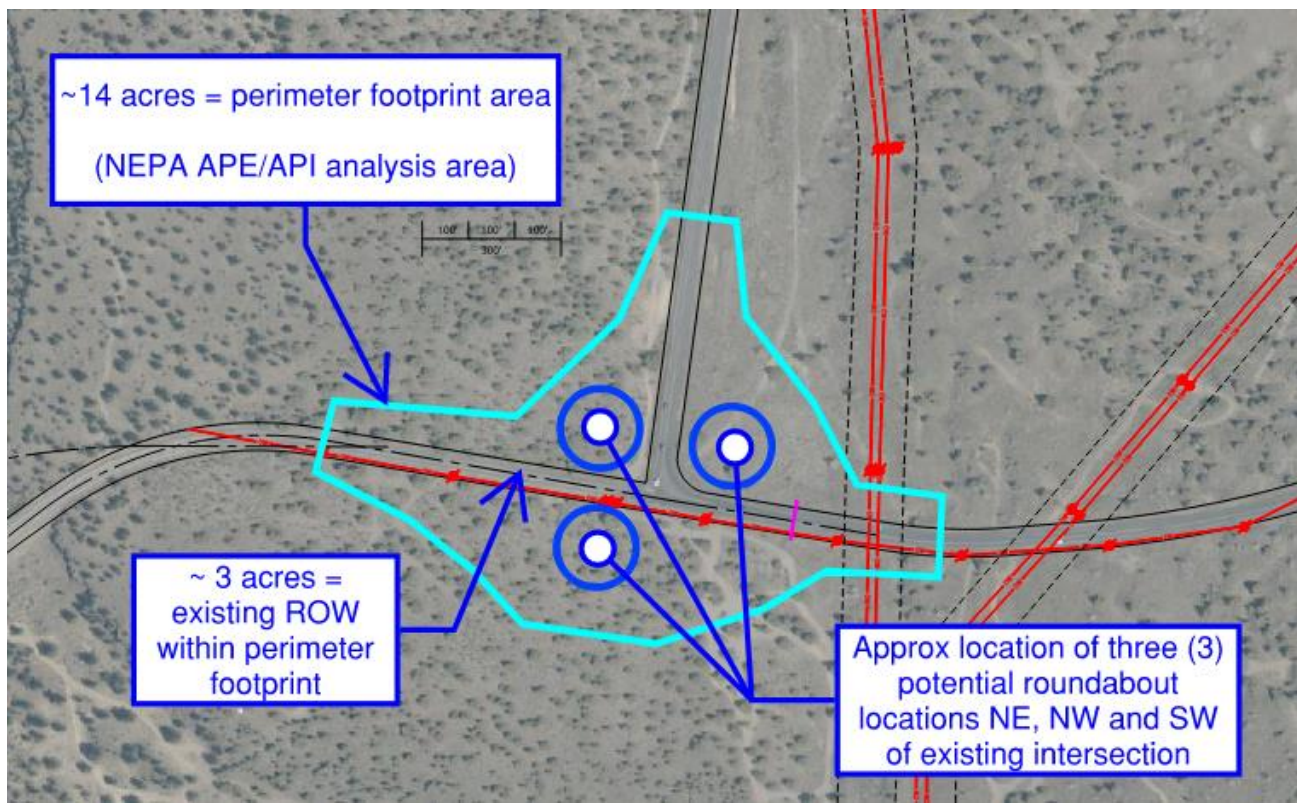
- The County will provide the required project information and background site data.
- No meetings or field surveys are included with task 5.1.A.
- Biological resources to be reviewed and documented by Consultant include wetland/waters, wildlife, fisheries, and botanical resources.
- No more than three intersection alternatives will be reviewed.
- Access to the study area shall be arranged for and provided by the County and BLM as needed.
- A courtesy notice to tribal organizations in advance of biological survey (visual only) will be provided.
- Although general plant conditions and habitats shall be described, a rare plant survey is not included in this task.
- No off-site areas (areas outside of the NEPA study area) shall be reviewed by Consultant.
- The NEPA study area is approximately 14 acres.
- Biological resources NEPA analysis and documentation completed by Consultant will be similar to the examples EAs provided by the County during project scoping.
- The project will result in a NEPA Finding of No Significant Impact.
- This task includes up to two (2) meetings with County and/or BLM staff to discuss the project and NEPA implications. These meetings are assumed to be virtual and approximately 1 hour in duration.
- Meetings or coordination with other agencies is not included.
- County will be the main point of contact with BLM staff and prepare the SF-299 application.
- The projects plans will be utilized for the SF-299 application and Road POD (Plan of Development) documentation and no additional plans will be required.

Task 5.2 Assumptions:

- Task 5.2.A is based upon the following assumptions and project understanding:
 - The area of potential effect (APE) consists of approximately 14 acres that encompasses the intersection and the layout of the three proposed roundabout locations.
 - An initial review of the project APE reveals that no previous cultural resource surveys have been undertaken at this location. A culvert of indeterminate age underlies NW Lower Bridge Way east of the intersection, and the APE is crossed by a Portland General Electric (PGE) transmission line that was originally constructed in approximately 1967. Consultant will conduct a pedestrian survey of the project APE using 15 meter (m) (49 foot [ft]) transect intervals to check for archaeological resources. After the survey, Consultant will excavate up to 15 shovel tests within identified high probability areas (HPAs) or to delineate any archaeological resources found during pedestrian survey. It is assumed up to one archaeological resource may be identified. The culvert and PGE transmission line will be documented as historic resources. It is assumed that no additional built environment resources are present within the APE.
 - To conduct fieldwork on BLM lands, a federal permit is required. Consultant currently holds a BLM blanket permit and will request a fieldwork task authorization under this blanket permit for the work described here. It is assumed that no collection of artifacts will be required under the permit. As part of the permit obligations Consultant must complete a report detailing the work completed under the permit. Completing this obligation, taken on behalf of the County, cannot be terminated even if your project is terminated.

Task 5.1 and 5.2 Assumption:

- NEPA APE/API analysis area is per graphic below



Task 5 Deliverables:

- Draft Biological Resources Memo, MS Word copy
- Final Biological Resources Memo, PDF copy
- Draft Cultural Resources Memo, MS Word copy
- Final Cultural Resources Memo, PDF copy

Task 6 – Utility Coordination

Consultant shall facilitate the relocation and/or coordination of any utilities that may conflict with the proposed improvements in accordance with the current version of the ODOT - Oregon Utility Relocation Manual. Installing utilities underground that are currently overhead is not within the scope of this Project.

Consultant shall coordinate with Portland General Electric (PGE) regarding any proposed work within PGE's easement.

6.1 Utility Coordination Kickoff meeting

Consultant shall facilitate a utility coordination kickoff meeting with the utility owners having facilities in the project vicinity and the County. The purpose of the meeting will be to identify any critical issues and to make the utility owners aware of the Project and its timelines. Consultant shall prepare a meeting agenda and meeting minutes summarizing the discussions at the Utility Kickoff Meeting.

6.2 Identify and Document Utility Conflicts

Consultant shall prepare a preliminary utilities conflict list based upon the 30% plans submittal. Consultant shall provide first notification, per OAR 734-055-0045, to utility owners.

6.3 Coordinate Relocation Plans and Specifications

Consultant shall coordinate up to 2 meetings with each affected utility owner to assist in relocation of the utility(s) to avoid conflict with the proposed improvements. Following the utility coordination meeting, Consultant shall coordinate any design changes as needed with the County for the purpose of minimizing utility relocations.

Consultant shall prepare a final utilities conflict list based on the 90% plan submittal. Consultant shall coordinate the efforts of the utility owners in developing and executing a plan for relocating utilities to resolve conflicts with the Project design. As part of that effort, Consultant shall complete the following:

- Preparation of Project Notification Letter(s)/Utility Conflict Notices
- Review of Utility Relocation Plans and Preparation of Relocation Time Requirement Letters

For those Utilities with facilities located within the project area, Consultant shall provide a Project Notification (first notice per OAR 734-055-045). Agency will provide the Project Notification letter template. The Project Notification letter must include plan sheets indicating location of existing utilities in relationship to proposed project.

Consultant's coordination schedule must allow each utility a 30-day period to respond with a proposal from date of the notice. Multiple notices or revised notices must be created and delivered to a utility owner when additional facility conflicts become apparent and the utility owner's response time may be shortened to 7 calendar days.

Consultant shall examine all received utility relocation plans for completeness and accuracy. If relocation plans do not resolve utility conflict, Consultant shall provide comments to Utility for correction and re-submittal.

Consultant shall negotiate with each utility a utility construction work schedule that conforms to the project construction schedule. Consultant shall deliver a Time Requirement Letter (second notice) to each utility owner accepting or modifying the required utility facility construction time. Agency will provide the Time Requirement Letter template.

Consultant shall incorporate utility information and relocation schedules into project specifications in order to properly identify relocation work and other requirements in the bid documents.

6.4 PGE Coordination Kickoff Meeting

Consultant shall facilitate a coordination kickoff meeting with PGE and the County. The purpose of the meeting will be to identify any critical issues and to make PGE aware of the Project and its timelines. Consultant shall prepare a meeting agenda and meeting minutes summarizing the discussions at the PGE coordination Kickoff Meeting.

6.5 PGE Coordination and Crossing Application

Consultant shall coordinate the roadway design and project plans with PGE. Depending on the scope of improvements within the PGE easement, this may include processing a Crossing Application.

Task 6 Assumptions:

- Pacific Power and PGE are the only utilities within the project vicinity that will need to be coordinated with for design. Limited coordination with BPA is included, primarily related to construction and schedule.

Task 6 Deliverables:

- Prepare Existing Conditions Utility Strip Map
- Utility kickoff meeting agenda and minutes
- Utility coordination meeting agenda and minutes
- Preliminary Utility Conflict List and Letters with the 30% plan submittal
- Final Utility Conflict List and Letters with the 90% plan submittal
- PGE kickoff meeting agenda and minutes
- PGE Crossing Application, if needed

Task 7 – Preliminary and Final Engineering

The Consultant shall provide preliminary and final engineering of the roadway. This task shall include the following elements.

7.1 30% Roadway, Drainage, Lighting and Landscape Design

Consultant shall prepare a 30% roadway, drainage, lighting, and landscape design based on the preferred concept development alternative, as directed by the County.

Construction Plans

Consultant shall produce 30% construction plans consistent with the plan sheet checklist at the end of this section. The design shall include design information such as horizontal and vertical alignment

including street (edge of pavement) layout for the project corridor. Plans will include profile and preliminary section information to determine the limits of impacts including slopes and retaining walls. Consultant shall produce 30% drainage design for the project and include drainage and stormwater control features impacting ROW requirements of the project in the 30% plans.

Plans shall also include details that are significant or important to describe the ROW requirements of the Project footprint. Other design elements to be provided include:

- 30% Signing & Striping Plans, Detour/Traffic Control Plans in conformance with Deschutes County Standards and Specifications and the latest version of the Manual on Uniform Traffic Control Devices.
- Lighting analysis using AGI software. Utilize ANSI/IES RP-8-18 to establish target light levels.
- 30% illumination plans, with light pole locations based on analysis results.

Consultant shall submit 30% plans in PDF format.

Construction Cost Estimate

Consultant shall prepare a preliminary construction cost estimate based on the 30% design. Consultant shall submit the 30% construction cost estimate in PDF or Microsoft Excel format.

30% Design Memo

Consultant shall prepare a 30% design memorandum documenting the design, any key design decisions, and next steps for each phase. Consultant shall submit the 30% design memo in Microsoft Word format.

Quality Control

Consultant shall complete an internal quality control review of all documents prior to submission to the County.

Plan Sheet Check List

Plan Sheets	30%
Title Sheet	X
Typical Sections	X
Details	X*
Pipe Data	
General Construction (Alignment, Plan, Profile, Drainage, Utilities and Notes)	X
Traffic Control	X**
Erosion Control	
Landscaping	
Permanent Signing	X
Permanent Pavement Markings	X
Illumination	X
Standard Drawings	

*Details that are significant or important to describe the ROW requirements of the Project footprint only.

**Temporary widening or detours requiring additional ROW or easements only.

7.2 Preliminary Stormwater Management Report

The Consultant shall prepare a preliminary stormwater management report documenting the stormwater management concepts for the project and compliance with the Central Oregon Stormwater Manual (COSM).

7.3 90% PS&E

30% Review Comments

The Consultant shall review and provide written response to all County comments from the 30% documents.

Construction Plans

Consultant shall produce 90% complete design plans addressing County review comments from 30% design and consistent with the plan sheet checklist at the end of this section. Construction plan sheet order, naming and numbering shall be in accordance with the most recent version of Chapter 2 of the ODOT Contract Plans Manual. Design shall include detailed grading of ramps and curb returns, construction notes and quantities, construction details and survey control and monument information. Plans shall show limits of the Project, catch points, construction limits, ROW requirements and easements. Consultant shall develop traffic control signing and staging plans, striping and signing design and erosion control design. Consultant shall submit 90% plans in PDF format.

Construction Specifications

Consultant shall prepare draft special provisions based on the most recent version of the Oregon Standard Specifications for Construction. Consultant shall modify the standard specifications by using the most recent version of the Boilerplate Special Provisions available on the ODOT website to produce draft Special Provisions to the Standard Specifications. Consultant shall use "track-changes" while modifying boilerplate special provisions and shall submit draft special provisions for review to the county in Microsoft Word format.

Construction Cost Estimate

Consultant shall calculate quantities and prepare an engineer's construction cost estimate based on construction bid items for the proposed improvements. Consultant shall submit the 90% construction cost estimate in PDF or Microsoft Excel format.

Quality Control

Consultant shall complete an internal quality control review of all documents prior to submission to the County.

7.4 Final Stormwater Management Report

The Consultant shall prepare a final stormwater management report documenting the stormwater management for the project and demonstrating compliance with the COSM standards. The report will build upon the concepts from the 30% design.

7.5 100% PS&E

90% Review Comments

The Consultant will review and provide written response to all County comments from the 90% documents.

Construction Plans

The Consultant shall produce final construction plans addressing County review comments from 90% design and consistent with the plan sheet checklist at the end of this section. Consultant shall submit 100% plans in PDF format for review and comment by the County. Upon receipt of County review comments or approval, the Consultant shall incorporate any revisions necessary and submit final Bidding Plans, stamped and signed by the Engineer of Record, in PDF format.

Consultant shall provide all necessary 3D engineered models to fully construct the project, in AutoCAD (.dwg) and Civil3D (.xml) format, prior to bid opening for the review by the County. Consultant shall finalize the 3D engineered models based on County review comments and submit the final 3D engineered models for handoff to the Contractor.

Construction Specifications

The Consultant shall prepare final special provisions addressing County review comments from the 90% submittal. Consultant shall use "track-changes" while modifying boilerplate special provisions and shall submit final special provisions in Microsoft Word format.

Construction Cost Estimate

The Consultant shall prepare a final engineers construction cost estimate for the proposed improvements, including a contingency amount of 3.5%. Consultant shall submit the final engineer's construction cost estimate in PDF and Microsoft Excel format.

Bid Reference Documents

The Consultant shall provide cross sections at 25' intervals for the entire limits of the project to be provided as a reference document with the bid advertisement. Consultant shall provide the final approved project plans in Vector PDF format to be provided as a reference document with the bid advertisement.

Quality Control

Consultant shall complete an internal quality control review of all documents prior to submission to the County.

7.6 Bid Support

The Consultant shall respond to questions from bidders and suppliers regarding the plans and special provisions that are fielded by the County. Responses to questions shall be in writing and forwarded to the County for distribution within 24 hours from the time a question is submitted by the bidder.

The Consultant shall manage communications with bidders and suppliers during the bidding process in a manner that assures that no bidder or supplier is provided with information that could provide a bidding advantage or disadvantage. Consultant shall prepare a written log to document conversations

and questions by bidders and/or suppliers and the answers provided to them. Consultant shall prepare a summary of the communications at the close of the bidding period.

The Consultant shall prepare addenda to the bid documents as required during the bidding process. For budgeting purposes, this scope of work shall include the preparation of two (2) addenda to the bid documents.

7.7 Construction Support 1

The Consultant shall review contractor submittals during the course of construction. Upon construction completion, the Consultant shall prepare as-built plans based upon redlines provided by Contractor.

7.8 Construction Support 2

The Consultant shall review and answer Contractor and County questions and issue any revised plan sheets as may be necessary. The scope of this task is based upon the hours assumed in the Breakdown of Cost Spreadsheet.

Plan Sheet Check List

Plan Sheets	90%	100%
Title Sheet	X	X
Typical Sections	X	X
Details	X	X
Pipe Data	X	X
General Construction (Alignment, Plan, Profile, Drainage, Utilities and Notes)	X	X
Traffic Control	X	X
Erosion Control	X	X
Landscaping	X	X
Permanent Signing	X	X
Permanent Pavement Markings	X	X
Illumination	X	X
Standard Drawings		X

Task 7 Assumptions:

- Lighting design will consist of new aluminum street light poles in the project area and that there is no need to evaluate various alternatives. Lighting plans and specifications shall conform to the NEC, NESC, PP&L, and Deschutes County standards as applicable. Consultant shall coordinate with utility (PP&L) for service connections. Lighting design assumes that the utility will own and maintain wiring and circuitry of the lighting system. Plans

will be limited to showing underground infrastructure only (foundations, conduits, junction boxes, pull line). Other elements such as light poles, luminaires, wiring, and circuitry will be shown on the utility design drawings and will be furnished and installed by the utility.

- Plans will include a light pole schedule with height, mast arm length, wattage, etc.
- Permanent signing and striping limits will extend approximately 600 feet in all directions from the intersection.
- No traffic analysis is included for the temporary traffic control design.
- Geotechnical investigation is not required and pavement sections will be provided by County.

Task 7 Deliverables:

- 30% Plans and Cost Estimate
- Preliminary Stormwater Management Report
- Final Stormwater Management Report
- 90% Plans, Specifications and Cost Estimate
- 100% Plans, Specifications and Cost Estimate
- Construction Schedule
- Bid reference documents
- Written log of conversations, questions and answers, as required during construction bidding.
- Two (2) memos in response to any question submitted by bidders, as required.
- Up to two (2) addenda to the bid documents, as required.
- Record / As-built plans in PDF format based upon redlines provided by Contractor.

EXHIBIT "B" - BREAKDOWN OF COST - Phase II
 NW Lower Bridge Way / NW 43rd Street
 Intersection Improvement
 Deschutes County

Harper Houf Peterson Righellis Inc.
 May 3, 2024

TASK DESCRIPTIONS	HHPR Subtotal	DKS Subtotal	MB&G Subtotal	AINW Subtotal	TOTAL PER TASK
Task 1: Project Management					
1.1 Project Management and Administration	\$ 20,090	\$ 9,680	\$ -	\$ -	\$ 29,770.00
1.2 Project Meetings	\$ 9,900	\$ 3,488	\$ -	\$ -	\$ 13,387.50
Task 2: Public Involvement Support					
2.1 Graphics / Mailers	\$ 9,630	-	-	-	\$ 9,630.00
Task 3: Concept Alternatives / Siting of Roundabout					
3.1 Concept Development and Summary Memo	\$ 34,470	-	-	-	\$ 34,470.00
Task 4: Survey and Base Mapping					
4.1 Topographic Survey and Base Map	\$ 19,360	-	-	-	\$ 19,360.00
4.2 Legal Descriptions and ROW Sketch Maps	\$ 6,480	-	-	-	\$ 6,480.00
4.3 Right of Way Staking	\$ 3,100	-	-	-	\$ 3,100.00
4.4 Right of Way Monumentation and Survey	\$ 14,535	-	-	-	\$ 14,535.00
Task 5: BLM ROW Acquisition Support					
5.1 EA - Biological Resources Support	\$ 2,330	-	\$ 20,276	\$ -	\$ 22,606.00
5.2 EA - Archaeological / Historical Resources Support	\$ 2,330	-	-	\$ 32,105	\$ 34,435.00
Task 6: Utility Coordination					
6.1 Utility Coordination Kickoff Meeting	\$ 1,230	-	-	-	\$ 1,230.00
6.2 Identify and Document Utility Conflicts	\$ 2,330	-	-	-	\$ 2,330.00
6.3 Coordinate Relocation Plans and Specifications	\$ 3,740	-	-	-	\$ 3,740.00
6.4 PGE Coordination Kickoff Meeting	\$ 1,690	-	-	-	\$ 1,690.00
6.5 PGE Coordination and Crossing Application	\$ 3,460	-	-	-	\$ 3,460.00
Task 7: Preliminary and Final Engineering					
7.1 30% Roadway and Drainage Design	\$ 57,800	\$ 19,480	\$ -	\$ -	\$ 77,280.00
7.2 Preliminary Stormwater Management Report	\$ 7,830	-	-	-	\$ 7,830.00
7.3 90% PS&E	\$ 53,200	\$ 20,073	-	-	\$ 73,273.40
7.4 Final Stormwater Management Report	\$ 7,110	-	-	-	\$ 7,110.00
7.5 100% PS&E	\$ 27,940	\$ 22,473	-	-	\$ 50,413.40
7.6 Bid Support	\$ 6,780	\$ 2,540	-	-	\$ 9,320.00
7.7 Construction Support 1 (submittal review, as-builts)	\$ 8,560	\$ 1,950	-	-	\$ 10,510.00
7.8 Construction Support 2 (answer questions, provide plan revisions)	\$ 19,520	\$ 1,950	-	-	\$ 21,470.00
Total Cost by Consultant	\$ 323,415.00	\$ 81,634.30	\$ 20,276.00	\$ 32,105.00	\$ 457,430.30