CITY OF CAMAS, WASHINGTON

Scope of Work
NE Lake Road and NE Everett Street (SR-500):
Design and Environmental Permitting Through 30% Plans
City of Camas Project # T1011

INTRODUCTION

PBS Engineering and Environmental Inc. (PBS) and their Consultant team have been selected by the City of Camas to perform traffic and design engineering, environmental permitting, public involvement and other related professional services for the NE Lake Road and NE Everett St. (SR-500): Intersection Improvements Project. Professional services will include evaluation of roundabout and traffic signal options, evaluation of alignment options, traffic engineering, , environmental process & permits, and utility coordination. This project is assumed not to have federal funding.

The project team currently includes:

- Kittelson & Associates, Inc. (KAI) – Traffic Analysis and design
- BergerABAM – Structural engineering, environmental permitting and documentation, and public outreach
- Archaeological Investigations Northwest (AINW) – cultural resources investigation

The Project is funded with Public Works Trust Fund money for design and right of way and is expected to have local or TIB funding in the construction phase.

Although the Project has several properties which were purchased with Washington State Recreation and Conservation Office (RCO) Funding in the immediate vicinity of the project, it is assumed that this project will avoid impacts to those parcels.

This phase of the project will take the analysis and design through the alternatives analysis phase with a recommended alternative accepted by the City and then the design will continue through the 30% phase. Upon City approval of the recommended alternative a supplement agreement will be prepared to complete the project design, permitting, and right of way acquisition. It is assumed that this first phase of the project design will last up to 5 months.

PROJECT DESCRIPTION/BACKGROUND

NE Everett Road (SR-500) and NE Lake Road is currently a 3-legged signalized intersection. The surrounding area includes Lacamas Lake, forested lands owned by the City of Camas (City) and Clark County, and to the north along SR-500 a bridge over a body of water connecting Lacamas Lake and Round Lake. This intersection connects two roads that are critical links between the south shore and north shore areas of Camas. Average daily traffic entering the intersection is well over 15,000. Camas has received State pre-construction funds from the Public Works Board to complete design, permitting, and to secure the necessary property rights for this project. An alternative

analysis and intersection type evaluation will be completed to identify the appropriate intersection improvement. Currently the project is not funded for construction.

The project limits extend from the northern property line of the Camas Produce Store (located to the south of the intersection of Lake Road and Everett Street) to the Everett Street Bridge to the north, and from the sidewalk terminus at the Lodge, to the intersection of Lake Road and Everett Street intersection. The project area also includes the City owned property, east of the intersection, in its entirety.

OVERALL PROJECT ASSUMPTIONS

- The traffic data collected by DKS in April of 2018 will be used for the traffic analysis.
- Project is anticipated to go out to bid in early 2020
- Project is anticipated to be constructed in 2020
- The City is anticipated to resolve Conservation Futures property impacts including arranging for any required land exchange
- City staff will approve a tree permit
- The Scope of work is based on the assumption that a signal and a roundabout will be analyzed as the potential intersection improvement alternatives. This scope will need to be amended after a preferred alternative is accepted by the City.

SCOPE OF WORK

TASK 1: PROJECT MANAGEMENT AND ADMINISTRATION

PBS shall oversee project tasks and coordinate with City representatives to manage the scope, schedule and budget for the design engineering phase. The current phase of the project is assumed to take up to 5 months to complete.

Subtask 1.1 Contract Administration, Invoicing, and Progress Reports

- Prepare and submit monthly invoices. Each invoice will include: date period covered by invoice, number of hours worked during the billing period with billing rates shown; expenses and associated mark-ups; total cost for labor and expenses for the billing period; subconsultants fees including markups for the billing period; and a total amount summarizing labor, expenses, and subconsultant fees.
- Prepare a Contract Summary Report to accompany the monthly invoices. The Contract Summary Report will list each invoice as well as current invoice with an itemized summary of invoice numbers, dates, and amounts billed for labor, expenses, and subconsultants as well as total amounts for each invoice. The Contract Summary Report will also list the total amount billed to date, total amount remaining under contract, and contract expiration date.
- Maintain required contract documentation. Provide copies of project files and records to the CITY for audits and public information requests. Final documents shall be provided in electronic format as requested.

Deliverables

- Monthly invoices, Contract Summary Reports, and Project Status Reports.
- Project Documentation, upon request

Subtask 1.2 Meetings

This item includes the coordination and meetings necessary to successfully complete the project.

- Preparation for and attendance at project kickoff meeting with City Staff including up to two PBS staff attending a 2-hour kickoff meeting with City staff in Camas.
- Up to 17 weekly phone meetings with City Staff
- Up to 5 internal PBS design team coordination and meetings.
- Preparation for and attendance monthly (5) project coordination meeting with City staff including and up to two PBS staff. Other consultant team members will attend meetings as needed.
- Meet with City staff after the review of the 30% plansubmittal, this meetings will be attended instead of the monthly meeting these months.

Deliverables

- Meeting Agendas and Meeting Summaries
- Design Submittal Comment Review and Response Log

Subtask 1.3 Management, Coordination, and Direction

- The Consultant shall provide management, coordination, and direction to the Project team in order to complete the project on time and within budget. The City fosters a partnership approach of all stakeholders in the Project. The Consultant shall integrate this strategy into the overall management approach.
- The Consultant shall establish a quality management program and designate responsibility for review of technical work and other deliverable products.
- Prepare and maintain project design schedule. The schedule shall identify CONSULTANT tasks and items provided by CITY and other consultants. The schedule shall be updated as circumstances require or as requested by the CITY (assumes 1 update).
- The Consultant shall prepare and submit an activities list and schedule to the City following the Notice to Proceed. The schedule shall show appropriate milestones for the Project, including intermediate and final submittal dates for design documents and key decision points.
- The Consultant shall coordinate Consultant tasks and activities with the City.

Deliverables

- Project Schedule& Schedule Updates
- Summary notes of coordination efforts
- QA/QC Program

Subtask 1.4 WSDOT Coordination

- The Consultant will coordinate with WSDOT and the City of Camas for all applicable WSDOT procedures, approvals, and processes related to the project.
- WSDOT coordination meetings with the City and the Consultant will he held for key aspects of the project.

Deliverables

Coordination meeting agendas and meeting summaries.

TASK 2: SURVEYING

Subtask 2.1 - Surveying and Base Map

PBS will perform boundary resolution, topographic surveying and data collection services to include the following:

- Establish a control network throughout the project limits based on the Clark County horizontal and vertical datum (NAD 83/91 & NGDV29/47).
- Conduct research of existing records for information on deeds, surveys, plats, road rights-of-way and easements along the project corridor.
- The survey field crew will collect data (property corners, right-of-way/ centerline monuments, control and physical boundary/right-of-way features) in the project area and relevant to the project site. The project surveyor will then review research and field data and determine the current right-of-way location.
- Order and obtain title reports for adjacent properties

PBS will meet with City staff to discuss right-of-way issues discovered prior to completing the survey. Once the right-of-way has been resolved a "Pre-construction" Record of Survey will be filed with the Clark County Surveyor's Office showing the centerlines, right-of-way lines and found monuments within the right-of-way along the project route.

- Perform topographic survey along the project corridor starting from the entrance of the Fallen Leaf Park entrance to the southern bridge abutment north of said intersection (right-of-way to right-of-way plus 20-ft on the privately owned parcel), and from a point 50 feet west of the sidewalk terminus at the Lacamas Lake Lodge to the intersection of Lake Road and Everett Street intersection (right-of-way to right-of-way plus 20 feet on the privately owned Gano property to the west). Topographic survey will also include the City owned property (Tax Lot 124541000 East of the intersection of Lake Road and Everett Street), and the Lacamas Park parking lot (North of the City property). A survey of trees will be performed within the area shown on the attached exhibit. This will include the placement of tree identification medallions in support of arborist coordination. Topographic survey will also include targets for an aerial drone survey. PBS will conduct research of existing records for information on available as-built and utility maps, request One-Call utility locates and field survey existing above ground features (i.e. edge of pavement, curbs, sidewalks, buildings, trees, utilities, etc.), including cross sections necessary to produce one foot contour intervals. See attached exhibit for survey limits
- Prepare legal descriptions and exhibits for right-of-way acquisition and easement takes. It is assumed that there will be 4 legals/exhibits to prepare.
- Prepare existing surface model reflecting collected topographic survey and breaklines.

Subtask 2.1.2 Base Map

- Upon completion of topographic survey and development of the surface model, PBS will prepare an existing conditions base map showing mapped features and utilities collected from both survey and as-built plans.
- Consultant shall coordinate with City staff regarding drafting standards and conventions.

Subtask 2.1.3 Site Visits

- Consultant will conduct site visits to verify the design fits the field conditions.

Subtask 2.1.4 Project Photos

- Consultant will conduct site visits, take project photos of each property along the corridor and conduct field verification of survey data represented in project base map. Consultant will use photographs to document pre-project conditions.

Assumptions

- Traffic control (flagging) will be billed as an expense
- Traffic control plan (TCP) will be provided by the traffic control company and billed as an expense
- Title reports will be billed as an expense
- All Pre-construction recording and associated fees (county review, mylar, etc.)will be billed as an expense

Deliverables

- Topographic Survey
- Pre-construction Record of Survey
- Surface Model
- Basemap
- Legal Descriptions and Exhibits
- Project Photos

TASK 3: GEOTECHNICAL ENGINEERING

Subtask 3.1 Geotechnical Engineering

This task includes work to conduct a geotechnical investigation to evaluate pavement, soil and groundwater conditions along the project alignment. Tasks include geotechnical design recommendations and construction guidelines for the proposed new roadway design and intersection (signalized or roundabout), including pavement design, roadway embankments, stormwater detention facility, utility trench construction, retaining walls, and traffic signal pole foundations. The work will be conducted in general conformance with City of Camas (City) Design Standards, Washington State Department of Transportation's (WSDOT's) Geotechnical Design Manual, and Washington State Department of Transportation's (WSDOT's) Highway Runoff Manual (HRM). Specific tasks include:

- Review readily available geologic, groundwater, and soil survey maps that cover the project vicinity.
- Review available geotechnical reports prepared for nearby developments (available in our files) and provided by the City.
- Conduct a reconnaissance of the project alignment.
- Mark the proposed exploration locations in the field and notify the "One Call" service for public utility locates.
- Prepare WSDOT approved traffic control plans for and provide traffic control during completion of field explorations (if needed).
- Advance three drilled borings to characterize subsurface soil and groundwater conditions. We

anticipate that one day will be required for drilling.

  - Drill one boring to a depth between 40 feet below grade or practical refusal for signal foundation design purposes and two borings to a depth of 25 feet below grade or practical refusal to evaluate pavement subgrade conditions. Collected SPT samples at 2.5- and 5-foot intervals to evaluate subgrade strength and characterization of deeper soil conditions for potential traffic control structure at the intersection.

- Excavate up to six test pits to depths between 12 feet below ground surface (bgs), or practical refusal
  - No infiltration tests will be performed
- Maintain a log of the soils encountered in the explorations and collect soil samples for laboratory testing.
- Restore the explorations in the following manner:
  - Borings - Backfill the drilled borings in accordance with City of Camas standards. In paved areas, the surface of the boreholes will be patched with concrete or asphalt. Excess soil cuttings from the Borings will be placed on site.
- Conduct a program of laboratory testing on select soil samples. The actual quantity and type of tests run will be based on the materials collected, though for budgeting purposes include up to (if needed or appropriate)
  - 1 particle-size distribution tests (sieve analyses)
  - 4 percent fines determinations (percent passing the No. 200 sieve)
  - 20 moisture content and/or density determinations
  - 2 Atterberg Limits determinations
  - 1 organic content determinations
  - 1 modified compaction testing (ASTM D1557)
  - 1 compacted California Bearing Ratio test CBR
- Conduct engineering analyses to evaluate:
  - Utility trench construction guidelines. (excavations and backfill)
  - Embankment construction alternatives. (structural fill)
  - Pavement design for Asphalt and Concrete for 20- and 40-years life.
  - Retaining wall earth pressure design parameters (including active, at-rest, and passive pressures).
  - Retaining wall foundation design parameters.
  - Traffic signal foundation design parameters.
  - Seismic design parameters.
  - Earthquake and geologic hazards.
  - Excavations and cut/fill slopes.
- Prepare a draft geotechnical report summarizing the results of the subsurface exploration and laboratory testing programs and presenting appropriate recommendations and conclusions.
- Prepare a final geotechnical report incorporating requested changes/updates from the project team's review of the draft report.
- Coordinate geotechnical tasks with other design tasks
- Attendance at up to two project meetings

Assumptions
The above scope of work is based upon the following assumptions:

- Rights of entry will be obtained under other work tasks for work outside the right of way.
- Field work will be performed during daylight hours.
- If contaminated soils are encountered, then additional charges will be incurred for equipment decontamination, testing, and soil disposal.
- Work will commence after archeological investigation is completed
- Archeologist will be required to monitor testpit and boring activities (2 days). Included in task 6
- The City and WSDOT will issue a street use permit at normal cost to the Consultant and the Consultant will submit the cost as an expense for review of the traffic control plan.
- Infiltration testing will not be performed.

Deliverables
- Draft geotechnical report (electronic PDF copy) at the future 60% design submittal.
- Final geotechnical report (electronic stamped and signed PDF copy, word stamped and signed document and up to 3 hard copies as requested) at the future 90% design submittal.

TASK 4: TRAFFIC ENGINEERING

Subtask 4.1 Traffic Analysis Report

Task 4.1.1 Existing Transportation Facilities and Traffic Conditions

- Document existing roadway facilities, including the number of travel lanes, lane and shoulder widths, presence of curbs and bridges within the project limits.
- Document the location and width of existing sidewalks, crosswalks and pathways.
    - Document existing sidewalk connections with the City's current or proposed trail system.
- Document existing bikeway facilities, including the location of bike lanes and shoulders on Lake Road and Everett Street.
- Document existing pedestrian facilities, including desired origin and destination in the vicinity of the study intersection.
- Traffic counts performed in the Spring of 2018 for the City will be used. No additional counts will be collected.
- Summarize the existing conditions analysis that will be incorporated into Traffic Analysis Report (see Task 4.1.5).

Task 4.1.2 Future No-Build Traffic Conditions

- Review base and future year 2040 projected traffic volumes (or most current available) using model information provided by the Southwest Washington Regional Transportation Council (RTC).
    - Kittelson will coordinate and obtain required model runs with RTC.
- Prepare an assessment of future demand and operations for approved in-process development that may affect the project.

- Develop future 2040 weekday AM and PM peak hour traffic volume projections at the study intersections.
- Travel Demand Validation: Future travel demand shall be estimated at the intersection to evaluated and determine how it will operate with the projected traffic demand and potential modification needs shall be identified that accommodate future traffic demand.
- Summarize future No-Build traffic conditions that will be incorporated into Traffic Analysis Report (see Task 4.1.4)

Task 4.1.3 Future Build Traffic Conditions with Signals and Roundabouts

- Conduct an alternative evaluation comparing potential traffic signals and roundabouts at the study intersection.
  - Preliminary capacity, delay and traffic signal warrants shall be evaluated at the study intersection to determine whether a new traffic signal will be needed in the future and when the signal will be needed.
  - Analyze roundabout operations at intersection under 2040 traffic conditions during the weekday AM and PM peak hours. The capacity and delay will be evaluated for each roundabout approach using the HCM 6th Edition methodology to confirm the appropriate roundabout size and number of lanes needed to service the forecast traffic volumes.
  - Conduct a queuing analysis of projected 2040 weekday AM and PM peak hour conditions to determine storage length needs at the project study intersections for the respective intersection controls, as appropriate.
  - Evaluate accesses relative outcomes of Build traffic operations analyses.
  - Evaluate the feasibility of a potential enhanced crossing on the north leg of the study intersection and the potential impact it may have on the respective intersection altenatives.
- Sketch-Level Roundabout Design for up to three (3) layouts.
  - Review and discuss sketch concepts with the project design team. Work collaboratively with the City and project design team to identify preferred roundabout concept for further refinement.
- Summarize future Build traffic conditions that will be incorporated into Traffic Analysis Report (see Task 4.1.4)
  - This portion of the report will document the preferred intersection traffic control for the key intersection (signal and roundabout).

Task 4.1.4 Traffic Analysis Report

- Preparation of a draft and final Traffic Analysis Report that summarizes the project elements above.
- Respond to draft report review comments and submit a final report.
- Coordination with the air quality and noise teams to provide SYNCHRO reports (if roundabouts, output files from HCM 6th Edition methodology) and preliminary channelization plans required for their analyses.

Subtask 4.2 Intersection Control Analysis – ICA

The consultant will conduct an intersection control analysis (ICA) for the study intersection. Initial CAD Intersection Design based on preferred layouts developed in Task 4.1.3.

- Prepare 15%-level preliminary designs at the intersection in AutoCAD for the preferred layout/configuration for both the roundabout and signal alternatives, respectively. The designs will include basic horizontal geometric design elements, including edges of travel way, channelization striping and islands, sidewalks, crosswalks, and truck apron (for roundabout). The designs will ensure the geometry incorporates key operational and safety features including design speed objectives, speed consistency principles, design vehicle accommodations, and bicycle/pedestrian treatments.
- Prepare engineering drawings showing AutoTurn vehicle paths through critical turning movements of the roundabout for the design vehicle for both alternatives.
- For the roundabout alternative specifically:
    - Prepare sketch-level drawings showing "fastest path" design speeds for all critical approaches of the roundabout in accordance with NCHRP Report 672.
    - Evaluate stopping and intersection sight distances at roundabout in accordance with guidelines from NCHRP Report 672. Determine the sight distance triangles needed at each roundabout approach and within the central island as a guideline for potential easements and landscape design. Prepare an exhibit showing the recommended sight lines.
- Evaluate access along the approaches based on layouts for both alternatives respectively and support project team and City staff to address access needs.

Deliverables

- Draft and Final Intersection Control Analysis Memorandum

TASK 5: ALTERNATIVE ANALYSIS

The intent of this section is to conduct an intersection control analysis associated with the project intersection as analyzed as part of Section 4.2 based on WSDOT's ICA approach:

Subtask 5.1 Alternative Analysis

Task 5.1.1 Summarize traffic operations

- Summarize traffic operations analysis results for both roundabouts and signals from Task 4.1.3 to be incorporated into combined Alternatives Analysis Report

Task 5.1.2 Alternatives Preliminary Design & Estimates

Consultant will assist with the preparation of the conceptual plans and conceptual construction cost estimates for each of the alternatives analyzed, by peer reviewing refine intersection layouts and related construction costs.

PBS Team will be responsible to provide design engineering services for the deliverables outlined below for the following submittals in support of task 8:

- Design Memorandum
- Decision Matrix
- Alternative Analysis

Subtask 5.1.3 Design Memorandum, Decision Matrix and Alternative Analysis

Consultant Shall summarize the roadway design standards and decisions in an excel spreadsheet for City staff concurrence. Standards will include but not be limited to:

- Right of way
- Lane widths
- Curb return radii
- Roadway cross-section
- Roadway section depth
- Design speed
- Design vehicle
- Transition tapers
- Max. and min. profile grades
- Vertical curve criteria

Alternative analysis

Consultant shall prepare conceptual designs and conceptual order of magnitude comparison estimates for each of the alternatives listed below.

Aspects to be included in the alternative analysis report will be:

- Signalized intersection (1 layout)
- Roundabout (up to 3 layouts)

Consultant shall develop each alternative to concept level design sufficient to establish horizontal construction limits, order of magnitude estimates and identify major construction activities. Each alternative shall have a horizontal alignment developed that meets appropriate design standards. Consultant shall prepare a drawing stamped "preliminary" for each alternative. The drawing shall utilize available aerial imagery and GIS boundary and environmental data. Geometric design elements that do not meet design standards shall be identified as needing a design exception. Consultant shall analyze each alternative and determine the potential benefits and impacts associated with construction of the proposed alternative. Potential benefits and impacts to be considered include, but are not limited to, right-of-way, safety, utilities, construction costs, permitting and environmental Impacts.

This subtask will include a summary of the identified impacts and cost estimate associated with each alternative to allow City to determine which alternative to move forward to design and construction.

Alternative Analysis Report

Aspects to be included in the alternative analysis report will be:

- Roundabout versus Signalized Intersections
- Roundabout options
- Preferred alternative

Deliverables

- Summarize preliminary design evaluation to be incorporated into the Alternatives Analysis
- Design Memorandum
- Draft and final alternatives analysis memo

TASK 6: ENVIRONMENTAL REVIEW AND DOCUMENTATION

Subtask 6.1 – Environmental Permitting

Local funding for the NW Lake Road and Everett Road project is secured solely through the Public Works Trust Fund for the preliminary engineering and right-of-way phases. Environmental permitting tasks are summarized below in Tasks 6.1.1 through 6.1.12.

Environmental Review and Documentation Task Overall Assumptions

- Federal funding is not secured at this time and, therefore, the National Environmental Policy Act (NEPA) process is not anticipated. But, if federal funding is added to the project, the project team has applicable technical expertise and can easily respond to address the required NEPA documentation associated with federal funding.
- Permit fees will be paid for by the City.
- The shoreline substantial development permit and conditional use permit and critical areas permit will be processed as Type 2 applications and hearing examiner approval will not be required.
- City will conduct one round of review for all permit narratives and technical memoranda. Documents will be provided electronically.
- Meetings are limited to those defined in project tasks.
- Consultant will assemble and submit applications to the City.

Subtask 6.1.1 – Wetland and Waterbodies Delineation and Assessment

The Consultant will delineate the boundaries of wetlands and ordinary high water mark (OWHM) within the study area. Wetland boundaries will be delineated in accordance with the criteria and methods described in the U.S. Army Corps of Engineers (USACE) 2010 Regional Supplement to the USACE Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region – Version 2.0 (USACE 2010). OHWM boundaries will be demarcated according to the criteria defined in the Washington State Department of Ecology (Ecology) publication titled – Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State (2016). The study area for the project as shown in Figure 6.1includes portions of the rights of way at the intersection of NE Lake Road and NE Everett Road (State Route 500), the City owned parcel located east of the intersection (Parcel Number 124541000), and portions of Parcel Numbers 124522000, 90249000, 91025001, 90941000, 124502000, 124524000, and to the southern terminus of Lacamas Village mobile home park. To complete this effort the Consultant will conduct the following tasks.

- Review background information including soil maps, topographic maps, National Wetland Inventory maps, and recent and historic aerial photos. To assist in determining the location of jurisdictional wetlands.
- Conduct a field investigation and collect the appropriate data, determine the wetland boundaries, record the boundaries using a GPS unit capable of post-processed sub-meter accuracy, and flag them in the field for future verification by regulating agencies.
- Delineate the OHWM of Lacamas Lake north of the existing intersection and the Round Lake slough east of the intersection.

- Prepare a project-specific wetland and waterbodies delineation and assessment report for the study area that summarizes the findings of the field investigations.
- Compile the data collected in the field onto wetland data sheets and summarize the results in report form.
- Evaluate pertinent records concerning wetland alterations and site hydrology as required by the delineation method.
- Assess all delineated wetlands using the most recent version of the Washington State Wetland Rating System for Western Washington (Ecology 2014).
- Prepare the graphics required for concurrency by the regulating agencies for inclusion in the delineation report.
- Participate in one 2-hour meeting with the Consultant design team to discuss the mapped wetlands within the corridor and identify opportunities to avoid and minimize wetlands impacts and permitting strategies.
- Prepare for and participate in one 4-hour on-site meeting with the U.S. Army Corps of Engineers (USACE) to review the delineated wetlands to facilitate agency review and concurrence with the delineation.

Assumptions

- The study area for the wetland and waterbodies delineation will be limited to the area shown in Figure 6.1. The City will coordinate rights of entry to parcels not owned by the City.
- No direct wetland impacts will result from the project and no authorizations are needed from the USACE or Washington Department of Ecology.
- City will conduct one round of review on the wetland delineation; any resulting edits will be minor and will not require additional technical analysis.

Deliverables

- Draft and final wetland delineation report (one electronic copy)

Subtask 6.1.2 – Habitat Assessment

The project site is mapped as having both riparian and non-riparian priority habitats. The riparian habitats are associated with Lacamas and Round lakes. The forested area on Parcel Number 124541000 is mapped as part of the larger biodiversity area and corridor surrounding Round Lake. To complete the habitat assessment the Consultant will conduct the following tasks:

- Conduct a qualitative assessment of the riparian and non-riparian habitat within the project area in accordance with the Washington Department of Fish and Wildlife Priority Habitat and Species List (2018).
- Prepare descriptions of the existing conditions of any habitat identified and a description of functions the habitat provides.
- Capture the existing baseline conditions of the site that can be used in other tasks to quantify impacts and develop appropriate mitigation measures.

Assumptions

- The study area for the habitat assessment will be limited to the area shown in Figure 6.1. The City will coordinate rights of entry.

- City will conduct one round of review on the habitat assessment; any resulting edits will be minor and will not require additional technical analysis.

Deliverables

- Draft and final habitat assessment report (one electronic)

Subtask 6.1.3 – Camas Tree Survey Permit

It is expected that the planned road design improvements will result in the removal of existing trees in the intersection vicinity. The City of Camas regulates trees considered "significant trees". These are defined by CMC 18.03.050 Environmental Definitions as evergreen trees 8-inches and larger in diameter at breast height (dbh), and deciduous trees, other than red alder or cottonwood, twelve inches and larger in dbh. For the tree/vegetation survey the Consultant will conduct the following tasks.

- A professional forester will identify all trees meeting the above criteria by species with dbh and health condition.
- Record their position during the topographic survey.
- Conduct a hazardous tree inventory condition assessment as part of the inventory to document trees that are not required to be included in the tree inventory as tree units.
- Conduct two, 8-hour site visits to perform field verification, data collection, and to flag species regulated by city ordinances.
- Evaluate the proposed project design impact to trees.
- Prepare a tree plan summarizing the existing tree species and diameter, tree health condition, hazardous tree appraisals, and preservation.
- Prepared a restoration plan to mitigate for trees impacted at the suggested 2:1 replacement ratio per CMC 16.51.125(B) using native trees that are a minimum caliper of two inches. Replacement trees may include mitigation plantings, applicable street trees, City tree fund or some combination thereof.
- Tree replacement will also be required to meet the City tree density requirements.
- Tree removal options will include assessment of three roundabout alternatives and one signal alternative.

Assumptions

- The tree survey area is limited to the area shown in Figure 6.1.
- The City will conduct one round of review and comment on the tree survey and tree restoration plan.
- The tree restoration plan will accompany the other project permits, but will not require a separate permit application.
- Tree mitigation locations will be combined with the critical areas mitigation plan, Task 6.1.6 to the extent possible.

Deliverables

- Draft and final tree survey (one electronic copy)
- Draft and final tree restoration plan (one electronic copy)

Subtask 6.1.4 – Type II Critical Areas Permit/Pre-application Conference Application

The project area contains critical areas, outside of shoreline jurisdiction, that would be regulated under the City's Critical Areas Ordinance (CMC Chapter 16.51 to 16.61), including wetlands, fish and wildlife conservation areas, regulated trees, and associated buffers. Because it is anticipated that the project will require some degree of impact to critical areas, including tree removal, applicable to the critical areas ordinance, a Type II critical area permit (CMC 16.51.125) will be required. The critical areas permit application will include the necessary forms and a critical areas report that summarizes how impacts will be avoided, minimized, and/or mitigated for each type of critical area, including supporting documents, such as the wetland delineation (Subtask 6.1.1), habitat assessment (Subtask 6.1.2), tree inventory and restoration plan (Subtask 6.1.3), critical areas mitigation plan (Subtask 6.1.6), and flood hazard assessment (Subtask 6.1.7).

It is expected that tree removal will be necessary for the project that will result in a loss of priority habitat areas and significant trees. Mitigation associated with the tree impacts will be detailed in the critical areas mitigation plan (Subtask 6.1.6) and summarized in the critical areas report.

The Consultant will prepare a City pre-application conference application prior to submittal of the critical areas permit application. This will include a project narrative, application form and conceptual engineering plans. Three Consultants will attend a one hour meeting with City staff to review the city requirements and confirm application submittal requirements.

The Consultant will request a copy of the draft Type II staff report for the critical areas permit and will circulate the draft staff report to the project team via email for review and input. The Consultant will collect and compile team comments on the staff report and will respond to City review staff with any suggested edits to the staff report.

Assumptions

- Draft pre-application conference application
- Final pre-application conference application
- Critical areas impacts may include both temporary and permanent impacts
- The Consultant includes one round of review and comments on the City's draft staff report
- Recording of a covenant or tract to preserve critical areas and/or project mitigation, if necessary, will be handled by the City

Deliverables

- Draft critical areas report consisting of a narrative and summary of impacts/mitigation of critical areas for City review (one electronic copy)
- Final critical areas report based on City comments
- Application form and compilation and submittal of the compiled application package
- Draft staff report review comments

Subtask 6.1.5 – Shoreline Management Permit

The shoreline master program (SMP) applies to shorelands extending two hundred (200) feet in all directions from the ordinary high water mark (OHWM) of waterbodies designated water of the state. The corridor alignment and proposed improvements are located within 200 feet of the OHWM of Lacamas Lake and is subject to the Camas

Shoreline Master Program. Arterial roadways are permitted in the Medium Intensity environmental designation and are permitted conditionally in the Urban Conservancy designation.

The shoreline permitting process will require documentation that shows no net loss of shoreline functions within the shoreline area, along with a design that minimizes shoreline impacts, and maintains safe public access to Lacamas Lake. The Shoreline Substantial Development and Conditional Use Permit applications will require review and approval by the City Shoreline Management Review Committee and it is assumed that hearings examiner review and approval is not needed; however shoreline committee attendance by the Consultant may be required, and up to three Consultants would attend this meeting if needed. The shoreline conditional use permit is subject to approval from the Department of Ecology (DOE). Specific regulations relating to transportation uses outlined in SMP 6.3.14 and all other applicable shoreline regulations will be addressed in the permit application, along with conditional use permit criteria.

For the Shoreline Permit, the consultant will:

- Prepare the combined shoreline substantial development and conditional use permit application including:
    - the general application form
    - mailing list of property owners within three hundred feet of the proposed improvements
    - SEPA checklist (described in Task 6.1.8 of this scope of services)
    - project narrative
    - vicinity map showing the location of waterbodies within three-hundred feet of the improvements
    - proposed engineering plans (described in Task 8).
- The shoreline narrative will address critical areas within shoreline jurisdiction and summarize the critical areas impacts and mitigation detailed in the Critical Areas Mitigation Plan (Subtask 6.1.6).

Assumptions

- The shoreline substantial development and conditional use permit application will be combined into one submittal.
- A JARPA will not be necessary because work below the OHWM of regulated waterbodies or wetlands will not occur.
- The Consultant will conduct one round of review of the draft shoreline substantial development and conditional use permit application.
- A hearings examiner hearing will not be necessary for shoreline permit approval.

Deliverables

- Draft and final combined shoreline substantial development and conditional use permit application package (one electronic copy).

Subtask 6.1.6 – Critical Area Mitigation Plan

As previously described, the project area contains critical areas, both within and outside of shorelines. It is anticipated that the project will have impacts to wetland buffers, riparian habitat, non-riparian habitat, and "significant trees" as defined by CMC 18.03.050 and the mitigation plan will include a detailed discussion of these impacts. To compensate for impacts to critical areas, the Consultant will prepare a critical areas mitigation plan

that details temporary and permanent impacts to critical areas regulated by the City. To develop a mitigation strategy that results in no-net loss of function, the Consultant will assess up to four potential sites within Lacamas River watershed that can accommodate wetland buffer, riparian habitat, and non-riparian habitat mitigation. The plan will include:

- A description of temporary project impacts that can be adequately mitigated by restoring impacted areas to their existing conditions.
- A summary of the restoration plan in Subtask 6.1.3, mitigating for trees impacted at the suggested 2:1 replacement ratio per CMC 16.51.125(B) using native trees.
- Mitigation strategy that replaces wetland buffer, riparian habitat, and non-riparian habitat at an off-site location that results in no net loss of critical area functions and values.

Assumptions

- Temporary project impacts are adequately mitigated through construction methods, best management practices, and restoring impacted areas.
- Frequently flooded areas occur within the project area but will be addressed under Subtask 6.1.7.
- Significant tree impacts and associated mitigation are addressed in Subtask 6.1.3.
- No direct impacts will occur to wetlands within the project area.
- The Consultant will review up to four, City identified sites that can accommodate riparian, non-riparian, and wetland buffer mitigation.
- The Consultant includes up to three 2-hour meetings to discuss mitigation sites and strategy with City staff.

Deliverables

- Draft and final critical areas mitigation plan (one electronic copy)

Subtask 6.1.7 – Flood Hazard Assessment (CONTINGENCY)

- Not currently included

Subtask 6.1.8 – SEPA Documentation

The Consultant will complete a SEPA checklist limited to the proposed project corridor which contains critical area with grading activities. The SEPA checklist will be provided to the City and the City will issue the SEPA determination.

Assumptions

- The Consultant will not conduct any additional studies to support the SEPA checklist.
- The City will act as the SEPA lead agency and issue a threshold determination.
- The SEPA threshold determination is anticipated to be a Determination of Nonsignificance (DNS) or a Mitigated Determination of Nonsignificance (MDNS).
- A SEPA environmental impact statement will not be required.

Deliverables

- Draft and final SEPA checklist

Subtask 6.1.9 – Clark County Legacy Lands and Conservation Futures

A portion of the anticipated road alignment was acquired via the Clark County's Conservation Futures program which sets aside parks and natural areas known as Legacy Lands. Monies are spent using a countywide property tax initiated in 1985 (6.25 cents/$1,000 assessed property value) and the lands are purchased throughout the county, including within city boundaries. The land is set aside with long-term grant obligations similar to those affecting federal and state recreation and conservation resources. The conversion of these lands to a transportation use will require a replacement of land in-like-kind and utility. Conservation Futures and the conversion of these lands is described in the *Clark County Conservation Futures Legacy Lands Program Guidance Manual* (June, 2013) and the revised code of Washington (RCW) 84.34.

Three Clark County Legacy Lands exist within the project area - Fallen Leaf Lake Park, Lacamas Lake Park, and the Heritage Trail, however, none of these properties are anticipated to be impacted by this project. The City does own property which is understood to be under the Clark County Legacy Land program that is located on the undeveloped property south of the Lacamas Lake Park and parking lot, east of Everett Road, and north of the Camas Produce Store. The *Clark County Conservation Futures Legacy Lands Program Guidance Manual* (June, 2013) describes the process required to complete a conversion of land use to a transportation use. If these lands are converted to public right-of-way, a grant conversion process will likely be triggered. The City will take the lead in completing any necessary documentation to address impacts to and complete the conversion process.

It is also anticipated that a sidewalk connection from the intersection to Fallen Leaf Lake Park will be at least conceptually planned for as part of the planned road improvements and it will be important to address how the side walk connection to the park matches up with the Fallen Leaf Lake Park Master Plan, and the Consultant will address this connection of the sidewalk in a memorandum to advise on the conceptual sidewalk connection.

To assist in this effort, the Consultant will

- Provide up to 40 hours to assist the city in this process, including coordination/meetings with county parks staff, to discuss the conservation futures program and potential impacts and documentation needed to mitigation for impacts. Provide up to 40 hours of coordination/teleconferences with the Washington State Recreation and Conservation Office (RCO) to address Lacamas Lake Regional Park in Clark County and whether an RCO conversion process would be needed to connect sidewalks and paving into the park
- Provide a brief memorandum regarding pedestrian connectivity and sidewalk access between the intersection and the Fallen Leaf Lake entrance, and address consistency with the Fallen Leaf Lake Park Master Plan.

Assumptions

- Meetings will be held in either Camas or in Vancouver Washington with Clark County staff.
- The Clark County Legacy Land conversion process will only be required for the City owned Legacy Land property and a Recreation and Conservation Office (RCO) conversion process will not be required for this project.
- The City will take the lead in completing any necessary documentation to address impacts to and complete the Clark County Legacy Land conversion process

Deliverables

- Up to 40 hours of consultant assistance related to the conservation futures conversion process
- Up to 40 hour of consultant assistance related to coordination with RCO
- Draft and final memorandum for Fallen Leaf Lake sidewalk access

Subtask 6.1.10 – USACE Section 404 and Ecology Section 401 Authorization (CONTINGENCY)
Not currently included.

Subtask 6.1.11 – Hydraulic Project Approval (CONTINGENCY)
Not currently included.

Subtask 6.2 Cultural Resources
The City of Camas's (City) NE Lake Road and NE Everett St. (SR-500) - Intersection Improvements Project will be funded through Washington State funds through the Washington State Department of Commerce, and will require compliance under Governor's Executive Order 05-05 (EO 05-05) and the City's archaeological ordinance. AINW will provide a cultural resource survey for EO 05-05 and State Environmental Protection Act (SEPA) review, and provide the report for the SEPA submittal. The study will be directed by AINW staff meeting the professional qualifications of the Secretary of the Interior's Standards and Guidelines in Archaeology and Historic Preservation. Department of Archaeology and Historic Preservation (DAHP) standards will also be followed.

AINW will perform the following tasks:

- Participate in a project kick-off meeting/conference call.
- Conduct a background review of the previous studies performed in the vicinity.
- Provide the EZ-1 Form that outlines the project area for the City to submit to the Department of Commerce, DAHP, and the Tribes.
    - The EZ-1 needs to include maps and photographs of the project area and outline the proposed archaeological survey methodology. A field visit will be needed to photograph the project area to complete the EZ-1 Form.
    - Once the EZ-1 is accepted, the archaeological survey fieldwork can be conducted.
- Monitor geotechnical borings within the project area.
    - An archaeologist will inspect the locations of geotechnical borings in advance, to see if an archaeological resource is present.
    - Two 10-hour days are assumed, including both monitoring and travel time.
    - A summary will be provided to the project team upon completion of monitoring, and the results will be included in the cultural resource survey report.
- Conduct an archaeological survey.
    - Portions of the project area have been previously surveyed with pedestrian transects, but no shovel testing has been conducted.
    - Fieldwork will include a pedestrian survey using transects spaced no more than 33 feet (10 meters) apart.
    - Excavate up to eighteen (18) shovel tests in the project area. The shovel tests will be used to delineate resource boundaries, if a resource is found; fewer will be needed if there is no resource. Shovel tests will be 30 centimeters at the surface and will be excavated to 50 centimeters below the surface or deeper, if warranted. Soils will be screened through ¼- and ⅛-inch mesh hardware cloth. The shovel tests will be backfilled immediately upon completion.
    - If artifacts are observed, they will be photographed, but not collected.
- One archaeological site may be newly documented.

  - No archaeological resources have been previously recorded within the project area, but several are in the project vicinity.
  - If more than one archaeological resource is found, an additional budget may be needed to complete the resource forms.
  - The resource will be recorded on a State of Washington Archaeological Site Inventory Form.
- Prepare the survey report to meet review by the Washington State Department of Commerce, DAHP, the City, and Tribes.
  - The Archaeological resource form will be appended to the report.
  - Upon acceptance, AINW will compile the report (and site form, if appropriate) as a single document. AINW can assist with distributing the report to reviewers, if needed.
    - For EO 05-05, the City will submit the report to DAHP and the Washington State Department of Commerce. The City's submittal to DAHP will also address SEPA needs for the project.
    - To meet the City's archaeological ordinance, the City will submit the report to the eight Tribes with whom the City coordinates.

Deliverables

- An EZ-1 Form, draft and final.
- A geotechnical monitoring summary in an email.
- A cultural resource report, draft and final.

Assumptions/Out of Scope Exclusions

- The compliance will be through EO 05-05 to be reviewed by PWTF and possibly reviewed by WSDOT. This will not be done to meet Section 106 of the National Historic Preservation Act.
- No historic resources will be found within the project area.
- One archaeological resource may be found.
- If more than one archaeological resource is found, additional shovel testing, site form preparation, and reporting would be at additional cost.
- If the geotechnical monitoring requires more than two 10-hour days, the extra time would be at additional cost.
- Geotechnical borings will be within the road prism, or where an archaeological walkover has been conducted in advance, and no resource is present.
- A traffic control plan (TCP) is not assumed to be necessary for archaeological work on the shoulder of the roads within the project area. If a TCP is needed, it would be at additional cost.
- If an archaeological site resource is found, based on the results of the pedestrian survey and shovel testing, additional excavations may be needed to evaluate the integrity and significance of the resource.

Subtask 6.3 NPDES Construction Stormwater General Permit

Not currently included.

TASK 7: WSDOT DESIGN DOCUMENTATION

The Consultant will perform the required roadway and hydraulic design documentation per the requirements of the WSDOT Design Manual and Hydraulics Manual. The current phase is only through the Design Approval and does not include the Project Development Approval or the Hydraulic Report Documentation. The following scope of work is described below in greater detail.

Subtask 7.1 Design Approval

Design Approval by WSDOT is required per WSDOT Design Manual Section 300.04(1) and the Consultant will create the following documents for the package for submittal and approval by WSDOT:

- Intersection Plans for Approval
- Basis of Design
- Design Parameters
- Project Summary Documents
- Design Analysis with list of known variances
- Channelization Plans (stamped)
- Design Approval Memo Describing the Project (stamped)
- Include other information from Practical Solutions/Design, Environmental and Preliminary Roadway Plans.

Subtask 7.2 Project Development Approval

Not currently included.Subtask 7.3 Hydraulic Report Documentation

Not currently included.

Assumptions

- WSDOT procedures and approvals are required per the pertinent WSDOT manuals.
- WSDOT will be involved in the review and approval of documentation. This includes addressing review comments by WSDOT and the City Camas.
- A formal channelization plan will be required for intersection changes.
- An access justification report is not required for the project.

Deliverables

- Draft and Final Design Approval (at 30% Design Phase)

TASK 8: DESIGN ENGINEERING

The consultant will advance the design to preliminary (30 percent) plans during the current phase of the project. , The Consultant team will be responsible to provide design engineering services for the deliverables outlined below for the following submittals:

- Preliminary (30%) Submittal
- QA/QC

Subtask 8.1 30 Percent Design (Preliminary)

The consultant will develop preliminary documents to the 30 percent design stage. These documents will be used to assist the permit process. Review documents will consist of drawings, and a preliminary opinion of probable construction cost. At this design level, the overall design layout, footprint, and geometrics of the project are established, and all decisions required to generate construction details have been made.

Develop corridor Infraworks model and flight path for use in public outreach.

The 30% plans shall include:

- Cover Sheet
- Civil Legend Sheet
- Typical Sections
- Plan over Profile Sheets showing basic roadway geometry information and preliminary stormwater layout
- Strip Map
    - Plan over Profile strip map showing basic roadway geometry information and incorporating recommended intersection geometry, lane configurations, pedestrian crossing and median locations and access management implementation, and conceptual storm layout.

Deliverables

- Ultimate lane configuration recommendation along the corridor
- 30% strip map
- 30% Plans, and Cost Estimates 3 hard copies of the plans (11X17), a PDF of the plan set, and cost estimate)
- 30% Construction Cost Estimate
- Infraworks Video

Subtask 8.2 - 60 Percent Design (PS&E)
Not currently included.Subtask 8.3 - 90 Percent Design (PS&E)
Not currently included.Subtask 8.4 - Final Design (PS&E)

Not currently included.

Subtask 8.5 - QA/QC

The Consultant will provide quality assurance/quality control (QA/QC) for design work in accordance with the Consultant's QA/QC Program. The Consultant will provide senior level design and construction personnel to review plan submittals and provide technical support.

Subtask 8.6 Structural Engineering (CONTINGENCY)

Not currently included.

TASK 9: UTILITY COORDINATION

Subtask 9.1 Utility Coordination

Contact utilities within the project limits and obtain existing system mapping. Review mapping for consistency with project base map.

Conduct a utility reconnaissance of the project corridor to determine visual evidence of underground and above ground utility facilities and confirm utility provided facility maps and project base map completeness.

Identify and discuss with each utility special requirements associated with their facility relocation or modification.

Subtask 9.1.1 - Utility Meetings
Not currently included.Subtask 9.1.2 - Conflict Identification, Analysis and Recommended Resolution
Not currently included.Subtask 9.1.3 -Conflict Notification and Utility Relocations
Not currently included.

Assumptions

- City will provide utility plans, GIS and other supporting documents for City utilities within the project corridor
- Utility design location fees, if any, are not included in Consultant's costs and will be paid by the City if required.
- Utilities will provide as-built system maps of their facilities within the project corridor
- Additional right-of-way and/or easements that may be required for relocated utilities, is the responsibility of the utilities or the City in the event of prior rights.

Deliverables

- 30% Submittal - Existing utilities identified and marked-up on survey basemapping.

TASK 10: PUBLIC INVOLVEMENT

This task includes coordinated public and stakeholder involvement, including the formation of the Project Advisory Committee (PAC), stakeholder interviews, open houses, project website, and social media outreach. All outreach efforts are designed to engage the citizens of Camas, visitors to the recreation areas in the vicinity of the project, agencies involved with the project, and owners of nearby properties and businesses who will be impacted by the project.

The following public involvement tasks will allow stakeholders to engage in the project in a number of ways, including attendance at physical open houses, access open house information online, an online survey, and website updates so they can share concerns and issues that can be addressed in a meaningful way to develop community consensus.

Task 10.1 Public Involvement Plan

At the kick-off meeting the Consultant will discuss with the City the public involvement needs of the project, the program, and deliverables. Following this meeting, the Consultant will develop a public involvement plan (PIP) to guide the outreach efforts for the project. The PIP will include the following elements.

- Public involvement goals (i.e., education on the project, effective stakeholder engagement), and public involvement schedule.
- Project stakeholder list that will include nearby property owners, local neighborhood associations, business owners, relevant recreational user groups, agencies, and community leaders within the city. This list will likely include representatives of agencies (e.g., WSDOT, Camas School District, Camas Parks Department, Clark County Parks Department, and others) and will include contact information (name, title, e-mail, phone, mailing address).

- Project Advisor Committee (PAC) member list; members will most likely to include representatives of City, the project team, and owners of nearby properties and businesses.
- Outline the goals and timing of stakeholder interviews, the online survey, PAC meetings, and open houses.
- Communication tools (project brand and website, social media content, mailers, and media release content).
- Social Media Protocols.
- Procedures for acknowledging, considering, and responding to public comments.
- Aerial map of the project area with property ownerships and businesses location labels.
- 4'x8' project board at intersection (PBS to coordinate)

Assumptions

- The City will respond to all media inquiries and serve as the public information officer for this project.
- The City will provide any additional available information for any known stakeholders from these communities who should be engaged in the outreach process.
- The Consultant will help develop content that the City will post at its existing social media outlets.
- This task includes one 2-hour public involvement kickoff meeting with the City attended by public involvement staff and project manager and project engineer. (2 PBS Staff, 2 Berger Staff)
- This task includes up to two, 1-hour public involvement coordination meetings with the City. (1 PBS Staff and 1 Berger Staff)
- The City will conduct one round of review on the draft PIP.
- The City will conduct one round of City review of the project brand
- 4'x8' project board at intersection will be expensed to the City.

Deliverables

- One 2-hour pubic involvement kickoff meeting
- Up to two, 1-hour public involvement coordination meetings with the City
- Property and business ownership aerial map
- Draft and final PIP
- Draft and final project brand
- MS Excel electronic file with stakeholder contact information (e-mail, phone, mailing address)
- 4'x8' project board at intersection

Subtask 10.2 Stakeholder Interviews

To gain an early understanding of key concerns from owners of property and businesses who may be directly impacted by the project the Consultant will conduct stakeholders interviews. This effort will allow the project team to gather information about the issues, identify community perceptions regarding the range of solutions, and share findings with the PAC through a stakeholder summary. This input will help the project team better understand the project area, and the potential impacts and improvements as they are perceived by stakeholders. For this effort, the Consultant will

- Develop, for the City's approval, a list of up to 15 stakeholders to be interviewed.

- Prepare an invitation for the City to send to ask stakeholders for their participation.
- Work with the City to develop a list of questions for use in the interviews.
- Conduct up to 15, 45-minute one-on-one interviews scheduled by the City over a three day period.
- Prepare a summary report highlighting stakeholder comments, findings, and key observations.

Assumption(s)

Assumptions

- The City will approve the list of stakeholders to be interviewed.
- Each stakeholder interview (up to 15) will not exceed 45-minutes.
- The City will conduct one round of review of the stakeholder questions and draft summary report.
- The City will schedule the interviews over a three day period.
- Any missed or make up interviews outside of the schedule will be conducted via telephone.
- If available, a City venue will be the location of the stakeholder interviews.

Deliverable(s)

Deliverables

- Recommended stakeholder interview list
- Draft and final prospective stakeholder letter.
- Draft and final interview questions
- Draft and final summary report of stakeholder findings and key observations

Subtask 10.3 Project Advisory Committee (PAC)

The PAC will comprise a mix of stakeholders that represent local agencies, businesses, residents, and interests that will be engaged in the development of a preferred project design, and will be formed with City. The PAC will advise the City and Consultant team on the development of design concepts and on the ultimate selection of a preferred design. The PAC will operate under agreed roles and responsibilities to be set at their first meeting. The PAC will meet two times during the current phase of the contract:

- PAC Meeting No. 1 – Review project purpose and goals, PAC roles and responsibilities, existing conditions and design constraints, and alternatives evaluation criteria prior to Open House No. 1.

  At the first PAC meeting the consultant will present preliminary findings regarding critical existing conditions and design constraints, and develop design evaluation criteria. Workshop No. 1 (noted in subtask 10.4) will follow, allowing the public to weigh in on the project goals, concerns and to provide initial input on project expectations. This meeting will be held prior to alternative analysis.

- PAC Meeting No. 2 – Review stakeholder interview summary, website survey results, Open House 1 summary, and review Draft Alternatives Report and the Preferred Alternative prior to Workshop No. 2. (noted in subtask 10.4)

  At their second meeting the PAC will review the stakeholder interviews summary, online survey results, and provide input on the Draft Alternative Analysis Report which was used to select the Preferred Alternative (draft). Using the information gathered from this meeting, the consultant team will use this feedback in conjunction with feedback from the City Council Workshops to refine the Preferred Design Alternative and the Final Alternative Analysis Report. The Final alternative analysis will be featured at Open House No. 2. This Final Preferred Alternative will be refined for the 30% plans.

For the PAC, the Consultant will conduct the following tasks.

- Coordinate two 2-hour PAC meetings, which will alternate with Open Houses for the project.

- Prepare agendas and materials for the City to review and send to the PAC.
- Maintain and manage the PAC roster.
- Prepare presentation boards or a slide presentation featuring conceptual graphics (original and Final design alternatives) for each PAC meeting.
- Facilitate each PAC meeting.
- Prepare a summary of the PAC discussion and forward any recommendations following each meeting for City review.
- Prepare final meeting summaries based on City comments and provide to City.
  Assumption(s)

Assumptions

- Up to two 2-hour PAC meetings will occur.
- Up to five Consultant team staff members will attend (2 Berger Staff, 2 PBS Staff, 1 KAI Staff).
- The City will arrange, provide notice to members, and schedule a venue for PAC meetings.
- The City will conduct one round of review of the meeting summaries.

Deliverables

- Agendas, presentation boards (up to 4 per meeting) or slide presentations for up to two meetings (3 exhibits Provided by PBS, 1 exhibit and agenda by Berger)
- Up to two draft and final meeting summaries (Prepared by Berger).

Subtask 10.4 City Council Workshops

After each PAC Meeting and prior to each open house a City Council Workshop will be attended:

- Workshop Meeting No. 1 – Review project purpose and goals, PAC roles and responsibilities, existing conditions and design constraints, and alternatives evaluation criteria prior to Open House No. 1.

  At the first workshop meeting the consultant will present preliminary findings regarding critical existing conditions and design constraints, and develop design evaluation criteria. Open House No. 1 will follow, allowing the public to weigh in on the project goals, concerns and to provide initial input on project expectations. This meeting will be held prior to alternative analysis.

- Workshop Meeting No. 2 – Review stakeholder interview summary, website survey results, Open House 1 summary, PAC comments, and review Draft Alternatives Report and the Preferred Alternative prior to Open House No. 2.

  The second workshop will review the PAC comments, stakeholder interviews summary, online survey results, and provide input on the Draft Alternative Analysis Report which was used to select the Preferred Alternative (draft). Using the information gathered from this meeting, the consultant team will refine the Preferred Design Alternative and the Final Alternative Analysis Report. The alternative analysis will be featured at Open House No. 2. This Final Preferred Alternative will be refined for the 30% plans.

For the Council, the Consultant will conduct the following tasks.

- Coordinate two Council Workshop meetings, which will take place after the PAC meetings and prior to the project Open Houses.
- Prepare agendas and materials for the City to review propr to the Workshop.

- Prepare presentation boards or a slide presentation featuring conceptual graphics (original and Final design alternatives) for each workshop.
- Facilitate each workshop.
- Prepare a summary of the workshop discussion and forward any recommendations following each meeting for City review.
- Prepare final meeting summaries based on City comments and provide to City.

Assumptions

- Up to two Council Workshops will occur.
- Up to four Consultant team staff members will attend the 2 meetings (2 PBS Staff, 1 Berger Staff, 1 KAI Staff).
- The City will conduct one round of review of the meeting summaries

Deliverables

- Agendas, slide presentations for up to two workshops (Provided by PBS)
- Up to two draft and final meeting summaries (Prepared by PBS).

Subtask 10.5 Open Houses (2) and Community Survey (1)

Two community open houses will provide interested community members the opportunity to learn about the project and ask questions one-on-one with subject matter experts on the project team, and will facilitate public feedback. Materials presented at these open houses will be posted to the project website following each event, including a comment form for those unable to attend in person.

Open House No 1 will focus on soliciting public opinion, comment, and providing information about the project, goals drafted by the PAC, and to garner public insight to existing conditions and concerns. An online survey will be provided to document public feedback.

Open House No. 2 will include presenting the Final Preferred Alternative to the general public and providing an update on anticipated project schedule.

The following tasks will be undertaken by the Consultant to complete both of the open houses:

- Develop one event plan that identifies event process, format, displays, staffing, advertising/public notice needs, and the schedule of deliverables.
- Prepare up to eight (4 per open house) 24- by 36-inch presentation boards,
- Prepare double-sided 8.5x11 inch factsheets (one per meeting),
- Prepare comment forms. The comment forms (one per open house) will be distributed to solicit feedback from the event attendees.
- Prepare sign-in sheets, staff name tags, and meeting signage.
- Develop one online survey with input from the PAC via Survey Monkey to document the publics' concerns and priorities pertaining to this project. The survey will introduce the project and solicit input from a broad cross-section of the Camas community.

- Post the online survey via the website and social media.
- Prepare event summaries, including a summary of written comments received at the open house.
- Prepare draft and final public notices for The Columbian and Camas-Washougal Post-Record for review and submittal by the City.
- Draft and coordinate release of a notice for each open house (2) on the project website and social media platforms.
- Draft an email notice of upcoming open houses (2) to project stakeholders for distribution by the City.
- Draft, produce, and distribute two 7x10 inch postcard mailer to all addresses in the Camas zip code.
- Provide up to three staff members for the event: an event coordinator/greeter and two subject matter experts who will be made available for questions.
- Conduct up to two, 30-minute preparation meetings via conference call with the City to discuss and to maintain progress, one per Open House.

Assumptions

- City will be responsible for selecting and securing venue and directly paying any applicable venue fee.
- Open houses will be up to 2 hours in length.
- The City will provide key staff to attend the event.
- The City will post local newspaper public notice, and will directly pay any applicable fees.
- Postcard mailer printing and postage costs (2 mailings) are included.
- The Consultant will include open house announcements (2) on the project website and social media outlets.
- The City will distribute an event announcement via email to project stakeholders.
- The City will conduct one round of review of the event plan, meeting materials, and meeting summaries.
- Up to five Consultant staff to set up and staff open houses; including subject matter experts (2 Berger Staff, 2 PBS Staff, 1 KAI Staff).

Deliverables

- One online survey and summary memorandum (Berger).
- Draft and final event plan (Berger).
- Draft and final advertisement content: local newspaper notice, stakeholder email content (Berger).
- Draft and final event materials: postcard mailers, sign-in sheets and comment forms (hard copies) provided for three open houses (Berger).
- Draft and final double-sided 8.5x11-inch factsheets (hard copies for the meeting) provided for two open houses (Berger).
- Two draft and final event summaries (Berger).
- Up to 8 draft and final 24- by 36-inch presentation boards (up to 4 per open house, 2 total boards provided by Berger, 6 total boards provided by PBS)

Subtask 10.6 Branding and Website

The Consultant will develop a project brand and a project website. The brand will provide a consistent look for all public outreach materials that is easily recognizable, providing a project identity. The project brand will be used in print and online materials.

The project website will educate stakeholders and residents, thus helping to build project momentum and gain support. It will convey and collect data on project purpose, current constraints (e.g., traffic delays), and opportunities that will be used to develop the design alternatives. This data will be collected through an online survey and comment forms. The website will also communicate open house and public participation opportunities. Information presented at the open houses will be made available for online review and comment. The website represents a two-way communication loop, wherein data is collected to shape the project, and updates on project alternatives are provided to the public to reflect their input. To accomplish this two-way communication, the website will include outgoing information – updates on what was learned during the outreach process, how that information has been applied to the project, next steps, project benefits, project impacts, community updates – and opportunities for incoming feedback by commenting, asking questions, and signing up for the mailing list.

The Consultant will coordinate with the City to maximize social media outreach. Use of the City's social media platforms (Facebook, Twitter, and the City's website) will enable the Consultant team to reach community members who currently follow the City. The Consultant will help develop content that the City will post at its existing social media outlets. The project website and social media pages will link to each other and work together to reflect a unified message.

Development of the project brand and website includes:

- **Branding:** Research existing project information and develop the project brand; this will include background research, purpose, concept renderings, images, feedback from initial outreach, and project goals.
    - Design and implement a project brand and brand standards for all public engagement materials that are reflective of the key messages developed in the alternatives evaluation.
    - The brand will be developed as two draft images/logos for review and a final selection for use online and with print materials.
- **Website Hosting:** One website domain name and hosting for 14 months
- **Strategy:** Analyzing information, organizing content, developing wireframe outline, and selecting engagement tools.
- **Design:** Initial design of website including homepage and navigation implementing project branding,
- **Review:** Two, 1-hour meetings with the City and Consultant to present the project brand, draft website design, and content for City review and comment. The Consultant will revise the website design based on the comments. One, 1-hour meeting to address final changes before launch.
- **Development:** Building up to five pages, inserting content, setting up e-mails, and coding and testing forms.
- **Document Library:** Housing key background and environmental documents, meeting summaries, and technical findings on the website.

- **QA/QC:** Revise information based on City review comments on soft launch of project website.
- **Launch:** Launch site upon receipt of final site approval from City.

Assumption(s)Assumptions

- The Consultant will develop content for the website with City review and approval.
- The City will provide the Consultant with any existing content, including client-approved copy, maps, renderings, and images for all pages.
- The Consultant will design and develop downloadable documents used in the physical open houses (3) for review online and provide a website document library in PDF format to include up to six key project documents (i.e. traffic, environmental, and other project related reference documents).
- The website will be used to link to the online survey.
- Consultant will participate in two, 1-hour meetings (one for branding and one for website development) with the project team and the City, and one, 1-hour pre-launch teleconference.
- City will conduct up to three rounds of review of website content and design: text content and web outline; initial design, branding, navigation, and homepage layout; and QA/QC before final launch.
- The City will manage the email list, and be responsible for receiving, responding to, and collecting emails generated from the website as comments or from those who opt-in for project updates.
- The Consultant will provide an email account for the City to log into to check the emails.
  Deliverable(s)

Deliverables

- Project branding includes two draft and one final image/logo for use online and with print material
- Project website (up to five pages), including a document library for up to 6 key project reference documents domain name and hosting for up to 14 months
- Consultants will provide project specific and general roundabout information for the website (assumed 20 PBS hours and 20 KAI hours)

Subtask 10.7 Website Maintenance

To maintain the website the Consultant will:

- Provide up to 5 hours per month of website maintenance, including project updates, analytic reports, and website backup for up to 5 months, with potential to extend into the construction phase, as a separate scope of work.

Assumptions

- This scope of work and cost estimate assume a 5-month duration. Domain name and 12 months of hosting is an anticipated expense of $350, which BergerABAM will pay and invoice the client.
- Website maintenance for more than 5 months and hosting fees for more than 5 months can be provided and extended as part of future project phases (e.g. construction)
- Website update content will be provided by the Consultant team with review and input from the City. (Work consist of the assumed 40 hours in task 10.5)

Deliverables

- Monthly website updates (up to 5 hours per month) from time of launch for 5 months and hosting of the site for 5 months.

TASK 11: RIGHT OF WAY

Subtask 11.1 Appraisal and Appraisal Review

Not currently included.

Subtask 11.2 Acquisition

Not currently included.

TASK 12: CONSTRUCTION MANAGEMENT

Subtask 12.1 Bid Support

Not currently included.

CITY DELIVERABLES TO THE CONSULTANT

City Provided Information

Sample Projects

The City will provide copies of sample City projects, BA documents, and design guidelines. The City will also provide electronic files of title blocks, ortho and aerial drawings and standard details for streets, traffic signal, street lighting and other available details.

Project Coordination

The City will assist the Consultant in managing relationships with other jurisdictions involved in the project, adjacent property owners and the public. The City will provide staff to meet and discuss the project with the Consultant as needed. The City will provide written comments pertaining to the design submittals.

Right of Entry Permits

The City will obtain the right of access to private parcels for all project developments. The Consultant shall coordinate access.

Pavement Design

The City will select the pavement type and structural sections based on the pavement recommendation provided by the Consultant.

Utility List

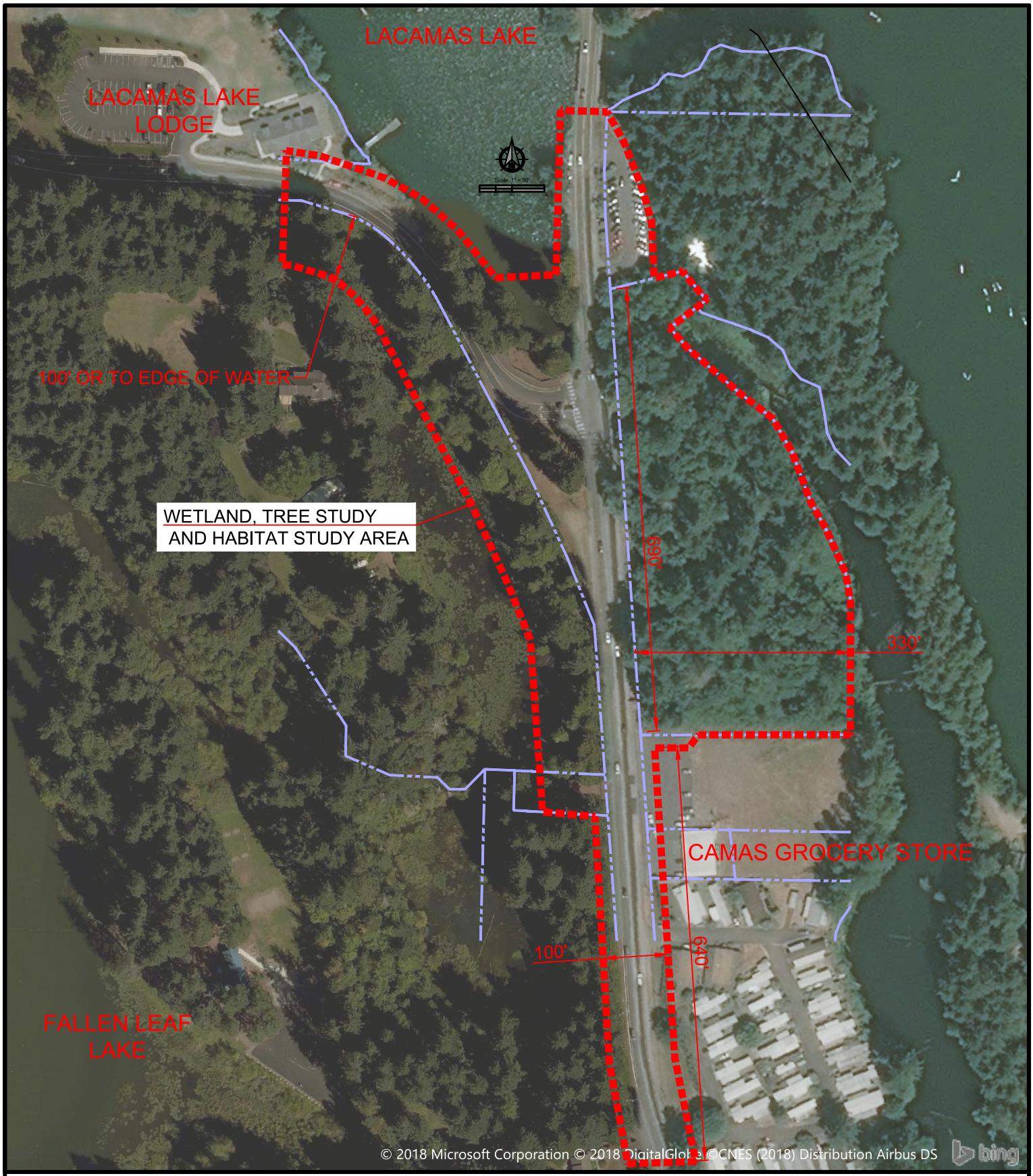
The City will provide the Consultant with a list of local contacts for utilities within the project limits. Design and plan preparation for the addition or relocation of utilities within the project limits will be done by others.

Street Light and Traffic Signal Requirements

The City will provide the illumination type, the minimum illumination levels and uniformity ratios to be used in the project design. The City will also provide traffic signal design concepts, standards and policies, including traffic interconnect schemes as needed.

- Sample projects
- Project coordination
- Survey work and preliminary plans
- Right-of-Way plans, exhibits and legal descriptions
- Right of Entry permits

- Pavement type & structural sections selection
- Utility list
- Street light and traffic signal requirements



LAKE ROAD AND EVERETT - STUDY LIMITS (FIGURE 6.1)