20 December 2023

Mr. Rob Charles
Utilities Manager
City of Camas
1620 SE Eighth Avenue
Camas, WA 98607

Subject: Well 6/14 Water Transmission Main – Scope Amendment No. 05

Dear Mr. Charles:

Thank you for the opportunity to present this amendment for WSP to provide design and permitting services for the Well 6/14 Water Transmission Main project. This amendment is necessary to further investigate landslide hazards through geotechnical field exploration and testing. Testing will allow the Geotech to determine an estimated slope failure displacement in the event of an earthquake. Design documents will be updated based on findings from geotechnical testing.

PROJECT UNDERSTANDING

The Amendment 3 contract, (dated 7 June 2023) included bid ready design documents under the assumption that geotechnical testing was not required for design. The Draft Geotechnical Hazard Assessment Report indicates landslide hazards are highly likely due to steep slopes consisting of undocumented and un-engineered fill within the project area. The following scope of work assumes information found through geotechnical testing will not trigger a change in the alignment, however specifications and design criteria will need to be updated based on estimated displacement findings from the geotechnical investigation.

Draft SEPA, Shoreline Exemption Letter, Critical Areas Report, 90% plan, specifications, and estimate deliverables were prepared and provided to the City based on the assumption that no geotechnical hazards were present. Additional work under this contract amendment will include updates to the critical areas assessment, the SEPA checklist, shoreline exemption, and the bid set submittal documents based on findings from the geotechnical testing. This scope of work assumes a shoreline permit exemption will be granted. This understanding was confirmed in a virtual meeting with the City on October 20, 2023, with the City's Planning Director, Robert Maul.

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OVERALL ASSUMPTIONS

- The proposed waterline alignment is found within a critical geological hazard area. Waterlines are an allowed use, and a permit will not be required.
- The proposed waterline alignment is within shoreline jurisdiction due to the geologic hazard liquefaction mapping. However, an exemption will be requested. Should the exemption be denied, a contract amendment will be required to reroute the waterline outside of shoreline jurisdiction or amend the City's shoreline master program to allow waterlines in the Natural shoreline environment designation.
- Site plan review would not be required based on Camas Municipal Code 18.18.020(A)(3) and (B)(3).
- A landscape, tree, and vegetation plan will not be required.
- All work products will be provided in Microsoft Word or PDF format.

SCOPE OF SERVICES

The following is WSP's proposed scope of work to address the items outlined above.

Task 1. Project Management

This task in our original scope and fee is supplemented to extend the time of performance for the project beyond 2023 as described in Amendment 3. The new time of performance shall extend through August 2024. Project management work during the extended timeline includes additional invoicing, project updates, subconsultant management, and coordination.

Task 2.6. Geotechnical Site Review

Scope

Haley & Aldrich (H&A) will perform a field exploration and laboratory testing program to inform geotechnical recommendations for the pipeline design and construction. Specific services to be completed are the following items:

- Conduct a site visit to mark proposed explorations and identify potential obstacles to location access.
- Coordinate location of existing site utilities via the One-Call Service and through the use of a private locator for utility locates near the boring and test pit locations.
- Observe drilling by a subcontractor at two boring locations along the proposed alignment, including:
  - Observe and log two borings drilled as deep as 35 feet below existing ground surface (bgs) using sonic drilling methods.

  - Attempt to collect soil samples from each boring at 2.5 to 5-foot depth intervals by advancing split spoon samplers. (H&A anticipates that the presence of cobbles may preclude the collection of some samples).

- Observe test pit excavation by a subcontractor at up to six exploration locations along the proposed alignment. Test pits will be excavated to a maximum depth of up to 15 feet bgs using a track-mounted backhoe.

- Conduct a program of laboratory testing on select soil samples collected to evaluate engineering properties of the materials. For budgeting purposes, it is assumed testing will include moisture content and grain size distributions determinations, and a suite of tests to identify soil corrosion potential. However, actual tests will depend upon the materials encountered during explorations.

- Evaluate soil conditions encountered during field exploration work; evaluate seismic hazards; and develop geotechnical design recommendations and general construction guidelines for pipelines. The analysis will include the following:

  - Development of seismic design parameters and evaluation of the potential for liquefaction, seismic settlement, lateral spread, and seismic slope instability.

  - Geotechnical engineering assessments and recommendations for the pipeline including subgrade properties, corrosion potential, and bedding and backfill material requirements.

  - Soil settlement potential under pipe and backfill loads.

  - Anticipated subgrade conditions and potential need for pipe subgrade stabilization.

  - Recommendations for open excavation, trenchless construction, subgrade stabilization, shoring, and ground control during construction.

  - Lateral earth pressures for shoring design, including active, at-rest, and passive pressures.

  - Backfill recommendations for the pipeline and compaction criteria.

- Prepare a geotechnical exploration report (draft and final versions in PDF format), including:

  - Summary of subsurface conditions;

  - Geological profiles along the pipeline alignment;

  - Results of engineering analysis; and

  - Recommendations for the pipeline design and construction.

- Provide project management and support services, including staff coordination, subcontractor coordination, and telephone consultations with the design team.

Task 2 Assumptions

- Others will coordinate right-of-way access for reconnaissance of and explorations along the project alignment.
- H&A will complete a one-day site visit prior to the start of drilling for utility clearance and site access evaluation. Boring locations will be marked by stakes for public utility clearance purposes.
- Soil cuttings from borings will be drummed and removed from the site. Borings will be backfilled with bentonite.
- Test pits will be backfilled with spoils and backfill will be tamped in place using excavator-mounted equipment. No compaction testing of backfill is proposed.
- H&A will not survey locations and elevations of completed explorations.
- Permits, if necessary to perform the site exploration activities, will be provided by the city.

Task 2 Deliverables

- Draft Geotechnical Investigation Report in PDF.
- Final Geotechnical Investigation Report in PDF

Task 5. Bid Set Submittal

Task 5.1. Final Bid Set

Finalize the plans, specifications, and cost estimate for bidding purposes. Incorporate review comments from the 90% Submittal stage and update documents per Geotechnical investigation findings.

Task 5 Assumptions

- No alignment changes.

Task 5 Deliverables

- Final Bid Set Plans, Specifications and Cost Estimate in PDF Format

Task 6. Permitting Services

Task 6.1. Revised Critical Areas Assessment

A draft critical areas assessment for the project was completed in November 2023. The report will be updated to reflect the findings of the geotechnical site investigation in Task 2.6. Additionally, the project is now located within shoreline jurisdiction and the critical areas assessment will be updated to reflect the Shoreline Master Program regulations found in Chapter 16.50.

Task 6.2. Revised SEPA Checklist and Shoreline Exemption Letter

Based on the geotechnical site investigation findings prepared by Haley & Aldrich and the revised critical areas assessment, WSP will update the draft SEPA checklist to address geologically hazardous areas to ensure compliance with the City's code. To update the checklist, WSP will:

- Revise the Earth section, if required, to incorporate findings from the geotechnical site investigation.
- Revise the Water section to include updated findings from the revised critical areas assessment.
- Revise the Land and Shoreline use section to discuss critical areas and shoreline jurisdiction based on available mapping, the geotechnical report, and the updated critical areas assessment.
- Revise the shoreline exemption letter to reflect the geotechnical site investigation findings.
- Provide the revised draft checklist to the City's utilities manager for review.
- Revise the SEPA checklist once based on comments from the City's utilities manager and Community Development staff.
- Review the City's draft staff report and draft an email requesting edits to the conditions of approval.
- Attend one, 1-hour meeting with the project team and Community Development staff to discuss the project after submittal of the SEPA checklist and the shoreline exemption letter.
- Provide the shoreline exemption letter, SEPA checklist, standard application form (already completed), and plans to the City's utility manager for submittal to the City.

Task 6 Assumptions

- The geotechnical site investigation will indicate that on-site slopes are a landslide risk, but mitigation will be achieved through specifying hazard resilient pipe that will allow for continued function after the landslide. No additional mitigation will be required.
- There will be a 1-hour meeting with Community Development staff and a WSP project engineer, and senior planner, and natural resources scientist will attend.
- SEPA and shoreline submittal fees will be paid directly by the City of Camas.

- Haley & Alrich will provide a geotechnical site investigation report to document the estimated slope displacement. If estimated slope displacement cannot be mitigated through a hazard resilient pipe, a scope amendment will be required to shift the water alignment outside of the geological hazard area.
- The city will be the lead agency and will make the SEPA threshold determination.
- The city is responsible for SEPA notice and review.
- SEPA review by the city will result in a determination that impacts are not significant.
- One round of review of the revised SEPA checklist and shoreline exemption by the City's utility manager
- Preparation of responses to questions in the checklist will involve coordination with the city based on the 90 percent design-level plans from Amendment 3.
- The City's utility manager will submit the shoreline exemption application and SEPA checklist to the Community Development Department after receipt from WSP

Task 6 Deliverables

- Revised draft and final critical areas site assessment report
- Draft and final revisions to the SEPA checklist
- Draft and final shoreline exemption letter

SCHEDULE

The schedule for these tasks is estimated to extend through August 2024 for design and permitting.

FEE ESTIMATE

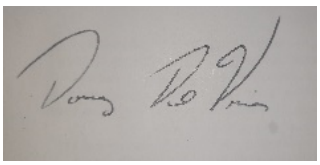
We propose a not-to-exceed budget of $73,024.83. This fee will be accrued on a time-and-materials basis. If you agree with this proposal, please incorporate this scope of work into the City's contracting documentation. A fee breakdown by task is provided below:

Task 1	$15,125.67
Task 2	$2,371.53
Task 2.6[1]	$30,250.00
Task 5	$15,792.03
Task 6	$9,485.60
TOTAL	$73,024.83

1. Work to be completed by Haley & Aldrich

Thank you for the opportunity to provide this amendment and we look forward to working with you. If you have any questions or comments about this proposal, please contact me at 503-290-1341 and Douglas.DeVries@wsp.com or Sarah Merrill at 503-417-9362 and Sarah.Merrill@wsp.com.

Sincerely,



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