CLACKAMAS
WATER ENVIRONMENT SERVICES

GREGORY L. GEIST | DIRECTOR

Water Quality Protection
Surface Water Management
Wastewater Collection & Treatment

September 4, 2025 BCC Agenda Date/Item: _____

Board of County Commissioners
Acting as the governing body of Water Environment Services
Clackamas County

Approval of a Personal Services Contract with Hazen and Sawyer for on-call engineering services. Contract Value is $2,000,000 for 5 years. Funding is through Water Environment Services Construction Fund and Operating Fund. No County General Funds are involved.

Previous Board Action/Review	N/A		
Performance Clackamas	1. This project supports the WES Strategic Plan Goal to strategically plan and execute capital projects to meet the growth, reliability, and regulatory needs of our service area at the lowest-life cycle cost. 2. This project supports the County's Strategic Priorities of Strong Infrastructure, Vibrant Economy, and Safe, Secure and Livable Communities.		
Counsel Review	Yes	**Procurement Review**	Yes
Contact Person	Jeff Stallard	**Contact Phone**	503-742-4694

EXECUTIVE SUMMARY: WES frequently encounters unanticipated projects and urgent engineering needs that arise outside of the annual planning and capital improvement process. These can include emergency repair design, regulatory compliance support, specialty technical analysis, and smaller capital or operational projects.

Under the current procurement process, engaging engineering services for these smaller or urgent projects often requires repetitive contracting efforts, which can be time-consuming and delay project delivery. Establishing on-call contracts will allow WES to streamline procurement, improve efficiency, and ensure timely response to our needs.

We conducted a competitive solicitation process to identify qualified engineering firms capable of providing services in four categories, Wastewater Conveyance and Treatment Engineering, Water Resources Engineering, Engineering Construction Services, and Wastewater Process Engineering and Operational Support. Work in these categories will include a wide range of services, including planning, design, permitting, and construction support. Multiple firms were selected to ensure adequate availability,

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specialized expertise, and competitive pricing.

The on-call contracts do not obligate funding at the time of award. Task orders issued under these contracts will be funded through approved operating or capital project budgets.

RECOMMENDATION: Staff recommends that the Board of County Commissioners of Clackamas County, acting as the governing body of Water Environment Services, approve Contract #1279 with Hazen and Sawyer, D.P.C. for engineering on-call services.

Respectfully submitted,

Greg Geist
Director, WES

Attachment: Contract #1279 Hazen and Sawyer, D.P.C.

WATER ENVIRONMENT SERVICES
PERSONAL SERVICES CONTRACT
Contract # 0000001279

This Personal Services Contract (this "Contract") is entered into between Hazen and Sawyer, D.P.C. ("Contractor"), and Water Environment Services, an intergovernmental entity formed pursuant to ORS Chapter 190 ("District").

ARTICLE I.

1. **Effective Date and Duration.** This Contract shall become effective upon signature of both parties. Unless earlier terminated or extended, this Contract shall expire on **June 30, 2030**.

2. **Scope of Work.** Contractor shall provide On-Call Engineering Services ("Work"), further described in **Exhibit A.** The Contractor is approved to provide services for the following classes of Work:

   ☒ 1) Wastewater Conveyance and Treatment Engineering
   ☐ 2) Water Resources Engineering
   ☐ 3) Engineering Construction Services
   ☒ 4) Wastewater Process Engineering and Operational Support

   This Contract is on an "on-call" or "as-needed basis" for Work.

   When the District wishes Contractor to perform the Work, the District will submit an official Clackamas District Task Order form (found at: https://www.clackamas.us/finance/terms.html) detailing the scope of Work, the entity on whose behalf the Work will be performed, and the total compensation, pursuant to the fee schedule set forth in this Contract. Contractor may not perform Work until the County Task Order form has been executed by the parties. In the event a project authorized under the County Task Order extends beyond the expiration of this Contract, the County Task Order shall remain in effect under the terms of this Contract until the completion or expiration of the authorized task.

   No task order shall modify or amend the terms and conditions of this Contract.

3. **Consideration.** The District agrees to pay Contractor, from available and authorized funds, a sum not to exceed **two million dollars ($2,000,000.00)** for accomplishing the Work required by this Contract. Because this is an on-call or as-needed contract, and the exact amount of Work needed, if any, is unknown, nothing herein shall be construed as a promise to pay Contractor the full $2,000,000.00 authorized herein. Consideration rates are on a time and materials basis in accordance with the rates and costs specified in Exhibit A. If any interim payments to Contractor are made, such payments shall be made only in accordance with the schedule and requirements in Exhibit A.

4. **Invoices and Payments.** Unless otherwise specified, Contractor shall submit monthly invoices for Work performed. Invoices shall describe all Work performed with particularity, by whom it was performed, and shall itemize and explain all expenses for which reimbursement is claimed. The invoices shall include the total amount billed to date by Contractor prior to the current invoice. If Contractor fails to present invoices in proper form within sixty (60) calendar days after the end of the month in which the services were rendered, Contractor waives any rights to present such invoice thereafter and to receive payment therefor. Payments shall be made in accordance with ORS 293.462 to Contractor following the District's review and approval of invoices submitted by Contractor. Contractor shall not submit invoices for, and the District will not be obligated to pay, any amount in excess of the maximum compensation amount set forth above. If this maximum compensation

amount is increased by amendment of this Contract, the amendment must be fully effective before Contractor performs Work subject to the amendment.

Invoices shall reference the above Contract Number and be submitted to: Wes-Payables@clackamas.us

5. **Travel and Other Expense.** Authorized: ☐ Yes ☒ No
If travel expense reimbursement is authorized in this Contract, such expense shall only be reimbursed at the rates in the Clackamas County Contractor Travel Reimbursement Policy, hereby incorporated by reference and found at: https://www.clackamas.us/finance/terms.html. Travel expense reimbursement is not in excess of the not to exceed consideration.

6. **Contract Documents.** This Contract consists of the following documents, which are listed in descending order of precedence and are attached and incorporated by reference, this Contract, Exhibit A, and Exhibit B. Unless explicitly agreed to by the parties in this Contract, any additional terms and conditions that may be contained in Exhibit A are void.

7. **Contractor and District Contacts.**

Contractor	District
Administrator: Andy McCaskill Phone: 816-729-3765 Email: amccaskill@hazenandsawyer.com	Administrator: TDB Phone: Email:

Payment information will be reported to the Internal Revenue Service ("IRS") under the name and taxpayer ID number submitted. (See I.R.S. 1099 for additional instructions regarding taxpayer ID numbers.) Information not matching IRS records will subject Contractor payments to backup withholding.

ARTICLE II.

1. **Access to Records.** Contractor shall maintain books, records, documents, and other evidence, in accordance with generally accepted accounting procedures and practices, sufficient to reflect properly all costs of whatever nature claimed to have been incurred and anticipated to be incurred in the performance of this Contract. District and their duly authorized representatives shall have access to the books, documents, papers, and records of Contractor, which are directly pertinent to this Contract for the purpose of making audit, examination, excerpts, and transcripts. Contractor shall maintain such books and records for a minimum of six (6) years, or such longer period as may be required by applicable law, following final payment and termination of this Contract, or until the conclusion of any audit, controversy or litigation arising out of or related to this Contract, whichever date is later.

2. **Availability of Future Funds.** Any continuation or extension of this Contract after the end of the fiscal period in which it is written is contingent on a new appropriation for each succeeding fiscal period sufficient to continue to make payments under this Contract, as determined by the District in its sole administrative discretion.

3. **Captions.** The captions or headings in this Contract are for convenience only and in no way define, limit, or describe the scope or intent of any provisions of this Contract.

4. **Compliance with Applicable Law.** Contractor shall comply with all applicable federal, state and local laws, regulations, executive orders, and ordinances at the time services are performed.

5. **Counterparts.** This Contract may be executed in several counterparts (electronic or otherwise), each of which shall be an original, all of which shall constitute the same instrument.

6. **Governing Law.** This Contract, and all rights, obligations, and disputes arising out of it, shall be governed and construed in accordance with the laws of the State of Oregon and the ordinances of Clackamas County without regard to principles of conflicts of law. Any claim, action, or suit between District and Contractor that arises out of or relates to the performance of this Contract shall be brought and conducted solely and exclusively within the Circuit Court for Clackamas County, for the State of Oregon. Provided, however, that if any such claim, action, or suit may be brought in a federal forum, it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. In no event shall this section be construed as a waiver by the District of any form of defense or immunity, whether sovereign immunity, governmental immunity, immunity based on the Eleventh Amendment to the Constitution of the United States or otherwise, from any claim or from the jurisdiction of any court. Contractor, by execution of this Contract, hereby consents to the personal jurisdiction of the courts referenced in this section.

7. **Indemnity, Responsibility for Damages.** Contractor shall be responsible for all damage to property, injury to persons, and loss, expense, inconvenience, and delay which may be caused by, or result from, any negligent act, or omission of Contractor, its subcontractors, agents, or employees. The Contractor agrees to indemnify and defend the District and Clackamas County, and their officers, elected officials, agents and employees from and against all claims, actions, losses, liabilities, including reasonable attorney and accounting fees, and all expenses incidental to the investigation and defense thereof, arising out of or based upon Contractor's negligent acts or omissions in performing under this Contract. Provided, however, that pursuant to ORS 30.140(4), Contractor's duty to defend obligations arising from or related to Contractor's professional negligence, or related to professional services provided by Contractor, are limited to reimbursement of reasonable defense costs (including reasonable attorney fees) of District and Clackamas County in an amount not to exceed the proportionate fault of Contractor, as determined by adjudication, alternative dispute resolution, or otherwise resolved by settlement agreement.

   However, neither Contractor nor any attorney engaged by Contractor shall defend the claim in the name of District or Clackamas County ("County"), purport to act as legal representative of District or County, or settle any claim on behalf of District or County, without the approval of the Clackamas County Counsel's Office. District or County may assume their own defense and settlement at their election and expense.

8. **Independent Contractor Status.** The service(s) to be rendered under this Contract are those of an independent contractor. Although the District reserves the right to determine (and modify) the delivery schedule for the Work to be performed and to evaluate the quality of the completed performance, District cannot and will not control the means or manner of Contractor's performance. Contractor is responsible for determining the appropriate means and manner of performing the Work. Contractor is not to be considered an agent or employee of District for any purpose, including, but not limited to: (A) The Contractor will be solely responsible for payment of any Federal or State taxes required as a result of this Contract; and (B) This Contract is not intended to entitle the Contractor to any benefits generally granted to District employees, including, but not limited to, vacation, holiday and sick leave, other leaves with pay, tenure, medical and dental coverage, life and disability insurance, overtime, Social Security, Workers' Compensation, unemployment compensation, or retirement benefits.

9. **Insurance.** Contractor shall secure at its own expense and keep in effect during the term of the performance under this Contract the insurance required and minimum coverage indicated below. The insurance requirements outlined below do not in any limit the amount of scope of liability of Contractor under this Contract. Contractor shall provide proof of said insurance and name the District

and Clackamas County as an additional insureds on all required liability policies, except Workers Compensation and Professional Liability. Proof of insurance and notice of any material change should be submitted to the following address: Clackamas County Procurement Division, 2051 Kaen Road, Oregon City, OR 97045 or the County Contract Analyst.

Required - Workers Compensation: Contractor shall comply with the statutory workers' compensation requirements in ORS 656.017, unless exempt under ORS 656.027 or 656.126.
☒ Required – Commercial General Liability: combined single limit, or the equivalent, of not less than $1,000,000 per occurence, with an annual aggregate limit of $2,000,000 for Bodily Injury and Property Damage.
☒ Required – Professional Liability: of not less than $1,000,000 per claim, with an annual aggregate limit of $2,000,000 for damages caused by error, omission or negligent acts.
☒ Required – Automobile Liability: combined single limit, or the equivalent, of not less than $1,000,000 per accident for Bodily Injury and Property Damage.

The policy(s) shall be primary insurance as respects to the District. Any insurance or self-insurance maintained by the District shall be excess and shall not contribute to it. Any obligation that District agree to a waiver of subrogation is hereby stricken.

10. **Limitation of Liabilities.** This Contract is expressly subject to the debt limitation of Oregon counties set forth in Article XI, Section 10, of the Oregon Constitution, and is contingent upon funds being appropriated therefore. Any provisions herein which would conflict with law are deemed inoperative to that extent. Except for liability arising under or related to Article II, Section 13 or Section 20 neither party shall be liable for (i) any indirect, incidental, consequential or special damages under this Contract or (ii) any damages of any sort arising solely from the termination of this Contact in accordance with its terms.

11. **Notices.** Except as otherwise provided in this Contract, any required notices between the parties shall be given in writing by personal delivery, email, or mailing the same, to the Contract Administrators identified in Article 1, Section 6. If notice is sent to District, a copy shall also be sent to: Clackamas County Procurement, 2051 Kaen Road, Oregon City, OR 97045. Any communication or notice so addressed and mailed shall be deemed to be given five (5) days after mailing, and immediately upon personal delivery, or within 2 hours after the email is sent during District's normal business hours (Monday – Thursday, 7:00 a.m. to 6:00 p.m.) (as recorded on the device from which the sender sent the email), unless the sender receives an automated message or other indication that the email has not been delivered.

12. **Ownership of Work Product.** All work product of Contractor that results from this Contract (the "Work Product") is the exclusive property of District. District and Contractor intend that such Work Product be deemed "work made for hire" of which District shall be deemed the author. If for any reason the Work Product is not deemed "work made for hire," Contractor hereby irrevocably assigns to District all of its right, title, and interest in and to any and all of the Work Product, whether arising from copyright, patent, trademark or trade secret, or any other state or federal intellectual property law or doctrine. Contractor shall execute such further documents and instruments as District may reasonably request in order to fully vest such rights in District. Contractor forever waives any and all rights relating to the Work Product, including without limitation, any and all rights arising under 17 USC § 106A or any other rights of identification of authorship or rights of approval, restriction or limitation on use or subsequent modifications. Notwithstanding the above, District shall have no rights in any pre-existing Contractor intellectual property provided to District by Contractor in the performance of this Contract except to copy, use and re-use any such Contractor intellectual property for District use only.

13. **Representations and Warranties.** Contractor represents to District that (A) Contractor warrants that it has the power and authority to enter into and perform this Contract; (B) this Contract, when executed and delivered, shall be a valid and binding obligation of Contractor enforceable in accordance with its terms; (C) Contractor shall at all times during the term of this Contract, be qualified, professionally competent, and duly licensed to perform the Work; (D) Contractor is an independent contractor as defined in ORS 670.600; and (E) the Work under this Contract shall be performed in accordance with the standard of professional skill and care required for members of the same profession, a project of similar size, location, scope, and complexity, during the time in which the Work is being performed. The Contractor shall be responsible for the technical accuracy of its services and documents resulting therefrom, and District shall not be responsible for discovering deficiencies therein. The Contractor shall correct such deficiencies because of negligence of error of Contractor without additional compensation except to the extent such action is directly attributable to deficiencies in information furnished by the District.

14. **Survival.** All rights and obligations shall cease upon termination or expiration of this Contract, except for the rights and obligations set forth in Article II, Sections 1, 6, 7, 10, 12, 13, 14, 15, 17, 20, 21, 25, 27, 28 and 32, and all other rights and obligations which by their context are intended to survive. However, such expiration shall not extinguish or prejudice the District's right to enforce this Contract with respect to: (a) any breach of a Contractor warranty; or (b) any default or defect in Contractor performance that has not been cured.

15. **Severability.** If any term or provision of this Contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Contract did not contain the particular term or provision held to be invalid.

16. **Subcontracts and Assignments.** Contractor shall not enter into any subcontracts for any of the Work required by this Contract, or assign or transfer any of its interest in this Contract by operation of law or otherwise, without obtaining prior written approval from the District, which shall be granted or denied in the District's sole discretion. In addition to any provisions the District may require, Contractor shall include in any permitted subcontract under this Contract a requirement that the subcontractor be bound by this Article II, Sections 1, 7, 8, 13, 16, and 27 as if the subcontractor were the Contractor. District's consent to any subcontract shall not relieve Contractor of any of its duties or obligations under this Contract.

17. **Successors in Interest.** The provisions of this Contract shall be binding upon and shall inure to the benefit of the parties hereto, and their respective authorized successors and assigns.

18. **Tax Compliance Certification.** The Contractor shall comply with all federal, state and local laws, regulation, executive orders and ordinances applicable to this Contract. Contractor represents and warrants that it has complied, and will continue to comply throughout the duration of this Contract and any extensions, with all tax laws of this state or any political subdivision of this state, including but not limited to ORS 305.620 and ORS chapters 316, 317, and 318. Any violation of this section shall constitute a material breach of this Contract and shall entitle District to terminate this Contract, to pursue and recover any and all damages that arise from the breach and the termination of this Contract, and to pursue any or all of the remedies available under this Contract or applicable law.

19. **Termination.** This Contract may be terminated for the following reasons: (A) by mutual agreement of the parties or by the District (i) for convenience upon thirty (30) days written notice to Contractor, or (ii) at any time the District fails to receive funding, appropriations, or other expenditure authority as solely determined by the District; or (B) if Contractor breaches any Contract provision or is declared insolvent, District may terminate after thirty (30) days written notice with an opportunity to cure.

Upon receipt of written notice of termination from the District, Contractor shall immediately stop performance of the Work. Upon termination of this Contract, Contractor shall deliver to District all documents, Work Product, information, works-in-progress and other property that are or would be deliverables had the Contract Work been completed. Upon District's request, Contractor shall surrender to anyone District designates, all documents, research, objects or other tangible things needed to complete the Work.

20. **Remedies.** If terminated by the District due to a material breach by the Contractor, then the District shall have any remedy available to it in law or equity. If this Contract is terminated for any other reason, Contractor's sole remedy is payment for the goods and services delivered and accepted by the District, less any setoff to which the District is entitled.

21. **No Third Party Beneficiaries.** District and Contractor are the only parties to this Contract and are the only parties entitled to enforce its terms. Nothing in this Contract gives, is intended to give, or shall be construed to give or provide any benefit or right, whether directly, indirectly or otherwise, to third persons unless such third persons are individually identified by name herein and expressly described as intended beneficiaries of the terms of this Contract.

22. **Time is of the Essence.** Contractor agrees that time is of the essence in the performance this Contract.

23. **Foreign Contractor.** If the Contractor is not domiciled in or registered to do business in the State of Oregon, Contractor shall promptly provide to the Oregon Department of Revenue and the Secretary of State, Corporate Division, all information required by those agencies relative to this Contract. The Contractor shall demonstrate its legal capacity to perform these services in the State of Oregon prior to entering into this Contract.

24. **Force Majeure.** Neither District nor Contractor shall be held responsible for delay or default caused by events outside the District or Contractor's reasonable control including, but not limited to, fire, terrorism, riot, acts of God, or war. However, Contractor shall make all reasonable efforts to remove or eliminate such a cause of delay or default and shall upon the cessation of the cause, diligently pursue performance of its obligations under this Contract.

25. **Waiver.** The failure of either party to enforce any provision of this Contract shall not constitute a waiver by District of that or any other provision.

26. **Public Contracting Requirements.** Pursuant to the public contracting requirements contained in Oregon Revised Statutes ("ORS") Chapter 279B.220 through 279B.235, Contractor shall:
    a. Make payments promptly, as due, to all persons supplying to Contractor labor or materials for the prosecution of the work provided for in the Contract.
    b. Pay all contributions or amounts due the Industrial Accident Fund from such Contractor or subcontractor incurred in the performance of the Contract.
    c. Not permit any lien or claim to be filed or prosecuted against District on account of any labor or material furnished.
    d. Pay the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.
    e. As applicable, the Contractor shall pay employees for work in accordance with ORS 279B.235, which is incorporated herein by this reference. The Contractor shall comply with the prohibitions set forth in ORS 652.220, compliance of which is a material element of this Contract, and failure to comply is a breach entitling District to terminate this Contract for cause.
    f. If the Work involves lawn and landscape maintenance, Contractor shall salvage, recycle, compost, or mulch yard waste material at an approved site, if feasible and cost effective.

27. **No Attorney Fees**. In the event any arbitration, action or proceeding, including any bankruptcy proceeding, is instituted to enforce any term of this Contract, each party shall be responsible for its own attorneys' fees and expenses.

28. **Reserved.**

29. **Reserved.**

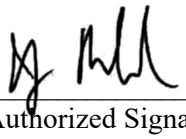
30. **Key Persons.** Contractor acknowledges and agrees that a significant reason the District is entering into this Contract is because of the special qualifications of certain Key Persons set forth in the contract. Under this Contract, the District is engaging the expertise, experience, judgment, and personal attention of such Key Persons. Neither Contractor nor any of the Key Persons shall delegate performance of the management powers and responsibilities each such Key Person is required to provide under this Contract to any other employee or agent of the Contractor unless the District provides prior written consent to such delegation. Contractor shall not reassign or transfer a Key Person to other duties or positions such that the Key Person is no longer available to provide the District with such Key Person's services unless the District provides prior written consent to such reassignment or transfer.

31. **Reserved.**

32. **Merger.** THIS CONTRACT CONSTITUTES THE ENTIRE AGREEMENT BETWEEN THE PARTIES WITH RESPECT TO THE SUBJECT MATTER REFERENCED THEREIN. THERE ARE NO UNDERSTANDINGS, AGREEMENTS, OR REPRESENTATIONS, ORAL OR WRITTEN, NOT SPECIFIED HEREIN REGARDING THIS CONTRACT. NO AMENDMENT, CONSENT, OR WAIVER OF TERMS OF THIS CONTRACT SHALL BIND EITHER PARTY UNLESS IN WRITING AND SIGNED BY ALL PARTIES. ANY SUCH AMENDMENT, CONSENT, OR WAIVER SHALL BE EFFECTIVE ONLY IN THE SPECIFIC INSTANCE AND FOR THE SPECIFIC PURPOSE GIVEN. CONTRACTOR, BY THE SIGNATURE HERETO OF ITS AUTHORIZED REPRESENTATIVE, IS AN INDEPENDENT CONTRACTOR, ACKNOWLEDGES HAVING READ AND UNDERSTOOD THIS CONTRACT, AND CONTRACTOR AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS.

By their signatures below, the parties to this Contract agree to the terms, conditions, and content expressed herein.

Hazen and Sawyer, D.P.C.



06/23/25

Authorized Signature Date

Andy McCaskill / Associate Vice President

Name / Title (Printed)

130884-97

Oregon Business Registry #

FPC/New York

Entity Type / State of Formation

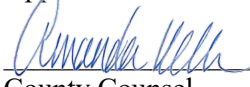
Water Environment Services

Signature Date

Name: _____

Title: _____

Approved as to Form:



6/26/2025

County Counsel Date

EXHIBIT A
RFP 2025-01
Water Environment Services Engineering Master Contract
On-Call Engineering Services
Published January 27, 2025

REQUEST FOR PROPOSALS #2025-01

FOR

Water Environment Services Engineering Master Contract
On-Call Engineering Services

BOARD OF COUNTY COMMISSIONERS
CRAIG ROBERTS, Chair
PAUL SAVAS, Commissioner
MELISSA FIRESIDE, Commissioner
MARTHA SCHRADER, Commissioner
BEN WEST, Commissioner

Gary Schmidt
County Administrator

Ryan Rice
Contract Analyst

PROPOSAL CLOSING DATE, TIME AND LOCATION

DATE: **February 20, 2025**

TIME: **2:00 PM, Pacific Time**

PLACE: **Email:** https://bidlocker.us/a/clackamascounty/BidLocker

SCHEDULE

Request for Proposals Issued…….....January 27, 2025

Protest of Specifications Deadline.....February 3, 2025, 5:00 PM, Pacific Time

Deadline to Submit Clarifying Questions.....February 13, 2025, 5:00 PM, Pacific Time

Request for Proposals Closing Date and Time…….....February 20, 2025, 2:00 PM, Pacific Time

Deadline to Submit Protest of Award.....Seven (7) days from the Intent to Award

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Section 3 – Scope of Work

Section 4 – Evaluation and Selection Criteria

Section 5 – Proposal Content (Including Proposal Certification)

SECTION 1
NOTICE OF REQUEST FOR PROPOSALS

Notice is hereby given that Water Environment Services ("WES"), through its Board of County Commissioners, will receive sealed Proposals per specifications until **2:00 PM, February 20, 2025** ("Closing"), to provide On-Call Engineering Services. No Proposals will be received or considered after that time.

RFP Documents can be downloaded from the state of Oregon procurement website ("OregonBuys") at the following address https://oregonbuys.gov/bso/view/login/login.xhtml, Document No. S-C01010-00012654.

Prospective Proposers will need to sign in to download the information and that information will be accumulated for a Plan Holder's List. Prospective Proposers are responsible for obtaining any Addenda, clarifying questions, and Notices of Award from OregonBuys. Sealed Proposals are to be emailed to https://bidlocker.us/a/clackamascounty/BidLocker.

Submitting Proposals: Bid Locker

Proposals will only be accepted electronically thru a secure online bid submission service, **Bid Locker**. *Email submissions to Clackamas County email addresses will no longer be accepted.*

A. Completed proposal documents must arrive electronically via Bid Locker located at https://bidlocker.us/a/clackamascounty/BidLocker.
B. Bid Locker will electronically document the date and time of all submissions. Completed documents must arrive by the deadline indicated in Section 1 or as modified by Addendum. LATE PROPOSALS WILL NOT BE ACCEPTED.
C. Proposers must register and create a profile for their business with Bid Locker in order to submit for this project. It is free to register for Bid Locker.
D. Proposers with further questions concerning Bid Locker may review the Vendor's Guide located at https://www.clackamas.us/how-to-bid-on-county-projects .

Contact Information

Procurement Process and Technical Questions: Ryan Rice, rrice@clackamas.us

The Board of County Commissioners reserves the right to reject any and all Proposals not in compliance with all prescribed public bidding procedures and requirements, and may reject for good cause any and all Proposals upon the finding that it is in the public interest to do so and to waive any and all informalities in the public interest. In the award of the contract, the Board of County Commissioners will consider the element of time, will accept the Proposal or Proposals which in their estimation will best serve the interests of Clackamas County and will reserve the right to award the contract to the contractor whose Proposal shall be best for the public good.

Clackamas County encourages proposals from Minority, Women, and Emerging Small Businesses.

SECTION 2
INSTRUCTIONS TO PROPOSERS

Clackamas County ("County") reserves the right to reject any and all Proposals received as a result of this RFP. County Local Contract Review Board Rules ("LCRB") govern the procurement process for the County.

2.1 Modification or Withdrawal of Proposal: Any Proposal may be modified or withdrawn at any time prior to the Closing deadline, provided that a written request is received by the County Procurement Division Director, prior to the Closing. The withdrawal of a Proposal will not prejudice the right of a Proposer to submit a new Proposal.

2.2 Requests for Clarification and Requests for Change: Proposers may submit questions regarding the specifications of the RFP. Questions must be received in writing on or before 5:00 p.m. (Pacific Time), on the date indicated in the Schedule, at the Procurement Division address as listed in Section 1 of this RFP. Requests for changes must include the reason for the change and any proposed changes to the requirements. The purpose of this requirement is to permit County to correct, prior to the opening of Proposals, RFP terms or technical requirements that may be unlawful, improvident or which unjustifiably restrict competition. County will consider all requested changes and, if appropriate, amend the RFP. No oral or written instructions or information concerning this RFP from County managers, employees or agents to prospective Proposers shall bind County unless included in an Addendum to the RFP.

2.3 Protests of the RFP/Specifications: Protests must be in accordance with LCRB C-047-0730. Protests of Specifications must be received in writing on or before 5:00 p.m. (Pacific Time), on the date indicated in the Schedule, or within three (3) business days of issuance of any addendum, at the Procurement Division address listed in Section 1 of this RFP. Protests may not be faxed. Protests of the RFP specifications must include the reason for the protest and any proposed changes to the requirements.

2.4 Addenda: If any part of this RFP is changed, an addendum will be provided to Proposers that have provided an address to the Procurement Division for this procurement. It shall be Proposers responsibility to regularly check OregonBuys for any notices, published addenda, or response to clarifying questions.

2.5 Submission of Proposals: Proposals must be submitted in accordance with Section 5. All Proposals shall be legibly written in ink or typed and comply in all regards with the requirements of this RFP. Proposals that include orders or qualifications may be rejected as irregular. All Proposals must include a signature that affirms the Proposer's intent to be bound by the Proposal (may be on cover letter, on the Proposal, or the Proposal Certification Form) shall be signed. If a Proposal is submitted by a firm or partnership, the name and address of the firm or partnership shall be shown, together with the names and addresses of the members. If the Proposal is submitted by a corporation, it shall be signed in the name of such corporation by an official who is authorized to bind the contractor. The Proposals will be considered by the County to be submitted in confidence and are not subject to public disclosure until the notice of intent to award has been issued.

No late Proposals will be accepted. Proposals submitted after the Closing will be considered late and will be returned unopened. Proposals may not be submitted by telephone or fax.

2.6 Post-Selection Review and Protest of Award: County will name the apparent successful Proposer in a Notice of Intent to Award published on OregonBuys. Identification of the apparent successful Proposer is procedural only and creates no right of the named Proposer to award of the contract. Competing Proposers shall be given seven (7) calendar days from the date on the Notice of Intent to Award to review the file at the Procurement Division office and file a written protest of award, pursuant to LCRB C-047-0740. Any award protest must be in writing and must be delivered by hand-delivery or mail to the address for the Procurement Division as listed in Section 1 of this RFP.

Only actual Proposers may protest if they believe they have been adversely affected because the Proposer would be eligible to be awarded the contract in the event the protest is successful. The basis of the written protest must

be in accordance with ORS 279B.410 and shall specify the grounds upon which the protest is based. In order to be an adversely affected Proposer with a right to submit a written protest, a Proposer must be next in line for award, i.e. the protester must claim that all higher rated Proposers are ineligible for award because they are non-responsive or non-responsible.

County will consider any protests received and:

a. reject all protests and proceed with final evaluation of, and any allowed contract language negotiation with, the apparent successful Proposer and, pending the satisfactory outcome of this final evaluation and negotiation, enter into a contract with the named Proposer; OR
b. sustain a meritorious protest(s) and reject the apparent successful Proposer as nonresponsive, if such Proposer is unable to demonstrate that its Proposal complied with all material requirements of the solicitation and Oregon public procurement law; thereafter, County may name a new apparent successful Proposer; OR
c. reject all Proposals and cancel the procurement.

2.7 Acceptance of Contractual Requirements: Failure of the selected Proposer to execute a contract and deliver required insurance certificates within ten (10) calendar days after notification of an award may result in cancellation of the award. This time period may be extended at the option of County.

2.8 Public Records: Proposals are deemed confidential until the "Notice of Intent to Award" letter is issued. This RFP and one copy of each original Proposal received in response to it, together with copies of all documents pertaining to the award of a contract, will be kept and made a part of a file or record which will be open to public inspection. If a Proposal contains any information that is considered a **TRADE SECRET** under ORS 192.345(2), **SUCH INFORMATION MUST BE LISTED ON A SEPARATE SHEET CAPABLE OF SEPARATION FROM THE REMAINING PROPOSAL AND MUST BE CLEARLY MARKED WITH THE FOLLOWING LEGEND:**

"This information constitutes a trade secret under ORS 192.345(2), and shall not be disclosed except in accordance with the Oregon Public Records Law, ORS Chapter 192."

The Oregon Public Records Law exempts from disclosure only bona fide trade secrets, and the exemption from disclosure applies only "unless the public interest requires disclosure in the particular instance" (ORS 192.345). Therefore, non-disclosure of documents, or any portion of a document submitted as part of a Proposal, may depend upon official or judicial determinations made pursuant to the Public Records Law.

2.9 Investigation of References: County reserves the right to investigate all references in addition to those supplied references and investigate past performance of any Proposer with respect to its successful performance of similar services, its compliance with specifications and contractual obligations, its completion or delivery of a project on schedule, its lawful payment of subcontractors and workers, and any other factor relevant to this RFP. County may postpone the award or the execution of the contract after the announcement of the apparent successful Proposer in order to complete its investigation.

2.10 RFP Proposal Preparation Costs and Other Costs: Proposer costs of developing the Proposal, cost of attendance at an interview (if requested by County), or any other costs are entirely the responsibility of the Proposer, and will not be reimbursed in any manner by County.

2.11 Clarification and Clarity: County reserves the right to seek clarification of each Proposal, or to make an award without further discussion of Proposals received. Therefore, it is important that each Proposal be submitted initially in the most complete, clear, and favorable manner possible.

2.12 Right to Reject Proposals: County reserves the right to reject any or all Proposals or to withdraw any item from the award, if such rejection or withdrawal would be in the public interest, as determined by County.

2.13 Cancellation: County reserves the right to cancel or postpone this RFP at any time or to award no contract.

2.14 Proposal Terms: All Proposals, including any price quotations, will be valid and firm through a period of one hundred and eighty (180) calendar days following the Closing date. County may require an extension of this firm offer period. Proposers will be required to agree to the longer time frame in order to be further considered in the procurement process.

2.15 Oral Presentations: At County's sole option, Proposers may be required to give an oral presentation of their Proposals to County, a process which would provide an opportunity for the Proposer to clarify or elaborate on the Proposal but will in no material way change Proposer's original Proposal. If the evaluating committee requests presentations, the Procurement Division will schedule the time and location for said presentation. Any costs of participating in such presentations will be borne solely by Proposer and will not be reimbursed by County. **Note:** Oral presentations are at the discretion of the evaluating committee and may not be conducted; therefore, **written Proposals should be complete.**

2.16 Usage: It is the intention of County to utilize the services of the successful Proposer(s) to provide services as outlined in the below Scope of Work.

2.17 Review for Responsiveness: Upon receipt of all Proposals, the Procurement Division or designee will determine the responsiveness of all Proposals before submitting them to the evaluation committee. If a Proposal is incomplete or non-responsive in significant part or in whole, it will be rejected and will not be submitted to the evaluation committee. County reserves the right to determine if an inadvertent error is solely clerical or is a minor informality which may be waived, and then to determine if an error is grounds for disqualifying a Proposal. The Proposer's contact person identified on the Proposal will be notified, identifying the reason(s) the Proposal is non-responsive. One copy of the Proposal will be archived and all others discarded.

2.18 RFP Incorporated into Contract: This RFP will become part of the Contract between County and the selected contractor(s). The contractor(s) will be bound to perform according to the terms of this RFP, their Proposal(s), and the terms of the Sample Contract.

2.19 Communication Blackout Period: Except as called for in this RFP, Proposers may not communicate with members of the Evaluation Committee or other County employees or representatives about the RFP during the procurement process until the apparent successful Proposer is selected, and all protests, if any, have been resolved. Communication in violation of this restriction may result in rejection of a Proposer.

2.20 Prohibition on Commissions and Subcontractors: County will contract directly with persons/entities capable of performing the requirements of this RFP. Contractors must be represented directly. Participation by brokers or commissioned agents will not be allowed during the Proposal process. Contractor shall not use subcontractors to perform the Work unless specifically pre-authorized in writing to do so by the County. Contractor represents that any employees assigned to perform the Work, and any authorized subcontractors performing the Work, are fully qualified to perform the tasks assigned to them, and shall perform the Work in a competent and professional manner. Contractor shall not be permitted to add on any fee or charge for subcontractor Work. Contractor shall provide, if requested, any documents relating to subcontractor's qualifications to perform required Work.

2.21 Ownership of Proposals: All Proposals in response to this RFP are the sole property of County, and subject to the provisions of ORS 192.410-192.505 (Public Records Act).

2.22 Clerical Errors in Awards: County reserves the right to correct inaccurate awards resulting from its clerical errors.

2.23 Rejection of Qualified Proposals: Proposals may be rejected in whole or in part if they attempt to limit or modify any of the terms, conditions, or specifications of the RFP or the Sample Contract.

2.24 Collusion: By responding, the Proposer states that the Proposal is not made in connection with any competing Proposer submitting a separate response to the RFP, and is in all aspects fair and without collusion or fraud. Proposer also certifies that no officer, agent, elected official, or employee of County has a pecuniary interest in this Proposal.

2.25 Evaluation Committee: Proposals will be evaluated by a committee consisting of representatives from County and potentially external representatives. County reserves the right to modify the Evaluation Committee make-up in its sole discretion.

2.26 Commencement of Work: The contractor shall commence no work until all insurance requirements have been met, the Protest of Awards deadline has been passed, any protest have been decided, a contract has been fully executed, and a Notice to Proceed has been issued by County.

2.27 Best and Final Offer: County may request best and final offers from those Proposers determined by County to be reasonably viable for contract award. However, County reserves the right to award a contract on the basis of initial Proposal received. Therefore, each Proposal should contain the Proposer's best terms from a price and technical standpoint. Following evaluation of the best and final offers, County may select for final contract negotiations/execution the offers that are most advantageous to County, considering cost and the evaluation criteria in this RFP.

2.28 Nondiscrimination: The successful Proposer agrees that, in performing the work called for by this RFP and in securing and supplying materials, contractor will not discriminate against any person on the basis of race, color, religious creed, political ideas, sex, age, marital status, sexual orientation, gender identity, veteran status, physical or mental handicap, national origin or ancestry, or any other class protected by applicable law.

2.29 Intergovernmental Cooperative Procurement Statement: Pursuant to ORS 279A and LCRB, other public agencies shall have the ability to purchase the awarded goods and services from the awarded contractor(s) under terms and conditions of the resultant contract. Any such purchases shall be between the contractor and the participating public agency and shall not impact the contactor's obligation to the County. Any estimated purchase volumes listed herein do not include other public agencies and County makes no guarantee as to their participation. Any Proposer, by written notification included with their Proposal, may decline to extend the prices and terms of this solicitation to any and/or all other public agencies. County grants to any and all public serving governmental agencies, authorization to purchase equivalent services or products described herein at the same submitted unit bid price, but only with the consent of the contractor awarded the contract by the County.

SECTION 3
SCOPE OF WORK

3.1. INTRODUCTION

Clackamas County on behalf of Clackamas Water Environment Services ("District") is seeking Proposals from vendors to provide On-Call Engineering Services. This Contract is on an "on-call" or "as-needed basis" for work. When the District wishes Contractor to perform the Work, the District will submit an official County Task Order form (found at: https://www.clackamas.us/finance/terms.html) detailing the scope of work, the entity on whose behalf the Work will be performed, and the total compensation, pursuant to the fee schedule set forth in this contract. Contractor may not perform work until the County Task Order form has been executed by the parties. In the event a project authorized under the County Task Order extends beyond the expiration of this contract, the County Task Order shall remain in effect under the terms of this contract until the completion or expiration of the authorized task.

No task order shall modify or amend the terms and conditions of this contract.

Please direct all Technical/Specifications or Procurement Process Questions to the indicated representative referenced in the Notice of Request for Proposals and note the communication restriction outlined in Section 2.19.

3.2 BACKGROUND

Clackamas Water Environment Services (WES, District), an intergovernmental partnership formed pursuant to ORS 190, owns and operates over 340 miles of wastewater conveyance infrastructure and five wastewater treatment facilities serving more than 150,000 residents. WES operates and maintains this critical infrastructure in order to collect and treat waste and storm water. The engineering services resulting from this RFP will play a vital role in ensuring the continuous and safe operation of WES facilities, and ensure that WES goals are met as part of the adopted Capital Improvement Plan, Facility Plans, Sanitary Sewer System Master Plan, and Storm System Master Plan. Access to those plans can be found here: https://www.clackamas.us/wes/wes-projects.

3.3. SCOPE OF WORK

3.3.1. Scope:

Water Environment Services (District) wishes to select several consultants to provide services in one or more of the following categories:

SCOPE OF SERVICES

1) Wastewater Conveyance and Treatment Engineering

Wastewater engineering consultants to provide professional engineering services in support of projects involving the planning, design, and construction of wastewater treatment facilities, treatment processes, pump stations and force mains, gravity conveyance systems, and related facilities.

2) Water Resources Engineering
Water resources engineering to provide management, development, and conservation of water resources to ensure their sustainability and availability. It involves the design and implementation of systems for stormwater, water recovery, and sustainable watershed management.

3) Engineering Construction Services
Construction services to provide management and inspection of construction projects to ensure they are completed efficiently and safely. It involves overseeing the construction process, which includes, but is not limited to: project management, attending meetings on
WES' behalf, review of work/inspection services, independent testing, survey, regulation compliance, contractor coordination, pay application support, substantial and final completion, RFI's, document management, and startup/commissioning.

4) Wastewater Process Engineering and Operational Support
Engineering services for wastewater treatment process engineering and operational support include providing expert consultation and technical assistance on an as-needed basis to optimize treatment processes and ensure compliance with regulatory requirements. Tasks may include evaluating plant performance, troubleshooting operational issues, developing process improvement strategies, preparing technical reports, and conducting data analysis to enhance efficiency and reliability. Additional responsibilities involve recommending equipment upgrades, reviewing and designing process modifications, and offering training to operational staff. The service provider must also be available to respond promptly to urgent operational challenges and collaborate with stakeholders to maintain continuous and effective treatment operations.

Firms may submit a Statement of Qualifications (SOQ) for one or all categories. WES will assess the submitted SOQs and select the most qualified firm(s) for each category. Each selected firm will enter into a Master Contract and will be eligible to provide services in support of WES tasks, initiatives and projects under the terms of the Contract. The specific work to be performed under these Master
Contracts will be defined, budgeted, and scheduled on a task-by-task basis through Task Order sub-agreements.

Interested firms must submit SOQs. A single SOQ is required for each category the consultant is applying. Each SOQ must apply to only one company; no "teaming" of companies is permitted.

WES may reject any SOQ not in compliance with all prescribed procedures and requirements, and may cancel this solicitation or reject, for good cause, any or all SOQs upon a finding that it is in the public's best interest to do so.

3.3.2. Term of Contract:
The term of the contract shall be from the effective date through **June 30, 2030.**

3.3.3. Sample Contract: Submission of a Proposal in response to this RFP indicates Proposer's willingness to enter into a contract containing substantially the same terms (including insurance requirements) of the sample contract identified below. No action or response to the sample contract is required under this RFP. Any objections to the sample contract terms should be raised

in accordance with Paragraphs 2.2 or 2.3 of this RFP, pertaining to requests for clarification or change or protest of the RFP/specifications, and as otherwise provided for in this RFP. This RFP and all supplemental information in response to this RFP will be a binding part of the final contract.

The applicable Sample Personal Services Contract for this RFP can be found at https://www.clackamas.us/finance/terms.html.

Personal Services Contract (unless checked, item does not apply)

The following paragraphs of the Professional Services Contract will be applicable:

☐ Article I, Paragraph 5 – Travel and Other Expense is Authorized
☐ Article II, Paragraph 27 – Confidentiality
☐ Article II, Paragraph 28 – Criminal Background Check Requirements
☒ Article II, Paragraph 29 – Key Persons
☒ Exhibit A – On-Call Provision

The following insurance requirements will be applicable:

☒ Commercial General Liability: combined single limit, or the equivalent, of not less than $1,000,000 per occurrence, with an annual aggregate limit of $2,000,000 for Bodily Injury and Property Damage.
☒ Professional Liability: combined single limit, or the equivalent, of not less than $1,000,000 per occurrence, with an annual aggregate limit of $2,000,000 for damages caused by error, omission or negligent acts.
☒ Automobile Liability: combined single limit, or the equivalent, of not less than $1,000,000 per occurrence for Bodily Injury and Property Damage.
☐ Cyber Liability: combined single limit, or the equivalent, of not less than $1,000,000 per occurrence for network security (including data breach), privacy, interruption of business, media liability, and errors and omissions

Additional Personal Services Contract Terms:

Max Multiplier: 3.15
Rate Cap: $260.00
Technical Expert: Negotiated.
Subcontractor Markup: 5%
Expenses Markup: 0%
Accounting, Technology and Safety program charges are considered to be business expenses and included in the multiplier.

SECTION 4
EVALUATION PROCEDURE

4.1 An evaluation committee will review all Proposals that are initially deemed responsive and they shall rank the Proposals in accordance with the below criteria. The evaluation committee may recommend an award based solely on the written responses or may request Proposal interviews/presentations. Interviews/presentations, if deemed beneficial by the evaluation committee, will consist of the highest scoring Proposers. The invited Proposers will be notified of the time, place, and format of the interview/presentation. Based on the interview/presentation, the evaluation committee may revise their scoring.

Written Proposals must be complete and no additions, deletions, or substitutions will be permitted during the interview/presentation (if any). The evaluation committee will recommend award of a contract to the final County decision maker based on the highest scoring Proposal. The County decision maker reserves the right to accept the recommendation, award to a different Proposer, or reject all Proposals and cancel the RFP.

Proposers are not permitted to directly communicate with any member of the evaluation committee during the evaluation process. All communication will be facilitated through the Procurement representative.

4.2 Evaluation Criteria

Category	**Points available:**
Firm Resources	0-10
Local Experience	0-35
Project Team	0-40
Approach	0-15
Available points	**0-100**

4.3 Once a selection has been made, the Proposer will be required to submit its proposed fees for completion of the project. The proposed fees must be on a time and material basis with a not to exceed for each phase of the work. The proposed fees must be reasonable and fair to the County, as determined solely by the County.

During negotiation, the County may require any additional information it deems necessary to clarify the approach and understanding of the requested services. Any changes agreed upon during contract negotiations will become part of the final contract. The negotiations will identify a level of work and associated fee that best represents the efforts required. If the County is unable to come to terms with the highest scoring Proposer, negotiations shall be terminated and negotiations will begin with the next highest scoring Proposer. If the resulting contract contemplates multiple phases and the County deems it is in its interest to not authorize any particular phase, it reserves the right to return to this solicitation and commence negotiations with the next highest ranked Proposer to complete the remaining phases.

SECTION 5
PROPOSAL CONTENTS

5.1. Vendors must observe submission instructions and be advised as follows:

5.1.1. Complete Proposals must be emailed to https://bidlocker.us/a/clackamascounty/BidLocker. The subject line of the email must identify the RFP title. Proposers are encouraged to contact Procurement to confirm receipt of the Proposal.

5.1.2. County reserves the right to solicit additional information or Proposal clarification from the vendors, or any one vendor, should the County deem such information necessary.

5.1.3. The Proposal's Statements of Qualifications (SOQ) consists of the proposer's Firm Resources, Local Experience, Project Team, and Approach, as defined below in sections 5.3, 5.4, 5.5 and 5.6 respectively. To maintain the fairness and integrity of the selection process, limit the entire SOQ to the following page limit requirements:

- Limit entire SOQ for each category to 10 pages (five double-sided sheets of paper).
- Use 8 ½ x 11 paper size, in a minimum of 12 pt. font, with one-inch margins.
- Blank pages, cover letter, section separators, resumes, and the Proposal Certification do not count towards the SOQ page limit.

Provide the following information in the order in which it appears below:

5.2. Introduction:

a. Indicate the complete legal name, address, and telephone numbers (voice and fax) of your company.
b. Provide the name and telephone number of the contact person for your SOQ.
c. Provide the name and title of the person who is legally authorized to sign the Master Contract, if it is awarded to your firm.
d. State that your SOQ will be valid for a period of ninety days.
e. State the categories covered by the SOQ.

5.3. Firm Resources (10 Points):

Provide a profile of your firm and the firm-wide resources that will be available to support the performance of the work. Provide the firm's length of time in business, number of employees, and the locations of key offices supporting the project. Describe the firm's overall experience with providing professional services. Provide a brief profile of the firm and available firm resources.

5.4. Local Experience (35 Points):

Describe your company's local (Pacific Northwest Region) experience in performing the services you are proposing. Describe similar services your company has performed for a minimum of three local customers in the past five years and include the names and telephone numbers for contact persons for each of these customers. District will use the information required in this paragraph, along with the District's prior experience with the consultant, to evaluate the Local Experience selection criterion.

5.5. Project Team (40 Points):

Describe your proposed team's capability to perform the services within the category. Include the number of employees who are available to perform the work and their qualifications and level of expertise. Describe any specialized equipment or software your company owns that would be used in performing the work. Describe

specific skills and experience of key staff that provide the professional services outlined in the categories section of the RFP. Provide resumes for key staff that will have responsibility for the work. (The resumes should be included in the Appendix.) List any licenses, certifications or accreditations your company or staff holds that are relevant to the services to be performed.

5.6. Approach (15 Points)
Describe your company's approach to providing the on-call services. Describe how projects will be managed. WES will use the information required in this paragraph to evaluate the "Approach" selection criterion.

5.7 Appendices
Include resumes for staff that will be responsible for performing the proposed services, up to 12 pages in this appendix.

5.8 Completed Proposal Certification (see the below form).

EXHIBIT B
CONTRACTOR'S PROPOSAL

Hazen

4640 S Macadam Avenue, Suite 50, Portland, OR 97239
971-357-3150
all things water®

February 20, 2025

Ryan Rice
Contract Analyst
Clackamas County
Water Environment Services
150 Beavercreek Road
#430
Oregon City, OR 97045

RFP #2025-01

Water Environment Services Engineering Master Contract

On-Call Engineering Services

Dear Mr. Rice,

Hazen and Sawyer (Hazen) is pleased to submit this proposal for the Water Environment Services Engineering Master Contract / On-Call Engineering Services. As the enclosed proposal demonstrates, we have a team that has the technical expertise and the management experience to deliver the requested services for Category 1 - Wastewater Conveyance and Treatment Engineering and provide the District with:

A local team that is responsive to your needs

Hazen has a long history of serving municipal clients on projects of all shapes and sizes. Hazen's greatest value to these clients is often our ability to respond quickly and deploy rapidly with a team of experts to address any challenge. With several experienced key team members located in Portland, we can be responsive to the needs of WES within a matter of hours.

Regional and national support that will provide exceptional value

Hazen's nimble business structure allows our local staff to leverage regional resources and national experts from within the company to best serve your needs. We put the best people on the job to effectively solve your problems; whether that's a junior staff member or a senior technical expert.

Unmatched Commitment

Our team, led by Dan Garbely (Contract Manager) and Andy McCaskill (Principal-in-Charge) represent the leadership of Hazen's Portland office. Our goal is to continue to build a long-term partnership with WES through serving your needs and achieve success for every project. You will not find a team more committed to serving your needs.

We are excited for the potential opportunity to work with WES to solve your wastewater and conveyance challenges large and small.

Dan Garbely, PE
Senior Associate/Contract Manager

5.2 INTRODUCTION

a. Legal Name | Address | Numbers

Hazen and Sawyer, D.P.C.
4640 S. Macadam Avenue, Suite 50
Portland, OR 97239
(971) 357-3150 (phone) | N/A (fax)

b. Contact Person

Dan Garbely, Project Manager
503-927-9447

c. Authorized Signatory

Andy McCaskill, PE
Associate Vice President

d. SOQ Validation

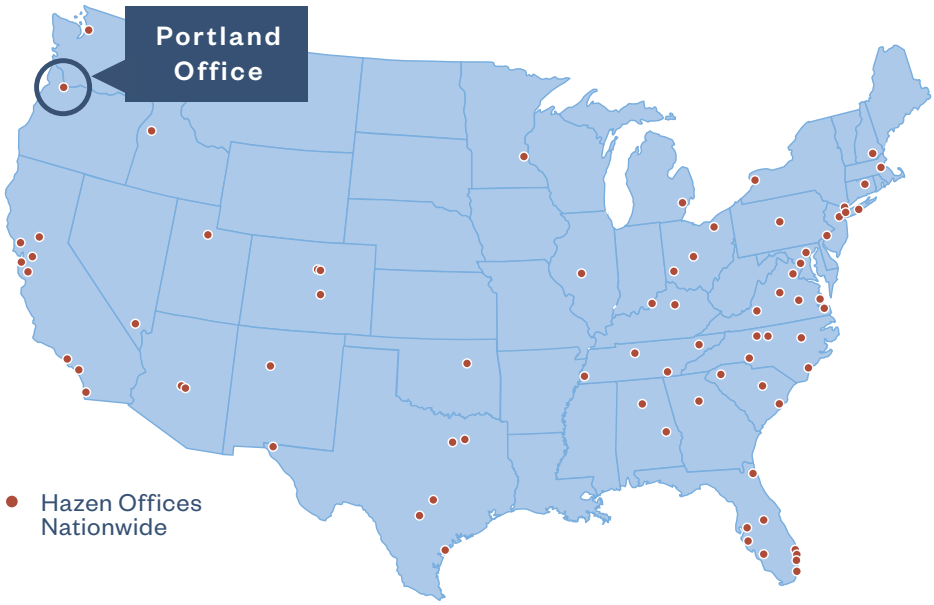
This SOQ will remain valid for a period of ninety days.

e. SOQ Categories

Category 1
Wastewater Conveyance and Treatment Engineering

5.3 FIRM RESOURCES

Hazen and Sawyer is a national consulting firm with a singular focus on "All Things Water." By providing excellent engineering to our clients, Hazen has grown to over 2,000 engineering professionals in more than 70 offices across the United States and around the world. Founded in 1951 (74 years), we are recognized as a top-10 Sewer and Waste Design Firm by Engineering New Record.



all things water®

founded
1951

employee-owned
100%

offices nationwide
70+

employees
2,000+

Hazen has a deep bench of engineering professionals to efficiently and effectively assist the District with your wastewater conveyance and treatment engineering needs. Our firmwide conveyance team is comprised of more than 175 talented engineers and is anchored in the Pacific Northwest by Brad Moore, an accomplished conveyance engineer based in our Portland office with more than 35 years of experience serving clients in the region. Hazen's process mechanical wastewater team is made up of more than 280 engineers across the country and is represented by local Portland staff Dan Garbely, Dan Laffitte, Anthony Tartaglione, and Andrew Matsumoto (sharing more than 85 years of experience). Hazen's local staff, bolstered by the national resources of our 2,000+ person firm, will support the District to find the best solutions for your most challenging problems.

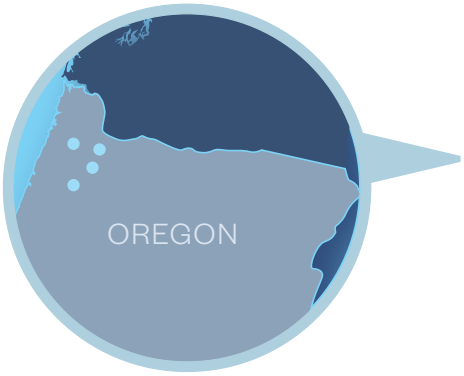
LOCAL ON-CALL EXPERIENCE

Hazen has delivered task order contracts for more than 2,000 on-call assignments nationwide. Some of our on-call contracts for the Pacific Northwest region are illustrated in the maps on this page.

Our proven approach to successfully deliver these on-call contracts leverages both our local staff and our extensive roster of nationally recognized wastewater experts. Our local team is already familiar with your facilities and understand regional industry challenges and trends. Our national process and operations specialists are easily and routinely leveraged to support our client's challenges throughout the nation.

A summary of our Pacific Northwest treatment and conveyance projects are summarized on the following pages.

PACIFIC NORTHWEST ON-CALL CONTRACT EXPERIENCE

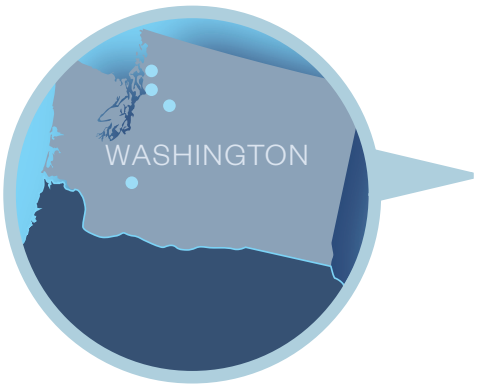


Clean Water Services
- Wastewater Treatment On-Call Services

City of Salem
- Consultant of Record On-Call Services
- Engineering and Staff Augmentation Services
- General Civil Engineering Services for Willow Lake Water Pollution Control Facility

City of Portland
- Bureau of Environmental Services Wastewater Engineering On-Call Services

City of Canby
- Professional and Technical Services On-Call Services



City of Bellevue
- On-Call Professional Engineering Services for Water, Sewer, Stormwater Facilities (2023-2026)

City of Lynnwood
- On-Call Utility Engineering Services

City of Seattle
- Seattle Public Utilities: On-Call Project Planning, Options Analysis, Design and Construction

LOTT Clean Water Alliance
- General Engineering Services On-Call Services (serving Lacey, Olympia, Tumwater, and Thurston County, WA)

WASTEWATER TREATMENT ON-CALL ENGINEERING SERVICES

CLEAN WATER SERVICES
Washington County, Oregon

Since 2022, Hazen has been providing services to support design projects and general consulting to support operational and process improvements at various Clean Water Services treatment facilities. Some of these projects are described below.

Chicken Creek Pump Station

- Hazen is providing preliminary engineering investigations and designs for the Chicken Creek Pump Station. This project is intended to replace aging infrastructure and allow for future development in the Sherwood area. Hazen performed initial sizing, evaluated potential siting locations, and developed concepts to integrate the pump station into a new city park. In the next phase of the project, Hazen will lead the detailed design which will include 15,000 LF of 24" forcemain and a new pump station with a capacity of 13 MGD.

Durham Water Resource Recovery Facility (WRRF) Struvite Recovery Facility (SRF)

- Hazen is providing design and construction phase services for the upgrade of two chemical systems for the SRF at the Durham WRRF. These upgrades include the installation of a day tank system for Caustic and Magnesium Chloride in a new exterior containment system complete with a chemical tote filling station, safety shower and eyewash. In addition, the project will modify the pumping systems for both chemicals as well as numerous upgrades to increase operator safety.

Durham WRRF Aeration Basins Pump Station

- Due to operational challenges associated with draining the plant's oldest aeration basins, Hazen developed a conceptual design of a purpose built pump station to drain the basins. The proposed approach would reduce the time required to drain the basin and allow for additional operational flexibility if staff needed to transfer biomass during process upsets.

Rock Creek WRRF Caustic Bulk Storage Tank System

- The existing bulk caustic tank at the Rock Creek WRRF was beginning to fail, so the District hired Hazen to provide design and construction phase services for the replacement of the tank with an upgraded poly tank system that increased redundancy and improved safety through the construction of a new spill containment and isolation system. In order to maintain caustic service during construction, Hazen also designed a temporary caustic storage system.

Chemical Resiliency and On-Site Hypochlorite Generation

- Hazen is conducting a study to evaluate and improve the resiliency of chemical systems at the District's treatment facilities. This study includes the evaluation of risks posed by loss of vital chemicals used in the wastewater treatment process, analysis of potential short-term and long-term mitigation strategies, and the development of implementation plans at both Durham and Rock Creek WRRFs to provide operations staff guidance during chemical shortage event. The study separately evaluated the feasibility of implementing an On-Site Hypochlorite Generation System at the Durham WRRF.

DATES
2023- Present

RELEVANT TEAM MEMBERS
Andy McCaskill, Dan Garbely, Andrew Matsumoto, Adam Butts, Wyatt Dressler, Melanie Mann, Thomas Nolan, Bill Russell, Chris Portner, Charlie Allaben, Aaron Duke

CLIENT CONTACT
Jana Otero, PE
Senior Engineer
Clean Water Services
(503) 547-8181

WASTEWATER ON-CALL ENGINEERING SERVICES

COLUMBIA BOULEVARD WASTEWATER TREATMENT PLANT
CITY OF PORTLAND BUREAU OF ENVIRONMENTAL SERVICES (BES)
Portland, Oregon

▸ Resource Recovery Master Plan

The Columbia Boulevard Wastewater Treatment Plant (CBWTP) is expanding its resource recovery program to establish itself as a leading Resource Recovery Facility. This project involves evaluating and recommending solutions for recovering biosolids and struvite from wastewater, aiming to beneficially use the resultant products. The evaluation process includes detailed analysis of various treatment and reuse solutions, which are documented in a Resource Recovery Plan (RRP). This RRP guides the diversification, expansion, and strategic investments in the Resource Recovery Program, ensuring sustainable and efficient resource recovery practices at the plant.

DATES
2021- Present

RELEVANT TEAM MEMBERS
Andy McCaskill, Dan Garbely, Andrew Matsumoto, Anthony Tartaglione, Blair Wisdom

CLIENT CONTACT
Dana Devin-Clarke
Engineer III
Portland BES
(503) 823-2400

ON-CALL ENGINEERING SERVICES

CITY OF SALEM
Salem, Oregon

Since 2021, Hazen has held an on-call contract managed directly by plant staff at the Willow Lake Water Pollution Control Facility (WLWPCF) in Salem, Oregon. Under this contract, Hazen has provided a variety of process and operational support services including:

▸ Additional Biosolids Storage Area

The City of Salem was interested in implementing additional storage for biosolids at the WLWPCF to allow for on-site storage of sludge during extended periods of wet weather, or other circumstances when off-site disposal is difficult or precluded. The City selected Hazen to provide design and construction phase services under a tight schedule to facilitate regulatory approval, and construction of the needed improvements.

▸ FOG Receiving Station Study and Update

Hazen is currently performing an update to a previous study for the City to develop a FOG receiving station at WLWPCF. Efforts include a market analysis to understand the potential supply of FOG and High Strength Waste from haulers in the Mid-Willamette Valley area. Hazen will also be updating the conceptual design of the facility.

DATES
2021- Present

RELEVANT TEAM MEMBERS
Andy McCaskill, Paul Pitt, Alonso Griborio, Riley Murnane, Brad Moore, Dan Garbely

CLIENT CONTACT
Jue Zhao, PE
Asst. Public Works Director
City of Salem
(503) 588-6380

ON-CALL ENGINEERING SERVICES

CITY OF BELLEVUE
Bellevue, Washington

In 2023, the City of Bellevue selected Hazen to provide professional on-call engineering design and construction support for an array of services including wastewater treatment, sanitary sewer conveyance & rehabilitation, pump station design, water distribution, stormwater, utility

Water Main Replacement 2026 and 2027 Phase 2

This project work consists of two construction projects to be designed and bid separately, and also to be constructed as two separate construction contracts. The Hazen Team is providing professional engineering design services and will be providing construction support services for replacing existing water main with new ductile iron water (DI) main and to replace one existing PRV station as part of the City of Bellevue's program to replace aging infrastructure. This scope of work covers design services and engineering services during construction, for the replacement of approximately 27,700 lineal feet of water main and the replacement of one PRV station. The design includes potable water distribution system pipe, fire hydrants, valves, water services, one PRV station, associated distribution system appurtenances, and restoration of surfaces anticipated to be disturbed by construction. This project work has thus far included field verification, field survey, geotechnical investigations, 60% design drawings, specifications and cost estimate. Construction for the two packages is planned for 2026 and 2027, respectively.

Water Main Replacement 2027 Phase 3

Hazen's Team will provide professional engineering design services and construction support services for replacing existing water main with new ductile iron water (DI) main and to replace one existing PRV station as part of the City of Bellevue's program to replace aging infrastructure. This scope of work covers design services and engineering services during construction, for the replacement of approximately 11,500 lineal feet of water main and the replacement of one PRV station.

Team Site Investigation for Water Main Replacement

DATES	RELEVANT TEAM MEMBERS	CLIENT CONTACT
2023 - Present	Aaron Duke and Brad Moore	**Ali Sabeeh, PMP, ENV SP** **Utility Engineer / Project Manager** City of Bellevue Utilities (452) 452-7663

THE HAZEN ON-CALL TEAM

EXPERTISE AND RESOURCES

Hazen's full-service team is led by local staff with the ability to rapidly respond to any assignment WES might have while leveraging experienced facility design and wastewater process experts to provide cost efficient and innovative but practical solutions that satisfy the District's technical and operational drivers. Hazen will effectively deliver and manage implementation of any wastewater planning, study or design task requested by the District.

TOTAL NUMBER OF STAFF AVAILABLE FOR THIS CONTRACT: 30

CLACKAMAS WATER ENVIRONMENT SERVICES

ANDY McCASKILL, PE ✻
PRINCIPAL-IN-CHARGE

DAN GARBELY, PE ✻
CONTRACT MANAGER

LOCAL TEAM

DAN LAFFITTE, PE
WASTEWATER TASK LEAD

ANDREW MATSUMOTO, PE
REGULATORY LEAD

AARON DUKE, PE, BCEE ✻
CHEMICAL SYSTEMS LEAD

RILEY MURNANE, PE
REGIONAL WASTEWATER TASK SUPPORT

ANTHONY TARTAGLIONE, PE, BCEE
SOLIDS LEAD

BRAD MOORE, PE ✻
CONVEYANCE LEAD

ERIC POLLI, PE
WASTEWATER PROCESS LEAD

CHARLIE ALLABEN, PE ✻
PUMP STATION LEAD

DISCIPLINE SUPPORT

LAURA SALEEBY, PE
CIVIL ENGINEERING

THOMAS NOLAN
HVAC

WYATT DRESSLER, PE
STRUCTURAL

MARC SOLOMON, PE, BCEE, D.WRE
PERMITTING

CHRIS PORTNER, PE, ENV SP, CEP
COST ESTIMATING

BILL RUSSELL
ARCHITECTURAL

ADAM BUTTS, PE
E & I

HENRY RICCA, PE
MECHANICAL

NATIONAL EXPERTS

PAUL PITT, PhD, PE, BCEE
WASTEWATER DESIGN

MICHAEL PARKER, PE
SCREENING AND GRIT LEAD

JOSEPH ROHRBACHER, PE
AERATION LEAD

MOHAMMAD ABU-ORF, PhD
RESIDUALS / SOLIDS LEAD

BLAIR WISDOM, PE
STRUVITE LEAD

TJ LYNCH
OPERATIONS LEAD

RON LATIMER, PE
WASTEWATER PROCESS MODELING

ALONSO GRIBORIO, PhD, PE
SETTLING / CLARIFICATION LEAD

MELANIE MANN, PE
DISINFECTION LEAD

TROY WALKER, MIE (AUST)
MEMBRANES / REUSE LEAD

KRISTEN SMEBY, PE
ODOR CONTROL LEAD

BRYAN LISK, PE, CEM
BIOGAS UTILIZATION LEAD

Organizational Chart - Key

✻ **Key Staff:** resumes for key team members listed above are provided in the **Appendix**.

KEY STAFF

SKILLS AND EXPERIENCE

* Primary District Contact

Dan Garbely, PE has 22 years of experience managing a variety of projects across every wastewater unit process. Throughout his career he has focused on sustainable design principles to maximize system efficiency and create opportunities for beneficial reuse of waste products.

Dan also has extensive experience successfully managing, executing and delivering task order assignments for on-call contracts. He is an experienced project manager that applies both his technical and management capabilities to work in partnership with clients to achieve results and beneficial outcomes. Dan will manage our on-call team to timely execute and deliver high-quality work and solutions that meet the District's needs and expectations.

Andy McCaskill, PE has over 25 years of experience specializing in wastewater and drinking water treatment. He has served as Principal-In-Charge and Contract Manager for on-call contracts throughout the Northwest. As Principal-In-Charge for this contract, he will be responsible for ensuring the District's satisfaction with our team and leverage all Hazen resources to deliver the success of this contract.

Aaron Duke, PE, BCEE has over 25 years of professional experience covering an array of projects across the spectrum of water and wastewater facilities engineering and conveyance. His expertise includes physical/chemical processes, water process technology and optimization, pilot testing, process and chemical feed design, and residuals handling and disposal.

Brad Moore, PE has 30+ years of experience serving municipal clients throughout the Northwest. He has expertise in collection and distribution systems, as well as, significant experience in infrastructure and conveyance projects including planning, design and construction of water, sanitary, storm and CSO conveyance systems. Brad's expertise in conveyance systems will support addressing system deficiencies and the development of infrastructure improvements.

Charlie Allaben, PE is a pumping system specialist with over 30 years of experience in pump station design, pumping system performance and evaluation, and hydraulic engineering and structure design. Based in Hazen's Seattle office, he will provide support to guide pump station evaluation and the design of associated improvements.

Hazen's approach for delivering wastewater conveyance and treatment engineering services is to be responsive and to leverage our deep bench of more than 2000 staff for the benefit of the District. We have a diverse group of industry leading subject matter experts and also all the necessary professional and support disciplines to assist with the planning, design, and construction of any wastewater related projects. Our Portland office has multiple task leads that will quickly and efficiently leverage all of these resources to support the District. We envision that each task encompassed by this contract, regardless of its size or scope, will involve five basic steps, as

1

ASSISTANCE REQUEST

When the District has identified a need and made contact, our next step will be to make sure that we thoroughly understand the needed services or desired improvements. We can also advance our understanding of the issue through site visits and face to face meetings with your engineering, operations, and maintenance staff to better comprehend the context of the issue.

2

TEAM IDENTIFICATION

Based on our developed understanding of the District's challenge, our team will work closely with the District to identify a task lead and a team that has the right experience and expertise to support the project.

3

WORK PLAN

After confirming our understanding of the needed support, our task lead will prepare scope, schedule, and budget in a timely manner for the District's review and approval.

4

EXECUTION

With the District's approval, the Hazen team can proceed with execution of the needed support services that could include planning, design, construction, and startup support activities.

5

APPLY LESSONS LEARNED

Our team is committed to continuous improvement. After each assignment, we will reflect on the lessons learned, carefully analyzing both successes and challenges encountered. We can then apply this knowledge to future projects which will help us deliver even greater value to the District.

SCHEDULE AND BUDGET MANAGEMENT

Hazen's approach to keeping task orders on schedule and on budget focuses on the efficient use of technology and open lines of communication. During the initial task order meeting, we will ask questions to understand the District's schedule requirements, and develop a detailed schedule with proposed deliverables and dates for review during task scoping. The established deliverable milestones will be set on both the District's and Hazen's calendars to guide and manage the schedule for each task assignment. The Contract Manager reviews schedule updates monthly to track progress and determine any necessary adjustments to maintain progress and stay on schedule. Hazen offers dynamic, technology-based tools developed with Deltek Vision to facilitate budget management for a wide range of on-call task assignments. Through the use of Deltek Vision, we can develop and provide the District with interactive dashboards to review, monitor and track budgets in real-time, allowing responsive management to foresee shifts and adhere to target budget and financial requirements.

Hazen uses several tools and strategies to deliver projects on schedule and budget including MS Project (establish and monitor schedule), Deltek Vision (real-time budgeting), Risk Register (mitigate project risks), Decision Log (track decisions and define paths), Weekly Check-Ins (Poject Manager conducts check-ins to track critical scope items).

Hazen's interactive dashboards and digital tools to manage project schedules and budgets

ADAPTATION OF APPROACH TO TASK SIZE AND DURATION

Hazen knows that task order assignments come in various shapes and sizes, and we adapt our delivery approach accordingly. A large assignment will get a full project work plan, whereas a small assignment may entail a simple email relaying relevant details to the project team. Our Contract Manager may be the one to execute small assignments controlling costs and streamlining the team.

QUALITY ASSURANCE / QUALITY CONTROL

Hazen has developed a Quality Assurance Policy Manual that provides guidance to staff and is used in the execution of all projects undertaken by the firm. The manual requires that QC reviewers be independent of the design process so that reviews have a broad perspective and are objective. Our quality approach strategy is illustrated below and incorporates: (**1**) identification of independent reviewers with appropriate expertise at project scoping; (**2**) inclusion of dedicated QA/QC scope and task budgets for each task order; (**3**) oversight provided by our regional quality manager; and (**4**) resolving QA/QC comments and updating deliverables.

COLLABORATION FROM START TO FINISH WILL DRIVE DECISION-MAKING

Our team understands that collaboration and communication are just as important as technical excellence when implementing successful solutions. Our project manager Dan Garbely, along with other Hazen staff, have familiarity working with the District which will inform our team's approach to preparing for and running productive project meetings.

We recognize the need to be flexible during workshops/meetings and to allow creative thoughts and conversations to occur. We will balance this with the need to run efficient and effective meetings.

1. Collaborate with the District project management team on the purpose of the workshop (i.e. decisions to be made, approvals that are sought)
2. Establish list of project stakeholders and meeting attendees
3. Provide workshop materials (agenda, PowerPoint presentation, data, etc.) one week in advance of workshop
4. Adjust materials ahead of time based on District feedback
5. Document critical conversations, decisions, and direction in meeting minutes and distribute within one week

CONSTRUCTABILITY AND OPERABILITY REVIEWS

Two important features of Hazen's execution approach for design projects include constructability and operability reviews.

CONSTRUCTABILITY REVIEWS

As part of our quality control process, Hazen uses our senior staff with significant construction backgrounds to perform a constructability review on each of our design projects.

OPERABILITY REVIEWS

We have developed a formal operability review checklist that codifies more than 200 design features, broken into four categories including:

- Operability
- Safety
- Maintenance of Plant Operations
- Startup/Commissioning/Turnover

This checklist can be applied to the District's design projects to increase the flexibility and reliability of operations for facility improvements.

APPENDIX

KEY TEAM MEMBER RESUMES

Dan Garbely, PE

Contract Manager

Dan has over 20 years of experience on a variety of wastewater, drinking water, and energy projects, in both private consulting and public sectors. Throughout his career he has focused on sustainable design principles to maximize system efficiency and create opportunities for beneficial reuse of waste products.

Education

M.S., Civil/Environmental Engineering, Cal Poly, San Luis Obispo, CA

B.S., Environmental Engineering, Cal Poly, San Luis Obispo, CA

Certification/License

Professional Engineer: OR

Areas of Expertise

- Wastewater Treatment
- Project Management
- Construction Management
- Renewable Energy
- Resource Recovery

Professional Activities

WEF / PNCWA

Value Engineering Review of the Wastewater Facility Plan, City of Lynnwood, Lynnwood, WA

Project Manager. In 2022, the City completed a facility planning project to identify necessary improvements for increasing the capacity and performance of the treatment facilities on the existing site to meet the anticipated growth and nitrogen removal requirements. The completed plan recommended a three-phased approach with an estimated total cost of approximately $200 million. Hazen was hired to conduct a third-party review of the facility plan to identify risks, update project costs, and assist the City in identifying the preferred project delivery method. The Hazen team identified 57 unique risks associated with the proposed treatment process, regulatory uncertainty, constructability, site permitting, financial management, and public engagement. For each risk, the team developed risk scores associated with the likelihood of the risk occurring and the potential consequences if the risk occurred. Hazen then developed mitigation measures for the top ranked risks associated with implementing the facility plan recommendations.

Durham Advanced Wastewater Treatment Facility 2019 Master Plan, Tigard, OR

Project Manager. Manager for the 2019 update to the Durham AWWTF Mas-ter Plan which looked at growth and expansion requirements to the treatment plant and collection system at 10, 20, and Buildout timelines. Developed a 10 year, $250M Capital Improvement Plan for implementation.

Tryon Creek Wastewater Treatment Plant Facility Plan, City of Portland – BES, Portland, OR

Assistant Project Manager and Project engineer for the evaluation of existing facilities, regulatory requirements, and developed facility improvement alternatives. Evaluated existing process and hydraulic

capacity, and developed projected flows and loads based on analysis of historical plant data. Developed several plant alternatives for the 30-year planning period and evaluated capital and O&M cost impacts. Managed cost and schedule controls, invoicing, and subcontractor management.

Client Project Manager, 2019 East Basin Facilities Plan, Clean Water Services, Hillsboro, OR

Project Manager. Dan Garbely served as Project Manager and played a pivotal role in the 2019 facility planning processes at Clean Water Services (CWS) Durham WWTP. The plan looked at growth and expansion requirements to the treatment plant and collection system at 10, 20, and buildout timelines. CWS faced an uncertain regulatory environment, aging infrastructure, high wet weather peaks, and increasing population growth. Utilizing an integrated planning approach, the District established cost effective solution for the wastewater basin which resulted in a plan that was compliant with current and future regulatory requirements, and ultimately improved the health of the watershed.

Client Plant Engineer, Various Projects 2015-2022, Clean Water Services, Hillsboro, OR

Client Plant Engineer. Managed the planning, design, and construction of all capital improvement projects, large and small, at the Durham AWWTP. Provided resident engineering expertise and inspection during construction projects. Provided engineering evaluation, assessments, troubleshooting support to operations and maintenance staff for all unit processes at the plant. Developed new processes to improve plant staff engagement and input during design and construction of projects. Examples of small improvement projects include Secondary Clarifier 3 topping slab demolition, repair, and mechanism replacement, Headworks Monorail Extension, SRF Improvements Project, FOG & IPS Odor Control Improvements, Tertiary Filter media evaluation and replacement, Aeration System Evaluation, Sampling Improvements, Backwash Modifications, O&M Building Retrofit, Digester Pumping and Mixing Modifications, Primary Effluent Pump Station Lining Repairs.

Subconsultant Project Manager, CBWTP Resource Recovery Plan, City of Portland BES, Portland, OR

Project Manager. The Columbia Boulevard Wastewater Treatment Plant (CBWTP) is expanding itsresource recovery program to establish itself as a leading Resource Recovery Facility. This project involves evaluating and recommending solutions for recovering biosolids and struvite from wastewater, aiming to beneficially use the resultant products. The evaluation process includes detailed analysis of various treatment and reuse solutions, which are documented in a Resource Recovery Plan (RRP). This RRP guides the diversification, expansion, and strategic investments in the Resource Recovery Program, ensuring sustainable and efficient resource recovery practices at the plant.

Andy McCaskill, PE

Principal-In-Charge

Andy serves as Hazen's Portland Office Operations Manager. He has 25 years of experience serving public and private sector clients in the Midwest and the Pacific Northwest. He has spent the last 10 years specializing in wastewater and drinking water treatment, water quality and conveyance engineering throughout the state of Oregon.

Education

B.S., Civil Engineering, University of Missouri, Columbia, MO, Honors Scholar

Certification/License

Professional Engineer: OR

Areas of Expertise

- Project Management
- Program Management
- Owner's Representative
- Contract Management

Professional Activities

WEF / PNCWA

AWWA / PNWS

An accomplished project manager, he applies his technical and management capabilities to work in collaborative settings to deliver results. He has a wide variety of experience in regulatory agency compliance and community stakeholder collaboration and has managed a wide variety of projects from initial planning, through design, construction and operation.

SE Bend Septic Solutions Project, City of Bend, OR
This project included the study, preliminary design (30%) and development of a Preliminary Engineering Report for bringing sanitary sewers to a neighborhood currently served by septic tanks. The City of Bend has more publicly owned pump stations that the City of New Orleans (which happens to be below sea level). This is due to the ever-present hard basalt that makes up the local geology. Breaking through rock to build gravity sewers is expensive, but maintaining regional pump stations has turned into a bigger challenge. The City is in the process of rolling out projects (new sewer interceptors) to provide gravity service to areas and to get away from regional pump stations. This neighborhood is comprised of about 500 lots. One of the project goals was to serve as many of these lots by gravity as possible. The project also included the evaluation of potential funding strategies, including public/private cost share.

Secondary Treatment Process Support, City of Portland BES, OR
The City of Portland CBWTP began experiencing filamentous bulking outbreaks and settling challenges starting in April 2021. Hazen was retained to provide understanding of the process upset and identify future process upset risk mitigation measures that can proactively reduce the likelihood of process upset. Project efforts included a review of historical data, laboratory study including microscopic and carbohydrate analysis, and field sampling. Andy is serving as the project manager.

Hazen

Durham Advanced Wastewater Treatment Facility, Tertiary Improvements, Clean Water Services

The project team evaluated alternatives to improve the reliability and performance of Durham's existing tertiary treatment system resulting in a rehabilitation strategy that saved the District $6M. The team performed filter field investigations and testing to assess the condition of the media and underdrains as well as to optimize filter operation strategy. The team identified and implemented short term system improvements: new polymer make-down equipment, new polymer injection point, modification to rapid mixing, tertiary clarifier HRT analysis, and chemical sludge recycle pilot. The team provided permit season monitoring and data analysis of tertiary system operation and testing performances. The team performed jar testing support to optimize existing coagulant and polymer dosing, as well as test new polymers and poly-aluminum chloride. The team provided 20% preliminary design of the recommended improvements. Mr. McCaskill served as the project manager.

Value Engineering Review of the Wastewater Facility Plan, City of Lynnwood, Lynnwood, WA

Risk Manager. In 2022, the City completed a facility planning project to identify necessary improvements for increasing the capacity and performance of the treatment facilities on the existing site to meet the anticipated growth and nitrogen removal requirements. The completed plan recommended a three-phased approach with an estimated total cost of approximately $200 million. Hazen was hired to conduct a third-party review of the facility plan to identify risks, update project costs, and assist the City in identifying the preferred project delivery method. The Hazen team identified 5 7 unique r isks a ssociated with t he proposed treatment process, regulatory uncertainty, constructability, site permitting, financial management, a nd public engagement. For e ach risk, the team developed risk scores associated with the likelihood of the risk occurring and the potential consequences if the risk occurred. Hazen then developed mitigation measures for the top ranked risks associated with implementing the facility plan recommendations.

Spring Street Wastewater Treatment Plant Owner's Representative, City of Klamath Falls, OR

As the Owner's Representative Andy helped the City of Klamath Falls deliver this Progressive Design Build project to rebuild their aging wastewater treatment facility. Valued at nearly $40M; this is largest project in the history of the City and requires frequent communication with City leadership and elected officials. This project has included extensive coordination with Oregon Department of Environmental Quality regarding the negotiation of a new NPDES permit, collaboration with other stakeholders and agencies to build partnerships for effluent reuse, and the development of a risk-based strategy to identify the best long-term alternative for the City.

Aaron Duke, PE, BCEE

Chemical Systems Lead

Aaron has over 25 years of professional experience covering an array of projects across the spectrum of water and wastewater facilities engineering. He understands how to organize and deliver projects from inception through planning, design, bidding, commissioning, and construction closeout. Mr. Duke believes in effective and proactive communication to drive project schedules and resolve design issues quickly as they arise and is dedicated to quality. He has served as project director and technical advisor on numerous projects and will leverage this experience to ensure our team brings quality, collaboration and value.

Education

MSEnvE University of Michigan, Ann Arbor, MI (Environmental Engineering)

BSE University of Michigan, Ann Arbor, MI (Civil and Environmental Engineering)

Certification/License

Profession al Engineer: WA, ID, OR, DC, MD, VA, NC, NY

Board Certified Environmental Engineer (BCEE)

Areas of Expertise

- Physical/chemical processes
- Water process technology
- Pilot testing
- Process evaluations for regulatory compliance
- Process and chemical feed design
- Treatment plant residuals handling and disposal

Professional Activities

Chesapeake Section American Water Works Association: Chair of Section Communications Committee, 2000-2004; 2003 Horizon Award Winner; Trustee 2004-2006; Chair Elect-2006; Chair – 2007; Past Chair – 2008

PNCWA, Awards Committee Chair

PNWS, Water Quality Committee Vice Chair

American Water Works Association Water Treatment Plant Residuals Management Committee Vice Chair

Hazen

Value Engineering Review of Lynnwood Wastewater Treatment Plant Facility Plan, Lynnwood, WA

Project Director. Supported the project team with resources and technical reviews and ensured client satisfaction with project deliverables and execution. Lynnwood is facing a significant challenge in upgrading its wastewater treatment plant, likely to be the largest capital improvement in a generation. Hazen was hired to identify the major risks to the delivery of the project and develop strategies to mitigate the top priority risks.

Rock Creek WRRF Caustic Tank Replacement, Clean Water Services, OR

Technical Advisor / QAQC Reviewer. Project involved the demolition of an existing horizontal caustic storage tank and pumps, and installation of two new vertical storage tanks and pumps. The installation also involved structural and architectural modifications and design of a temporary bulk storage and transfer system to maintain system operations during construction.

Noman Cole WPCP Tertiary Filters VE, Fairfax County, VA

VE Team Member. Evaluated the process mechanical recommendations of the design engineering consultant for the 67-mgd WPCP. Project involved the rehabilitation of the existing tertiary filters, piping, valves and pumping systems. Developed alternative approaches to selected design components to simplify construction, avoid operational challenges and reduce the overall project cost.

AlexRenew WRRF UV Disinfection Upgrades, AlexRenew, Alexandria, VA
QA/QC and Technical Advisor. Design of improvements to the existing UV disinfection facility at the 54-mgd Water Resource Recovery Facility.

St. Louis and Waterford Community WWTPs Disinfection Improvements, Loudoun Water, Loudoun County, VA
Technical Advisor. Evaluation and preliminary design for improvements to the St. Louis and Waterford Community WWTPs. The evaluation considered the use of both UV disinfection and liquid chlorination / dechlorination for the two lagoon-based WWTPs.

Critical Control Point Assessment to Quantify the Robustness and Reliability of Multiple Barriers of a DPR Scheme (Project 13-03), WateReuse Research Foundation
Project Engineer. Application of HACCP principals for development of direct potable reuse (DPR) treatment trains. Primary efforts were focused on the development of the critical control points and associated alert response flow charts / decision trees for the non-membrane based DPR scheme of Ozone/BAC/GAC/UV, Suggested design components to be incorporated into the non-membrane DPR scheme for operational robustness and monitoring were also developed.

Development of Operation and Maintenance Plan and Training and Certification Framework for Direct Potable Reuse (DPR) System (Project 13-13), WateReuse Research Foundation
Project Engineer. Development of operating guidelines for the non-membrane based direct potable reuse (DPR) treatment train (ozone/BAC/GAC/UV). The operating guidelines built off of the Project 13-03 project work in that the guidelines included specific responses to alert and critical level situations associated with the Critical Control Points within the non-membrane based DPR train.

Risk Assessment and Peer Review of Direct Potable Reuse (DPR) Pilot Scheme, Gwinnett County, GA
QA/QC and Technical Advisor. Hazard Analysis and Critical Control Point (HACCP) evaluation of the direct potable reuse scheme for the F. Wayne Hill WRF.

SWIFT Demonstration Facility Design-Build Project, Hampton Roads Sanitation District, VA
Technical advisor and QA/QC reviewer for the design of the treatment processes at a 1 MGD demonstration treatment plant utilizing secondary WWTP effluent for managed groundwater recharge. Processes designed include conventional rapid mixing, flocculation and sedimentation, ozonation, biological filtration, GAC contact and UV disinfection. Additionally, co-led the efforts associated with application of the HACCP pro-cess for risk identification and development of a risk management plan for the facility.

SWIFT Full-Scale Implementation Program Management, HRSD, Hampton Roads, VA
Technical Lead for Pre-Treatment and Residuals Handling. Lead the conceptual and 30% design and aspects of the project bridging documents for the rapid mixing, flocculation and sedimentation pre-treatment facilities and the settle solids pumping and backwash equalization facilities for the SWIFT advanced water treatment (AWT) facility at the James River WWTP.

Brad Moore, PE

Conveyance Lead

Mr. Moore is a senior civil/water resources engineer with over 30 years of project management experience on numerous, multi-disciplined teams for municipal infrastructure/ conveyance projects including planning, design and construction of water, sanitary, storm and CSO conveyance systems. Brad has a successful history of working with Owners to mitigate risk and providing them with the information required to make sound design decisions.

Project Role

Task Manager

Education

M.S., Water Resources Engineering, University of Kansas, Lawrence, KS

B.S., Civil Engineering, University of Kansas, Lawrence, KS

Certification/License

Professional Engineer

Areas of Expertise

- Pipelines / Conveyance Systems
- Project Managemen

Professional Activities

American Water Works Association, Pacific Northwest Section, AWWA – PNWS

Water Environment Federation, Pacific Northwest Clean Water Assn., WEF – PNCWA

North American Society for Trenchless Technology, NASTT

American Society of Civil Engineers, ASCE

Experience Prior to Hazen

Willamette Water Supply, Raw Water Facilities Project RWF_1.0, Trenchless Crossing of Arrowhead Creek, Willamette Water Supply Program (WWSP), Wilsonville, OR

Trenchless Engineer responsible for review of alternative alignments and trenchless methods for crossing under Arrowhead Creek in Wilsonville, Oregon. Based on review of geotechnical and groundwater conditions, a 270-foot pipe ram was selected for the trenchless crossing including an 84-inch outer diameter steel casing with 66-inch steel raw water transmission line. Specifications were prepared for the pipe ram installation and annular space fill, along with related shaft excavations and installation monitoring requirements. A geotechnical baseline report (GBR) was also prepared to document the allocation of risk, and basis of bid and construction project execution related to potential for encountering boulders, cobbles and groundwater during shaft support, shaft excavation and pipe ram casing installation. STC also provided review of daily monitoring reports during construction including real-time installation advance rates and ramming forces. The casing installation by pipe ramming was successfully completed in May 2021 meeting line and grade requirements, with no settlement.

Willamette Water Supply, Pipeline West Project PLW_1.3, Trenchless Crossing of Butternut Creek, Willamette Water Supply Program (WWSP), Hillsboro, OR

Trenchless Engineer responsible for review of alternative alignments and trenchless methods for crossing under Butternut Creek in South

Hazen

Chi Epsilon, Civil Engineering Honor Society

Technical Publications

Willamette Water Supply Program Trenchless Construction Success, 2022, North American Society for Trenchless Technology

Willamette Water Supply Program Successfully Completes Initial Trenchless Crossing, 2018, North American Society for Trenchless Technology

Pipe Ramming and Auger Boring provide Trenchless Solutions for Critical Crossings, Northwest Oregon, 2016, North American Society for Trenchless Technology

Another Success for the City of Portland Using Alternative Contracting Methods to Deliver the Balch Consolidation Conduit, 2011, North American Society for Trenchless Technology

Risk Mitigation in Trenchless Design and Manifestation in Construction, 2017, North American Society for Trenchless Technology

An Industry Survey and Analysis of the Effectiveness of Differing Prequalification and Qualification Packages, 2017, North American Society for Trenchless Technology

Lake Oswego – Tigard Water Partnership, Construction of a New Willamette River Pipe Crossing, 2016, American Water Works Association, Pacific Northwest Section

HDD Through High-Strength Basalt, 2015, Trenchless International

Installing Pipelines with Microtunneling while Successfully Avoiding Claims – A Case History Illustrating the Value of Using Alternative Contracting Methods, 2011, American Society of Civil Engineers

Hillsboro, Oregon. Based on review of geotechnical and groundwater conditions, a 500-foot microtunnel was selected for the trenchless crossing including a 78-inch diameter steel casing with 66-inch steel finished water transmission line. Specifications were prepared for the microtunnel installation and annular space fill, along with related shaft excavations and settlement monitoring requirements. STC also provided daily review of microtunneling monitoring reports during construction including real-time installation loads and grades, with comments provided to the Construction Manager and Owner. The casing installation by microtunneling was successfully completed in May 2021 meeting line and grade requirements, with no settlement.

Willamette Water Supply, Pipeline West Project PLW_1.1, Trenchless Crossing of Tualatin Valley Highway at Cornelius Pass Road, Willamette Water Supply Program (WWSP), Hillsboro, OR

Trenchless Engineer responsible for the review of alternative alignments and trenchless methods for crossing Tualatin Valley Highway (State Highway 8) and Union Pacific Railroad. Geotechnical explorations and review of geotechnical and groundwater conditions resulted in a 270-foot auger bore as the selected method for the trenchless crossing. Specifications were prepared for auger boring along with related shaft excavations and settlement monitoring requirements. Project bids were received in December 2016 and the successful low bidder included $392k for auger boring of the 60-inch steel casing installation and owner-provided 48-inch welded steel carrier pipe. Shaft excavation work and casing installation began in May 2017. The casing installation was successfully completed in June 2017 meeting line and grade requirements, with no settlement.

Raw and Finished Water Pipelines, Lake Oswego Tigard Water Partnership, Lake Oswego, OR

Project Manager for the design of over 10.5 miles of pipeline using various construction methods including open cut construction, a 3,900-foot horizontal directionally drilled (HDD) crossing of the Willamette River, and three auger bored segments for crossing under Trillium Creek in West Linn, Interstate 5 in Tigard and parallel railroad tracks along Bonita Road in Tigard. The pipeline alignment also traversed major parks including Meldrum Bar State Park in Gladstone, Mary S. Young Park in West Linn, George Rogers Park and Waluga Park in the City of Lake Oswego. The Raw Water Pipeline consists of 9,100 feet of 46-inch diameter welded steel pipeline constructed by open cut construction along with 3,900 feet of 36-inch diameter pipeline constructed using horizontal directional drilling (HDD) with a 54-inch bore beneath the Willamette River. The Finished Water Pipeline consists of 14,800 feet of 48-inch, 7,100 feet of 42-inch and 11,100 feet of 36-inch diameter pipeline, constructed using a combination of open cut construction, one aerial pipeline crossing and two auger boring trenchless crossings.

Charlie Allaben, PE

Pump Station Lead

Mr. Allaben is a recent addition to Hazen, joining the firm's Water Resources Management group. He is a pumping system specialist with over 27 years of experience in the industry.

Education

BS, Civil Engineering, Michigan State University

Certification/License

Professional Engineer: WA

Areas of Expertise

- Pump station design
- Hydraulic structure design
- Pumping system evaluation
- Plant hydraulic evaluations
- Intake structure design

Professional Activities

Hydraulic Institute

- Standards Partner Representative

Experience Prior to Hazen

Semper High-Service Pump Station Repair and Rehabilitation, City of Westminster, Westminster, Colorado

Technical Advisor for the High Service Pump Station (HSPS) project that included replacing the medium voltage electrical system for a series of 400hp and 600hp pumps. The project included the hydraulic and vibration analysis associated with addition of VFDs and replacement of the pump motors. The project also included a transient analysis for Pressure Zone 1, identified probable causes of transients in the system, and identified an appropriate mitigation approach.

Northern Integrated Supply Project, Northern Colorado Water Conservancy District, Fort Collins, CO

Technical Advisor. The project involved development of conceptual design for the Northern Integrated Supply Project (NISP) pump stations and conveyance components of the multi-faceted water storage and distribution project, which included two new reservoirs and a pipeline delivery system deriving water from the Cache la Poudre (Poudre) River and South Platte River. The system includes three new pumping stations with installed horsepower ranging from 2,400 to 14,000; the conveyance portion of the NISP project includes almost 90 miles of 32-inch to 80-inch diameter pipe.

Pierce Burch Water Treatment Plant Improvements, Arlington Water Utilities, Arlington, TX

Technical Advisor and QC Reviewer of the Pierce-Birch Water Treatment Plant High Service Pump Station. The joint venture project was led by the City of Arlington along with the Trinity River Authority, with shared responsibility for operation. The pump station is equipped with 5 1,750 HP pumps capable of delivering flow to both a low and high pressure zone. The overall station capacity includes simultaneous delivery of 75 mgd to the lower zone and 35 mgd to the upper zone.

Hazen

West Point Treatment Plant Raw Sewage Pump Station Capacity Increase, King County, Seattle, WA Lead Mechanical Designer. The project involved replacement of the raw sewage pumps at the West Point WWTP. The plant headworks pump station requires a capacity increase to provide a firm pumping capacity of 440 mgd to match plant treatment capacity. The 4 existing 110 mgd engine-driven pumps are to be replaced with 4 -147 mgd electric motor-driven pumps. Project required extensive alternatives analysis and will include replacement of concrete imbedded formed suction inlets.

Cantrell Road Pump Station Improvements, Little Rock Water Reclamation Authority, AR
Lead Designer. The 32-mgd wastewater lift station was fully renovated with installation of dry-pit submersible pumps. The new pumps experienced chronic seal failure and excessive vibration during the first several years of operation. The project involved recommendations to correct the operational problems. Led the design team through the process that included field vibration testing, physical modeling, changes to the control scheme, and ultimately procurement of replacement pumps under the equipment warranty provisions. The newly installed pumps continue to run without failure since project completion.

Rowan Pump Station Design, Louisville Metropolitan Sewer District, Louisville, KY
Technical Advisor. The project involved design of the Rowan Deep Tunnel CSO Pump Station. The 220-foot-deep pump station is equipped with 1 0 - 4 mgd submersible tunnel dewatering pumps and 2 - 3 mgd submersible grit pumps. The innovative design provides an economical pumping system configuration for challenging CSO tun-nel pumping systems.

Able Storm Water Pump Station, City of Dallas, TX
Technical Advisor. The 3,000 HP units each have a capacity of 220,000 gpm and utilize concrete volute pumps for a total station capacity of 880,000 gpm (1.3 bgd). Provided hydraulic analysis for the project, construction phase services review, and startup services.

PROPOSAL CERTIFICATION
RFP #2025-01

Submitted by: Hazen and Sawyer, D.P.C. (New York)
(Must be entity's full legal name, and State of Formation)

Each Proposer must read, complete and submit a copy of this Proposal Certification with their Proposal. Failure to do so may result in rejection of the Proposal. By signature on this Proposal Certification, the undersigned certifies that they are authorized to act on behalf of the Proposer and that under penalty of perjury, the undersigned will comply with the following:

SECTION I. OREGON TAX LAWS: As required in ORS 279B.110(2)(e), the undersigned hereby certifies that, to the best of the undersigned's knowledge, the Proposer is not in violation of any Oregon Tax Laws. For purposes of this certification, "Oregon Tax Laws" means the tax laws of the state or a political subdivision of the state, including ORS 305.620 and ORS chapters 316, 317 and 318. If a contract is executed, this information will be reported to the Internal Revenue Service. Information not matching IRS records could subject Proposer to 24% backup withholding.

SECTION II. NON-DISCRIMINATION: That the Proposer has not and will not discriminate in its employment practices with regard to race, creed, age, religious affiliation, sex, disability, sexual orientation, gender identity, national origin, or any other protected class. Nor has Proposer or will Proposer discriminate against a subcontractor in the awarding of a subcontract because the subcontractor is a disadvantaged business enterprise, a minority-owned business, a woman-owned business, a business that a service-disabled veteran owns or an emerging small business that is certified under ORS 200.055.

SECTION III. CONFLICT OF INTEREST: The undersigned hereby certifies that no elected official, officer, agent or employee of Clackamas County is personally interested, directly or indirectly, in any resulting contract from this RFP, or the compensation to be paid under such contract, and that no representation, statements (oral or in writing), of the County, its elected officials, officers, agents, or employees had induced Proposer to submit this Proposal. In addition, the undersigned hereby certifies that this proposal is made without connection with any person, firm, or corporation submitting a proposal for the same material, and is in all respects fair and without collusion or fraud.

SECTION IV. COMPLIANCE WITH SOLICITATION: The undersigned further agrees and certifies that they:

1. Have read, understand and agree to be bound by and comply with all requirements, instructions, specifications, terms and conditions of the RFP (including any attachments); and
2. Are an authorized representative of the Proposer, that the information provided is true and accurate, and that providing incorrect or incomplete information may be cause for rejection of the Proposal or contract termination; and
3. Will furnish the designated item(s) and/or service(s) in accordance with the RFP and Proposal; and
4. Will use recyclable products to the maximum extend economically feasible in the performance of the contract work set forth in this RFP.

Name: Andy McCaskill
Date: February 20, 2025
Signature: 
Title: Associate Vice President
Email: amccaskill@hazenandsawyer.com
Telephone: (816) 729-3765
Oregon Business Registry Number: 1308985-96
OR CCB # (if applicable):

Business Designation (check one):
☑ Corporation ☐ Partnership ☐ Sole Proprietorship ☐ Non-Profit ☐ Limited Liability Company

☑ Resident Quoter, as defined in ORS 279A.120
☐ Non-Resident Quote. Resident State:

Hazen

4640 S Macadam Avenue, Suite 50, Portland, OR 97239
971-357-3150
all things water®

February 20, 2025

Ryan Rice
Contract Analyst
Clackamas County
Water Environment Services
150 Beavercreek Road
#430
Oregon City, OR 97045

RFP #2025-01

Water Environment Services Engineering Master Contract

On-Call Engineering Services

Dear Mr. Rice,

Hazen and Sawyer (Hazen) is pleased to submit this proposal for the Water Environment Services Engineering Master Contract / On-Call Engineering Services. As the enclosed proposal demonstrates, we have a team that has the technical expertise and the management experience to deliver the requested services for Category 4 - Wastewater Process Engineering and Operational Support and provide the District with:

A local team that is responsive to your needs

Hazen has a long history of serving municipal clients on projects of all shapes and sizes. Hazen's greatest value to these clients is often our ability to respond quickly and deploy rapidly with a team of experts to address any challenge. With several experienced key team members located in Portland, we can be responsive to the needs of WES within a matter of hours.

Regional and national support that will provide exceptional value

Hazen's nimble business structure allows our local staff to leverage regional resources and national experts from within the company to best serve your needs. We put the best people on the job to effectively solve your problems; whether that's a junior staff member or a senior technical expert.

Unmatched Commitment

Our team, led by Dan Garbely (Contract Manager) and Andy McCaskill (Principal-in-Charge) represent the leadership of Hazen's Portland office. Our goal is to continue to build a long-term partnership with WES through serving your needs and achieve success for every project. You will not find a team more committed to serving your needs.

We are excited for the potential opportunity to work with WES to solve your wastewater and conveyance challenges large and small.

Dan Garbely, PE
Senior Associate/Contract Manager

5.2 INTRODUCTION

a. Legal Name | Address | Numbers

Hazen and Sawyer, D.P.C.
4640 S. Macadam Avenue, Suite 50
Portland, OR 97239
(971) 357-3150 (phone) | N/A (fax)

b. Contact Person

Dan Garbely, Project Manager
503-927-9447

c. Authorized Signatory

Andy McCaskill, PE
Associate Vice President

d. SOQ Validation

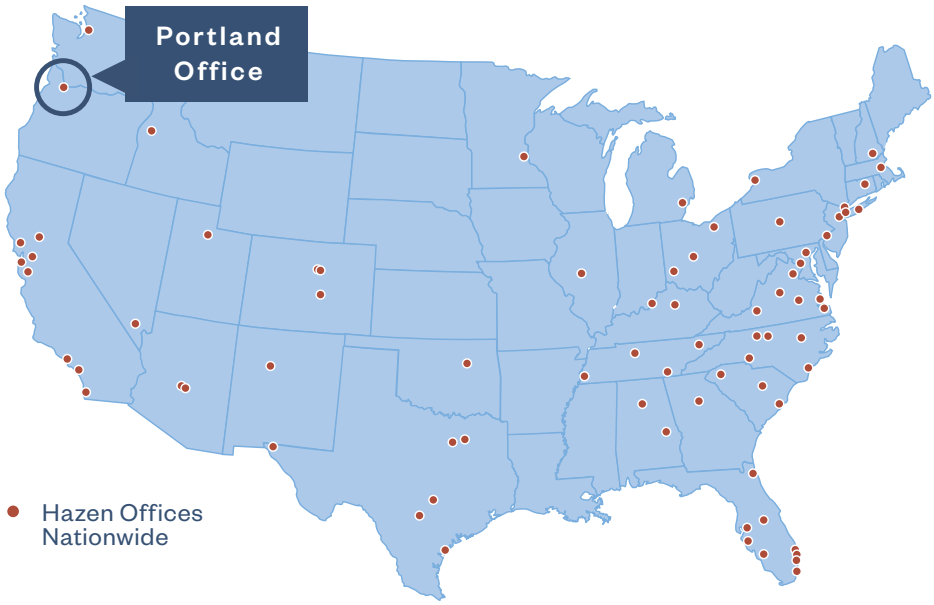
This SOQ will remain valid for a period of ninety days.

e. SOQ Categories

Category 4
Wastewater Process Engineering and Operational Support

5.3 FIRM RESOURCES

Hazen and Sawyer is a national consulting firm with a singular focus on "All Things Water." Founded in 1951 (74 years), we are recognized as a top-10 Sewer and Waste Design Firm by Engineering New Record. Wastewater treatment is our core business, and we are a leader in developing treatment and operational strategies that are both effective and flexible.



offices nationwide
70+

employees
2,000+

wastewater process team members
150+

process modelers
55

certified wastewater operators
17

modeled wastewater treatment plants
275

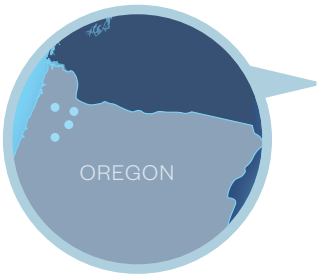
Hazen has a deep bench to efficiently and effectively assist the District with your wastewater process and operations challenges. Our wastewater process group includes 89 process focused individuals and 55 wastewater process modelers. We have an operations support team that includes 17 certified wastewater operators that help our clients address challenging operational issues. We have our own laboratory equipment and often assemble Hazen Rapid Response Teams to assist in process trouble shooting and optimization. We also have a dedicated lab through a partnership with Manhattan College that supports wastewater sampling and industry research. All of these resources are brought to bear throughout the nation to support our clients.

LOCAL ON-CALL EXPERIENCE

Hazen has delivered task order contracts for more than 2,000 on-call assignments nationwide. Some of our on-call contracts in the Pacific Northwest region are shown in the maps below along with a table of some of our applicable west coast process and operations support experience.

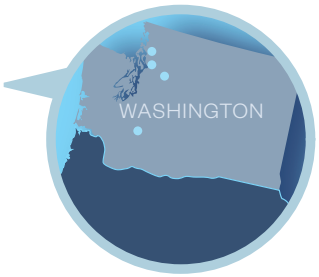
Our proven approach to successfully deliver these on-call contracts leverages both our local staff and our deep bench of wastewater experts. Our local team is already familiar with your facilities and understand regional industry challenges and trends. Our national process and operations specialist are easily and routinely leveraged to support our client's challenges nationwide.

Pacific Northwest On-Call Contracts



City of Canby
City of Portland BES
City of Salem
Clean Water Services

City of Bellevue
City of Lynnwood
City of Seattle | SPU
LOTT



WASTEWATER PROCESS AND OPTIMIZATION SUPPORT

Hazen's process optimization and operations support goes beyond just wastewater process modeling. We support our clients with process challenges through multiple ways including the five (5) outlined to the right, and take pride in our responsiveness to prevent escalation of process support issues.

- Develop comprehensive understanding of the facilities (beyond just the record drawings) and build a relationship with Operations staff to provide stronger context.
- Create a process model to troubleshoot issues and perform operational alternative analyses.
- Leverage the expertise of our certified wastewater operators and engineers.
- Provide specialty lab analysis at the Hazen research lab in NY and activated sludge microscopy in San Francisco.
- Deploy Rapid Response Teams that can lead, or assist with sampling, emergency troubleshooting and process optimization.

ON-CALL PROCESS EXPERIENCE

	Trouble Shooting	Process Optimization	Process Sampling	Process Modeling	Microscopy Assistance	Rapid Response Team
1 City of Portland BES - OR	*	*	*	*	*	*
2 City of Salem - OR	*	*	*			*
3 Daly City - CA	*	*	*	*	*	*
4 Eastern Municipal Water District - CA	*	*	*	*	*	*
5 Orange County Sanitation District - CA	*	*	*	*	*	*

WASTEWATER ON-CALL ENGINEERING SERVICES

CITY OF PORTLAND BUREAU OF ENVIRONMENTAL SERVICES (BES)
Portland, Oregon

Since 2021, Hazen has provided on-call support at the Columbia Boulevard Wastewater Treatment Plant (CBWTP) to support process and operations improvements.

Process Upset Investigation and Microscopy Lab

Dr. Paul Pitt demonstrates microscopy testing for BES staff

In the summer of 2021, the CBWTP experienced a significant process upset. Through one of the City's existing on-call contracts, Hazen and Sawyer was specifically requested to investigate and provide guidance on how to avoid future upsets. Hazen's Wastewater Process Design Director Paul Pitt led the investigation with support from our local northwest staff. Sampling was performed by Hazen staff to expand secondary process-specific knowledge during troubleshooting of the aeration basins, specifically anaerobic selector performance and stage wise dissolved oxygen concentrations. The sampling methods employed by Hazen staff were incorporated into the CBWTP sampling Standard Operating Procedures (SOP). Mixed liquor samples were analyzed by Dr. Pitt using microscopy to diagnose the causes of the increased SVI and were compared with the aeration basin sampling results and process data. Dr. Pitt then held a 2-day microscopy workshop at CBWTP to help operators identify filamentous organisms in the secondary treatment system and describe proper methods for RAS chlorination and aerobic solids retention time (aSRT). Information presented by Dr. Pitt was incorporated into CBWTP SOP documents to assist staff in preventing and responding to future upsets.

Chemically Enhanced Primary Treatment (CEPT) Optimization

BES started experiencing challenges with low pH when using their Chemically Enhance Primary Treatment (CEPT) system for wet weather treatment. The system relied on the use of ferric chloride and polymer to remove solids and organic matter. Through one of the City's existing on-call contracts, Hazen was asked to lead an investigation of other potential chemicals that could be used to reduce the pH impacts. Dr. Pitt served as an advisory member for the Hazen team's efforts to investigate aluminum chlorohydrate alternatives to ferric chloride through jar testing, small-scale dry weather testing, and full-scale wet weather testing to help CBWTP staff comply with their instantaneous effluent pH limits while maintaining sufficient clarifier performance.

Dr. Paul Pitt leads a microscopy workshop with City staff to optimize the secondary process

DATES	RELEVANT TEAM MEMBERS	CLIENT CONTACT
2021- Present	Andy McCaskill, Paul Pitt, Alonso Griborio, Riley Murnane	**Heather McKenna, Supervising Engineer** Portland BES (503) 823-6900

ON-CALL ENGINEERING SERVICES

CITY OF SALEM
Salem, Oregon

Since 2021, Hazen has held an on-call contract managed directly by plant staff at the Willow Lake Water Pollution Control Facility (WLWPCF) in Salem, Oregon. Under this contract, Hazen has provided a variety of process and operational support services as follows:

Secondary Clarifier Stress Testing and CFD Modeling ▶

The Willow Lake Water Pollution Control Facility has a permitted capacity of 35-mgd average dry and 155-mgd design peak wet weather flow. The secondary clarifiers at WLWPCF are located downstream of primary clarifiers and a combined trickling filter and activated sludge process. The WLWPCF's existing north and south secondary clarifier mechanisms were approaching the end of their useful life and there were several elements of the clarifier tank geometry and mechanism features that differ from current industry standards. The objective of this study was to identify modifications to WLWPCF secondary clarifiers to improve performance during average and high flows and increase peak flow capacity. Hazen performed a detailed study of settling and flocculation properties of trickling filter effluent and the application of customized secondary clarifier CFD modeling to determine overall clarifier capacity and identify optimization strategies.

River Road Facility Foaming Assistance ▶

The River Road Wet Weather Facility (River Road) is activated during wet weather events to reduce peaks sent to the WLWPCF. Hazen was hired by the City to investigate foaming issues detected in the Willamette River downstream of the River Road Facility following wet weather events. Hazen's investigation included a review of the City's standard operating procedures and chemicals for the River Road Facility. Hazen provided recommendations for new chemicals to pilot as well as recommended low-BOD defoamers.

Secondary Clarifier at the Willow Lake Water Pollution Control Facility ▶

DATES	RELEVANT TEAM MEMBERS	CLIENT CONTACT
2021- Present	Andy McCaskill, Paul Pitt, Alonso Griborio, Riley Murnane	**Jue Zhoa, PE, Asst. Public Works Director** City of Salem (503) 588-6380

ON-CALL WASTEWATER PROCESS SUPPORT

NORTH SAN MATEO COUNTY SANITATION DISTRICT
Daly City, California

Since 2021, Hazen has held various on-call process support contracts managed directly by operations staff at the North San Mateo County Sanitation District (District) Wastewater Treatment Facility (WWTF) in Daly City, CA. Over the last few years, Hazen has assisted the District in managing treatment issues due to high-strength wastewater and significant wet-weather flows using their existing facilities, while designing and implementing projects to increase capacity and bolster operational reliability.

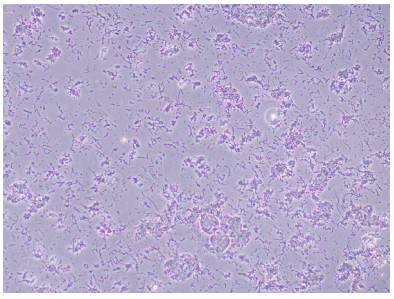
Wet-Weather Hydraulic Troubleshooting ▶ A hydraulic model of the WWTF was developed using our HazenPro tool to identify and remedy hydraulic issues downstream of the secondary treatment system. Site visits and discussions with Operations staff have refined the model to accurately reflect typical operating conditions.

CEPT Pilot ▶ Hazen developed a pilot test of Chemically Enhanced Primary Treatment (CEPT) using ferric chloride to increase settling in the primary clarifiers and reduce load to the secondary treatment system.

Activated Sludge Reactors Support ▶ The District operates a High-Purity Oxygen Activated Sludge (HPOAS) reactor system consisting of two trains previously equipped with UNOX mixer-aerators that were inefficient at oxygen transfer, causing operational issues of the secondary system. Hazen designed the replacement of the mixer-aerators with new & more efficient models.

Secondary Clarifier Stress Testing ▶ In 2023, Hazen performed stress testing of the secondary clarifiers by taking one of the 3 units offline and used the equalization basins to carefully meter flows. The results of the stress testing were used to calibrate a state point analysis (SPA) model specific to the WWTF.

Solids Treatment System ▶ Hazen became involved with the District during an upset of one of their anaerobic digesters. Hazen supported the District in reseeding the digester and continually monitors digester health to prevent another upset. Hazen is currently working on a Facilities Master Plan for the District that will include upgrades to the solids treatment system.



Activated sludge microscopy (left image) and Hazen staff performs secondary clarifier stress testing at the District's WWTF (right image) ▶

DATES	RELEVANT TEAM MEMBERS	CLIENT CONTACT
2021 - Present	Paul Pitt, Riley Murnane, Alonso Griborio	**Gregory Krauss, Chief of Operations** North San Mateo County Sanitation District (650) 991-8204

THE HAZEN ON-CALL TEAM

EXPERTISE AND RESOURCES

With Hazen, you have access to a deep bench of industry-leading wastewater process and operations experts for all your process and operational challenges. The District will also receive service through our local, knowledgeable team of wastewater engineers that will be responsive and accountable.

Dan Garbely will serve as our Project Manager and brings valuable wastewater experience from his time both on the owner's side and as a consultant. This section introduces you to some of the resources that could be used to support the District's team.

TOTAL NUMBER OF STAFF AVAILABLE FOR THIS CONTRACT: 20

CLACKAMAS WATER ENVIRONMENT SERVICES

ANDY McCASKILL, PE ✻
PRINCIPAL-IN-CHARGE

DAN GARBELY, PE ✻
CONTRACT MANAGER

LOCAL TEAM

DAN LAFFITTE, PE
WASTEWATER TASK LEAD

ANDREW MATSUMOTO, PE
REGULATORY LEAD

AARON DUKE, PE, BCEE
CHEMICAL SYSTEMS LEAD

ERIC POLLI, PE ✻
WASTEWATER PROCESS LEAD

RILEY MURNANE, PE
REGIONAL WASTEWATER TASK SUPPORT

ANTHONY TARTAGLIONE, PE, BCEE
SOLIDS LEAD

NATIONAL EXPERTS

PAUL PITT, PhD, PE, BCEE ✻
WASTEWATER DESIGN

MICHAEL PARKER, PE ✻
SCREENING AND GRIT LEAD

JOSEPH ROHRBACHER, PE
AERATION LEAD

MOHAMMAD ABU-ORF, PhD
RESIDUALS / SOLIDS LEAD

BLAIR WISDOM, PE ✻
STRUVITE LEAD

TJ LYNCH ✻
OPERATIONS LEAD

RON LATIMER, PE ✻
WASTEWATER PROCESS MODELING

ALONSO GRIBORIO, PhD, PE ✻
SETTLING / CLARIFICATION LEAD

MELANIE MANN, PE
DISINFECTION LEAD

TROY WALKER, MIE (AUST) ✻
MEMBRANES / REUSE LEAD

KRISTEN SMEBY, PE
ODOR CONTROL LEAD

BRYAN LISK, PE, CEM
BIOGAS UTILIZATION LEAD

Organizational Chart - Key

✻ **Key Staff:** resumes for key team members listed above are provided in the **Appendix**.

KEY STAFF

SKILLS AND EXPERIENCE

Dan Garbely, PE has 22 years of experience managing a variety of projects across every wastewater unit process. Throughout his career he has focused on sustainable design principles to maximize system efficiency and create opportunities for beneficial reuse of waste products.

Dan also has extensive experience successfully managing, executing and delivering task order assignments for on-call contracts. He is an experienced project manager that applies both his technical and management capabilities to work in partnership with clients to achieve results and beneficial outcomes. Dan will manage our on-call team to timely execute and deliver high-quality work and solutions that meet the District's needs and expectations.

* Primary District Contact

Andy McCaskill, PE has over 25 years of experience specializing in wastewater and drinking water treatment. He has served as Principal-In-Charge and Contract Manager for on-call contracts throughout Oregon. As Principal-In-Charge for this contract, he will be responsible for ensuring the District's satisfaction with our team and leverage all Hazen resources to successfully deliver the task orders from this contract.

Eric Polli, PE is Hazen's Northwest Process Modeling Lead with extensive experience collaborating with our national experts Paul Pitt and Ron Latimer. His expertise focuses on wastewater process evaluation and design, and process optimization. He also has experience in wastewater treatment plant master planning and pilot testing.

Paul Pitt, PhD, PE, BCEE serves as Hazen and Sawyer's Director of Wastewater Technology and he is a leading expert in the field of wastewater treatment plant process and operation. He is an expert in all aspects of wastewater treatment, with emphasis on BNR/ENR upgrades, process modeling, operational troubleshooting, and strategies and solutions for nutrient removal. He will use his expertise to support the District in addressing any wastewater treatment challenges.

Michael Parker, PE specializes in planning, hydraulic analysis and design of wastewater treatment and conveyance facilities. In addition, he has expertise in preliminary treatment and chemical facilities design. In his role, he leads the design, construction, startup, hydraulic/CFD modeling, and field testing associated with screening and grit removal projects.

Blair Wisdom, PE is a wastewater process and design engineer with extensive experience in the research, planning, design, operations, and optimization of wastewater treatment plants and processes. Her expertise includes detailed wastewater facility design, research and pilot testing, wastewater facility master planning, process controls and optimization, and main and sidestream nutrient treatment and recovery. During her time as a process engineer at a wastewater utility, Blair developed unique expertise in the management of struvite and lead the implementation of a large scale struvite recovery facility.

TJ Lynch is Hazen's Corporate Lead for the Operations Assistance Service Group. He has over 30 years of experience in wastewater treatment operations and management as well as wastewater treatment design and process optimization. He has an extensive background in municipal utility service, and overseeing entire wastewater systems including plant operations, facilities maintenance, and sewer system management. With his leadership and expertise in optimizing operations, TJ has a proven track record of ensuring compliance with environmental standards. He is adept at developing strategies and guiding teams to maintain and improve utility operations across complex systems.

Ron Latimer, PE leads Hazen's Wastewater Process Modeling Group and provides company-wide oversight for all aspects of BioWin™ and GPS-X modeling, as well as, wastewater process design support for wastewater treatment plant expansions and upgrades. He has led process modeling at over 40 BNR/ENR facilities.

Alonso Griborio, PhD, PE is Hazen's Director of Clarification Technology. He is an internationally recognized expert in wastewater treatment plant assessment and optimization with a specialization in clarifier modeling. His experience includes evaluation, analysis and design of wastewater facilities with a particular focus on wastewater treatment process engineering, plant optimization and operations assistance. He has completed more than 50 clarifier design and modeling projects and co-developer of the 2D hydrodynamic clarifier model "2Dc."

Troy Walker, MIE is Hazen's Water Reuse Practice Leader and Membrane Technology Leader and has a wealth of experience in piloting, detailed design, construction, commissioning and long-term operations of membrane treatment technologies. He has been a leader of membrane and water reuse projects across the country ranging from leading design of a membrane bioreactor to provide low ammonia recycled water for an oil refinery, design of membrane filtration systems for reuse application and operations support for multiple membrane treatment and reuse facilities.

Hazen's approach for delivering on-call process and operations support is to be responsive and to leverage our deep bench of nationally recognized wastewater process specialist for the benefit of the District. Our Portland office has multiple task leads that can all leverage Hazen's resources to help address both urgent and more routine process and operations support activities.

We envision that each task encompassed by this contract, regardless of its size or scope, will involve five basic steps, as discussed below.

1

ASSISTANCE REQUEST

When the District has identified a need and made contact, our next step will be to make sure that we thoroughly understand the process challenge. We can also advance our understanding of the issue through site visits on short notice to engage with your operations staff to better comprehend the context of the issue.

2

TEAM IDENTIFICATION

Based on our developed understanding of the District's challenge, our team will work closely with the District to identify a task lead and the process or operations specialist that have the right experience and expertise to provide assistance. Specialist could be a subject matter expert in either liquids or solids processes or one of our many certified wastewater operators that have faced and addressed a similar challenge.

3

WORK PLAN

After confirming our understanding of the needed support, our task lead will prepare scope, schedule, and budget in a timely manner for the District's review and approval.

4

EXECUTION

With the District's approval, Hazen's process and operations support team can assist the District as needed. Potential support services could include:

- On-site microscopy or through samples shipped to Hazen's dedicated laboratory. We have even sent samples to Dr. Paul Pitt's home for urgent microscopy needs.
- Deployment of wastewater rapid response teams to perform sampling or assist with process trouble shooting.
- Focused wastewater process modeling.

5

APPLY LESSONS LEARNED

Our team is committed to continuous improvement. After each assignment, we will reflect on the lessons learned, carefully analyzing both successes and challenges encountered. We can then apply this knowledge to future projects which will help us deliver even greater value to the District .

SCHEDULE AND BUDGET MANAGEMENT

Hazen's approach to keeping task orders on schedule and on budget focuses on the efficient use of technology and open lines of communication. During the initial task order meeting, we will ask questions to understand the District's schedule requirements, and develop a detailed schedule with proposed deliverables and dates for review during task scoping. The established deliverable milestones will be set on both the District's and Hazen's calendars to guide and manage the schedule for each task assignment. The Contract Manager reviews schedule updates monthly to track progress and determine any necessary adjustments to maintain progress and stay on schedule. Hazen offers dynamic, technology-based tools developed with Deltek Vision to facilitate budget management for a wide range of on-call task assignments. Through the use of Deltek Vision, we can develop and provide the District with interactive dashboards to review, monitor and track budgets in real-time, allowing responsive management to foresee shifts and adhere to target budget and financial requirements.

Hazen uses several tools and strategies to deliver projects on schedule and budget including MS Project (establish and monitor schedule), Deltek Vision (real-time budgeting), Risk Register (mitigate project risks), Decision Log (track decisions and define paths), Weekly Check-Ins (Project Manager conducts check-ins to track critical scope items).

Hazen's interactive dashboards and digital tools to manage project schedules and budgets

ADAPTATION OF APPROACH TO TASK SIZE AND DURATION

Hazen knows that task order assignments come in various shapes and sizes, and we adapt our delivery approach accordingly. A large assignment will get a full project work plan, whereas a small assignment may entail a simple email relaying relevant details to the project team. Our Contract Manager may be the one to execute small assignments controlling costs and streamlining the team.

QUALITY ASSURANCE / QUALITY CONTROL

Hazen has developed a Quality Assurance Policy Manual that provides guidance to staff and is used in the execution of all projects undertaken by the firm. The manual requires that QC reviewers be independent of the design process so that reviews have a broad perspective and are objective. Our quality approach strategy is illustrated below and incorporates: (**1**) identification of independent reviewers with appropriate expertise at project scoping; (**2**) inclusion of dedicated QA/QC scope and task budgets for each task order; (**3**) oversight provided by our regional quality manager; and (**4**) resolving QA/QC comments and updating deliverables.

APPENDIX

KEY TEAM MEMBER RESUMES

Dan Garbely, PE

Contract Manager

Dan has 23 years of experience on a variety of wastewater, drinking water, and energy projects, in both private consulting and public sectors. Throughout his career he has focused on sustainable design principles to maximize system efficiency and create opportunities for beneficial reuse of waste products.

Education

M.S., Civil/Environmental Engineering, Cal Poly, San Luis Obispo, CA

B.S., Environmental Engineering, Cal Poly, San Luis Obispo, CA

Certification/License

Professional Engineer

Areas of Expertise

- Wastewater Treatment
- Project Management
- Construction Management
- Renewable Energy
- Resource Recovery

Professional Activities

WEF / PNCWA

CBWTP Resource Recovery Master Plan, City of Portland Bureau of Environmental Services (BES), Portland, OR

The Columbia Boulevard Wastewater Treatment Plant (CBWTP) is expanding its resource recovery program to establish itself as a leading Resource Recovery Facility. This project involves evaluating and recommending solutions for recovering biosolids and struvite from wastewater, aiming to beneficially use the resultant products. The evaluation process includes detailed analysis of various treatment and reuse solutions, which are documented in a Resource Recovery Plan (RRP). This RRP guides the diversification, expansion, and strategic investments in the Resource Recovery Program, ensuring sustainable and efficient resource recovery practices at the plant.

WWTP Principal Engineer – Durham AWWTP, Clean Water Services, Hillsboro, OR

Managed the planning, design, and construction of all capital improvement projects, large and small, at the Durham AWWTP. Provided resident engineering expertise and inspection during construction projects. Provided engineering evaluation, assessments, troubleshooting support to operations and maintenance staff for all unit processes at the plant. Developed new processes to improve plant staff engagement and input during design and construction of projects. Examples of small improvement projects include Secondary Clarifier 3 topping slab demolition, repair, and mechanism replacement, Headworks Monorail Extension, SRF Improvements Project, FOG & IPS Odor Control Improvements, Tertiary Filter media evaluation and replacement, Aeration System Evaluation, Sampling Improvements, Backwash Modifications, O&M Building Retrofit, Digester Pumping and Mixing Modifications, Primary Effluent Pump Station Lining Repairs.

Andy McCaskill, PE

Principal-In-Charge

Andy serves as Hazen's Portland Office Operations Manager. He has 24 years of experience serving public and private sector clients in the Midwest and the Pacific Northwest. He has spent the last 10 years specializing in wastewater and drinking water treatment, water quality and conveyance engineering throughout the state of Oregon.

Education

B.S., Civil Engineering, University of Missouri, Columbia, MO, Honors Scholar

Certification/License

Professional Engineer

Areas of Expertise

- Project Management
- Program Management
- Owner's Representative
- Contract Management

Professional Activities

WEF / PNCWA

AWWA / PNWS

Secondary Treatment Process Support, City of Portland BES, OR
Project Manager. The City of Portland CBWTP began experiencing filamentous bulking outbreaks and settling challenges starting in April 2021. Hazen was retained to provide understanding of the process upset and identify future process upset risk mitigation measures that can proactively reduce the likelihood of process upset. Project efforts included a review of historical data, laboratory study including microscopic and carbohydrate analysis, and field sampling.

Durham Advanced Wastewater Treatment Facility, Tertiary Improvements, Clean Water Services
Project Manager. The project team evaluated alternatives to improve the reliability and performance of Durham's existing tertiary treatment system resulting in a rehabilitation strategy that saved the District $6M. The team performed filter field investigations and testing to assess the condition of the media and underdrains as well as to optimize filter operation strategy. The team identified and implemented short term system improvements, provided permit season monitoring and data analysis of tertiary system operation and testing performances, and provided 20% preliminary design of the recommended improvements.

CEPT Improvements for pH Compliance, City of Portland BES, OR
Project Manager. CBWTP started experiencing pH excursions below the permitted limit during wet weather events starting in September of 2020 under the new NPDES permit. Hazen is leading the effort to investigate two improvements to the CEPT system to increase outfall pH for NPDES compliance: (1) the addition of alkalinity to buffer pH decreases with existing CEPT chemicals and (2) replacement of $FeCl_3$ with different chemical(s) which have less impact on pH. Efforts include jar testing and pilot testing.

Hazen

Eric Polli, PE

Wastewater Process Lead

Eric specializes in the design, process evaluation, and optimization of wastewater facilities. His experience includes general plant design, BioWin™ modeling, master planning, creating process control descriptions, process troubleshooting, and construction administration and inspection. He also has experience in wastewater characterization, nutrient profiling, clarifier column settling testing, and jar testing.

Education

MSEnvE, North Carolina State University

BSEnvE, North Carolina State University

Certification/License

Professional Engineer

Areas of Expertise

- Wastewater treatment plant master planning
- Wastewater treatment plant evaluation, process optimization, and design
- Biological nutrient removal
- BioWin modeling
- Pilot testing development, protocol, and analysis

Professional Activities

NC One Water

Water Environment Federation

North and South Durham WRF Biosolids & Energy Master Plan, Durham, NC

Task Lead. The primary objective of this Master Plan is to identify near and long-term improvement projects at both water reclamation facilities that will help the City of Durham optimize the biosolids treatment, handling and disposal processes as well as the beneficial reuse of biogas production from anaerobic digestion. Mr. Polli is leading the data collection and review, flow and load development, updating of the existing BioWin™ process models for each plant, and the modeling to provide solids production numbers that will be used in the evaluation of the biosolids processes and alternatives.

Cape Fear Public Utility Authority (CFPUA) Southside Wastewater Treatment Plant (SWWTP) Replacement and Capacity Upgrade, Wilmington, NC

Design Engineer. CFPUA owns and operates the 12 mgd SWWTP in Wilmington, NC. The existing SWWTP is a trickling filter plant with short retention time activated sludge basin. In 2008, Hazen helped design the original plant expansion from 12 mgd to 24 mgd; however, the project was put on held in December 2012 and never constructed. In 2023, Hazen was re-selected to design the replacement and expansion of the plant to 16 mgd, with provisions to expand to 20 and 24 mgd in the future. The expansion to 16 mgd includes a completely new conventional activated sludge plant to be constructed on a parcel of land next to the existing plant. The current design assumes a 3-stage Bardenpho process with provisions for 5-stage Bardenpho operation at the 24 mgd capacity to meet potential effluent nutrient limits.

Paul Pitt, PhD, PE, BCEE

Wastewater Design

Paul serves as Hazen and Sawyer's Director of Wastewater Technology. He was formerly in charge of wastewater treatment design and optimization for the City and County of San Francisco. Dr. Pitt is an expert in all aspects of wastewater treatment, with emphasis on BNR/ENR upgrades, process modeling, operational troubleshooting, and solutions to activated sludge filamentous bulking and foaming problems.

Education

Ph.D., Environmental Engineering, University of California at Berkeley

MSc, Environmental Engineering, University of Newcastle upon Tyne

BSc, Civil Engineering, University of Newcastle upon Tyne

Certification/License

Professional Engineer

Areas of Expertise

- Design, optimization, and operation of WWTPs
- Process evaluation, troubleshooting, full-scale, pilot testing, and bench scale testing
- Process modeling, calibration, optimization, utilization of BioWin™ and CFD modeling to enhance plant performance
- Use of selector technology, activated sludge bulking and foaming control
- BNR/ENR treatment plant upgrades

Professional Activities

Water Environment Federation

International Water Association

On-Call Wastewater Process Support, North San Mateo County Sanitation District, Daly, CA

Since 2021, Hazen has held various on-call process support contracts managed directly by operations staff at the North San Mateo County Sanitation District (District) Wastewater Treatment Facility (WWTF) in Daly City, CA. Over the last few years, Hazen has assisted the District in managing treatment issues due to high-strength wastewater and significant wet-weather flows using their existing facilities, while designing and implementing projects to increase capacity and bolster operational reliability.

Process Support for Plant 2 Transition to Non-Reclaimable Flow (PS21-08), Orange County Sanitary District, CA

Technical Lead. The purpose of this project is to provide specialized process support for the Plant 2 transition to operation in non-reclaimable flow mode as part of the final GWRS expansion. This work included developed of a startup guide for operations to use during this transition. This work included extensive historical data review, on-site analytical testing, process and CFD modeling, operational training, and microscopic analysis. Dr. Pitt provided microscopic analysis of the mixed liquor before and after the transition to document and guide operational decisions. Additionally, the team determined new operational parameters for this 90 mgd HPOAS facility and identified optimization opportunities. New standard operating procedures were also developed during this project to support current and future successful operation.

Hazen

Michael Parker, PE

Screening and Grit Lead

Mr. Parker has over 25 years of experience in the planning, hydraulic analysis, and design of wastewater treatment and pumping facilities.

Education

MCE, North Carolina State University

BSME, North Carolina State University

Certification/License

Professional Engineer

Areas of Expertise

- Wastewater treatment plant planning/design
- Plant hydraulics
- Pump station design
- Preliminary treatment design
- Chemical facilities design

Professional Activities

American Water Works Association

Water Environment Federation

Irwin Creek Wastewater Treatment Plant Phase 1 / Phase 2 Upgrades, Charlotte Water, NC

Project Manager and Lead Engineer for upgrades at the 15-mgd wastewater treatment plant (WWTP), including complete influent pump station and screening upgrades, grit removal upgrades, secondary process upgrades, anaerobic digester upgrades, and plant standby power and elec-trical distribution design.

Metropolitan WWTP Influent Pump Station and Preliminary Treatment, City of Columbia, SC

Lead Engineer for the new 200-mgd influent pump station and preliminary treatment facilities for the 60-mgd WWTP. The influent pump station is a two-stage screw pump facility with four 50-mgd pumps in each stage, and space for future capacity expansion. The preliminary treatment facilities consist of three 50-mgd fine mechanical screens and associated conveyance equipment and three 24-foot stirred vortex tank and associated pumps and dewatering equipment. The facilities also include effluent weirs designed to provide level control, flow measurement, and variable flow distribution to the existing plant treatment trains.

Main Pump Station and 'O' Street Pump Station, DC Water, Washington, DC

Lead Engineer for upgrades to the 240-mgd Main Pump Station and the 45-mgd 'O' Street Pump Station. The two pump stations provide low lift pumping of sewage flows as well as coarse screening of combined storm-induced flows. The project included major mechanical upgrades of existing pumping equipment, installation of new mechanical screens and associated screenings handling, and conveyance equipment. It also included major renovations to the existing buildings to modernize the facilities and improve operations.

Blair Wisdom, PE

Struvite Lead

Blair is a wastewater process and design engineer with extensive experience in the research, planning, design, operations, and optimization of wastewater treatment plants and processes.

Education

MS Environmental Engineering, University of Massachusetts – Amherst

BS Civil and Environmental Engineering, University of Texas – Austin

Certification/License

Professional Engineer

Areas of Expertise

- Technical Support for Utility Regulatory Efforts
- Project Management
- Applied Research and Pilot Testing
- Wastewater Plant Operations and Optimization
- Utility Data Management and Utilization

Director of Technology and Innovation, Denver, CO

Lead a department of more than 20 staff including process engineers, data analytics engineers, instrumentation specialists, and research scientists. Oversaw and managed the research and development for the organization in support of capital projects and process optimization. Acted as a subject matter expert in the areas of nutrient treatment and management, disinfection, data management and utilization, biosolids treatment and end-use, and thermal and chemical energy. Provided technical support on regulatory and legislative issues, commonly interacting with the Colorado Department of Public Health and Environment and region and state policy makers.

Process Technical Lead Supporting the Phosphorus Initiative

Provided technical direction, subject matter expertise, and oversight for pilot and study activities to support a holistic evaluation of sidestream phosphorus management and treatment. Phases included experimental pilot evaluations of an AirPrex® treatment system, waste activated sludge release process, and thermal hydrolysis prior to anaerobic digestion. Each pilot supported the collection of data to quantify the impact of the test process on nuisance struvite formation, effluent quality, and dewaterability of biosolids.

Process Engineer Supporting Biogas Utilization and Wastewater Thermal Energy Use

Served as technical lead in efforts related to biogas utilization as the organization transitioned from combined heat and power to renewable natural gas. Lead the organization's efforts related to wastewater thermal energy use, championing the technology and striving to bring utilities, developers, and policy makers together to discuss sustainable development in the region as related to renewable energy.

Hazen

Theodore (T.J.) Lynch

Operations Lead

Mr. Lynch is an expert in wastewater treatment operations, having spent over 30 years in municipal utility service.

Certification/License

NC Biological Water Pollution Control Operator

NC Collection System Certification – Grade I

NC Spray Irrigation Certification

NC Land Application of Biosolids Certification

Areas of Expertise

- Utility management
- Treatment plant management
- Wastewater treatment process optimization
  - Biological nutrient removal
  - Biosolids management
  - Regulatory compliance
- Wastewater treatment design – Operability and maintainability reviews
- Operator training three

Professional Activities

Water Environment Federation

American Water Works Association

- NC One Water

NC Water Quality Association

Lower Dorchester WWTP Expansion, Dorchester County, SC
Technical Advisor and Operability Review. Design of an expansion of the Lower Dorchester WWTP from 8 to 16 mgd on an existing site. The $95 million project includes a retrofit of existing oxidation ditches with mechanical aeration to plug flow and fine bubble aeration, two new 4.0-mgd aeration basins, a new blower building, a new preliminary treatment facility, a new UV disinfection facility, a new disk filter, two new secondary clarifiers and RAS pump station, new solids distribution, new solids holding, a new thickening building with rotary drum thickeners, a new maintenance building, and a retrofit of an existing building for operations staff space. The design of the facility will include an early release package to accelerate design.

Patapsco WWTP Emergency Staff Augmentation, City of Baltimore Department of Public Works (DPW), Baltimore, MD
Technical Advisor. Worked with City of Baltimore DPW staff to evaluate treatment plant performance and built a prioritized plan to get the facility back into compliance with NPDES permit. The WWTP was experiencing process and equipment problems throughout the treatment process and had been non-compliant with NPDES permit and Chesapeake Bay TMDL for quite some time. Hazen's work at Patapsco has resulted in re-gained compliance with both NPDES permit and nutrient TMDL.

Back River WWTP Asset Condition Assessment, City of Baltimore Department of Public Works, Baltimore, MD
Project Supervisor. Back River WWTP was experiencing significant non-compliance with NPDES permit because of solids handling issues and out of service equipment. Led the effort to inventory plant equipment and assign a condition score. The collected asset data was then used to generate a high-level prioritization of the asset inventory for the City to then tackle repairs in order of criticality to the process and compliance.

Hazen

Ronald Latimer, PE

Wastewater Process Modeling

Mr. Latimer leads the Wastewater Process Modeling Group for Hazen and Sawyer and provides company-wide oversight for all aspects of BioWin™ and GPS-X modeling including field testing, calibration, and application of the model for process design and optimization. Mr. Latimer also provides firm-wide wastewater process design support. His experience includes the planning, analysis and design of municipal wastewater facilities with expertise in BNR/ENR systems.

Education

MS EnvE, Georgia Institute of Technology

BSCE, Georgia Institute of Technology

Certification/License

Professional Engineer

Areas of Expertise

- Design, optimization, and operation of WWTPs
- Process evaluation, troubleshooting, full-scale, pilot, and bench-scale testing
- Process modeling, calibration, optimization, utilization of Biowin™ , GPS-X, and CFD modeling for design and to enhance plant performance
- BNR/ENR treatment plant upgrades
- Wastewater process modeling (BioWin and GPS-X)

Professional Activities

American Society of Mechanical Engineers

American Water Works Association

Georgia Water and Pollution Control Association

Flat Creek WRF Master Plan, Gainesville, GA
Lead Process Engineer. As part of the Facility Master Plan, future flow and loading projections were evaluated to determine the future capacity needs of the facility through Year 2050. The scope includes performing a Facility Evaluation consisting of data collection and analysis, influent wastewater characterization, updates to a BioWin model previously developed by Hazen, visual condition assessment of process, structural, electrical and I&C, and a treatment and capacity analysis. The master plan will identify future modifications needed to meet future effluent limits (TP of 0.08 mg/L) at design loading conditions in a phased approach.

Fort Mill WWTP MBR, Town of Fort Mill, SC
Technical Advisor. Design and construction of an expansion of the WWTP from 2.3 to 4.5 mgd with provisions to easily expand to 6 mgd. The project is located on a very visible site in one of the fastest growing communities in the country. The new process was based on the MBR technology and includes conversion of existing facilities, new influent pump station, new pretreatment facility, new BNR and MBR basins, new UV disinfection and effluent re-aeration.

Broad Run Water Reclamation Facility (WRF) Master Plan and Sidestream Treatment, Loudoun Water, VA
Technical Advisor for the master planning effort focused on the future of the advanced Broad Run WRF which includes stringent effluent requirements (TP 0.18 mg/L, TN 3 mg/L, COD 15 mg/L). Also served as Technical Advisor for the sidestream deammonifcation (anammox) full scale design project.

Hazen

Alonso Griborio, PhD, PE

Settling / Clarification Lead

Dr. Griborio serves as Hazen's Director of Clarification Technology. He is an internationally recognized expert in clarifier modeling and optimization and is a co-developer of the 2D hydrodynamic clarifier model "2Dc". Dr. Griborio has completed more than 50 clarifier design and modeling projects.

Education

PhD University of New Orleans, Engineering and Applied Sciences

MS Universidad del Zulia, Venezuela, Environmental Engineering

BS Universidad Rafael Urdaneta, Civil Engineering

Certification/License

Professional Engineer

Areas of Expertise

- Wastewater Treatment
- Settling Tank Processes
- Computational Fluid Dynamics
- Water and Wastewater Engineering
- Numerical Modeling in Environmental Hydraulics
- Water Resources Engineering
- Hydrology and Hydrogeology

Professional Activities

American Water Works Association

Water Environment Federation

Florida Water Environment Association

Louisiana Professional Engineering and Land Surveying Board

On-Call Contract, Central Contra Costa Sanitary District, Martines, CA

Clarifier Lead for the Process Assistance on-call Contract. Hazen has a long history of working with Central San operational staff and providing process assistance, including: emergency response to process challenges (microscopic analysis, data analysis, sampling, evaluations) and quickly developing recommendations for process changes. Hazen has also provided on-site training on filament identification, selector operation and SRT control. Recently, Hazen recommended Central San adjust DO set points which led to better and more consistent effluent quality. Hazen also provided recommendations that allowed staff to successfully shut down the plant for construction without impacts to effluent quality.

Secondary Treatment Upgrade Project, Union Sanitary District, Union City, CA

Project engineer for the two- and three-dimensional CFD models used for the evaluation of the existing six squircle clarifiers and for the future implementation of circular clarifiers for the conventional activated sludge expansion option. The CFD models were also used for the capacity analysis evaluation and to optimize the design of the four proposed 160-foot diameter circular clarifiers.

Enhanced Treatment and Site Upgrade (ETSU) Program, Union Sanitary District, Union City, California

Project engineer and QC reviewer for the $350M ETSU Program which will result in increased plant capacity, replace aging infrastructure, provide for future nutrient removal, and provide flexibility for wet weather discharge to the San Francisco Bay. Dr. Griborio participated as project engineer and QC reviewer for the process design team responsible for designing an innovative, flexible, trigger-based secondary upgrade for nitrogen and phosphorus removal. The program includes aeration basin modifications to convert from carbon removal to BNR including a kinetic-metabolic selection process, a new eighth aeration basin, new secondary clarifiers, new RAS/WAS pump station, and new effluent facilities.

Hazen

Troy Walker, MIE (Aust)

Membranes / Reuse Lead

Mr. Walker is the corporate Water Reuse Practice Leader and Membrane Technology Leader for Hazen and Sawyer. He has over 27 years of experience in the planning, design, construction and operations management of advanced water reuse, seawater desalination and advanced drinking water facilities.

Education

B.E., Chemical Engineering, University of New South Wales, Australia, 1990–1994

Graduate of CO-OP Scholarship Program

Certification/License

Institution of Engineers, Australia

Professional Activities

American Water Works Association

- Membrane Process Committee
- Membrane Systems Subcommittee

American Membrane Technology Association

WateReuse Association

Watereuse Arizona

Southwest Membrane Operator Association

Biological and Advanced Treatment at Joint Water Pollution Control Plant, Los Angeles County Sanitation Districts, CA Recycled Water Leader. Technical analysis and preliminary design of wastewater treatment upgrades for the 150-mgd Regional Recycled Wa-ter Program, a partnership between LACSD and the Metropolitan Water District to increase local water supplies. One of the largest pure oxygen plants in the world, JWPCP will require nutrient removal and advanced water pretreatment prior to groundwater recharge or direct potable re-use.

Carson Regional Water Recycling Plant (JMMCRWRP), West Basin Municipal Water District, CA
Project Manager. A full design of a 2.0-mgd tertiary membrane bioreactor to reduce ammonia levels from tertiary effluent that is delivered as cooling water to a nearby oil refinery. The project also included a 6.0-mgd microfiltration system upgrade to replace existing pretreatment to a reverse osmosis system that produces high quality boiler feed for the same refinery.

Critical Control Point Assessment to Quantify Robustness and Reliability of Multiple Treatment Barriers of a DPR Scheme (WRRF 13-03), Watereuse Research Foundation
Principal Investigator. Uses the principles of Hazard Analysis and Critical Control Points (HACCP), a food safety methodology widely used in food manufacturing and production, to manage microbiological and chemical hazards and ensure the safety of recycled water. This project is engaging with multiple indirect and direct potable reuse facilities worldwide and using their operational and maintenance data to provide statistical evidence of process effectiveness, and to provide practical operational response procedures for integration into DPR plant operating plans.

PROPOSAL CERTIFICATION
RFP #2025-01

Submitted by: Hazen and Sawyer, D.P.C. (New York)
(Must be entity's full legal name, and State of Formation)

Each Proposer must read, complete and submit a copy of this Proposal Certification with their Proposal. Failure to do so may result in rejection of the Proposal. By signature on this Proposal Certification, the undersigned certifies that they are authorized to act on behalf of the Proposer and that under penalty of perjury, the undersigned will comply with the following:

SECTION I. OREGON TAX LAWS: As required in ORS 279B.110(2)(e), the undersigned hereby certifies that, to the best of the undersigned's knowledge, the Proposer is not in violation of any Oregon Tax Laws. For purposes of this certification, "Oregon Tax Laws" means the tax laws of the state or a political subdivision of the state, including ORS 305.620 and ORS chapters 316, 317 and 318. If a contract is executed, this information will be reported to the Internal Revenue Service. Information not matching IRS records could subject Proposer to 24% backup withholding.

SECTION II. NON-DISCRIMINATION: That the Proposer has not and will not discriminate in its employment practices with regard to race, creed, age, religious affiliation, sex, disability, sexual orientation, gender identity, national origin, or any other protected class. Nor has Proposer or will Proposer discriminate against a subcontractor in the awarding of a subcontract because the subcontractor is a disadvantaged business enterprise, a minority-owned business, a woman-owned business, a business that a service-disabled veteran owns or an emerging small business that is certified under ORS 200.055.

SECTION III. CONFLICT OF INTEREST: The undersigned hereby certifies that no elected official, officer, agent or employee of Clackamas County is personally interested, directly or indirectly, in any resulting contract from this RFP, or the compensation to be paid under such contract, and that no representation, statements (oral or in writing), of the County, its elected officials, officers, agents, or employees had induced Proposer to submit this Proposal. In addition, the undersigned hereby certifies that this proposal is made without connection with any person, firm, or corporation submitting a proposal for the same material, and is in all respects fair and without collusion or fraud.

SECTION IV. COMPLIANCE WITH SOLICITATION: The undersigned further agrees and certifies that they:

1. Have read, understand and agree to be bound by and comply with all requirements, instructions, specifications, terms and conditions of the RFP (including any attachments); and
2. Are an authorized representative of the Proposer, that the information provided is true and accurate, and that providing incorrect or incomplete information may be cause for rejection of the Proposal or contract termination; and
3. Will furnish the designated item(s) and/or service(s) in accordance with the RFP and Proposal; and
4. Will use recyclable products to the maximum extend economically feasible in the performance of the contract work set forth in this RFP.

Name: Andy McCaskill
Date: February 20, 2025
Signature: 
Title: Associate Vice President
Email: amccaskill@hazenandsawyer.com
Telephone: (816) 729-3765
Oregon Business Registry Number: 1308985-96
OR CCB # (if applicable):

Business Designation (check one):
☑ Corporation ☐ Partnership ☐ Sole Proprietorship ☐ Non-Profit ☐ Limited Liability Company

☑ Resident Quoter, as defined in ORS 279A.120
☐ Non-Resident Quote. Resident State: