

PERSONAL SERVICES CONTRACT

County of Nevada, California

This Personal Services Contract is made between the COUNTY OF NEVADA (herein "County"), and

Coastland Civil Engineering, Inc.

(herein "Contractor"), wherein County desires to retain a person or entity to provide the following services, materials and products generally described as follows:

(§1) **Design Services for the Cascade Shores Community Leach Field Project**

SUMMARY OF MATERIAL TERMS

(§2) **Maximum Contract Price:** 712,195
(§3) **Contract Beginning Date:** 11/13/17 **Contract Termination Date:** 11/30/18
(§4) **Liquidated Damages:** \$0 per day

INSURANCE POLICIES

Designate all required policies:

		Req'd	Not Req'd
(§6) Commercial General Liability	(\$1,000,000)	<u>X</u>	<u> </u>
(§7) Automobile Liability	(\$ 300,000) Personal Auto	<u> </u>	<u>X</u>
	(\$1,000,000) Business Rated	<u>X</u>	<u> </u>
	(\$1,000,000) Commercial Policy	<u> </u>	<u>X</u>
(§8) Worker's Compensation		<u>X</u>	<u> </u>
(§9) Errors and Omissions	(\$1,000,000)	<u>X</u>	<u> </u>

LICENSES AND PREVAILING WAGES

(§14) Designate all required licenses:

As Applies

NOTICE & IDENTIFICATION

(§26) **Contractor:** **Coastland Civil Engineering**
1400 Neotomas Avenue
Santa Rosa CA 95405

County of Nevada:
Nevada County Sanitation District No. 1
950 Maidu Ave.
Nevada City CA 95959

Contact Person: John Wanger
(707) 571-8005
e-mail: wanger@coastlandcivil.com

Contact Person: Brad Torres
(530) 265-7103
e-mail: brad.torres@co.nevada.ca.us

Contractor is a: (check all that apply)

Corporation: X Calif., Other, LLC, Non-profit
Partnership: Calif., Other, LLP, Limited
Person: Individ., Dba, Ass'n, Other

EDD: Independent Contractor Worksheet Required: Yes x No

HIPAA: Schedule of Required Provisions (Exhibit D): Yes x No

ATTACHMENTS

Designate all required attachments:

	Req'd	Not Req'd
Exhibit A: Schedule of Services (Provided by Contractor)	<u>x</u>	<u> </u>
Exhibit B: Schedule of Charges and Payments (Paid by County)	<u>x</u>	<u> </u>
Exhibit C: Schedule of Changes (Additions, Deletions & Amendments)	<u> </u>	<u>x</u>
Exhibit D: Schedule of HIPAA Provisions (Protected Health Information)	<u> </u>	<u>x</u>

Terms

Each term of this Contract below specifically incorporates the information set forth in the Summary at page one (1) above as to each respective section (§) therein, as the case may be.

Services

1. **Scope of Services:**

Contractor shall provide all of the services, materials and products (herein "Services") generally described in **Exhibit "A"**, according to a performance schedule, if applicable, as set forth in said exhibit (herein "Performance Schedule") . If requested, Contractor agrees to serve as an expert witness for County in any third party action or proceeding arising out of this Contract.

Payment

2. **Charges and Payments:**

The charges (herein "Charges") for furnishing the aforesaid Services under this Contract are set forth in **Exhibit "B"**, including, if applicable, hourly rates, unit pricing, and expense, mileage and cost limits. Said Charges shall be presented monthly by invoice, and shall be due within thirty (30) days of receipt unless payment is otherwise set forth in said **Exhibit "B"**, and shall remain in effect for the entire term of this Contract, and any extension hereof. In no event will the cost to County for Services to be provided under this Contract, including direct non-salary expenses, exceed the **Maximum Contract Price** set forth at §2, page one (1), above.

Time for Performance

3. **Contract Term:**

This Contract shall commence on the **Contract Beginning Date** set forth at §3, page one (1), above. All Services required to be provided by this Contract shall be completed and ready for acceptance no later than the **Contract Termination Date** set forth at §3, page one (1), above.

4. **Liquidated Damages:**

County and Contractor agree that damages to County due to delays in timely providing Services in accordance with the aforesaid Performance Schedule and Contract Termination Date are impractical and difficult to ascertain. Therefore, if §4 at page one (1) hereof shall indicate a daily amount as **Liquidated Damages**, County shall have the right to assess said daily sum, not as a penalty, but as and for damages to County due to delays in providing Services not in accordance with the said Performance Schedule, or later than the Contract Termination Date (herein "Delay"). Liquidated Damages shall be offset against amounts owing to Contractor, including retention sums.

To the extent that any Delay is a result of matters or circumstances wholly beyond the control of Contractor, County may excuse said Liquidated Damages; provided however, that County may condition such excuse upon Contractor having given prompt notice to County of such delay immediately by telephone and thereafter by written explanation within a reasonable time. The time for Contractor's performance shall be extended by the period of delay, or such other period as County may elect.

5. **Time of the Essence:**

Time is of the essence with respect to Contractor's performance under this Contract. Delay in meeting the time commitments contemplated herein will result in the assessment of liquidated damages, if indicated at §4 at page one (1), hereof. If Liquidated Damages are not so indicated, damages shall be as otherwise provided by law.

Insurance

6. **Commercial General Liability Insurance:** (County Resolution No. 90674)

If §6 at page one (1) hereof shall indicate a **Commercial General Liability** insurance policy is required, Contractor shall promptly provide proof of such insurance evidenced by a certificate of insurance with properly executed endorsements attached, which insurance shall include the following:

- (i) Broad form coverage for liability for death or bodily injury to a person or persons, and for property damage, combined single limit coverage, in the minimum amount indicated at said §6;

- (ii) An endorsement naming County as an additional insured under said policy, with respect to claims or suits arising from the Services provided or the relationships created under this Contract;
- (iii) A provision that said insurance shall be primary and other insurance maintained by the County of Nevada shall be excess only and not contributing with Contractor's insurance;
- (iv) A provision that said insurance shall provide for thirty (30) days written notice to County of any termination or change in coverage protection, or reduction in coverage limits (except ten (10) days notice for non-payment of premium).

7. Automobile Liability Insurance: (County Resolution No. 90676)

If §7 at page one (1) hereof shall require either a Business Rated or a Commercial Automobile Liability insurance policy, for each vehicle used including non-owned and hired automobiles, Contractor shall promptly provide proof of such insurance evidenced by a certificate of insurance with properly executed endorsements attached, which insurance shall include the following provisions:

- (i) Liability protection for death or bodily injury to a person or persons, property damage, and uninsured and underinsured coverage, combined single limit coverage, in the minimum amount indicated at said §7;
- (ii) An endorsement naming County as an additional insured under said policy, with respect to claims or suits arising from the Services provided or the relationships created under this Contract;
- (iii) A provision that said insurance shall be primary and other insurance maintained by the County of Nevada shall be excess only and not contributing with Contractor's insurance;
- (iv) A provision that said insurance shall provide for thirty (30) days written notice to County of any termination or change in coverage protection, or reduction in coverage limits (except ten (10) days notice for non-payment of premium).

If §7 at page one (1) hereof shall require a Personal Auto policy, for each vehicle used including non-owned and hired automobiles, Contractor shall promptly provide proof of such insurance for a minimum of three hundred thousand dollars, (\$300,000), in combined single limits, and naming the County as additionally insured.

8. Worker's Compensation: (County Resolution No. 90674)

If §8 at page one (1) hereof shall indicate a **Worker's Compensation** insurance policy is required, Contractor shall maintain said policy as required by law, and shall promptly provide proof of such insurance evidenced by a certificate of insurance, or other documentation acceptable to County.

Before commencing to utilize employees in providing Services under this Contract, Contractor warrants that it will comply with the provisions of the California Labor Code, requiring Contractor to be insured for worker's compensation liability or to undertake a program of self-insurance therefor.

9. Errors and Omissions:

If §9 at page one (1) hereof shall indicate **Errors and Omissions** insurance is required, Contractor shall maintain either a professional liability or errors & omissions policy in the minimum amount indicated, and shall promptly provide proof of such insurance evidenced by a certificate of insurance, or other documentation acceptable to County.

10. Miscellaneous Insurance Provisions: (County Resolution No. 90675)

All policies of insurance required by this Contract shall remain in full force and effect throughout the life of this Contract and shall be payable on a "per occurrence" basis unless County specifically consents to "claims made" coverage. If the County does consent to "claims made" coverage and if Contractor changes insurance carriers during the term of this Contract or any extensions hereof, then Contractor shall carry prior acts coverage.

Insurance afforded by the additional insured endorsement shall apply as primary insurance, and other insurance maintained by County, its officers, agents and/or employees, shall be excess only and not contributing with insurance required or provided under this agreement.

At all times, Contractor shall keep and maintain in full force and effect throughout the duration of this Contract, policies of insurance required by this Contract which policies shall be issued by companies with a Best's Rating of B+ or higher (B+, B++, A-, A, A+ or A++), or a Best's Financial Performance Rating (FPR) of 6 or higher (6, 7, 8 or 9) according to the current Best's Key Rating Guide, or shall be issued by companies approved by the County Risk Manager. In the event the Best's Rating or Best's FPR shall fall below the rating required by this paragraph, Contractor shall be required to forthwith secure alternate policies which comply with the rating required by this paragraph, or be in material breach of this Contract.

Failure to provide and maintain the insurance policies (including Best's ratings), endorsements, or certificates of insurance required by this Contract shall constitute a material breach of this agreement (herein "Material Breach"); and, in addition to any other remedy available at law or otherwise, shall serve as a basis upon which County may elect to suspend payments hereunder, or terminate this Contract, or both. (See §13, ¶2, below, as these provisions additionally apply to subcontractors.)

11. Indemnity:

Nothing herein shall be construed as a limitation of Contractor's liability, and Contractor shall indemnify, defend and hold harmless the County and its officers, officials, employees, agents and volunteers from any and all liabilities, claims, demands, damages, losses and expenses (including, without limitation, defense costs and attorney fees of litigation) which result from the negligent act, willful misconduct, or error or omission of Contractor, except such loss or damage which was caused by the sole negligence or willful misconduct of County or its officers, officials, employees, agents and volunteers.

Personal Services

12. Contractor as Independent:

In providing services herein, Contractor, and the agents and employees thereof, shall act in an independent capacity and as an independent contractor and not as agents or employees of County.

13. Assignment and Subcontracting:

Except as specifically provided herein, the rights, responsibilities, duties and Services to be performed under this Contract are personal to the Contractor and may not be transferred, subcontracted, or assigned without the prior written consent of County. Contractor shall not substitute nor replace any personnel for those specifically named herein or in its proposal without the prior written consent of County.

Contractor shall cause and require each transferee, subcontractor and assignee to comply with the insurance provisions set forth herein at §§6, 7, 8, 9 and 10, to the extent such insurance provisions are required of Contractor under this Contract. Failure of Contractor to so cause and require such compliance by each transferee, subcontractor and assignee shall constitute a Material Breach of this agreement, and, in addition to any other remedy available at law or otherwise, shall serve as a basis upon which County may elect to suspend payments hereunder, or terminate this Contract, or both.

14. Licensing and Permits:

Contractor warrants (i) Contractor is qualified and competent to provide all Services under this contract; (ii) Contractor and all employees of Contractor hold all necessary and appropriate licenses therefor, including those licenses set forth at §14, page one (1) hereof; and, (iii) Contractor shall obtain, and remain in compliance with, all permits necessary and appropriate to provide said Services. Contractor shall cause said licenses and permits to be maintained throughout the life of this Contract. Failure to do so shall constitute a Material Breach of this agreement, and, in addition to any other remedy available at law or otherwise, shall serve as a basis upon which County may elect to suspend payments hereunder, or terminate this Contract, or both.

Public Contracts

15. Prevailing Wage and Apprentices:

To the extent made applicable by law, performance of this Contract shall be in conformity with the provisions of California Labor Code, Division 2, Part 7, Chapter 1, commencing with Section 1720 relating to prevailing wages which must be paid to workers employed on a public work as defined in Labor Code §§1720, et seq.; and shall be in conformity with Title 8 of the California Code of Regulations §§200 et seq., relating to apprenticeship. Where applicable:

(i) Contractor shall comply with the provisions thereof at the commencement of Services to be provided herein, and thereafter during the term of this Contract. A breach of the requirements of this section shall be deemed a material breach of this contract. Applicable prevailing wage determinations are available on the California Department of Industrial Relations website at <http://www.dir.ca.gov/OPRL/PWD>.

(ii) Contractor and all subcontractors must comply with the requirements of Labor Code Section 1771.1(a) pertaining to registration of contractors pursuant to Section 1725.5. Registration and all related requirements of those Sections must be maintained throughout the performance of the Contract.

(iii) Contracts to which these prevailing wage requirements apply are subject to compliance monitoring and enforcement by the Department of Industrial Relations. Each contractor and subcontractor must furnish certified payroll records to the Labor Commissioner at least monthly.

(iv) The County is required to provide notice to the Department of Industrial Relations of any public work contract subject to prevailing wages within five (5) days of award.

16. Accessibility (County Resolution No. 00190):

It is the policy of the County of Nevada that all County services, programs, meetings, activities and facilities shall be accessible to all persons, and shall be in compliance with the provisions of the Americans With Disabilities Act and Title 24, California Code of Regulations. To the extent this Contract shall call for Contractor to provide County contracted services directly to the public, Contractor shall certify that said direct Services are and shall be accessible to all persons.

17. Nondiscriminatory Employment:

In providing Services hereunder, Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, age, sex, national origin, political affiliation, ancestry, marital status or disability. This policy does not require the employment of unqualified persons.

18. Prior Nevada County Employment (County Resolution No. 03-353):

Effective July 22, 2003, it is the policy of the County of Nevada that former members of the Board of Supervisors, a former CEO, or a former Purchasing Agent, for a period of twelve (12) months following the last day of employment, shall not enter into any relationship wherein that former employee or former Board member receives direct remuneration from a legal entity that, during the last twelve (12) months of said employment or Board member's service, entered into a contract with, or received a grant from the County of Nevada. Provided however, that this prohibition shall not apply to any employee that did not personally approve a contract with or grant to said legal entity during the last twelve (12) months of said employment, and shall not apply when the Board of Supervisors did not approve a contract with or grant to said legal entity during the last twelve (12) months of said Board member's service.

A violation of this policy shall subject Contractor to all of the remedies enumerated in said resolution and as otherwise provided in law, which remedies shall include but not be limited to injunctive relief, cancellation and voiding of this contract by County, a return of grant money, a cause of action for breach of contract, and entitlement to costs and reasonable attorney fees in any action based upon a breach of contract under this provision.

19. Cost Disclosure:

In accordance with Government Code Section 7550, should a written report be prepared under or required by the provisions of this Contract, Contractor agrees to state in a separate section of said report the numbers and dollar amounts of all contracts and subcontracts relating to the preparation of said report

Default and Termination

20. Termination:

A Material Breach of this Contract pursuant to the terms hereof or otherwise, in addition to any other remedy available at law or otherwise, shall serve as a basis upon which County may elect to immediately suspend payments hereunder, or terminate this contract, or both, **without notice**.

If Contractor fails to timely provide in any manner the services materials and products required under this Contract, or otherwise fails to promptly comply with the terms of this Contract, or violates any ordinance, regulation or other law which applies to its performance herein, County may terminate this Contract by giving **five (5) days written notice** to Contractor.

Either party may terminate this Contract for any reason, or without cause, by giving **thirty (30) calendar days written notice** to the other, which notice shall be sent by registered mail in conformity with the notice provisions, below. In the event of termination not the fault of the Contractor, the Contractor shall be paid for services performed to the date of termination in accordance with the terms of this Contract. Contractor shall be excused for failure to perform services herein if such performance is prevented by acts of God, strikes, labor disputes or other forces over which the Contractor has no control.

County, upon giving **sixty (60) calendar days written notice** to Contractor, shall have the right to terminate its obligations under this Contract at the end of any fiscal year if the County or the State of California, as the case may be, does not appropriate funds sufficient to discharge County's obligations coming due under this contract.

Miscellaneous

21. Books of Record and Audit Provision:

Contractor shall maintain complete records relating to this Contract for a period of five (5) years from the completion of Services hereunder. Said records shall include but not be limited to bids and all supporting documents, original entry books, canceled checks, receipts, invoices, payroll records including subsistence, travel and field expenses, together with a general ledger itemizing all debits and credits

Contractor shall permit County to audit said records as well as such related records of any business entity controlled by Contractor. Said audit may be conducted on Contractor's premises or at a location designated by County, upon fifteen (15) days notice. Contractor shall promptly refund any moneys erroneously charged and shall be liable for the costs of audit if the audit establishes an over-charged of five percent (5%) or more of the Maximum Contract Price.

22. Intellectual Property:

All original photographs, diagrams, plans, documents, information, reports, computer code and all recordable media together with all copyright interests thereto (herein "Intellectual Property"), which concern or relate to this Contract and which have been prepared by, for or submitted to Contractor, shall be the property of County, and upon fifteen (15) days demand therefor, shall be promptly delivered to County without exception. Provided however, for personal purposes only and not for commercial, economic or any other purpose, Contractor may retain a copy of Contractor's work product hereunder.

23. Entire Agreement:

This Contract represents the entire agreement of the parties, and no representations have been made or relied upon except as set forth herein. This Contract may be amended or modified only by written, fully executed agreement of the parties.

24. Jurisdiction and Venue:

This Contract shall be construed in accordance with the laws of the State of California and the parties hereto agree that venue shall be in Nevada County, California.

25. Compliance with Applicable Laws:

The Contractor shall comply with any and all federal, state and local laws, codes, ordinances, rules and regulations which relate to, concern or affect the Services to be provided by this Contract.

26. Notices:

This Contract shall be managed and administered on County's behalf by the department and the person set forth at §26, page one (1) of this Contract, and all invoices shall be submitted to and approved by this Department. In addition to personal service, all notices may be given to County and to Contractor by first class mail addressed as set forth at said §26 Said notices shall be deemed received the fifth (5th) day following the date of mailing or the earlier date of personal service, as the case may be.

27. Authority:

All individuals executing this Contract on behalf of Contractor represent and warrant that they are authorized to execute and deliver this Contract on behalf of Contractor.

IN WITNESS WHEREOF, the parties have executed this Contract effective on the Beginning Date, above.

CONTRACTOR:

COUNTY OF NEVADA:

Name:
Title:

Honorable Hank Weston
Chair, Board of Supervisors

Dated: _____

Dated: _____

Attest: _____
Julie Patterson Hunter
Clerk of the Board

EXHIBIT "A"
SCHEDULE OF SERVICES
(Provided By Contractor)



County of Nevada

Statement of Qualifications:

**DESIGN SERVICES FOR THE
CASCADE SHORES
COMMUNITY LEACH FIELD
PROJECT**

August 25, 2017



COASTLAND

CIVIL ENGINEERING - CONSTRUCTION MANAGEMENT - BUILDING DEPARTMENT SERVICES

ATTACHMENT B: COVER SHEET

Name of Person, Business or Organization:	Coastland Civil Engineering, Inc.
Type of Entity: (e.g. Sole-Proprietorship, Partnership, Corp., Non-Profit, Public Agency)	Corporation
Federal Tax ID Number:	68-0256235
Contact Person – Name	John Wanger, PE, CEO
Contact Person – Address	1400 Neotomas Avenue Santa Rosa, CA 95405
Contact Person – Phone Number (s)	707.571.8005
Contact Person – e-mail address	wanger@coastlandcivil.com

By signing this **Cover Sheet** I hereby attest: that I have read and understood all the terms listed in the RFQ; have read and understood all terms listed in this Statement of Qualifications; that I am authorized to bind the listed entity into this agreement; and that should this SOQ be accepted, I am authorized and able to secure the resources required to deliver against all terms listed within the RFQ as published by the County of Nevada, including any amendments or addenda thereto except as explicitly noted or revised in my submitted SOQ.



 Signature of Authorized Representative

John Wanger, PE

 Printed Name of Authorized Representative

8-23-17

 Date



COASTLAND

CIVIL ENGINEERING - CONSTRUCTION MANAGEMENT - BUILDING DEPARTMENT SERVICES

October 20, 2017

Mr. Brad Torres, Wastewater Operations Manager
Nevada County Sanitation District
950 Maidu Avenue
Nevada City, CA 95959

**Subject: Revised SOQ—Design Services for the Cascade Shores Community
Leach Field Project**

Dear Brad:

Coastland Civil Engineering, Inc. (Coastland) truly appreciates the opportunity to assist the County of Nevada with services related to the design of the Cascade Shores Community Leach Field. We have enjoyed working with you on the Penn Valley Pipeline project and look forward to working with you again on this project.

Our team provides a variety of municipal engineering services for communities throughout Northern California. Having served as contract engineers for over 20 cities, counties and special districts, we know the unique challenges facing public agencies. Please consider the following benefits of the Coastland team:

- ✓ Water system planning, modeling, alternative analysis and final design for public agencies throughout Northern California.
- ✓ Experience within Nevada County including project management of the Penn Valley Pipeline project.
- ✓ Researching, recommending and securing funding for utility improvements.
- ✓ As Contract Engineers for a number of public agencies, Coastland evaluates their water systems on a daily basis and provides recommendations, including master planning and CIP programs, funding assistance, plan review, engineering design, feasibility studies, construction management and inspection services.

The following chart describes the members of Coastland's team and identifies their roles and office locations. More information on our team is presented in our proposal.

Santa Rosa

1400 Neotomas Avenue
Santa Rosa, CA 95405
Tel: 707.571.8005

Auburn

11865 Edgewood Road
Auburn, CA 95603
Tel: 530.888.9929

Pleasant Hill

3478 Buskirk Avenue, Ste. 1000
Pleasant Hill, CA 94523
Tel: 925.233.5333

www.coastlandcivil.com

Project Management, Design, Construction Management & Inspection	Leach Field Design	Survey	Pump Station Design & Decommissioning of Existing Treatment Plant	CEQA
Coastland <i>Auburn</i>	Holdrege & Kull, an NV5 Company <i>Nevada City</i>	Dundas Geomatics <i>Grass Valley</i>	NEXGEN Utility Management <i>Sacramento</i>	Foothill Associates <i>Rocklin</i>

Our proposed project manager, Dane Schilling, PE, will be the County's single point of contact for this project. Dane has over 27 years of directly applicable experience and has been the project manager on a number of similar projects which makes him the ideal project manager. He can be reached by phone at the Auburn office (530.888.9929) or email schilling@coastlandcivil.com to offer assistance with questions regarding this proposal.

We submit this statement of qualifications in accordance with the RFQ dated July 13, 2017, supporting documents and Addendum #1, issued via email on August 17, 2017. As CEO of Coastland I am authorized to enter into a contractual agreement with the County. For questions regarding the contract I can be reached at 707.571.8005 or via email at wanger@coastlandcivil.com. John and I are available to discuss any questions you may have about our experience either in person or on the phone.

Sincerely,

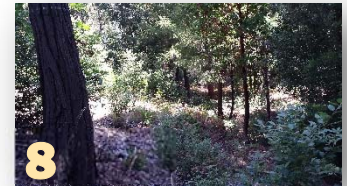


John Wanger, PE
CEO



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Appendix

- A. Coastland Resumes
- B. Subconsultant Information

Key Benefits of the Coastland Team

- *A project manager with over 27 years of experience concentrated on water and wastewater facilities for a broad range of public agencies.*
- *We specialize in serving special districts and mid-size agencies throughout Northern California.*
- *We are local resources.*
- *Coastland is a well-established and dependable firm with a 26-year track record on similar projects for cities, counties and water districts. Coastland and the team of subconsultants have worked together on a number of projects in Northern California.*



QUALIFICATIONS & EXPERIENCE

INTRODUCTION

Coastland Civil Engineering has assembled a highly qualified team to complete the tasks outlined in the RFQ for design services for the Cascade Shores Community Leach Field Project.

Table 1—Key Roles

Project Management, Design, Construction Management & Inspection	Leach Field Design	Survey	Pump Station Design & Decommissioning of Existing Treatment Plant	CEQA
Coastland Auburn	Holdrege & Kull, an NV5 Company Nevada City	Dundas Geomatics Grass Valley	NEXGEN Utility Management Sacramento	Foothill Associates Rocklin

- ✓ **Our proposed Project Manager, Dane Schilling, PE**, will be the County’s single point of contact for this project. He will be supported by staff from Coastland’s Auburn office who will provide design and construction management and inspection assistance with support during the design phase from our Santa Rosa office.
- ✓ **Holdrege & Kull** (an NV5 company) **has conducted extensive geotechnical analysis of the area and adjoining parcels**. As such, they are intimately familiar with the expected conditions and are best suited to determine the viability of the proposed site.
- ✓ **Dundas Geomatics of Grass Valley** has already provided retracement surveys in and around the Cascade Shores Subdivisions and will provide topographic survey services for this project.
- ✓ **NEXGEN Utility Management will provide civil, mechanical and electrical engineering on the design of the pump station**. They will also assist with start-up testing of the pump station.
- ✓ **Foothill Associates will provide CEQA compliance monitoring during construction in support of the biological mitigation measures** associated with the California Red-Legged Frog, Western Pond Turtle, migratory birds and raptors, on-site landmark trees and ESA staking.

Table 2—SOQ Evaluation Criteria

Evaluation Criteria	Experience	Page
Contract administration experience with similar projects	Coastland has provided contract administration services for more than 20 public agencies. Our proposed Project Manager and many members of our proposed team have performed these services on the Nevada County Sanitation District #1 Penn Valley Pipeline project. Other recent contract administration projects include WWTP’s and force mains.	22
Proposed scope of services identifies key project issues	We recognize that this project is integral to resolving long-term structural deficits and compliance issues in the Cascade Shores service area. We have provided a scope that addresses these challenges. Also, our approach to addressing challenges (see issues and solutions section of this proposal) demonstrates our approach for managing key project, scheduling, and communication issues.	8
Key project management and staff experience and staff stability	Our proposed Project Manager has more than 22 years of experience, with an emphasis on project management of water and wastewater facilities. As project manager on the Penn Valley Pipeline project, John Griffin administered over \$6 million in funding and managed a team of Coastland staff and subconsultants. Coastland and its team of subconsultants are well-established firms who continue to grow to meet the needs of their public agency clients.	4
Proposed Delivery Schedule	Per the RFQ our submittal includes the estimated number of hours expected to be required to complete each phase of the project.	19



COASTLAND BACKGROUND & EXPERIENCE

Coastland's project team and proposed approach provide several distinct advantages to the County:

- ✓ **Coastland has a long-standing relationship with the County of Nevada.** The Coastland team worked closely with the Sanitation District staff to provide project administration, design support, prepared the bid package, provided support to the District's procurement division for the award and execution of the construction contract, interfaced with Caltrans and completed all necessary application documents for the Highway 20 encroachment permit, assisted with State Revolving Fund (SRF) final budget approval forms and all supporting documentation (including all quarterly SRF status reports) and assisted in creating a SMARTs account for the District, "accepting" all documents required by the storm water permit.
- ✓ **Coastland specializes in providing on-call engineering support.** Coastland serves public agencies exclusively, specializing in contract services for cities, counties and special districts. We have maintained, or are currently maintaining, on-call engineering service contracts with over 20 agencies in Northern California. This experience makes us very familiar with how to most efficiently respond to the County's requests.
- ✓ **For the past three years Coastland has managed the Penn Valley Pipeline project for the Nevada County Sanitation District #1.** Our project manager has over 27 years of directly applicable experience and has provided project management on water and wastewater, transportation and drainage facilities for a broad range of public agencies. He provides project oversight, council/board presentations, and capital improvement project management for projects ranging in value from \$100,000 to \$20 million.
- ✓ **Our team has managed and designed dozens of projects involving regulatory agency coordination,** documentation and approvals. We will leverage our existing relationships to promote positive project progress and ensure scheduling goals are met.
- ✓ **Coastland has the appropriate level of resources to provide very prompt and accurate services,** while still maintaining a highly personal approach to serving our clients. Our team understands what coordination efforts are required to provide highly responsive service to our clients.
- ✓ **Coastland is well-founded and dependable.** Coastland has provided similar services to public agencies for over 26 years. Over 90% of our work is from repeat clients, attesting to client confidence and satisfaction.
- ✓ **Coastland staff focuses on acting as an extension of our clients' staff** to provide reliable project management services and timely project delivery.

Coastland has served the following clients through On-Call Contracts:

Alameda	American Canyon
Bodega Bay PUD*	Callayomi County Water Dist*
Clearlake	Cloverdale
Colfax*	Fairfax*
Fort Bragg	Hidden Valley Lake CSD*
Ione*	Lincoln
Lower Lake Water Dist	Piedmont*
Plymouth	Rancho Murieta CSD*
Sausalito	St. Helena*
Suisun City	Sweetwater Springs Water Dist*
Wheatland*	Willows*
Windsor	Yountville

* Currently serving as contract City or District Engineer

FIRM HISTORY

Coastland Civil Engineering, Inc. (Coastland) provides civil engineering, construction management and inspection, and building & safety services to public agencies spanning Northern California. Since Coastland opened its doors in 1991, our projects have encompassed a wide variety of transportation, water, wastewater, drainage, flood control, building, parks and public facilities. Our extensive experience with complex and multi-faceted projects benefits our clients in every arena. Whether the project requires expertise within one, or all of our departments, we deliver the highest quality work product and services ranging from building department, planning, financing, program management, design and construction management and inspection.

Coastland exists to assist public agencies to plan, develop, design and construct critical infrastructure.



Our approach is a little different from most companies. We function as a trusted partner to our clients, literally becoming an extension of our clients' staff and an integral part of their project team. This uncommon partnership helps our clients achieve more, especially when resources are limited.

Coastland is well known for our municipal contract engineering services; it is why more than 50 communities choose to work with us. Our staff provides reliable experienced extensions to your staff, helping to execute a wide range of services in these budget-conscious times.

Because we specialize in serving public agencies, we have a unique understanding of the approval process, stakeholder dynamics and the impacts each project may have on the community. This public agency focus allows us to understand the importance of timing constraints on public projects and how to successfully expedite project approval to meet our clients' schedule and budgetary needs. The vast majority of our work is from repeat clients, attesting to client satisfaction and confidence.

Primary Services

- Municipal Engineering
- Capital Project Design
- Construction Management
- Building & Safety
- Financing Assistance

Markets

- Transportation
- ADA Compliance
- Water
- Wastewater
- Public Facilities & Parks

Client Base

- Cities
- Counties
- Special Districts

PROJECT MANAGEMENT & DESIGN OF CAPITAL PROJECTS

There are many solutions to a single problem. Through team collaboration, a community focus and value engineering principles, the Coastland staff consistently provides creative solutions tailored to the needs of your project.

We realize permitting and environmental requirements, budget constraints and project processing can make public works projects complex. Coastland stays on top of the ever-changing requirements so we can guide our clients through the regulatory processes. We anticipate and plan for constraints, and know how to respond to regulations while protecting the community and its environment.

Municipal engineering and capital project design services are the core of our business. Having provided day-to-day contract municipal engineering for over 20 northern California agencies our team can provide unique insight and a highly efficient approach. We are excited about this opportunity to serve the County of Nevada again and we look forward to continuing our relations with County staff.

Capital Project Services include:

- Project Management & Coordination
- Feasibility Evaluation & Alternatives Analysis
- Design Development, PS&E, Cost Estimates
- Infrastructure Design
- Structural Design
- Sustainable Site Design
- Value Engineering
- Environmental Review & Permitting
- Bid Support & Engineering Services During Construction

Sustainable Principles

To help cities and counties meet their sustainable performance goals, Coastland offers Qualified SWPPP Developers (QSD) and Practitioners (QSP) whose focus is on today's expanding sustainable principals. We design for green infrastructure, water and energy efficiency, conservation of natural resources and open space. Our designs incorporate Low Impact Development (LID) materials and treatments. This approach is vital to ensure that the existing natural landscape is maintained as much as feasible, to ensure that the rural nature of the area is retained.

SRF Experience

Coastland has administered State Revolving Funds (SRF) for many of the clients we serve. This has involved preparing applications; coordinating with the RWQCB and SWRCB; funds processing including required quarterly status reports, DBE usage, and project closeout reports; and ensuring every stage of the project adheres to the funding requirements. SRF projects include:

- County of Nevada Penn Valley Pipeline (\$6 million)
- City of Galt WWTP Upgrade (\$27 million)
- City of Piedmont Sewer Main Replacement Project (\$1.6 million)
- City of Willows Sewer Main Replacement Project (\$1.8 million)
- City of Cloverdale Water Treatment Plant (\$2.4 million)
- City of Cloverdale Wastewater Treatment Plant Upgrade (\$1.4 million)



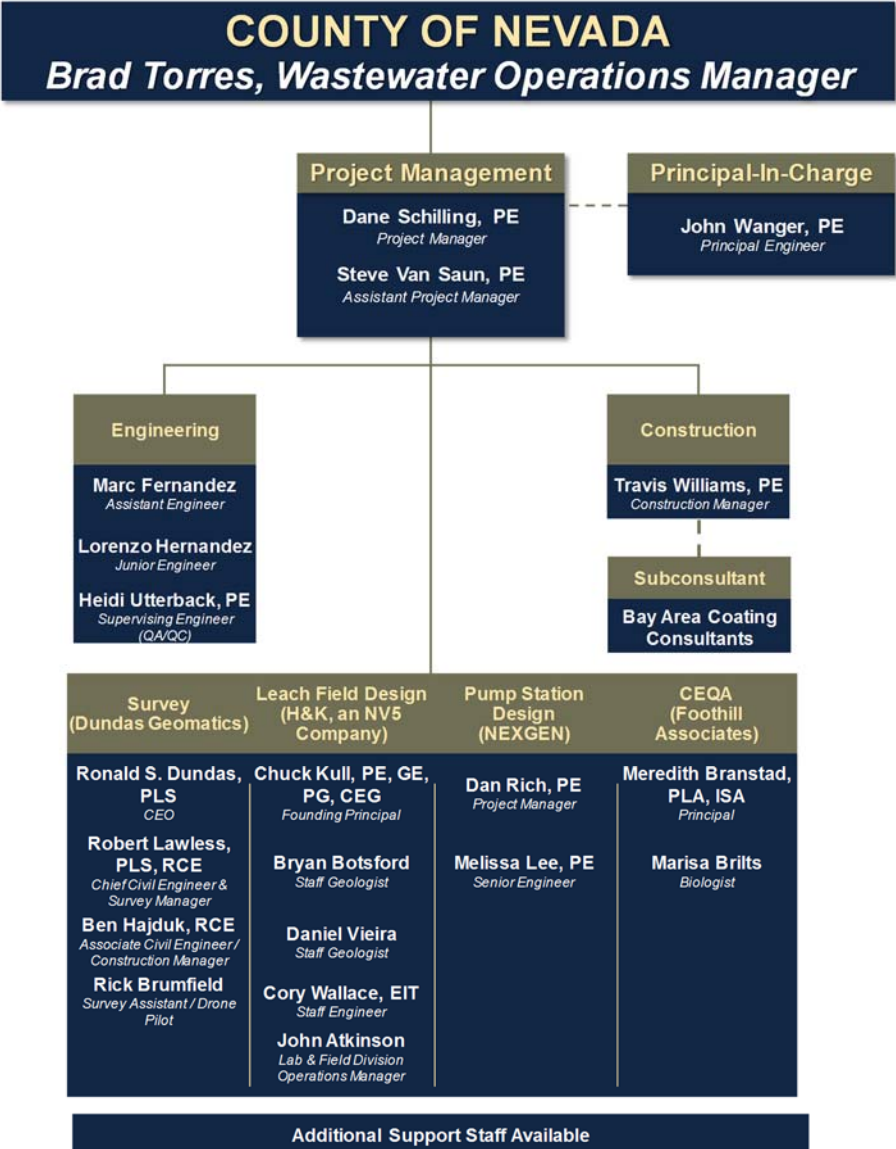
TEAM ORGANIZATION & QUALIFICATIONS

You can be confident knowing our team has the proven expertise to assist the County with the many phases necessary to complete this project. Our team is flexible and dedicated to meeting the needs of the County and will work closely with County staff to share our experience gained from serving other public agencies. Coastland specializes in serving public agencies exclusively, which will help us anticipate your needs and provides us with a perspective that other consultants may not have.

Coastland has ample resources to provide assistance to the County. The team organization chart identifies proposed personnel with the respective lines of communication in serving the County. The personnel identified in the chart are designated specifically for this contract because of their expertise in project management of utility projects. The proposed team members have worked together providing project management and administration and project design services for clients including Nevada County Sanitation District #1, the cities of Lincoln, Galt and Wheatland and Rancho Murieta Community Services District.

With a staff of over 50 professional engineers, technicians, construction managers and inspectors and support staff, Coastland has ample resources to respond to the needs of this project.

Following are brief descriptions of the proposed key team members and their credentials. Resumes of all staff have been included in **Appendix A**. Resumes and information on our team of subconsultants have been included in **Appendix B**.



COASTLAND STAFF

**Education:**

B.S., Civil Engineering
San Diego State University

Registration:

Civil Engineer, CA 56908

Selected Experience Overview:**County of Nevada**

- Penn Valley Pipeline Project Management

County of Amador

- Leachate Pond Cover
- Latrobe Road Guardrail

City of Colfax

- Contract City Engineering

City of Lincoln

- General Engineering Support Services

Town of Loomis

- On-Call Engineering Support Services

City of Nevada City

- Water/Wastewater Infrastructure Condition Assessment & Operational Review

County of Placer County

- Building Department & Third Party Plan Review Services

City of Wheatland

- Contract City Engineering Services
- Utility Rate Study Project Management

Dane Schilling, PE – Project Manager

Mr. Dane Schilling, Associate Principal and Managing Engineer of Coastland's Auburn office, has focused his energy on design and construction of public works projects for over **27 years**. Dane has extensive experience in project administration and funding, consultant/client management, design, plan review, construction management and public presentations. He has managed a multitude of capital improvement projects involving water, sewer, storm drain, parks, public facilities and roadway projects.

Responsibility: As proposed Project Manager, Dane will serve as the day-to-day point-of-contact for the County. He will be responsible for providing overall scheduling, budgeting and coordination for this project and will coordinate and oversee the designers and subconsultant team members to ensure seamless work products, coordinate with RWQCB and various regulatory agencies, provide SRF funding assistance, permitting, bid document preparation and award, and site reviews as needed. He will be available throughout the week to coordinate with all project players. He will be assisted in the Auburn office by Marc Fernandez and Lorenzo Hernandez to ensure all contract administration needs are met in a timely manner.

**Education:**

M.S., Civil Engineering,
Rutgers University
B.S., Civil Engineering
New Jersey Institute of
Technology

Registration:

Civil Engineer, CA 86180

Selected Experience Overview:**Bodega Bay Public Utility District**

- District Engineering Services

City of Ione

- Sutter & Shakely Lane Resurfacing

City of Piedmont

- Oakland Ave. Bridge Railing

City of Willows

- Sycamore Street Rehabilitation Project

Town of Tiburon

- 2017 Storm Drain Rehabilitation

Town of Windsor

- On-going development review
- Conde/Johnson Pedestrian Enhancement Project*

**Experience prior to joining Coastland*

Steven Van Saun, PE – Senior Engineer

Mr. Steven Van Saun is a licensed Professional Engineer with expertise in roadway and parking improvements, hydrology, hydraulics, environmental permitting, stormwater management, roadway drainage, and soil erosion and sediment control measures. He brings **over nine years** of experience and has managed and designed a wide variety of public improvement projects, including highway interchanges, bridge reconstruction and replacement, roadway intersections, parking lots, pedestrian safety enhancements, and storm drainage and sanitary sewer improvements.

Steven has been involved in more than 30 capital projects, ranging from \$200,000 to \$1 billion. On many of these projects he was the client's main point of contact and responsible for coordinating with numerous subconsultants, government agencies and property owners.





Education:
B.S., Civil Engineering
California State University,
Fullerton

Registration:
EIT, CA

Selected Experience Overview:

- County of Nevada**
- Penn Valley Pipeline Project Management
- City of Nevada City**
- Water/Wastewater Infrastructure Condition Assessment & Operational Review
- City of Lincoln**
- Contract Engineering Support
- Water & Sewer System Rehab Project Management
- Rancho Murieta Community Services District**
- Facilities Capital Improvement Program and Water Supply Augmentation Fee Study Update

Marc Fernandez, EIT – Engineering Support

Mr. Marc Fernandez, Assistant Engineer, has **12 years** of experience as an assistant city engineer, project manager and design engineer. His responsibilities have included assistance with CIP development, project management, grant funding, construction oversight, development review, inspection, contract management, and coordination with local, county and state municipal agencies.

Marc assists with Contract Engineering services and his duties include staff reports/ordinances, Caltrans submittals, project grant applications, development review and plan checks and preparing and reviewing RFPs. He has provided assistance on the Penn Valley Pipeline Project.

Responsibilities: Marc will provide design assistance and project management support during the course of this project.



Education:
B.S., Civil Engineering
California State University,
Sacramento

Selected Experience Overview:

- City of Lincoln**
- Contract Engineering Support
- Penryn 30-inch PCWA Pipeline Phase III
- Rancho Murieta Community Services District**
- Contract Engineering Support
- City of Woodland**
- Staff Augmentation Services

Lorenzo Hernandez – Engineering Support

Mr. Lorenzo Hernandez, Junior Engineer, has **three years** of experience in the engineering field. At Coastland Lorenzo performs engineering design support, plan review and project assistance. His experience includes design of construction plans for rehabilitated roads, construction work plan, method analysis, preparation of plans and estimates, evaluating existing conditions of pavement, striping, and street inventory.

Responsibility: Lorenzo will provide design assistance during the course of this project.



Education:
B.S., Civil Engineering,
University of California, Davis

Registration:
Civil Engineer, CA 53723

Selected Experience Overview:

- County of Nevada**
- Penn Valley Pipeline Project Management
- City of Nevada City**
- Water/Wastewater Infrastructure Condition Assessment & Operational Review
- City of Ione**
- Wastewater Treatment Plant Phase 1B Redesign
- Wastewater Treatment Plant Compliance Project
- Hidden Valley Lake CSD**
- Contract District Engineering
- Hexavalent Chromium Engineering Report
- Hexavalent Chromium Compliance Plan

Heidi Utterback, PE – QA/QC

Ms. Heidi Utterback, Supervising Engineer and Principal, is manager of Coastland’s civil design group and is responsible for staff oversight as well as project management, design, client coordination and project budgets. She has over **28 years** of experience designing and managing public works projects. Heidi has proven competence and experience designing sewer and water rehabilitation projects, roadway improvements, sidewalk replacement programs, ADA improvements, bicycle and pedestrian pathways, storm drain systems and grading plans. She is also very familiar with the coordinating efforts required of the regulatory agencies and local jurisdictions. In many of these projects, she was successful in preemptively evaluating the unique project conditions to overcome design challenges.

Responsibilities: Heidi will provide QA/QC of the design report and Plans, Specifications and Estimate (PS&E) submittals as well as oversight of the engineering design support staff.





Education:
B.S., Civil Engineering,
University of California, Davis

Registration:
Civil Engineer, CA 85470

Selected Experience Overview:

City of Ione

- City Engineering Support Services
- Wastewater Treatment Plant Town Field Header Pipe Installation
- Wastewater Treatment Plant Compliance Project

City of Lincoln

- Construction Management Staff Augmentation

City of Wheatland

- Contract City Engineering Assistance

Travis Williams, PE, QSD/QSP – Constructability Review / Construction Management

Mr. Travis Williams, Associate Principal and Resident Engineer, has **10 years** of experience in the construction industry. His experience comprises a wide range of municipal projects, including water, sewer, interchange, roadway and bridge improvements. On all of his projects, he excels at interfacing with the public and multiple agencies. He will often take the time to personally introduce himself to businesses, residents and other project stakeholders.

Travis routinely provides constructability review of in-house engineering design projects.

Responsibilities: Travis will perform constructability review of the 80% PS&E and provide oversight during the construction phase of the project.

SUBCONSULTANTS

Dundas Geomatic (Topographic Survey)

Dundas Geomatic, Inc. is the successor company to Dundas & Dundas, Land Surveying and Land Planning, established in Nevada County in 1978. Dundas Geomatics carries on and expands upon a 40-year tradition of providing excellence and professionalism in the fields of Geomatic Land Surveying, Land Planning and Civil Engineering, and Project Management.

Dundas employs the latest technological advances and techniques to the classic fundamentals of the various engineering disciplines. Their staff of professional engineers, land surveyors and support technicians have a combined “professional experience” well in excess of 135 years. Utilizing the latest “tools of the trade” including Robotic Total Stations, High Precision Static and RTK GPS, Laser Scanning Technology, and Aerial Drone Based Photography, along with the latest AutoCAD Design Suites of Software, they have the talent and tools to complete nearly any task.

Holdrege & Kull (Leach Field Design)

Holdrege & Kull Consulting Engineers and Geologists (H&K) is a multi-discipline consulting firm with a reputation for responsive, innovative, yet practical design approaches to complex geotechnical and environmental problems. Founded in 1993, H&K provides geotechnical, environmental engineering and construction quality assurance services. H&K will provide materials testing services for all projects.

NEXGEN (Wastewater Treatment Plant Decommissioning)

NEXGEN was established in 2005 as a result of the utility industry’s demand for increased performance and efficiency by improving utility management. The combination of more stringent regulatory requirements, dynamic work force, better asset management and competitive pressures have resulted in the utility management evolution in recent years.

NEXGEN is an employee-owned California Corporation based in Sacramento. The company has two divisions—a consulting division called NEXGEN Utility Management and a software and IT division called NEXGEN Asset Management. Their consulting work is primarily for water and wastewater planning and design for small to mid-sized cities and agencies.



Foothill Associates (CEQA)

Founded in 1995, Foothill Associates is a multidisciplinary Veteran-owned, California Corporation with Small Business certification (#20864) that provides a wide range of environmental consulting services to local governments, public agencies and private clients.

Foothill's staff combine highly specialized knowledge in biological assessment, environmental regulation and permitting (CEQA/NEPA), natural resources management, conservation planning, landscape architecture, recreation/parks planning and design, water resources, restoration, CAD/GIS computerized mapping capabilities and web site design and graphics to provide their clients with innovative and cost-effective consulting services.

WORK COMMITMENTS

All members of the proposed team are in the position to commit the necessary time to manage and design the County's project upon receipt of a Notice to Proceed. Coastland places a high priority on ensuring we do not over-commit individuals, nor leave any need unmet. The duration of this project is estimated to be approximately five years. During that time, no member of the team will be replaced without prior approval from the County.

PROJECT APPROACH

OVERVIEW

Nevada County Sanitation District #1 (District) operates a wastewater treatment plant (WWTP) for the Cascade Shores service area. This WWTP was constructed to address failing individual leach field systems in the area. Only a portion of the Cascade Shores community is served by the WWTP. There are currently 87 customers in the District's Cascade Shores service area.

The WWTP provides tertiary level treatment prior to discharges to Gas Canyon Creek. The primary processes employed at the WWTP consist of coarse screening, odor control, and equalization. Secondary treatment processes consist of anoxic moving bed reactors (MBBRs), followed by aerobic MBBRs and dissolved air flotation units. Tertiary processes consist of ultrafiltration followed by ultraviolet disinfection units.

The District is experiencing regulatory pressures regarding a permitted discharge from the WWTP to Gas Canyon Creek. The State adopted Waste Discharge Requirements (WDRs) Order R5-2008-0111 that imposed final effluent copper limits which became effective on May 19, 2010. Time Schedule Order (TSO) R5-2010-0909 provides for protection from mandatory minimum penalties for copper effluent violations through December 31, 2018. More recently, the State adopted WDRs Order R5-2015-0031 that imposed final effluent zinc limits which became effective on June 1, 2015. TSO R5-2015-0032 provides for protection from mandatory minimum penalties for zinc effluent violations through December 31, 2018.

These effluent discharge regulations exacerbate an already existing issue of wastewater rates that are among the highest in the State, with single-family residential rates typically averaging \$200 per month. Even with these rates, the Cascade Shores service area experiences annual deficits of almost \$90,000 annually on operations costs averaging only \$300,000 annually.

The District has evaluated options to address these issues and has determined that a community leach field system is most likely to achieve regulatory compliance while also resolving financial pressures experienced by the system. The District has forecasted that the community leach field system will reduce



operations and maintenance costs by 75% and utility usage by approximately 80%, achieving a total cost savings of over \$200,000 annually.

On January 13, 2015, Nevada County acquired 40.03 acres of property located 13491 Pacific Close (Assessor's Parcel Number 38-570-04). Also on January 13, 2015, the District entered into a lease agreement with Nevada County for the property for the purposes of investigating and constructing a leach field system.

The community leach field system project would consist of a new sewer lift station, new force main, leachate tanks, and leach field pipelines. The new sewer lift station would also be equipped with a motor control center and emergency generator for backup power supply. To aid in completion of the project, the District has obtained \$2.2M in funding from the State of California Clean Water State Revolving Fund Program.

APPROACH AND SCHEDULE

The schedule associated with each task is based on a Notice to Proceed being issued on October 2, 2017. Even though the District may be able to obtain extensions from RWQCB on the TSO for zinc and copper, the schedule is very aggressive recognizing that the District is under the gun in meeting deadlines in the TSO and will continue to run a deficit in the Cascade Shores (Zone 8) account until the project is completed and leach field in use.

Succinct explanation on our approach for each subtask outlined in the Scope of Work is below. We provide these services to our municipal and district clients, either as the design engineer or District/City Engineer. Further detail on how we provide these services can be provided upon request.

In order to minimize costs, all draft and final Technical Memos (TM's), Preliminary Design Report, and the 30%, 80%, and Screen-check final PS&E submittals will be provided in Adobe PDF format only. One wet-signed and stamped paper set of bid ready plans and specifications will be provided. The bid-ready plans and specifications will also be provided in Adobe PDF format for use by the County's Purchasing Department.

The initial analysis of the force main alignment and the community leach field location is predicated on the assumption that there are at least two options for each to evaluate, consistent with the Initial Study prepared for the project.

Task 1 – Project Management and Meetings

Coastland will provide overall management of the project and its subconsultants to ensure that the project is delivered on schedule. We will serve as the point of contact with District staff, interfacing throughout the planning, design, bidding, and construction phases of the project. We will participate in a minimum of eight (8) meetings with District staff (kickoff, site tours, and review meeting for each of the deliverables listed in the various tasks) during the design phase. During the construction phase, we envision constant communications with District staff on overall status and major project issues (such as unforeseen conditions and contract change orders), so that the District stays updated throughout construction.

All tasks identified below will be on-going for the duration of the project:

- a) Meetings
- b) Review Background Information
- c) Budget/Invoices
- d) Schedule Tracking
- e) Interface with District

At the kickoff meeting, we will provide an initial list of documents that are needed for subsequent tasks in this project. We will review these documents to ensure that the design addresses the needs of the project.

For every meeting, we will prepare an agenda for District review prior to the meeting and minutes capturing the important items discussed and action items to be completed by each member of the project team.

As part of our overall management, Coastland will also provide monthly invoices, with a summary of work performed during the billing period in support of invoices provided to the District. Our invoices will include



monthly schedule updates to document efforts recently completed and to be performed for the remainder of the project. These invoices and schedules will have sufficient data for inclusion and in support of reimbursement requests to the State Water Resources Control Board.

Task 2 – Geotechnical Investigation (Proposed Leach field Parcel)

H&K will perform geotechnical investigations to determine the size of required leach field and to identify issues related to underground construction. H&K will develop leach field design criteria, including recommended loading rate and typical trench cross section and identify locations of potential slope instability in the immediate vicinity of the proposed leach field area and force main locations. Specific field efforts to be performed by H&K include:

Task 2 will be conducted between October and December 2017:

- a) Conduct Slope Stability and Percolation Tests (Oct. 2017)
- b) Prepare Draft Findings Report (Oct. & Nov. 2017)
- c) District review of Draft Findings Report (Dec. 2017)
- d) Review Meeting with District and Prepare Draft Findings Report (Dec. 2017)

- Identify prescriptive setbacks related to features such as property lines and slopes.
- Identify geologic setbacks related to areas of potential slope instability.
- Determine test locations within the proposed leach field area and provide access to the test sites using a small excavator to remove undergrowth along the access routes.
- Perform a preliminary soil mantle study using a small excavator to record and evaluate shallow soil conditions (i.e., up to eight feet below the ground surface) at potential leach line locations, up to 32 locations.
- Perform preliminary percolation testing to evaluate potential loading rates, up to 32 locations.
- Select preliminary areas for the leach field and repair area based on the findings of our preliminary evaluation.
- Perform a preliminary mounding analysis, including:
 - Advance two shallow borings and installing two shallow piezometers.
 - Estimate the saturated capacity of shallow subsurface soil using a shallow leach trench which will be saturated for a period of 24 to 36 hours.
 - Perform a preliminary analysis to evaluate the potential for subsurface mounding of leachate on shallow restrictive soil layers.
- Perform supplemental soil mantles and percolation testing if deemed necessary to complete the soil evaluation.
- Perform two days of field investigation with the Nevada County Environmental Health Department (NCEHD) for official documentation and logging of the soil mantles.
- Review available aerial photographs and Lidar data, geologic maps, and the findings of our previous geotechnical investigations and stability analyses regarding local slope failures.
- Perform surface reconnaissance to observe local topography and surficial evidence of past instability and soil creep within the proposed leach field area and force main alignment.
- Perform a preliminary slope stability study:
 - Advance 2 to 3 borings to depths of 50 feet for soil classification, strength testing, and groundwater elevations.
 - Perform a preliminary evaluation of slope stability at the study location to estimate factors of safety.
 - Provide preliminary recommendations for setback from potentially unstable slopes and preliminary recommendations regarding slope stability along the proposed force main alignment.

If necessary to evaluate proposed improvements within potentially unstable areas, H&K's scope may include additional subsurface investigation (i.e., a drilling program), laboratory testing and stability analysis to refine our preliminary recommendations for setback and factors of safety for slope instability.

The end product of this task is the Findings Report. The objectives of this report are **to confirm the suitability of the site for use as a leach field and identify the constraints associated with the site that need to be addressed during the design of the community leach field system.** Coastland will prepare a draft report for District staff review and meet with District staff to discuss questions and comments



on the report. A final version of the report will be provided, reflective of responses to questions and comments from the review meeting. Please note that the schedule above is dependent upon weather conditions that will allow for all necessary work to be performed.

Assuming the results of Task 2 indicate that the proposed site is suitable for a leach field, then below is the outline and schedule for the remaining project tasks.

Task 3 – Project Surveys

In starting this task, we propose that all project team members (District, Coastland design and construction team, Holdredge & Kull, NEXGEN, Foothill, Dundas Geomatics) conduct a field meeting to discuss and coordinate completion of the integral surveys needed as a precursor for the preliminary design report. This field meeting will be scheduled in January 2018. More detail on the specifics for each of these surveys is below.

The Foothill Associates project manager will attend one field meeting with District staff to discuss onsite issues and coordinate any site investigations required. Upon completion of the field meeting, Foothill Associates' biologists will review available materials regarding existing site conditions, biological resources, and wetlands (e.g. USGS topographic maps, NRCS soils maps, and California Natural Diversity Database) for the project site. Foothill Associates shall then conduct a field survey to identify dominant plant communities on the site, identify sensitive vegetation communities, and evaluate the potential for the site to support special-status plant and wildlife species. Additionally, Foothill Associates will perform a wetland assessment of any potentially jurisdictional wetland features on the site. In addition, Foothill Associates will map the edge of potential California Department of Fish and Wildlife (CDFW) jurisdiction, if it differs from the edge of jurisdictional waters.

Task 3 will be performed between January and March 2018 and includes the tasks outlined below:

- a) Field Meeting w/District Staff (Jan. 2018)
- b) Arborist Survey (Jan. 2018)
- c) Environmentally Sensitive Areas (ESA) Identification (Jan. 2018)
- d) Site Survey (Jan. 2018)
- e) Geotechnical Investigation (Pipeline Alignment & Pump Station) (Jan. 2018)
- f) Draft Project Surveys Tech Memo (Jan. & Feb. 2018)
- g) District Review of Draft Project Surveys Tech Memo (March 2018)
- h) Review Meeting with District and Final Project Surveys Tech Memo (March 2018)

A Foothill Associates arborist will also conduct a field survey to identify and assess the health and structure of all trees within the Study Area that meet the Nevada County definition of a landmark tree.

Upon completion of the field survey, a biological resources assessment technical report will be prepared that identifies biological resources and potential biological constraints on the site, such as wetlands, assesses of the likelihood of special-status species or habitats to be found on the project site, and provides recommendations for any further studies or permitting that may be required prior to development of the leachfield. The report will also identify any environmentally sensitive areas (ESAs) for avoidance as feasible during leachfield design such as wetlands, potential special-status species habitat, or heritage trees. A draft biological resource assessment technical report and heritage tree report will be submitted electronically to the County for review in PDF format. Upon completion of the review by the County, two (2) hard copies and an electronic (PDF) copy of the final biological resources assessment technical report and heritage tree report will be submitted to the County.



To identify potential issues related to underground utilities, H&K will advance exploratory trenches to depths of up to eight feet below the ground surface along the proposed force main alignment at the back of private property lines on Pasquale Road.

Dundas will determine the position of the boundaries of APN: 38-570-04 in order to establish the requisite "septic" setbacks. Based on Ron Dundas's experience in the Cascade Shores Subdivisions, it is highly probable that some "material discrepancy" will be found with the record work. Older surveys tend to be marginal in quality and precision which may necessitate that a Record of Survey be filed for this parcel.



Dundas will continue the surveys by performing route topographic surveys of the force main alignments. The County site map delineates Alignment #1 as roughly 3,000 LF and Alignment #2 at about 1,300 LF. Dundas will survey both of these routes for design purposes. The Leach Field Topographic Surveys will include Route #2, along the backlot lines of the subdivision, and either Alternative Area #1 or Alternative Area #2.

H&K will provide geotechnical analysis of the two proposed force main alignments, identifying constraints and providing recommendations associated with construction.

For the conversion to land disposal, a big part of that decision will be related to how solids are removed prior to the leach fields. For instance, the District already has mechanical screens and pumping / storage at its existing MBBR WWTP that could be used, but they are located well below the leach field and would still require a settling tank and re-pumping. The homes also each have failed septic tanks that, in theory, could be re-purposed into STEP systems. It is likely that the least expensive option involves constructing a small duplex submersible pump station, community settling tank(s), and a pressure dosing station (required by County Standards) adjacent to the leach fields. We will evaluate and document each option in the Predesign Report. As a perspective, the “community septic tank” option likely includes leachate tanks constructed of fiberglass or precast concrete units. Typical design criteria for these the tanks would be to have the volume near the average flow conditions. The specific number and size of tanks will be determined based on site constraints; however one 11,000 gal septic tank followed by a 11,000 gal septic / dosing tank is about the size required. Most of the solids would be retained in the first tank. Having essentially three tank compartments and an effluent filter will minimize solids/ clogging in the leach field. The pumped effluent would be directed into an automatic switching valve(s), which will alternate flows to one of up to four leach fields. NEXGEN will provide preliminary design of the pump station and evaluate the options for processing solids.

Upon completion of the field surveys, Coastland will prepare a draft technical memorandum summarizing the results and findings of the field surveys and analyses by our subconsultants for District staff review and meet with District staff to discuss questions and comments on the technical memorandum. Results of utility coordination will be reflected in the draft technical memorandum. It is expected that there will be minimal, if no, underground utilities.

A final version of the technical memorandum will be provided, reflective of responses to questions and comments from the review meeting. The final version of this technical memorandum will be included in the Preliminary Design Report/Alternatives Analysis covered in Task 5 and pertinent findings will be incorporated into the preliminary design.

A preliminary engineer’s estimate of probable construction costs for both force main alignments and both community leach field locations will be part of the technical memorandum. The findings from the field investigations and the preliminary engineer’s estimate of probable construction costs will be utilized as justification for a recommended solids-handling process, force main alignment, and community leach field location that will be presented in the Preliminary Design Report.

Task 4 – As-Needed Permitting Support

As specified in the Initial Study/Mitigated Negative Declaration (IS/MND) for the project, the project Study Area contains potential habitat for the California red-legged frog (CRLF). As specified in Mitigation Measure 4A of the IS/MND, if leachfield alternative 2 is selected, a Foothill Associates biologist will conduct a habitat assessment on the site for CRLF according to U.S. Fish and Wildlife Service (USFWS) protocol. Upon completion of the habitat assessment, a draft habitat assessment report will be prepared and submitted to the County for review and comment. Upon receipt of comments from the County, a final habitat assessment report will be submitted to the USFWS for review. This scope also includes up to 10 hours for a Foothill Associates biologist to

Task 4 is necessary only if the findings from the Project Surveys Tech Memo indicate that leach field alternative location 2 is selected. This consultation will run concurrently with the design phase of the project and any permit requirements will be incorporated into the project bid documents.

- a) USFWS Consultation (Jan. 2018 through completion of Task 8)



consult with the USFWS including conducting a site visit as necessary during the CRLF habitat assessment phase.

If the USFWS determines that a focused survey for CRLF is necessary based on the results of the habitat assessment, a protocol survey for CRLF will be conducted on the site. Eight (8) separate site visits during the breeding and non-breeding season are budgeted in this optional task as specified by the USFWS survey protocol for CRLF. Upon completion of the protocol surveys, a draft summary report summarizing the results of the survey will be provided in PDF format for review by the County. Upon incorporation of County’s comments, two (2) hardcopies of the final summary survey report for CRLF will be provided (one copy for the County and one for USFWS).

If CRLF surveys determine that CRLF are present within the Study Area and that they may be affected by project construction or operation, incidental take coverage will be required prior to project construction. Incidental take coverage is assumed to be obtained through Section 7 consultation under the federal Endangered Species Act. Time is included for the preparation of a Section 7 Biological Assessment (BA) to support formal consultation with USFWS as part of this optional task. A draft BA will be prepared and submitted to the County for review and comment. Upon receipt of comments, two (2) hardcopies (one for the County and one for the USFWS) will be prepared and submitted. Project management time is also included for the biologist to facilitate the consultation process with USFWS up to the budgeted amount. Additional consultation time would be billed on a time and materials basis.

Task 5 – Preliminary Design Report/Alternatives Analysis

Reflective of the findings from the field surveys in Task 3, Coastland will prepare a draft preliminary design report that evaluates options for force main alignment, location of leachate tank and pump station, most appropriate process for handling solids ahead of the leach field system, and area for leach field. The draft preliminary design report will provide 10% plans for force main alignment, leachate tank, pump station, and solids handling. The draft preliminary design report will also include a preliminary cost estimate for the overall project, including all soft costs for engineering design, engineering services during construction, and construction management and observation, along with a preliminary estimate of probable construction costs, and construction contingency. The overall objective is to compare the estimated costs to available budget and determine where changes need to be made to stay within funding allocations.

Task 5 will be performed between April through June 2018 and includes the tasks outlined below:
 a) Draft PDR (April & May 2018)
 b) Review Meeting with District (June 2018)
 c) Final PDR (June 2018)

The Coastland team will meet with District staff to discuss questions and comments on the draft preliminary design report. A final version of the preliminary design report will be provided, reflective of responses to questions and comments from the review meeting. This final report will serve as the basis for the design efforts in Tasks 6 through 8.

Design submittals – Tasks 6 through 8

We envision that the design plans will consist of the following.

General Drawings		
1	G001	Title Sheet, Vicinity and Location Maps
2	G002	Process Flow Diagram/ Hydraulic Profile
3	G003	Overall Project Plan and Survey Control and Staging Area
Civil Drawings		
4	C001	Typical Civil details – 1
5	C002	Typical Civil details – 2
6	C003	Typical Civil Details – 3
7	C004	Demolition Plan
8	C005	Sewer Lift Station Site Plan
9	C006	Pipeline to Leachfield Plan and Profile 1
10	C007	Pipeline to Leachfield Plan and Profile 2
11	C008	Pipeline to Leachfield Plan and Profile 3
12	C009	Pipeline to Leachfield Plan and Profile 4
13	C010	Pipeline to Leachfield Plan and Profile 5



14	C011	Pipeline to Leachfield Plan and Profile 6
15	C012	Pipeline to Leachfield Plan and Profile 7
16	C013	Pipeline to Leachfield Details
17	C014	Leachfield Design Drawings
18	C015	Leachfield Design Drawings
19	C016	Leachfield Design Drawings
20	C017	Leachfield Design Drawings
Mechanical Drawings		
21	M001	Typical Mechanical Details
22	M002	Sewer Lift Station Plan
23	M003	Sewer Lift Station Sections
Electrical Drawings		
24	E001	Electrical Symbols and Abbreviations
25	E002	Typical Electrical Details
26	E003	Typical Electrical Details
27	E004	Electrical Site Plan
28	E005	Electrical Single Line Diagram- Pump Station
29	E006	Electrical Single Line Diagram- Leachfield
30	E007	Process and Instrumentation Symbols and Abbreviations
31	E008	P&ID Diagram
32	E009	Instrumentation Details

The design specifications will be in CSI Division 0 through 16 format, and will include County standard boilerplate front end specifications. Updated project inclusive costs estimates will be provided with each submittal. More detail on each of the design tasks is below.

Task 6 – 50% PS&E Submittal

We will provide a 50% design level submittal. At this stage, electrical drawings will not be included. The primary differences between the plan set with the 50% PS&E submittal and the PDR submittal will be incorporation of profile information on the force main alignment and community leach field lines and more detail on the mechanical components for the sewer lift station. An initial set of specifications will be provided.

Task 6 will be performed between July and August 2018 and includes the tasks outlined below:

- a) 50% PS&E Submittal (July & Aug. 2018)
- b) Review Meeting with District (Aug. 2018)

The 50% PS&E submittal will also include an updated cost estimate for the overall project, including all soft costs for engineering design, engineering services during construction, and construction management and observation, along with a preliminary estimate of probable construction costs, and construction contingency. The overall objective is to compare the estimated costs to available budget and determine if any additional changes are needed to be made to stay within funding allocations.

The Coastland team (Coastland, NEXGEN, and H&K) will meet with District staff to discuss questions and comments on the 50% PS&E Submittal. A comment summary matrix will be provided, to identify the comments from District staff and changes to the PS&E that will be reflected in the 80% PS&E submittal.

Task 7 – Final PS&E Submittal

We will provide a screen check final PS&E submittal, allowing the District to back-check that all changes were incorporated to their satisfaction. Upon notification of acceptance (or completion of any minor changes), Coastland will finalize and issue a bid set for use by County Purchasing in advertisement of bids.

Task 7 will be performed between January and February 2019 and includes the tasks outlined below:

- a) Screen-Check Final PS&E Submittal (Feb. & March 2019)
- b) Review Meeting with District (March 2019)
- c) Stamped Bid Set (April 2019)

The final PS&E submittal will also include a final cost estimate for the overall project, including all soft costs for engineering design, engineering services during construction, and construction management and observation, along with a preliminary estimate of probable construction costs, and construction contingency.



Task 8 – Bid Phase and Contract Award Support

To this point in the project, as evidenced by the project schedule, we have strived to complete the design as expeditiously as possible. Assuming that a Notice to Proceed is issued by June 3, 2019, it is our opinion that the construction can commence in the summer and sufficient work will be completed during the summer and fall months to allow for work to continue into the winter.

Task 8 will be performed between March and May 2019 and includes the tasks outlined below:
a) Bid Phase (March & April 2019)
b) Contract Award Support (May 2019)

Depending on the success of obtaining an extension to the TSO, Coastland and the District may want to consider taking a little more time in the design phase, allowing bidding in the fall of 2019. This may provide more competitive construction bids, compared to starting work in June 2019. In this option, the Notice to Proceed would be issued in November or December. The benefit to this approach is such that the contractor can work through the submittal process through the winter months, allowing the contractor to have approved submittals and materials procured by the time conditions allow construction to begin in the Spring of 2020.

Specific tasks to be performed include the following:

- Answer questions from bidders, either directly or via the design engineer, where appropriate.
- Attend the pre-bid and bid opening meetings.

Task 9 – Construction Phase Services

Coastland will provide construction management and inspection services for the improvements. We are assuming that pre-construction activities (mobilization, submittals, etc.) will last approximately eight weeks, followed by another six months for construction efforts for clearing and grubbing, pump station, force main, leach field, leachate tanks, and demonstration testing/closeout.

The Construction schedule is assumed to be 9 months, regardless of date of Notice to Proceed.
a) Construction Management
b) Construction Observation
c) CEQA Compliance Monitoring (CA Red-Legged Frog, Western Pond Turtle, migratory birds and raptors, on-site landmark trees, and ESA staking)
d) Engineering Services During Construction

Coastland will provide the following pre-construction activities:

- Conduct pre-construction conference and distribute meeting notes.
- Perform photographic documentation of pre-construction conditions

Coastland will provide construction management and administration services for the Project as follows:

- Conduct weekly progress meetings and distribute meeting notes.
- Conduct special meetings and distribute meeting notes, as needed.
- Coordinate and track submittal and RFI review.
- Review submittal and RFI responses from design engineer.
- Review contractor's schedule of values, baseline schedule and monthly updates.
- Review and assist the County in processing progress payments.
- Review and answer RFIs requiring construction management response.
- Issue and evaluate change orders and provide recommendations to the District.
- Contract administrative and clerical support.
- Document control.
- Startup, testing and commissioning support.
- Process Substantial Completion paperwork.



Coastland will provide special inspection and observation services. The intent is to provide full-time observation while the contractor is on-site for most of the project and part-time observation when applicable. Duties will include the following:

- Verify that construction work is in compliance with the construction contract documents.
- Special inspection of applicable trades including reinforced concrete, structural masonry, anchors, building, grading, excavation, backfill, and electrical.
- Observation of contractor's progress, means and methods.
- Daily reports.
- Weekly statement of working days.
- Photographic documentation.
- Coordination with project team members.
- Assist coordinating with the public.
- Maintain field set of red-line drawings.
- Track contract item quantities and change order work.
- Prepare punchlist and verify completion of punchlist items.
- Attend final walkthrough of project.

Coastland will provide the daily reports and photographs to the District on a weekly basis either by flash drive or DropBox.

Coastland's subconsultant, Holdrege & Kull, will provide material inspection services as follows:

- Pump station – Compaction and concrete testing
- Pipeline – Compaction testing

Coastland's subconsultant, Bay Area Coatings Consultants, will provide coatings inspection for the pump station wet well and other pertinent structures.

Stormwater Pollution Prevention: Coastland will verify that the contractor is complying with the approved SWPPP and BMPs. Coastland will not provide a Qualified SWPPP Practitioner (QSP) to inspect the project area. The Contractor is responsible to provide a QSP to inspect the work. The District is required by state law to upload SWPPP information to SMARTS.

Contractor's Safety: Coastland is not responsible for the contractor's compliance with the contractor's safety program or OSHA requirements. Coastland will notify the contractor and the District of safety issues that are an imminent risk to life or health.

Coastland's subconsultant, Foothill, will perform the following:

Provide CEQA compliance monitoring as specified in the IS/MND. Tasks to be performed include preparation of environmental training materials and one (1) presentation of an Environmental Training and Monitoring Program, pre-construction surveys for CRLF and western pond turtle (as necessary), a pre-construction survey for nesting birds (if construction begins during the nesting season-March 1 through July 31), as well as marking environmentally sensitive areas (ESAs) in the field for avoidance during construction such as wetlands or landmark trees.

Environmental Training and Monitoring Program

Prepare training materials and provide one (1) in-person training session for sensitive species and habitats to be avoided during construction and any applicable environmental mitigation measures to be implemented. It is assumed that the training materials will be provided in electronic format to the construction manager for any subsequent trainings required for new personnel. Foothill Associates can be available to conduct subsequent trainings as requested on a time and materials basis.



Pre-construction Survey for California Red-legged Frog and Western Pond Turtle

A Foothill Associates biologist will conduct a pre-construction survey for CRLF and western pond turtle, as needed, immediately before the start of construction. In the event that CRLF or western pond turtle are found during construction, avoidance and minimization measures will be implemented as appropriate. Any avoidance and minimization measures to be implemented by Foothill Associates biologists will be billed on a time and materials basis as needed.

Nesting Bird and Raptor Survey

If construction begins during the nesting bird season (March 1 through July 31), Foothill Associates will conduct a nesting bird survey within the project footprint and a 500-foot buffer (where accessible) no more than 14 days prior to the start of construction. In the event that active nests are found, nest buffers will be established as specified by the monitoring biologist. Due to uncertainties associated with the duration of nest monitoring, any required monitoring of nests to determine activity status during construction will be billed on a time and materials basis.

ESA Marking

A Foothill Associates biologist will mark with flagging or other visual marker any environmentally sensitive areas (ESAs) to be avoided during construction based on the results of previous site assessments. Potential ESAs to be marked in the field may include landmark trees, avoided wetlands or other aquatic resources, active nests, or CRLF habitat. It is the responsibility of the construction contractor to place orange safety fencing or other fencing markers based on flagging placed by Foothill Associates biologists. Foothill Associates biologists will conduct one (1) site visit to confirm correct placement of orange exclusion fencing by the construction contractor in the field.

Coastland will provide the following post construction services:

- Process final paperwork including lien releases and warranties.
- Process final payment application.
- Assist the District with processing the release of retention.
- Provide a warranty list to District for installed equipment.
- Provide project file archive to District.

Coastland will provide the following engineering during construction activities, as the design engineer for the project:

- Provide RFI, submittal, Contract Change Order, progress pay estimate review and response to the Construction Manager.
- Participate in construction progress meetings via conference call.
- Conduct site visits (assumed to be once every two weeks).
- Provide general coordination with SRF staff.
- Prepare record drawings.



Task 10 – SWRCB SRF Coordination

In our experience, early coordination with SWRCB staff is vital to provide a thorough and complete set of plans and specifications. We envision discussing the requirements of the agreement with SWRCB staff and the overall project schedule to ensure that all necessary components on the agreement are incorporated into the bid documents. This meeting will also serve to initiate the lines of communication between the District, SWRCB, and Coastland.

We will assist the District in preparation of a TSO extension request. The draft PDR is presented as part of the TSO extension request, to demonstrate the project is moving forward and outline a schedule. During the bid period, Coastland will prepare all pertinent documents for the Final Budget Approval form and complete the form within one day of execution of construction contract.

For the duration of the project, Coastland will prepare quarterly status reports in accordance with the District’s funding agreement. Our level of effort assumes a total of 12 quarterly reports. The Facilities Completion Report will be prepared in with the District’s funding agreement.

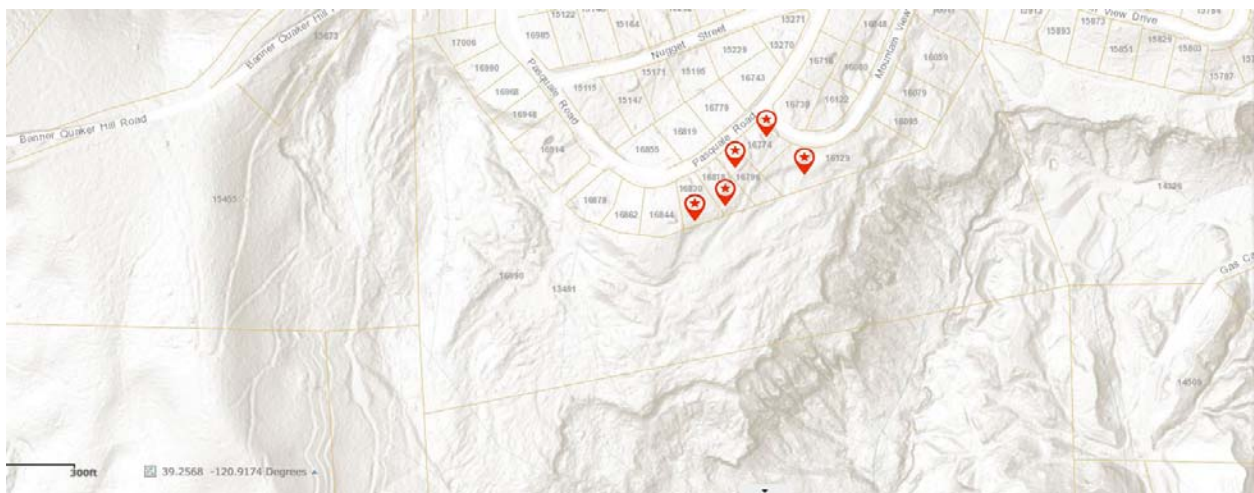
Lastly, Coastland will provide as-needed coordination with SWRCB.

- Task 10 will follow the schedule shown below:
- a) Funding Conditions Kickoff Meeting (April 2018 at the beginning of Task 5)
 - b) TSO Extension Request (July 2018)
 - c) FBA Form (Upon opening of bids)
 - d) Quarterly Status Reports (on-going)
 - e) Facilities Construction Completion Report (6 months after acceptance of improvements)
 - f) As needed Coordination

ISSUES & SOLUTIONS

We recognize that this project is integral to resolving long-term structural deficits and compliance issues in the Cascade Shores service area. In our evaluation of the project, we have identified a number of challenges that must be methodically evaluated to overcome. A few of these challenges are described below.

The suitability of the proposed leach field for long-term disposal is unknown. The proposed designer of the community leach field, Holdridge & Kull, has evaluated a number of parcels in the vicinity of the proposed leach field site on behalf of the District. The figure below highlights parcels investigated. This background knowledge is vital in assessing the slope stability and percolation rates for the proposed leach field site to ensure that the location recommended is reliable for many years.



Coastland values timely communications with our clients to ensure that they remain updated on status and issues. Coastland is currently providing project administration services to the District on the Penn Valley Dual Sewer Force Main Project. The project is approaching the end of construction. We have demonstrated throughout the project that we provide adequate, thorough, and timely communications with District and outside agency staff (such as SWRCB and Caltrans) and timely, complete submittals, along with well-thought out analysis of project issues.

Solids handling will be a key component of the overall project design. We will analyze several options in the PDR and identify the most appropriate for the project. Our analysis will include, but not be limited to the following:

1. New, individual septic tanks for each customer
2. One large solids handling tank as part of the lift station
3. One large solids handling tank as part of the leach field
4. Continued use of the solids handling and primary treatment process at the Cascade Shores WWTP and pumping partially treated effluent up to the new lift station

This analysis will consider both capital factors and operations and maintenance needs. Inadequate removal of solids will cause premature failure of the community leach field system.

In our experience, incomplete or poorly thought-out bid documents can be exploited by the contractor to their benefit. Coastland design guidelines require that all of our engineering documents (either technical studies or PS&E) are reviewed by a principal level engineer with the firm and also include a constructability review by our construction management team to close any loopholes that a contractor may try to abuse. This approach will be utilized by Coastland for this project to provide a high-quality work product.



PROJECT SCHEDULE

The initial study for the project proposed two possible force main alignments. The following two tables provide the anticipated project schedule, including estimated number of hours expected to be required to complete each phase of the project. Table 3 presents hours for force main alternative route 1 and Table 4 presents hours for force main alternative 2.

Table 3—Force Main Alternative Route 1

REVISED ESTIMATE OF HOURS																County of Nevada
Cascade Shores Community Leach Field Project		Design Services													County of Nevada	
Task Information		Billing Classification & Rate										Subconsultants			Hours	
TASK	Principal-in-Charge	Project Manager	Supervising Engineer	Senior Engineer	Assistant Engineer	Junior Engineer	Sr. Engineering Tech	Admin	Construction Manager	Construction Inspector	Dundas Geomatics	H&K	NE/GEN	Foothill Associates	BACC	TOTAL HOURS
1 Project Management and Meetings																
Meetings (5)		6		24	40								40	31		143
Review Background Information				4	12		4									20
Budget/Invoices		4		16				4								24
Schedule Tracking		4		12												16
Interface with District		4		12												16
Subtotal																219
2 Geotechnical Investigation (Proposed Leach Field Parcel)																
Sope Stability and Percolation Tests				2	6							340				350
Findings Report		1		2	6							32				43
Subtotal																393
3 Site Surveys																
Field Meeting w/ District Staff				4	6	6					6	6	6	5		45
Airbonst Survey				1	2	2	2							26		33
Environmentally Sensitive Areas (ESA) Identification				1	2	2	4							40		49
Site Survey				1	2	2	6				194					207
Geotechnical Investigation (Pipeline Alignment & Pump Station)				1	2	2	2									37
Draft Tech Memo		1		4	6	16	6					30		12		49
Final Tech Memo		1		1	2	4	2									10
Subtotal																430
4 As-Needed Permitting Support																
USFWS Consultation		2		6	40									249		299
Subtotal																299
5 Preliminary Design Report/Alternatives Analysis																
Draft PDR		1		2	6	24	40					45	60			203
Final PDR		1		2	2	4	4						22			35
Cost Estimate		1		2	6	16	4									29
QA/QC Review	1		4													5
Subtotal																272
6 50% Plans, Specifications & Estimate (P&S&E) Submittal																
Improvement Plans		4		12	32	70	45					50	170			366
Specifications (outline)		2		6	16	16							4			46
Cost Estimate		2		2	6	14	2						12			40
QA/QC Review	1		4						24							29
Subtotal																501
7 Final Submittal																
Improvement Plans		2		4	12	12	30					30	130			220
Specifications		1		2	10	10							6			31
Cost Estimate		1		1	4	4	4						18			32
QA/QC Review	1		2						24							27
Subtotal																310
8 Bid Phase & Contract Award Support																
Respond to RFI's (5)				2	12		6						12			32
Prepare addenda, if needed (2)				4	12		8									24
Subtotal																56
9 Construction Phase Services																
Construction Management		2		16	24				360							402
Construction Observation		2		16	24				80	840						1162
CEQA Compliance Monitoring		2		16	24				80		120				60	169
Engineering Services During Construction		2		16	100	100	16	12				100				346
Subtotal																2079
10 SWRCB SRF Coordination																
Funding Conditions Kickoff Meeting		2		8	6											16
Quarterly Status Reports		2		6	60											68
Facilities Construction Completion Report		1		2	40		8									51
As-Needed Coordination		2		4	40											46
QA/QC Review				8												8
Subtotal																191
Revised Estimate of Hours	3	55	18	218	576	306	200	16	668	840	200	658	602	410	80	4750



APPLICABLE REFERENCES

Coastland serves public agencies exclusively, specializing in contract engineering services for cities and special districts. Because many of our clients have limited resources, we always take active roles in all of our services. Our staff literally becomes an extension of our clients' staff, and an integral part of their project team. This is just one way we help our clients achieve what could not be done otherwise, especially when resources may be limited.

As contract engineers for several cities, counties, water districts and community services districts, Coastland has been responsible for all engineering matters relating to their water and wastewater systems. This has included design of water and sewer mains, evaluating the capacity of the system to accommodate additional or new uses, evaluating and/or recommending connection charges associated with new developments, and review of plans for new developments. Through collaboration with our clients and focusing on the needs of the local community, we are able to provide creative and reliable solutions.

Below are summaries of projects that are directly applicable to the County's Cascade Shores Leach Field project. A number of these projects are currently on-going with new or long-term clients. Due to page limitations information pertaining to our subconsultants is provided in *Appendix B*.

COASTLAND

Nevada County Sanitation District #1

The Nevada County Sanitation District (District) is currently under a Cease & Desist Order (CDO) with the Regional Water Quality Control Board for the Penn Valley Wastewater Treatment Plant for lack of reclamation capacity and storage. The long-term solution for this CDO is sending grey water from the Penn Valley service area to the Lake Wildwood Wastewater Treatment Plant, which is also operated by District, via a pump station and dual 6" force mains. The District does not have any engineering staff and solicited proposals from engineering firms to provide project administration services for this project. Coastland was selected and is currently providing on-going project administration services to the District for this project.

The project is funded almost completely by grants, with \$6.0M from the State Water Resources Control Board via Residual Bond Funds in the State Revolving Fund (SRF) program and \$1.3M from the State Department of Housing and Community Development (Community Development Block Grant). The funding was obtained many years before the engineering phase was initiated, and during the design phase Coastland identified that overall project costs (for the preliminary engineering, design engineering, construction, contingency, construction management and observation [CM&O], and project administration) would exceed the available funding. By having an understanding of how the system needed to operate, as part of the plan review process Coastland would conduct value engineering analysis as an integral part of the review of each engineering document, in order to identify components that were not absolutely necessary for the project and others that could be bid as additive alternates, providing these value engineering recommendations to the District. The bid documents reflected a number of Coastland's recommendations to the District, including the use of seven additive alternates, to ensure that the project could be constructed with available funding limits.

In addition to the typical project administration tasks that were identified in the Approach section, Coastland also provided the following support specific to this project:

- Prepare bid package using the District's standard construction documents.
- Provide support to the District's procurement division in awarding and executing the construction contract.

Dates of Service: 2014-present

Construction Cost: \$6 million

Team:

Dane Schilling, Principal-in-Charge
Marc Fernandez, Staff Team

Client Contact:

Brad Torres, Wastewater Operations
Manager
Nevada County Sanitation District #1
950 Maidu Avenue
Nevada City, CA 95959
Tel: 530.265.7103
brad.torres@co.nevada.ca.us



- Complete Final Budget Approval form and all supporting documentation.
- Assisting in creating a SMARTs account for the District and “accepting” all documents required by the storm water permit.

While our subconsultant is currently performing the CM&O for this project, Coastland is still providing oversight on the District’s behalf and remains actively involved in the project. Coastland continues to monitor progress of the entire team (contractor, CM&O, and engineer) to ensure that work is performed efficiently and timely, in accordance with contract documents. Coastland participates in weekly progress meetings, reviews all invoices from the contractor, CM&O, and design engineer, and participates in the facilitation and review of all submittals, requests for information, extra work items, and daily inspection reports. Coastland also prepares all quarterly status reports required by the SRF funding agreement.

City of Galt

Since 2011 Coastland has provided contract engineering services to the Utility Department of the City of Galt. Specific projects include:

▪ **Industrial Water Treatment Plant Deep Well Phases 1 & 2**

The City’s water supply exceeds the drinking water arsenic standards. In order to maintain compliance, the City’s groundwater treatment plants filter and remove arsenic from its water supply. Backwash water contains the arsenic removed and is discharged to the sanitary sewer system. This has caused violations of the effluent arsenic limits at the City’s Wastewater Treatment Plant. In order to resolve these effluent violations, the City is constructing a new well in a deeper aquifer that has lower concentrations of arsenic. The first phase consists of a test well, followed by a new municipal well. The contract for construction of the municipal well was recently awarded. The second phase consists of improvements to Industrial Water Treatment Plant and equipping the well, and is currently under design. This project was completed funded by the City’s water user rates, without relying on any outside funding, and has a very strict budget of \$4M for completion.

In addition to the typical project administration tasks that were identified in the Approach section, Coastland also provided the following support specific to this project:

- Negotiated short-term access with adjacent land owners for construction of the improvements and irrigation of lands with well development water.
- Interfaced with the Division of Drinking Water for permitting of the improvements.

▪ **Live Oak Pump Station and Force Main** — This project consisted of a 5.6 million gallon per day (MGD) sewer pump station and 2.5 miles of 24” force main, constructed in private property and in County right-of-way. This project was funded by a combination of City’s wastewater user rates and connection fees, without relying on any outside funding. Coastland was brought on board when the design was almost complete. Coastland resolved a number of final design issues with the City operations staff and engineer, obtaining final bid documents, and administered the bidding and construction phases of the project.

Dates of Service: 2011-present

Construction Cost: See project descriptions for specific costs.

Team:

Dane Schilling, Principal-in-Charge
 Marc Fernandez, Staff Team
 Lorenzo Hernandez, Staff Team

Client Contact:

Mark Clarkson, Deputy Public Works Director
 City of Galt
 495 Industrial Drive
 Galt, CA 95632
 Tel: 209.366.7260
 mclarkson@ci.galt.ca.us



In addition to the typical project administration tasks that were identified in the Approach section, Coastland also provided the following support specific to this project:

- Negotiated and executed easements with adjacent land owners.
- Coordinated with City in shutdown for completion of tie-ins.



- **WWTP Upgrade** — Almost every component of the City’s existing wastewater treatment plant was touched during construction of the project. Improvements included new headworks structures, new and modified oxidation ditches, new and modified secondary clarifiers, new solids dewatering system, expansion of an administration building, and conversion of the original control building to a dedicated laboratory. This project was funded with a \$26.7M SRF low-interest loan.

In addition to the typical project administration tasks that were identified in the Approach section, Coastland also provided the following support specific to this project:

- Prepare bid documents for procurement of heavy equipment needed to efficiently operate and maintain the improvements constructed.
- Prepare all necessary SRF application documents
- Facilitate Council authorization to execute the SRF funding agreement
- Prepare supporting documents and quarterly status reports required by the SRF funding agreement.

Additional Projects for City of Galt

- Golden Heights Water Treatment Plant Phase 3
- Vintage Oak Pump Station
- Water Cost of Service Study
- Wastewater Cost of Service Study and Water, Wastewater, and Stormwater Connection Fee Update
- Report of Waste Discharge Application
- NPDES Permit Special Studies
- Safe Routes to School
- Walker Park Phase 2

City of Wheatland Water and Wastewater Cost of Service Study

Coastland staff (Dane Schilling, John Griffin and Lorenzo Hernandez) is currently working with City staff and Clear Source Financial to adopt new water and wastewater rate structures. The City has not updated their current water and wastewater rate structures in almost ten years. The wastewater fund revenues are now insufficient to keep up with the costs of operation and maintenance of the system.

As City Engineer, Coastland prepared new water and wastewater capital improvement programs. These programs identified a number of water and wastewater capital replacement projects over a ten year planning horizon. Coastland also prepared cost estimates for each project within the capital improvement program. Coastland is supporting the City in the technical analysis of the rate model. A new rate model is scheduled to be adopted by the City Council later this summer.

Dates of Service: 2016-present

Team:

Dane Schilling, Staff Team
Marc Fernandez, Staff Team

Client Contact:

Larry Panteloglow, Public Works Director
111 C Street
Wheatland, CA 95692
Tel: 530.633.8192
larry@wheatland.ca.gov



EXHIBIT "B"

SCHEDULE OF CHARGES AND PAYMENTS

(Paid by County)

Payment schedules shall set forth specific milestones which relate to the schedule of services to be provided, as set forth in **Exhibit "A"**, above.

Instruction 1: This Exhibit "B" may also set forth hourly rates and/or unit pricing charges.

Instruction 2: Unless otherwise set forth here in Exhibit "B", Section 2. of the contract, provides that payments shall be due thirty (30) after receipt by County in order to allow adequate time for the auditor to prepare a warrant.



REVISED WORK ESTIMATE

Cascade Shores Community Leach Field Project	Design Services										County of Nevada						
Task Information	Billing Classification & Rate										Subconsultants					Hours & Cost	
TASK	Principal-in-Charge \$195	Project Manager \$180	Supervising Engineer \$180	Senior Engineer \$150	Assistant Engineer \$130	Junior Engineer \$115	Sr. Engineering Tech \$130	Admin \$85	Construction Manager \$150	Construction Inspector \$130	Dundas Geomatics	H&K	NEXGEN	Foothill Associates	BACC	TOTAL HOURS	TOTAL FEE
1 Project Management and Meetings																	
Meetings (8)		8		24	40								\$7,797	\$4,678	72	\$22,715	
Review Background Information				4	12		4								20	\$2,680	
Budget/Invoices		4		16				4							24	\$3,460	
Schedule Tracking		4		12											16	\$2,520	
Interface with District		4		12											16	\$2,520	
Subtotal															148	\$33,895	
2 Geotechnical Investigation (Proposed Leach Field Parcel)																	
Slope Stability and Percolation Tests				2	8							\$62,658			10	\$63,998	
Findings Report		1		2	8							\$4,342			11	\$5,862	
Subtotal															21	\$69,860	
3 Site Surveys																	
Field Meeting w/District Staff				4	8	8					\$1,000	\$1,000	\$1,449	\$725	20	\$6,734	
Arborist Survey				1	2	2	2						\$2,470		7	\$3,370	
Environmentally Sensitive Areas (ESA) Identification				1	2	2	4						\$4,431		9	\$5,591	
Site Survey				1	2	2	8			\$49,370					13	\$51,050	
Geotechnical Investigation (Pipeline Alignment & Pump Station)				1	2	2	2				\$4,733				7	\$5,633	
Draft Tech Memo		1		4	8	16	8						\$1,748		37	\$6,448	
Final Tech Memo		1		1	2	4	2								10	\$1,310	
Subtotal															103	\$80,136	
4 As-Needed Permitting Support																	
USFWS Consultation		2		8	40								\$30,400		50	\$37,160	
Subtotal															50	\$37,160	
5 Preliminary Design Report/Alternatives Analysis																	
Draft PDR		1		2	8	24	40					\$6,182	\$13,524		75	\$29,186	
Final PDR		1		2	2	4	4						\$4,416		13	\$6,136	
Cost Estimate		1		2	6	16	4								29	\$3,620	
QA/QC Review	1		4												5	\$915	
Subtotal															122	\$39,857	
6 50% Plans, Specifications & Estimate (PS&E) Submittal																	
Improvement Plans		4		12	32	70	48					\$6,090	\$17,733		166	\$44,793	
Specifications (outline)		2		8	16	16							\$2,760		42	\$8,240	
Cost Estimate		2		2	8	14	2						\$1,242		28	\$4,812	
QA/QC Review	1		4						24						29	\$4,515	
Subtotal															265	\$62,360	
7 Final Submittal																	
Improvement Plans		2		4	12	12	30					\$4,872	\$24,901		60	\$37,573	
Specifications		1		2	10	10							\$1,411		23	\$4,341	
Cost Estimate		1		1	4	4	4						\$1,242		14	\$3,072	
QA/QC Review	1		2						24						27	\$4,155	
Subtotal															124	\$49,141	
8 Bid Phase & Contract Award Support																	
Respond to RFI's (5)				2	12		6						\$2,829		20	\$5,469	
Prepare addenda, if needed (2)				4	12		8								24	\$3,200	
Subtotal															44	\$8,669	



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		\$195	\$180	\$180	\$150	\$130	\$115	\$130	\$85	\$150	\$130							
9 Construction Phase Services																		
	Construction Management		2		16	24			360							402	\$59,880	
	Construction Observation		2		16	24			80	840		\$17,846		\$10,580	962	\$155,506		
	CEQA Compliance Monitoring		2		16	24			80				\$5,097		122	\$22,977		
	Engineering Services During Construction		2		16	100	100	16	12			\$22,011			246	\$52,371		
	Subtotal														1732	\$290,734		
10 SWRCB SRF Coordination																		
	Funding Conditions Kickoff Meeting		2		8	8									18	\$2,600		
	Quarterly Status Reports		2		6	60									68	\$9,060		
	Facilities Construction Completion Report		1		2	40	8								51	\$6,720		
	As-Needed Coordination		2		4	40									46	\$6,160		
	QA/QC Review			8											8	\$1,440		
	Subtotal														191	\$25,980		
	Direct Costs (repro, mileage, etc.)																\$14,403	
Revised Total Cost		3	55	18	218	576	306	200	16	568	840						2800	\$712,195