

TRANSMITTAL

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**Date:** September 7, 2021

**Project Number:** PP21-7367-0915

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**To:** Mike Chambless  
County of San Benito  
2301 Technology Parkway  
Hollister, California 95023

**VIA Email**

**Phone:** 831-902-2266  
**Fax:**  
**Email:** [MChambless@cosb.us](mailto:MChambless@cosb.us)

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**From:** Kari E. Wagner, PE  
Principal  
**WALLACE GROUP**  
612 Clarion Court  
San Luis Obispo, CA 93401

**Phone:** 805 544-4011  
**Fax:** 805 544-4294  
**Email:** [kariw@wallacegroup.us](mailto:kariw@wallacegroup.us)

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**Subject:** Proposal for North County WWTP Constraints Analysis

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Please find attached our proposal for the above referenced project. If this proposal meets with your approval, please sign where indicated and return to our office, **to the attention of Kylie Castle ([kyliec@wallacegroup.us](mailto:kyliec@wallacegroup.us)), Marketing Coordinator**, which will serve as our notice-to-proceed on your project.

Please call me if you have any questions at 805 544-4011.

Thank you.

ATTACHMENT  
PP21-7367  
Exhibit A



**WALLACE GROUP®**

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GIS SOLUTIONS

WATER RESOURCES

WALLACE GROUP  
A California Corporation

612 CLARION CT  
SAN LUIS OBISPO  
CALIFORNIA 93401

T 805 544-4011  
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[www.wallacegroup.us](http://www.wallacegroup.us)

August 24, 2021

Mike Chambless  
County of San Benito  
2301 Technology Parkway  
Hollister, California 95023

Subject: North County WWTP Constraints Analysis

Dear Mr. Chambless:

Wallace Group appreciates the opportunity to provide you with our proposal for engineering services for the above referenced project.

### PROJECT UNDERSTANDING

As part of Wallace Group's On-call support for the County, Wallace Group prepared a memorandum on May 13, 2021 that estimated the wastewater flows from a future commercial facility (Hollister Research Campus) and subsequently prepared a Feasibility Report, dated June 18, 2021 that evaluated the costs to construct a wastewater treatment plant to serve the flows previously identified. On August 20, 2021, Wallace Group prepared a memorandum discussing the steps required for the County to potentially construct a wastewater treatment plant. The County is requesting Wallace Group to prepare a proposal to support Step #3 - Site Selection, and Step #4 - Constraints Analysis to further move the project forward. Based on our discussion, the following Scope of Services has been prepared for your consideration:

### SCOPE OF SERVICES

#### Task 1: Project Management and Meetings

##### Task 1.1: Project Management and Coordination

This Task includes day-to-day coordination of project activities, including scheduling and budget controls, staffing needs and coordination, Client coordination, monthly status updates, and other related project management activities. This Project Management Budget is based on an overall implementation schedule of 6 months.

##### Task 1.2: Kick-off Meeting and Field Review

We will coordinate and attend a kick-off meeting with key Team members and County staff. This is a key meeting, and as such, even with the COVID-19 Pandemic, this is planned to be an in-person meeting. On or before the meeting, we will provide the County with a list of information needs. We will prepare the meeting agenda and minutes for this meeting. This meeting will focus on scope of work, schedule, deliverables, and other components of the project so that the project direction is agreed upon by the Team members in advance. We will request that any items that may be of importance for the completion of the report be provided to us at the time of the kick-off meeting. Following the kick-off meeting we will tour the potential sites to gain a better understanding of the lay of the land.



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### Task 1.3: Review Meetings

To ensure coordination with the County throughout the project duration, we have budgeted for three (3) review meetings via zoom. The meetings will follow submittals to the County.

### Task 1.4: Additional Meetings

We will attend one (1) Board of Supervisor meeting to present the conditions analysis. Wallace Group will also attend a up to two (2) additional meetings with property owners, planning commissions, or others as necessary to coordinate the project. These meetings are budgeted to be in person.

### Task 1.5: QA/QC

Wallace Group and respective subconsultant team members will provide in-house quality assurance and quality control (QA/QC) at the various milestone stages. The QA/QC will be conducted by senior or principal engineers within the respective firms.

### **Task 1.0 Deliverables:**

- Email documentation of meetings, information needs/request, and pertinent project coordination correspondence including monthly status updates.

### **Task 2: Site Selection**

Wallace Group, in coordination with Yeh & Associates and GSI Water, will evaluate potential sites that would easily serve the wastewater treatment and disposal needs for the Hollister Research Center and the communities being proposed to be converted from septic. Wallace Group will complete a high-level paper research on land uses, topography using Google Earth, adjacent wells, subsurface mapping, and other items that may impact the siting of a new wastewater treatment plant and disposal site. If the disposal is anticipated to be a soccer field, we will also want County input on a site based on desired location to serve the community appropriately.

Wallace Group will prepare a memorandum discussing the various sites, the findings from the paper research. Wallace Group will eliminate sites that have potential fatal flaws. Wallace Group will provide guidance on the most suitable site(s). The County will need to provide written approval/direction of up to 2 sites that should be further evaluated in the next phase. Per Task 1.3, we will meet with the County to discuss the memorandum and the options prior to the County deciding on the site selection.

Note, Yeh and GSI proposals are provided as Attachments B and C, respectively.

### **Task 2.0 Deliverables:**

- Site Selection memorandum (PDF only)

### **Task 3: Constraints Analysis**

Wallace Group will prepare a constraints analysis on up to two sites (~25 acres total) based on the written approval/direction provided by the County in Task 2, above. The purpose of the Constraints Analysis is to identify any fatal flaws with the sites being proposed for wastewater treatment and disposal and to develop refined costs associated with developing the parcel. The Constraints Analysis will include the following:



### Task 3.1: Preliminary Engineering

Wallace Group will utilize the previous memorandums prepared by Wallace Group for the County to further evaluate the treatment and disposal options. This report will provide up to six (6) schematic layouts of the wastewater treatment plant and disposal. This task will also include preliminary layouts of the sewer collection system, based on Google Earth elevations to determine if the communities can be served via gravity or a sewer lift station would be required.

### Task 3.2: Environmental Review

In conjunction with EMC Environmental, a first level biological and cultural investigation will be completed on the chosen site(s). EMC will also provide a preliminary determination of the level environmental that will be required for construction of the wastewater treatment plant. EMC's full proposal is provided as Attachment D.

### Task 3.3: Title Research

Wallace Group will pull up to four (4) title reports for the prospective project sites and identify easements that may impact the siting of the wastewater treatment plant. No additional survey effort will be completed at this phase of the project.

### Task 3.4: Geotechnical and Hydrogeological Investigation

In conjunction with Yeh & Associates and GSI Water, subsurface field explorations will be conducted. One boring will be drilled to a depth of 50 feet below the ground surface as input to liquefaction. Yeh will also outfit this well to monitor groundwater (included as the optional task item in the Yeh and GSI proposal). Five additional borings will be drilled and tested for percolation testing. A draft and final Geologic Hazards and Preliminary Geotech Report will be prepared for the proposed project site(s). Yeh and GSI's full proposal is provided as Attachments B and C, respectively.

### Task 3.5: RWQCB and DDW Coordination

Wallace Group will meet with both the Regional Water Quality Control Board and the Department of Drinking Water to discuss details of the project and required documents/steps to support the completion of the project for wastewater disposal and potential use of recycled water.

### Task 3.6: PG&E Coordination

Wallace Group will have initial conversations with PG&E to discuss the PG&E infrastructure available to support the construction of the wastewater treatment plant.

### Task 3.7: Permitting Evaluation

Wallace Group will identify the anticipated permits that will be required to construct and operate the wastewater treatment plant and disposal facility.

### Task 3.8: Land Use Requirements

Wallace Group will work with County Planning to determine any constraints on the use of the land or the process to change the use of the land if necessary.

### Task 3.9: Engineer's Opinion of Probable Construction Costs

Wallace Group will prepare an Engineer's Opinion of Probable Construction Costs based on the results of each of these tasks. Wallace Group will also include soft costs (engineering, permitting, construction management and inspection).



Wallace Group will also prepare a cost estimate for annual operations and maintenance.

#### Task 3.10: Rate Analysis Evaluation

Using the costs estimated in Task 3.9, Wallace Group will work with the County and DTA to evaluate options on how to fund the construction and operations and maintenance of the wastewater treatment plant and disposal.

#### Task 3.11: Draft Constraints Analysis Report

Utilizing the information provided in Tasks 3.1 through 3.10, Wallace Group will prepare a Constraints Analysis discussing the findings from each task, identifying fatal flaws, and recommendation for a preferred site location. The analysis will also provide a discussion on next steps.

#### Task 3.12: Final Constraints Analysis Report

Following written comments from the County, Wallace Group will update the Constraints Analysis and submit a Final Report.

#### **Task 3.0 Deliverables:**

- Constraints Analysis Report, Draft and Final (PDF only)

#### **SCHEDULE**

It is anticipated that this project will take approximately 6 months to complete.

#### **TO BE PROVIDED BY THE CLIENT**

- Support on Land Use requirements and permits
- Written comments on the site analysis and preferred site alternatives

#### **ITEMS NOT INCLUDED IN SCOPE OF SERVICES**

The following services may also benefit your project. Wallace Group can provide these services, directly or through sub-consultants, however, they are not included in the current Scope of Services or estimate of fees:

- Design of the wastewater treatment plant
- Full survey of the preferred site(s)

#### **PROJECT FEES**

Wallace Group will perform the services denoted in Tasks 1 through 3 of the proposed Scope of Services in accordance with the attached Standard Billing Rates (Exhibit A). These services will be invoiced monthly on an accrued cost basis, and our total fees, including reimbursables will not exceed our estimated fee of \$199,500 without receiving written authorization from the Client.

At your request, additional services to the Scope of Services will be performed by Wallace Group following the signature of our Contract Amendment or the initiation of a new contract.



**TERMS AND CONDITIONS**

In order to convey a clear understanding of the matters related to our mutual responsibilities regarding this proposal, our master services agreement with the County of San Benito dated July 1, 2021 is considered a part of our proposal agreement. If this proposal meets with your approval, please sign where indicated and return to our office, which will serve as our notice-to-proceed.

We want to thank you for this opportunity to present our proposal for engineering services. If you would like to discuss this proposal in greater detail, please feel free to contact me.

Sincerely,

**WALLACE GROUP, a California Corporation**

**TERMS AND CONDITIONS ACCEPTED:**

A handwritten signature in blue ink, appearing to read "Kari Wagner".

Kari E. Wagner, PE C66026  
Principal  
612 Clarion Court  
San Luis Obispo  
California 93401  
T 805 544-4011  
F 805 544-4294  
www.wallacegroup.us

\_\_\_\_\_  
Signature  
\_\_\_\_\_  
Printed Name  
\_\_\_\_\_  
Title  
\_\_\_\_\_  
Date

Attachments  
KEW: PP21-7367, 2021, std  
Exhibit A  
Exhibit B  
Exhibit C  
Exhibit D

THIS PROPOSAL IS VALID FOR 60 DAYS FROM THE DATE OF THIS DOCUMENT.

Exhibit A  
Standard Billing Rates



**Engineering, Design & Support Services:**

Assistant Designer/Technician .....	\$ 95
Designer/Technician I - IV .....	\$100 - \$130
Senior Designer I - III .....	\$143 - \$157
GIS Technical Specialist .....	\$140
Senior GIS Technical Specialist .....	\$150
Associate Engineer I - III .....	\$ 122 - \$142
Engineer I - IV.....	\$154 - \$169
Senior Engineer I - III .....	\$177 - \$187
Director .....	\$192
Principal Engineer.....	\$228
Principal .....	\$238

**Support Services:**

Office Assistant.....	\$ 94
Project Assistant I - III.....	\$ 97 - \$117

**Additional Professional Services:**

Fees for expert witness preparation, testimony, court appearances, or depositions will be billed at the rate of \$300 an hour. If required to meet schedule requests, overtime on a project will be billed at 1.5 times the employee's typical hourly rate.

**Direct Expenses:**

Direct expenses will be invoiced to the client and a handling charge of 15% may be added. Sample direct expenses include, but are not limited to the following:

- travel expenses
- sub-consultant services
- agency fees
- delivery/copy services
- mileage (per IRS rates)
- other direct expenses

**Invoicing and Interest Charges:**

Invoices are submitted monthly on an accrued cost basis. A finance charge of 1.5% per month may be assessed on all balances that are thirty days past due.

**Right to Revisions:**

Wallace Group reserves the right to revise our standard billing rates on an annual basis, personnel classifications may be added as necessary.

September 3, 2021

Proposal No. 221-384

Wallace Group  
612 Clarion Ct.  
San Luis Obispo, CA 93401  
Attn: Ms. Kari Wagner, P.E.

**Subject: Proposal for Geotechnical Services, North San Benito County Wastewater Treatment Plant, San Felipe Road, Hollister, California**

Dear Ms. Wagner:

Yeh and Associates, Inc. is pleased to submit this proposal to provide geotechnical services for the preliminary planning and siting of a proposed wastewater treatment facility for San Benito County Resource Management Agency (County) north of the city of Hollister, California. This proposal is based on phone calls, emails and virtual meetings between our firms in August 2021. Yeh will coordinate our work with GSI Water, who will be providing hydrogeologic services for the proposed facility.

### **Project Understanding**

The project consists of the design of a proposed wastewater treatment facility in the area of San Felipe Road and Highway 156 north of the Hollister Airport. The facility limits within that area have not yet been delineated, but the site will generally be a 10- to 15-acre parcel in the vicinity of those roads. Santa Ana Creek and Tequisquita Slough are also nearby. The Calaveras Fault is approximately 1 to 2 miles west-northwest and the Quien Sabe Fault is approximately 3 to 4 miles north-northeast of the project area. The project is in the early planning stages that include defining the anticipated wastewater flows from existing and proposed developments, siting studies, and a constraints analysis of a selected site. We understand that the new facility will include the following:

- Operational flows of approximately 100,000 gallons per day from the proposed Hollister Research Center development and existing properties north of the site that are currently using septic systems for disposal of effluent.
- Membrane Bioreactors (MBR) units will be used to treat wastewater to tertiary levels. The MBR units will be supported on slab-on-grade foundations and no below grade structures are anticipated (except for conveyance piping).

- Athletic fields with or without additional storage are the preferred method of treated water disposal. Additional storage for wet weather conditions would likely include a holding pond that may be designed to facilitate treated water for infiltration.
- Percolation ponds would be a second choice for infiltration of treated water. The ponds would occupy approximately 7 acres and have a depth of 8 feet.

### Scope of Services

Yeh will provide geotechnical services for the project during preliminary planning and design. Yeh's scope for the project is as follows:

- 1. Initiation, Review Existing Data, and Site Reconnaissance.** Consult with Wallace Group, GSI Water, and the County to coordinate project initiation, collect project information, and request available reports and data collected in the proposed project area. Collect available geologic and geotechnical data from published maps and reports. Perform a site reconnaissance to review site conditions, map geologic features, identify existing wells and other drainage features within the proposed project area, and gather other information that may be pertinent to the geotechnical assessment of a proposed site.
- 2. Geotechnical Memorandum.** Prepare a *Geotechnical Memorandum* that documents the data gathered, site reconnaissance, and presents geotechnical conditions that may impact the siting of the proposed project. The memorandum will identify geologic hazards and geotechnical constraints in the project area such as nearby faults, mapped soil and geologic conditions, depth to groundwater based on available data, or any other features that may impact the selection of a particular project site from a geotechnical standpoint.
- 3. Coordination, Health and Safety, and Permits.** Initiate a field exploration program once the County has identified a preferred project site and parcel. Coordinate the locations of field exploration with Wallace Group, GSI Water and the County relative to access and existing buried utilities or structures. Yeh will collaborate with GSI Water to obtain subsurface information that may be needed for their work. Mark the locations of borings and contact Underground Services Alert (USA) to notify utility companies. Yeh will not be responsible for locating utilities or buried structures or damages resulting from encountering unmarked or improperly marked utilities for the project. Prepare a health and safety plan for the field work. Coordinate field exploration with the drilling subcontractor. Yeh has assumed the County will obtain any access agreements and/or permits for accessing drilling locations in the public right of way and those on private property. We understand from San Benito County Water District that well permits are not required for exploratory borings; however, well permits will be



procured for monitoring wells (see optional task). We have assumed that if any environmental studies, reports or monitors are required for this work that those services will be provided by others.

- 4. Subsurface Exploration Program.** Provide a 2-day field exploration program to drill a total of 6 borings for the project. One boring will be drilled to a depth of 50 feet below the ground surface as input to liquefaction screening for the site. Five additional borings will be drilled and tested for percolation in the vicinity of a potential percolation pond to depths of approximately 8 to 20 feet. The borings will be drilled using a truck- or track-mounted drill rig equipped with 6 to 8-inch diameter hollow-stem augers and will typically be sampled at 5-foot intervals by driving 2-inch or 3-inch split spoon samplers using Standard Penetration Test protocols or by pushing thin-walled (Shelby) tubes. Bulk samples will be collected from auger flights during drilling. The types and depths of the samples may be varied depending on subsurface conditions. Borings will be backfilled with native soil cuttings.
- 5. Percolation Testing.** Prepare the five percolation test holes by attempting to ream the sides of the hole to remove smeared material, setting a temporary slotted or perforated casing in the hole, backfilling the annular space between the casing and borehole with gravel, and pre-soaking the test interval overnight in advance of the testing. After at least 1 day of pre-soaking, percolation testing will be performed by filling the casings with 1 to 2 feet of water and measuring the rate at which water flows out of the pipes into the surrounding formation. Testing will be performed over at least a 6-hour period. Upon completing the testing, the temporary casings will be removed; however, the gravel used to support the borehole within the testing interval will remain in the hole and native soil will be used to backfill the holes to match the adjacent ground surface.
- 6. Laboratory Testing.** Tests for soil classification, corrosion, one-dimensional consolidation, expansion index, and hydraulic conductivity will be performed on selected samples from the exploration. The types and numbers of tests may vary depending on the results of the field exploration program.
- 7. Draft – Geologic Hazards and Preliminary Geotechnical Report.** Yeh will prepare a draft *Geologic Hazards and Preliminary Geotechnical Report* for use as input for the preliminary engineering and environmental assessments. The report will include logs of the explorations, laboratory test results, a map summarizing the site geology and showing the locations of the explorations, a regional fault map with historical seismicity, and interpreted subsurface profiles for the site. The report will also provide a discussion of geotechnical considerations

that could impact the design, construction, cost or schedule of the proposed improvements. A draft of the report will be prepared and issued in portable document file (PDF) format for review by Wallace Group, GSI Water and the County. The report will provide preliminary opinions and recommendations regarding:

- Regional and site geology;
- Soil, rock and groundwater conditions encountered;
- Regional faulting and historical seismicity in the site vicinity;
- Mapped areas of landsliding, creep and slope instability;
- Potential for geologic hazards to impact the site (active faulting and coseismic deformation, liquefaction, seismic settlement, lateral spreading, landslides and slope instability, flooding, erosion, hydrocollapse, subsidence, expansive soils, naturally occurring asbestos, tsunamis, seiche, and dam inundation);
- Seismic data including historical seismicity, design earthquake, causative fault and estimated peak ground acceleration for the site for use with the California Building Code;
- Presence of collapsible, expansive, and soft soils;
- Need for mitigation of liquefaction, seismic settlement, static settlement or lateral spreading/slope instability;
- Geologic structure and adverse geologic condition that should be considered in the design of graded slopes and excavations;
- Anticipated site preparation, subexcavation and grading for the treatment plant improvements;
- Suitability of excavated on-site soil for reuse as compacted fill or select backfill;
- Suitable foundation type(s) for structures based on the subsurface conditions encountered;
- Recommendations for additional geotechnical investigations to perform for the design-level studies; and
- Construction considerations regarding need for shoring, dewatering, and excavation characteristics.

- 8. Final – Geologic Hazards and Preliminary Geotechnical Report.** Prepare and issue the final *Geologic Hazards and Preliminary Geotechnical Report* incorporating comments and input from Wallace Group, GSI Water, and the County. This scope of work assumes that the final report will not involve additional field exploration or addressing alternative project sites, or changes in the project. One PDF copy of the final report will be submitted unless otherwise requested.

### Optional Task

Our preliminary review of available groundwater data from the area indicates variable depths to groundwater. Understanding the seasonal fluctuations of groundwater will be important input to the



selection of the type of treated effluent disposal. Yeh recommends completing the 50 foot boring as a 2-inch diameter monitoring well. Risers will also be installed to protect the well. A water level transducer will be programmed and installed in the well to record the water depth over a period of up to 6 months. These data will be included in the *Geologic Hazards and Preliminary Geotechnical Report*. Fees for the monitoring well permit from San Benito County Water District, additional drilling time, monitoring well construction materials, transducer, and data acquisition are noted on the attached cost estimate sheet and would be added to the base fee estimate.

### **Fee Estimate**

Our estimated fee for the scope of services described in this proposal is attached. Services will be provided on a time and materials basis for the fee provided on the attached Fee Estimate Worksheet. Fees for additional services not described will be charged at a time and expense basis in accordance with Yeh's fee schedule in effect at the time of service. Yeh has assumed this project is subject to California Prevailing Wage.

### **Schedule**

Our services and any changes to the schedule will be coordinated with the design team and County. The *Geotechnical Memorandum* can be submitted within approximately 3 weeks after completing the site reconnaissance. We anticipate that it will take about 2 weeks to coordinate site access, utility clearance, and prepare for the field work after selection of the preferred project site and notice to proceed. The draft *Geologic Hazards and Preliminary Geotechnical Report* can be submitted within 6 weeks after the completion of the field work. The final *Geologic Hazards and Preliminary Geotechnical Report* can be submitted within 2 weeks after having received comments. Scheduling will depend on receiving timely access to the site, the schedule of drilling subcontractors to Yeh, and coordination with the design team.

We appreciate the opportunity to be of service. Please contact Judd King at 805-481-9590 x285 or [jking@yeh-eng.com](mailto:jking@yeh-eng.com) if you have questions or require additional information.

Sincerely,  
**YEH AND ASSOCIATES, INC.**



Judd J. King, GE 2903  
Senior Project Manager

Attachments: Fee Schedule (2021 CA)  
Estimate of Fees



**STANDARD FEE SCHEDULE  
CALIFORNIA  
EFFECTIVE JANUARY 2021**

**Professional Services:**

<u>Classification</u>	<u>Basic Rate</u>
Principal.....	\$205/hr
Senior Project Manager .....	\$180/hr
Senior Project Specialist.....	\$175/hr
Project Manager .....	\$155/hr
Senior Project Engineer or Geologist.....	\$140/hr
Project Engineer or Geologist.....	\$110/hr
Staff Engineer or Geologist.....	\$95/hr
Engineer or Geologist Intern .....	\$60/hr
Resident Construction Engineer.....	\$170/hr
Construction Manager .....	\$145/hr
Construction Observer 3 .....	\$120/hr
Construction Observer 2 .....	\$105/hr
Construction Observer 1 .....	\$95/hr
Technician Leader or Supervisor .....	\$125/hr
Laboratory Supervisor.....	\$100/hr
Technician 3 .....	\$85/hr
Technician 2 .....	\$70/hr
Technician 1 .....	\$55/hr
CAD Designer .....	\$125/hr
CAD Technician .....	\$80/hr
Administrative Assistant.....	\$75/hr

\*\*Overtime rates for Construction Inspection, Technicians and Office Staff is 1.5 x rates shown.

Laboratory tests are per hourly rates or cost plus 10 percent for outside laboratory testing when applicable.

Fees for expert witness preparation, testimony, court appearances, or depositions will be billed at the rate of \$350 per hour.

Rates do not include prevailing wage rates for field services. Prevailing wages will be determined on a project-by-project basis.

**Other Direct Charges:**

Subcontracted services, copying and rented equipment.....	Cost Plus 10%
Travel, subsistence, and expenses .....	Cost Plus 10%
Vehicle.....	\$ 80/day
Automobile Mileage.....	\$ 0.55/mile
Hand Auger Kit .....	\$100/day
Slope Inclinator and readout .....	\$125/day

**FEE ESTIMATE WORKSHEET**  
**North San Benito County WWTP**  
**Geotechnical Services**

PREPARED BY: J. King  
 PROJECT No.: 221-384

DATE: September 3, 2021  
 CLIENT: Wallace Group

PHASE	Principal Engineer or Geologist	Sr. Project Specialist	Sr. Project Manager	Project Manager	Sr. Project Engineer or Geologist	Project Engineer or Geologist	Staff Engineer or Geologist	CAD Designer	Engineer Intern	HOURS	COSTS
<b>Geotechnical Services:</b>											
1 Initiation/Review Existing Data/Site Recon			12				4			16	\$2,540.00
2 Geotechnical Memorandum	2		12				20			34	\$4,470.00
3 Site access, Safety, USA/Drilling coordination			1				12			13	\$1,320.00
4 Field Exploration Program (Drilling)			1				24			25	\$2,460.00
5 Percolation Testing			1				12		12	25	\$2,040.00
6 Laboratory Testing							1		20	21	\$1,295.00
7 Draft - Geologic Haz. and Prelim Geotech Report	4		12			8	20	4	8	56	\$6,740.00
8 Final - Geologic Haz. and Prelim Geotech Report	2		4			2	8	2	2	20	\$2,480.00
A <i>Monitoring Wells - Const. and Data Collection (optional)</i>			2				30			32	\$3,210
<b>SUBTOTAL (excludes Optional Task A)</b>	<b>8</b>	<b>0</b>	<b>43</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>101</b>	<b>6</b>	<b>42</b>	<b>210</b>	<b>\$ 23,345</b>
<b>Unit Costs and Expenses:</b>											
Field Vehicle/Mileage	-----										\$ 912
Lodging	-----										\$ 288
Per Diem	-----										\$ 165
Percolation Testing Equipment/Consumables	-----										\$ 400
A <i>Level Loggers for MW (optional)</i>											\$ 660
A <i>Monitoring Well Permit (SBCWD) - optional</i>											\$ 1,474
<b>SUBTOTAL (Excludes Optional Task A)</b>											<b>\$ 1,765</b>
<b>Subconsultant and Vendor Services:</b>											
Subcontract Drilling Services	-----										\$ 9,910
Outside laboratory testing	-----										\$ 1,872
A <i>Subcontract Drilling - Monitoring Well Const/materials (optional)</i>											\$ 2,000
<b>SUBTOTAL (Excludes Optional Task A)</b>											<b>\$ 11,782</b>
RATE, PER HOUR (2021)	\$ 205	\$ 175	\$ 180	\$ 155	\$ 140	\$ 110	\$ 95	\$ 125	\$ 60		
<b>ESTIMATED TOTAL FEE (BASE)</b>											<b>\$ 36,892</b>
<i>TOTAL: Optional Task Item A - Monitoring Wells - Construction and Data Collection</i>											<i>\$7,344</i>



September 3, 2021

Ms. Kari Wagner, PE, Principal / Director of Water Resources  
Wallace Group  
612 Clarion Court  
San Luis Obispo, CA 93401

## **Proposal for Hydrogeologic Services for the Proposed North San Benito County Wastewater Treatment Plant, San Felipe Road, Hollister, California**

Dear Ms. Wagner:

GSI Water Solutions, Inc. (GSI), is pleased to present our proposal for hydrogeologic services for the siting of a proposed wastewater treatment plant north of the City of Hollister. We understand from our meeting on Tuesday, August 31, that the proposed facility is being constructed for the San Benito County Resource Management Agency (County). This proposal is being prepared in collaboration with Yeh and Associates, Inc. (Yeh), who will be providing geotechnical services for the project.

The proposed facility will be designed to receive and treat an estimated volume of 100,000 gallons per day from the proposed developments, located approximately 1 mile north of the Hollister Municipal Airport. To accommodate this tentatively planned flow, the County is considering constructing the facility with a disposal area, which may ultimately consist of a combination of spray irrigation on athletic fields and possibly approximately 7 acres of infiltration ponds of.

### **Scope of Services**

To accommodate the project's design, GSI and Yeh will be conducting a series of tasks to determine the feasibility of construction of the project and identify any potential constraints. To this end, the tasks described below were developed in coordination with Yeh and describe GSI's scope in support of each task. Note that conducting the percolation testing, laboratory testing and the optional monitoring well installation will be conducted exclusively by Yeh and are included here within GSI's scope for consistency with the separate Yeh Scope of Work.

1. Review of Existing Data
2. Preliminary Hydrogeological Memorandum
3. Coordination of Field Exploration Program
4. Subsurface Exploration Program
5. Percolation Testing (Yeh Task)
6. Laboratory Testing (Yeh Task)
7. Preparation of Draft Hydrogeological Characterization Report
8. Preparation of Final Hydrogeological Characterization Report
9. Monitoring Well Installation (Optional Task)

### **Task 1. Review of Existing Data**

In coordination with Yeh, GSI will support the review of available reports and data collected in the area of the proposed project site. Of particular interest will be the hydrogeologic conceptual model and groundwater conditions summarized in the Groundwater Sustainability Plan completed for the North San Benito Groundwater Basin. We will conduct a site visit to review the proposed site(s), identify existing wells, and gather other information pertinent to the groundwater conditions.

### **Task 2. Preliminary Hydrogeological Memorandum**

Based on review of the acquired data and site visit, GSI will prepare a preliminary memorandum that will identify hydrogeologic constraints that may influence the selection of the site for the installation of the proposed facility. The memorandum will also present the planned field exploration program, based on the results of this task in coordination with the County and Yeh.

### **Task 3. Coordination of Field Exploration Program**

GSI will coordinate with Yeh for the requirements of the field exploration program to adequately characterize the preferred project site to identify hydrogeologic constraints. These constraints may include a limited extent of the regional aquifer at the site; the presence of any fine-grained materials under the site; or shallow, perched or artesian groundwater conditions. Yeh will coordinate the drilling of borings at the site and conduct all health, safety, and permitting activities for the field exploration.

### **Task 4. Subsurface Exploration Program (Yeh Task)**

Yeh will conduct the subsurface exploration program developed as part of the prior tasks. The subsurface exploration program will consist of installation of a total of five borings at the site. GSI support is not needed for this task.

### **Task 5. Percolation Testing**

Based on the results of the subsurface exploration program, GSI will identify percolation test hole locations and infiltration test durations. The percolation test holes will be installed and tested by Yeh.

### **Task 6. Laboratory Testing (Yeh Task)**

Yeh will coordinate laboratory testing in accordance with the scope of work presented in their proposal. GSI support is not needed for this task.

### **Tasks 7 and 8. Preparation of Draft and Final Hydrogeological Characterization Reports**

GSI will provide hydrogeologic interpretation of the groundwater conditions based on the percolation test hole data. The report will present our assessment of the compatibility of the selected project site with the subsurface hydrogeologic conditions, specifically focused on any hydrogeologic conditions that may pose constraints. These constraints will consider the following:

- The nature of surface and subsurface material as they relate to the transmission of the treated wastewater by spray or percolation pond methods.
- The lateral extent of the coarse- and fine-grained materials that may accommodate or hinder the vertical and lateral movement of the water.
- The elevation and temporal variability (long term and seasonally) of the native groundwater.
- The anticipated mounding effects of the infiltration of the wastewater on the elevation of any groundwater mound that may occur during operation of the wastewater system.
- Any other characteristics that may unreasonably reduce the required vertical separation between the applied wastewater and the native groundwater.

### **Task 9. Monitoring Well Installation (Optional Task)**

One of the five borings may be completed as 2-inch diameter monitoring well under contract with Yeh. Within this monitoring well, Yeh has provided a cost to provide and install a dedicated pressure transducer capable of

recording water levels for a duration of 6 months. This scope would include the retrieval of that data after this period followed by the analysis of the data for inclusion in our draft hydrogeological characterization reports.

The conversion of the borings to a monitoring well and the installation of a transducer within the monitoring well is being considered as an optional task. The decision about whether the monitoring well will be installed and instrumented will be made following the exploration at the site based on the determination about whether groundwater levels are suitable for placement of the facility at the site.

## Fee Estimate

Our fee for the scope of services described in this proposal is presented on the table below.

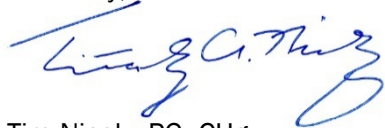
	Labor Hours	Labor Cost	Outside Services	Direct Expenses	Total
<b>Task 1. Review of Existing Data</b>	18	\$3,740	\$0	\$200	<b>\$3,940</b>
<b>Task 2. Preliminary Hydrogeological Memorandum</b>	30	\$4,940	\$0	\$0	<b>\$4,940</b>
<b>Task 3. Coordination of Field Exploration Program</b>	6	\$1,240	\$0	\$0	<b>\$1,240</b>
<b>Task 4. Subsurface Exploration Program (Yeh)</b>	0	\$0	\$0	\$0	<b>\$0</b>
<b>Task 5. Percolation Testing</b>	8	\$1,480	\$0	\$0	<b>\$1,480</b>
<b>Task 6. Laboratory Testing (Yeh)</b>	0	\$0	\$0	\$0	<b>\$0</b>
<b>Task 7. Preparation of Draft Hydrogeological Characterization Report</b>	32	\$4,980	\$0	\$0	<b>\$4,980</b>
<b>Task 8. Preparation of Final Hydrogeological Characterization Report</b>	18	\$3,080	\$0	\$0	<b>\$3,080</b>
<b>Project Totals</b>	<b>112</b>	<b>\$19,460p</b>	<b>\$0</b>	<b>\$200</b>	<b>\$19,660</b>
<b>Task 9. Monitoring Well Installation (Optional)</b>	10	\$2,740	\$0	\$200	<b>\$2,940</b>

The anticipated costs to conduct the project will be an estimated \$19,660.

The cost to retrieve and analyze data from the transducer within the optional monitoring well will be an estimated \$2,940 in accordance with our field schedule, which is attached. Any fees for additional services not described will be charged at a time and expense basis in accordance with GSI's fee schedule in effect at the time of service.

Thank you for your consideration of our proposal. We look forward to the opportunity to support this important project. Please do not hesitate to contact me with questions.

Sincerely,



Tim Nicely, PG, CHg  
 Supervising Hydrogeologist  
 GSI Water Solutions, Inc.  
 805.701.1245  
[tnicely@gsiws.com](mailto:tnicely@gsiws.com)



## 2021 GSI Fee Schedule

### Labor Category Hourly Rate

#### Technical Professionals

Principal	\$240 – \$280
Supervising	\$180 – \$250
Managing	\$160 – \$190
Consulting	\$140 – \$170
Project	\$130 – \$150
Staff	\$100 – \$140

#### Other Services

GIS/Graphics	\$100 – \$170
Editor/Documents	\$110 – \$140
Administration	\$70 – \$110

The hourly rate for trial preparation and expert witness testimony is 1.5 times the standard billing rate shown above.

### Expenses

- **Mileage:** IRS authorized rate/mile plus 10 percent markup
- **Direct expenses and outside services:** Cost plus 10 percent markup



*Planning for Success.*

August 26, 2021

Kari Wagner PE  
Principal/Director of Water Resources  
Wallace Group  
612 Clarion Ct.  
San Luis Obispo, CA 93401

Re: San Benito County Waste Water Treatment Plant  
Biological and Cultural Resources Feasibility Analysis

Dear Kari:

Thank you for requesting a proposal to conduct a biological and cultural feasibility analysis on two, 10 to 15 acres properties, in unincorporated San Benito County. The location of the two properties is yet to be determined. Our proposed scope of work follows:

### **Biological Resources**

Based on a preliminary review of aerial photographs, the general area where the two 10- to 15-acre sites will be located is proposed between two jurisdictional waterways, Santa Ana Creek and Tequisquita Slough. Both waterways are fed from San Felipe Lake, northwest of the general area. Habitat appears to be annual grassland west of State Route 25 and agricultural land east of State Route 25. According to the *California Natural Diversity Database* (California Department of Fish and Wildlife 2021) and our experience with habitats in the area, the following special-status species have the potential to occur at one or both of the project sites:

Plants:

- Hoover's button-celery (*Eryngium aristulatum* var. *hooveri*)
- Prostrate vernal pool navarretia (*Navarretia prostrata*)
- Saline clover (*Trifolium hydrophilum*)
- San Joaquin spearscale (*Extriplex joaquinana*)

Wildlife:

- Burrowing owl (*Athene cunicularia*)
- California red-legged frog (*Rana draytonii*)
- California tiger salamander (*Ambystoma californiense*)
- Monterey hitch (*Lavinia exilicauda harengus*)
- Prairie falcon (*Falco mexicanus*)
- Steelhead - south-central California coast DPS (*Oncorhynchus mykiss irideus* pop. 9)
- Tricolored blackbird (*Agelaius tricolor*)
- Western pond turtle (*Emys marmorata*)
- Western ridged mussel (*Gonidea angulate*)

This evaluation will assess potential habitat present for special-status species in the area and identify potential biological resources present at both sites. If suitable habitat is identified, recommendations may also include the need for additional specific or protocol-level surveys to be conducted during an appropriate time of year.

The following scope of work includes tasks to conduct a reconnaissance-level biological survey of both sites and prepare a biological resource evaluation report.

**Task 1      Project Research**

Compile and review available project information, including preliminary site location plans and aerial photographs. Conduct a review to determine the special-status species

that have been recorded as occurring within the general project vicinity based on current database searches of CDFW's *California Natural Diversity Database* (CNDDDB), the California Native Plant Society (CNPS) *Rare and Endangered Plant Inventory*, the US Fish and Wildlife Service (USFWS) *Endangered Species Program*, the USFWS *National Wetlands Inventory* (NWI); and other biological studies conducted in the vicinity of the project site, if available.

### ***Task 2 Reconnaissance-Level Field Survey***

Complete a reconnaissance-level field survey at both sites to (1) identify and map the principal plant communities; (2) assess the potential for special-status species and their habitats, wildlife movement corridors, potentially jurisdictional wetlands and waterways, regulated trees, and other significant biological resources to occur; and (3) identify and map any observed locations of special-status species and/or habitats. Plant and wildlife species observed during the survey will be recorded in field notes. Any special-status species observed will be reported to the CNDDDB in compliance with CDFW permit requirements, after the information is provided to the client.

### ***Task 3 Draft Biological Resource Evaluation***

This task includes preparing the biological resource evaluation letter report, describing existing habitats and plant and animal species found on both sites, and the occurrence of and/or potential for special-status species and their habitats. One or more figures will be prepared to illustrate habitat types and the location(s) of special-status species occurring on or in the vicinity of the project sites. Additional maps will include an aerial photograph of the site and surrounding area and impacts to biological resources due to site disturbance, if any. Potential impacts to biological resources will be identified. A pdf version of the letter report will be submitted to you for review.

**Note:** Focused surveys for specific plant and/or animal species are not included in this proposed scope of work. The presence or absence of certain species can be determined during the reconnaissance-level site assessments. If appropriate habitat for other sensitive species is observed during the site assessments, species-specific surveys may be required (i.e., surveys for annual plants not in bloom at the time of the survey, protocol-level surveys for special-status wildlife species, etc.). Species-specific survey requirements will be determined based on the results of the reconnaissance-level site assessments.

#### ***Task 4 Final Biological Resource Evaluation***

Respond to client comments on the draft Biological Resource Evaluation and produce a final document. A pdf version of the report will be submitted to you for use in site selection and future planning.

### **Cultural Resources**

#### ***Task 1 Archival Research***

Review available background documentation including preliminary project plans, maps, and aerial photographs, and conduct a search of the National Register of Historic Places, an archival search of the database of the California Historical Resources Information System affiliated with the California Office of Historic Preservation for the project boundary, and a Sacred Lands search with the Native American Heritage Commission, to determine if any known archaeological, historical, Sacred Sites, or Tribal Cultural Resources are recorded on or within a quarter mile of the project boundary.

#### ***Task 2 Reconnaissance Survey***

Conduct a reconnaissance-level archaeological pedestrian survey of both properties to determine if surface indicators of historic or prehistoric archaeological resources are present. The presence of surface materials, such as shell fragments, groundstone, or debitage (lithic waste flakes), could indicate additional subsurface prehistoric or historic archaeological resources.

#### ***Task 3 Archaeological Investigation Report***

Prepare a report that describes the methodology used to conduct the survey, relevant historical and ethnographic contextual information, maps of the area, pertinent photographs, the results from the Sacred Lands search, and a summary of the results from the archival and field research. The report will identify the environmental and regulatory setting, including the likelihood of project impacts to potentially significant prehistoric or historic archaeological resources.

### **Preliminary CEQA Determination**

EMC Planning Group will review any preliminary plans, along with the general environmental characteristics of the two sites and recommend the appropriate CEQA documentation for the project. A scope and budget for the project would be prepared.

*Kari Wagner*  
*Wallace Group*  
*August 26, 2021, Page 5*

Please let me know if you have any questions. We are prepared to be immediately upon your authorization to proceed.

Sincerely,

A handwritten signature in black ink that reads "Teri Wissler Adam". The signature is written in a cursive, flowing style.

Teri Wissler Adam  
Senior Principal

enc: Budget

**San Benito County Wastewater Treatment Plant Biological and Archaeological Feasibility Budget**

Task	EMC Planning Group Inc.								Total Hours	Total Cost
	Senior Principal	Reg. Prof. Archaeologist	Principal Biologist	Associate Biologist	Graphics	Production Manager	Admin./ Production			
Billing Rate (Per Hour)	\$250.00	\$125.00	\$190.00	\$130.00	\$95.00	\$125.00	\$115.00			
Project Management	2.0	0.0	0.0	0.0	0.0	0.0	1.0	3.0	\$615.00	
Biological Resources	1.0	0.0	7.0	40.0	4.0	1.0	1.0	54.0	\$7,400.00	
Cultural Resources	2.0	32.0	0.0	0.0	2.0	1.0	0.0	37.0	\$4,815.00	
CEQA Determination	4.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	\$1,000.00	
<b>Subtotal (Hours)</b>	9.0	32.0	7.0	40.0	6.0	2.0	2.0	<b>Total Hours</b>	<b>Total Cost</b>	
<b>Subtotal (Cost)</b>	\$2,250.00	\$4,000.00	\$1,330.00	\$5,200.00	\$570.00	\$250.00	\$230.00	<b>98.0</b>	<b>\$13,830.00</b>	

Additional Costs	
Production Costs	\$25.00
Travel Costs	\$110.00
Postal/Deliverables	\$25.00
Miscellaneous (CNDDDB and NWIC)	\$1,050.00
Administrative Overhead 10%	\$121.00
<b>Total</b>	<b>\$1,331.00</b>

<b>Total Costs</b>	<b>\$15,161.00</b>
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NOTE: This proposal is valid for 90 days