

RESOLUTION NO. 2020-05

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CASTROVILLE COMMUNITY SERVICES DISTRICT APPROVING PROFESSIONAL ENGINEERING SERVICES PROPOSAL FOR WASHINGTON SEWER TRUNK LINE BYPASS 30% DESIGN WORK

WHEREAS, Castroville Community Services District (“District”) is a Community Services District created pursuant to Government Code Section 61000; and

WHEREAS, as a Community Services District, the District’s public contracting shall be conducted in compliance with State law, including Public Contract Code sections 20680-20683 and Government Code Section 4525 et. seq.

WHEREAS, pursuant to Government Code section 4526, notwithstanding any other provision of law, selection by the District for professional services of private architectural, landscape architectural, engineering, environmental, land surveying, or construction project management firms shall be on the basis of demonstrated competence and on the professional qualifications necessary for the satisfactory performance of the services required; and

WHEREAS, in using this method of selection, for contracting for private architectural, landscape architectural, professional engineering, environmental, land surveying, and construction project management services, the District is to assure that these services are engaged on the basis of demonstrated competence and qualifications for the types of services to be performed and at fair and reasonable prices to the District; and

WHEREAS, the General Manager has evaluated current statements of qualifications and performance data on file with the District for professional engineering design services; and

WHEREAS, the District has previously engaged MNS Engineering to provide professional engineering design work.

WHEREAS, the General Manager has determined the professional engineering services provided by MNS Engineering to be of a demonstrated high quality, at a fair and reasonable cost, and competently and timely delivered; and

WHEREAS, the General Manager has determined that the highly specialized functions of the nature the professional engineering services needed for the Washington Sewer Trunk Line Bypass Design work requires a distinctly qualified professional engineering company and team of engineering professionals to render the professional engineering services required.

WHEREAS, on May 5, 2020, MNS Engineering submitted a Proposal for Professional Engineering Services – Washington Sewer Trunk Line Bypass 30% Design, a copy of which is attached as Exhibit A (MNS Proposal); and

WHEREAS, based on MNS Engineering’s services provided to the District, the General Manager has determined that MNS Engineering has the demonstrated the specialized skills, demonstrated competency, and holds the professional qualifications necessary for the satisfactory performance of the design services required; and

WHEREAS, in making a determination of the highly specialized skills, competency, and professional qualifications necessary for satisfactory performance of the design services, the General

Manager considered MNS Engineering's proven experience, high level of competency, qualifications, and proven skills to be more important than comparative cost when selecting the professional engineer for the engineering design work; and

WHEREAS, nevertheless, the General Manager has evaluated the MNS Engineering Proposal and determined the cost for services set forth in the Proposal are fair and reasonable to the District for the scope of professional engineering design services being provided.

NOW, THEREFORE, BE IT HEREBY RESOLVED that the Castroville Community Services District Board of Directors hereby finds:

1. That MNS Engineering, Inc. is an engineering company providing professional engineering services, as set forth in Government Code section 4525;
2. That contracting for MNS Engineering's professional engineering design services is not subject to the public bid process pursuant to Government Code section 4526;
3. That the District has previously engaged MNS Engineering for professional engineering services and finds that MNS Engineering has demonstrated their specialized skills, competency and qualifications necessary for the satisfactory performance of the professional engineering design services required; and
4. That the price for the professional engineering services set forth in the MNS Engineering - Washington Sewer Trunk Line Bypass 30% Design Proposal, is a fair and reasonable price to the District.

BE IT HEREBY FURTHER RESOLVED that the Board of Directors hereby approves May 2, 2020 MNS Engineering, Inc. Proposal for Professional Engineering Services – Washington Sewer Trunk Line Bypass 30% Design, as set forth in Exhibit A.

BE IT HEREBY FURTHER RESOLVED that the Board of Directors hereby directs the General Manager or his or her designee to take all steps necessary to implement and complete the design work for the Washington Sewer Trunk Line Bypass as set forth herein.

PASSED AND ADOPTED at a regular meeting of the Board of Directors of the Castroville Community Services District duly held on the 16th day of June 2020, by the following vote.

Ayes: Director(s) Dania, Padilla, Stefani & Cochran

Noes: Director(s) Ø

Absent: Director(s) Melgoza

Abstained: Director(s) Ø

ATTEST:

Lidia Santos
Lidia Santos, Secretary
(SEAL)

James Cochran
James Cochran, Vice President



Exhibit A



311 E. Captain Way, Ste 130 / San Luis Obispo CA 93401
Ph. (805) 692-6921 / F. (805) 691-6931

May 5, 2020

Eric Tynan, General Manager
Castroville Community Services District
11499 Geil Street
Castroville, CA 95012

Subject: Proposal for Professional Engineering Services – Washington Sewer Trunk Line Bypass 30% Design

Dear Mr. Tynan:

Thank you for the opportunity to submit this proposal for Professional Engineering Services to prepare 30% design documents for the Washington Sewer Trunk Line Bypass Project (Project) for the Castroville Community Services District (District). MNS Engineers, Inc. (MNS) offers our qualified team to provide professional services for this Project.

Project Understanding

It is our understanding the District is seeking a qualified consultant to develop preliminary design documents for a new 24-inch trunk sewer bypass main approximately 1,200 feet in length extending from the intersection of Washington Street and Merritt Street, to the corner of Washington Street and Tembladera Street, then across undeveloped areas and under Highway 1 to the Monterey Regional Water Pollution Control Agency (MRWPCA) pump station located at the south end of Watsonville Road. The proposed alignment is shown on Figure 1, attached to this proposal. This project was identified by the Wastewater Collection System Master Plan, 2013 Update, as essential to provide additional conveyance capacity from the collection system to the MRWPCA pump station. The existing conveyance system is under capacity, and proposed developments identified in the 2006 Castroville Community Plan will further exacerbate capacity issues without implementation of this project. This project presents several technical challenges which will need to be addressed over the course of the Project. Critical factors which we have identified are described as follows:

- **Caltrans Encroachment:** A portion of the pipeline alignment crosses under Highway 1, which is Caltrans Right-of-Way. Caltrans will most likely require this pipeline segment be constructed using bore and jack methodology. In addition, a Caltrans encroachment permit will need to be obtained prior to the start of construction. The preliminary design of this critical crossing is included in the MNS scope of work. A Caltrans permit will require 100% Plans and obtaining the Caltrans Encroachment permit is not included in this scope of work.
- **County of Monterey Encroachment:** A portion of the pipeline alignment is within County of Monterey (County) roadways. An encroachment permit for the construction of the project will be required. The County will require 100% Plans; obtaining this permit is not included in the MNS scope of work.
- **Coastal Zone:** Portions of the project are within the Coastal Zone, and as a result are within the jurisdiction of the California Coastal Commission. A Coastal Development Permit will need to be obtained prior to the start of construction. Processing a Coastal Development Permit will require prior approval of CEQA and obtaining this permit is not included in the scope of work.
- **Environmental Considerations:** Portions of the Project traverse undeveloped areas including vegetated areas and agricultural fields. There is a high potential these areas are habitat for sensitive plants or animals. A biological assessment of these areas is recommended to determine permitting requirements for the project. Environmental compliance work is not included in the scope of work.
- **Rights-of-Way Issues:** Historically, the District owned and maintained a 10-inch vitrified clay pipe (VCP) gravity sewer main along the proposed alignment of the bypass sewer. This pipeline crosses five individual private properties, in

addition to public rights-of-way, between the upstream connection point and the existing pump station. The District provided information regarding easements in the area, but additional research will be required to determine if the District owns easements along the entire alignment. If easements do not exist, additional easements will need to be obtained. In addition, due to modification of the pipeline alignment, additional easements will be required. This scope of work includes topographic and boundary surveying only. Scope and budget to provide legal descriptions for the District's use in obtaining additional easements are not included in the MNS scope of work.

Technical Approach

Our approach for this project is to focus on Coordination, Timely Project Management and Delivery, and Technical Excellence.

Coordination. In addition to strong verbal and e-mail communications, MNS will schedule regular meetings with the District, Caltrans, and project stakeholders as appropriate to ensure the recommendations and proposed improvements are in line with expectations. In addition, e-mails and conference calls with MNS staff will ensure District staff are involved in every stage of the design process.

Timely Project Management and Delivery. With our Project Manager's leadership, and a competent staff, we will lead all aspects of the Project to meet the District's goals. Our project team is available to kick this project off immediately and work towards the goal of a complete contract including detailed construction plans and specifications.

Technical Excellence. The MNS staff who will be involved in this project have extensive experience in the design and construction of wastewater facilities. Utilizing the advanced technical knowledge of our staff, we will lead every aspect of this project to ensure a robust and functional extension to the District's wastewater collection system.

Project Scope of Work

MNS has tailored a scope of work to provide engineering services for preliminary design of the Castroville Washington Sewer Trunk Line Bypass Project. A brief description of tasks and responsibilities are described below.

1.0 - Project Management, Quality Assurance/Quality Control, and Meetings

This task includes Project Management, Quality Assurance/Quality Control (QA/QC), and Meetings associated with the detailed design of the Project.

Subtask 1.1 – Project Management

The Project Manager will provide ongoing coordination of the project team including the District and the MNS project team. He will also monitor the budget and serve as the main point of contact with the District. Frequent phone calls and e-mail updates will be sent from the MNS Project Manager to the District General Manager in order to keep the coordination open and up-to-date. The MNS Project Manager will submit monthly invoices with all supporting documentation in a format acceptable to the District.

The MNS Project Manager will be responsible for ensuring all deliverable deadlines are met, all internal quality control reviews are completed, and the final products meet the expectations of the District.

Subtask 1.2 – Quality Assurance/Quality Control

In accordance with MNS company policy, all deliverables, calculations, recommendations, and other documentation will be reviewed by an experienced engineer, not otherwise associated with the Project, prior to submittal to the District. Documents will be reviewed to ensure technical excellence, the goals and expectations of the District are being met, and conformance with applicable design checklists and standards. For this project, all deliverables and other items requiring quality control reviews will be reviewed by Tyler Hunt, PE.

Subtask 1.3 – Meetings

Over the course of the Project, MNS will facilitate and lead meetings and conference calls as required to move the Project forward and ensure the District is informed and in concurrence with the progress of the project. For each meeting, MNS will develop a meeting agenda and will submit meeting minutes to the District within three business days. The Project Manager and the Project Engineer will attend meetings as appropriate.

Over the course of the Project, we anticipate two meetings which would be held at the District's offices:

- Project Kick-off Meeting
- 30% Design Review Meeting

Subtask 2.1 – Geotechnical Investigations

Portions of the proposed pipeline alignment will be installed at depth of up to 30 feet below ground surface, and trenchless pipeline installation methods will likely be utilized. Due to these factors, geotechnical investigations are recommended for this project and included in the scope of work.

Geotechnical engineering services will be provided by our subconsultant, Geosolutions, Inc. A detailed scope of work for geotechnical services to be provided is included as an attachment to this letter. MNS staff will coordinate the geotechnical investigations for this project.

Subtask 2.2 – Topographic Survey

MNS will conduct a ground survey of the proposed sewer alignment to obtain topographic information and develop a base map suitable for pipeline design including measuring invert elevations of six existing sewer manholes. The completed topographic map will include 1-foot surface contours and relevant surface features, and will include a 50-foot wide strip, approximately 1,200 feet in length centered along the proposed pipeline alignment. Trees, fences, manhole rim and invert elevations, and other observable utilities will be included in the survey.

Subtask 2.3 – Easement and Right-of-Way Mapping

MNS will conduct a field survey to re-establish the existing sewer easement and Highway 1 (Caltrans) Right-of-Way. The existing easements and rights-of-way will be plotted on the topographic base map. In addition, we will obtain title reports for four properties along the pipeline alignment. It is assumed the District will provide documentation of the existing sewer easement, and sufficient boundary monumentation exists, and can be located, to determine the existing easement and Right-of-Way.

MNS will develop a preliminary (30% complete) set of contract documents including draft plans and an engineer's opinion of probable cost of construction for the Project.

Subtask 3.1 – Plans

Using the site information collected and developed in Task 2, MNS will prepare detailed Plans for the Project clearly defining the work to be completed. The Plans will be prepared in the latest version of AutoCAD Civil 3D. Plan & Profile (P&P) drawings will be prepared with a horizontal scale of 1" = 20', with the vertical scales on profiles being drawn at a scale of 1" = 5'. An anticipated sheet list includes:

Sheet No.	Drawing No.	Description
1	G-1	Title Sheet
2	G-2	General and Civil Notes and Sheet Layout Plan
3	C-1	Sewer Alignment P&P – STA 10+00 to STA 14+00
4	C-2	Sewer Alignment P&P – STA 14+00 to STA 17+50
5	C-3	Sewer Alignment P&P – STA 17+50 to STA 22+00

Subtask 3.2 – Engineer's Estimate of Probable Cost of Construction

MNS will prepare an engineer's estimate of probable construction cost for each design submittal. We will base the estimate on recent projects of similar size and scope upon which we have worked.

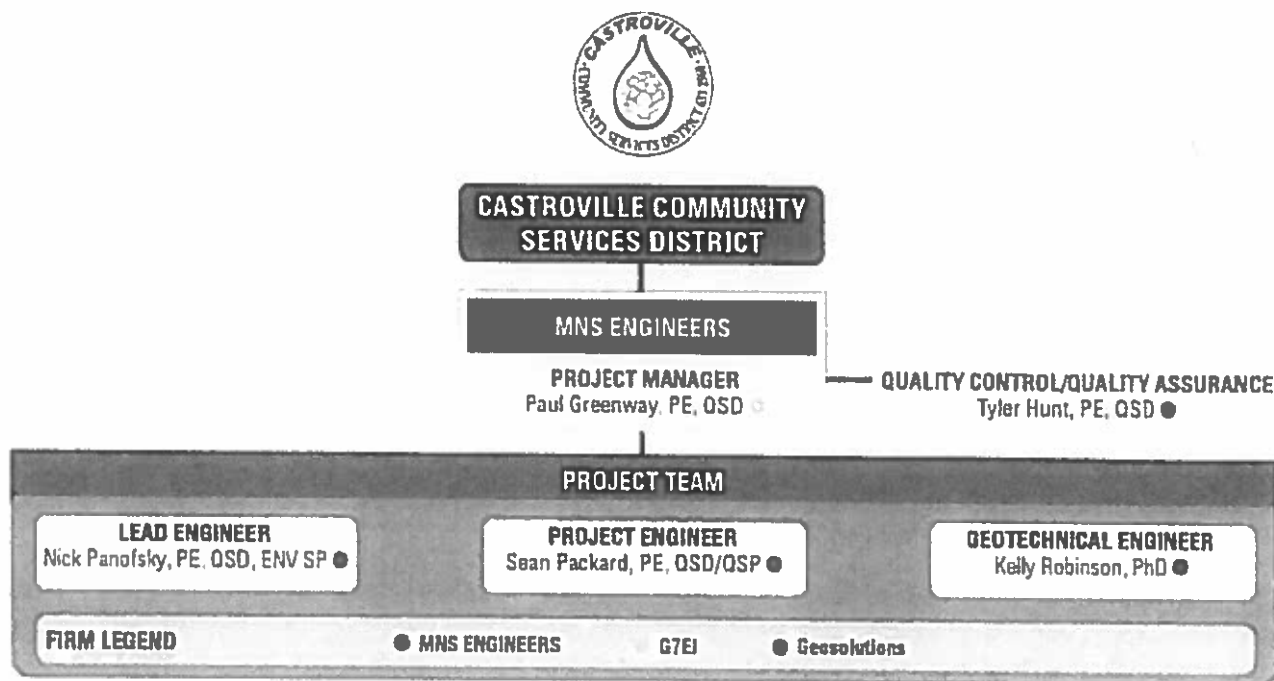
Deliverables

The following deliverables will be submitted to the District over the course of this project:

- Meeting Agendas and Meeting Minutes
- 30% design plans and cost opinion

Project Team

MNS has assembled a qualified team with the skills and expertise to bring this project to completion in line with the District's goals. An organizational chart for the proposed project team is included below. Detailed resumes for individual team members are available upon request.



Compensation

MNS proposes to perform the services described herein for a not-to-exceed fee estimate of \$59,723. A breakdown by task is provided in the following table. A detailed fee proposal spreadsheet is available on request. All fees are in accordance with the MNS Standard Fee Schedule, also included as an attachment

Task	Fee
Task 1 – Project Management, QA/QC, and Meetings	\$6,620
Task 2 – Earth and Land Investigations	\$37,815
Task 3 – Contract Document Development	\$15,288
Total	\$59,723

Schedule

We are prepared to meet or exceed the schedule provided in the following table, assuming a notice to proceed date of July 1, 2020

Project Kickoff	Week of July 1, 2020
Geotechnical Investigation	July 8 – October 4, 2020
Topographic Survey	July 15 – August 23, 2020
30% Design Submittal	October 21, 2020

Closing

Thank you for the opportunity to submit this proposal. We are excited and look forward to working with the District. This proposal is valid for six (6) months from the date of submission. Please feel free to contact Paul Greenway with any questions you may have about our submittal at 831.400.8964 or Paul@G7ei.com. Thank you for your consideration.

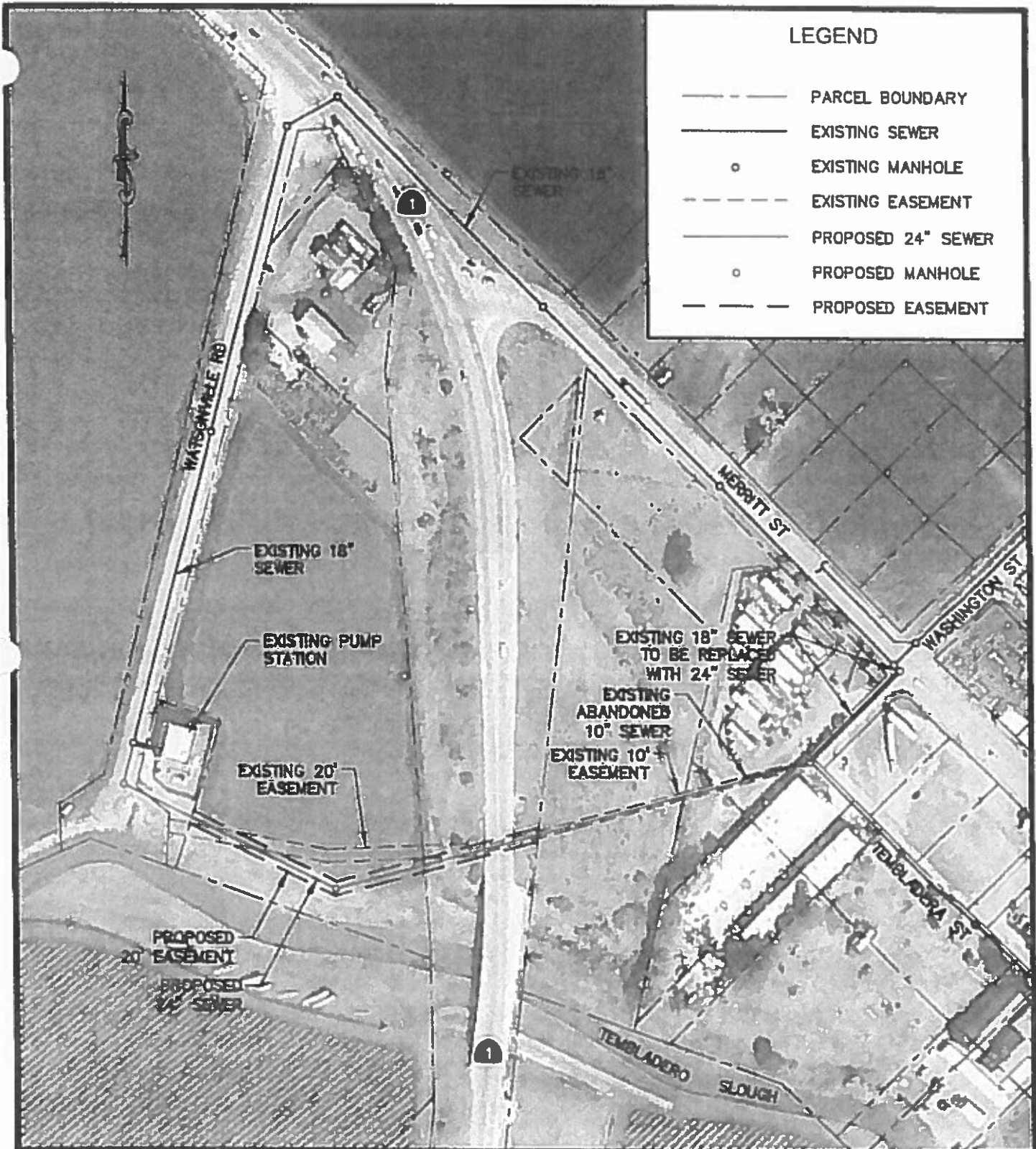
Sincerely,
MNS Engineers, Inc.



Nick Panofsky, PE
Lead Engineer

Attachments

- Figure 1 Proposed 24 inch Sewer Bypass Improvement
- Fee Schedule
- Geosolutions, Inc. Scope of Work

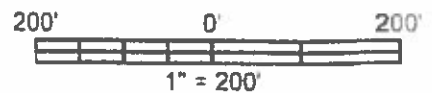


LEGEND	
---	PARCEL BOUNDARY
—	EXISTING SEWER
○	EXISTING MANHOLE
- - -	EXISTING EASEMENT
—	PROPOSED 24" SEWER
○	PROPOSED MANHOLE
- - -	PROPOSED EASEMENT

**FIGURE 1: PROPOSED 24-INCH SEWER BYPASS IMPROVEMENTS
WASHINGTON SEWER TRUNK LINE BYPASS
CASTROVILLE COMMUNITY SERVICES DISTRICT**

MNS
ENGINEERS INC
ENGINEERING | SURVEYING
CONSTRUCTION MANAGEMENT

25 San Juan Grade Road
Suite 105
Salinas, CA 93906
831.242.0058 Phone





2019 STANDARD SCHEDULE OF FEES

PROJECT/PROGRAM MANAGEMENT

Principal-In-Charge.....	\$275
Senior Project/Program Manager.....	250
Project/Program Manager.....	210
Assistant Project/Program Manager.....	180
Senior Project Coordinator.....	155
Project Coordinator.....	125

ENGINEERING

Principal Engineer.....	\$240
Lead Engineer.....	215
Supervising Engineer.....	200
Senior Project Engineer.....	185
Project Engineer.....	170
Associate Engineer.....	155
Assistant Engineer.....	140

SURVEYING

Principal Surveyor.....	\$225
Senior Survey Project Manager.....	205
Supervising Surveyor.....	200
Senior Project Surveyor.....	180
Project Surveyor.....	160
Senior Land Title Analyst.....	155
Associate Project Surveyor.....	145
Assistant Project Surveyor.....	130
Party Chief.....	155
Chainperson.....	135
One-Person Survey Crew.....	185

CONSTRUCTION MANAGEMENT

Principal Construction Manager.....	\$250
Senior Construction Manager.....	235
Resident Engineer.....	210
Structure Representative.....	185
Construction Manager.....	185
Assistant Resident Engineer.....	160
Construction Inspector (PW).....	150
Office Administrator.....	105

TECHNICAL SUPPORT

CADD Manager.....	\$160
Supervising Technician.....	145
Senior Technician.....	135
Engineering Technician.....	105

ADMINISTRATIVE SUPPORT

Senior Management Analyst.....	\$160
Management Analyst.....	\$135
Administrative Analyst.....	\$115
IT Technician.....	110
Graphics/Visualization Specialist.....	100
Administrative Assistant.....	75

GOVERNMENT SERVICES

City Engineer.....	\$215
Deputy City Engineer.....	195
Assistant City Engineer.....	180
Plan Check Engineer.....	170
Permit Engineer.....	150
City Inspector.....	125
City Inspector (PW).....	150
Principal Stormwater Specialist.....	155
Senior Stormwater Specialist.....	140
Stormwater Specialist.....	125
Stormwater Technician.....	115
Building Official.....	175
Senior Building Inspector.....	150
Building Inspector.....	135
Planning Director.....	185
Senior City Planner.....	160
Assistant Planner.....	145
Senior Grant Writer.....	160
Grant Writer.....	135
Grant Associate.....	105
Grant Assistant.....	85

DIRECT EXPENSES

Use of outside consultants as well as copies, blueprints, survey stakes, monuments, computer plots, telephone, travel (out of area) and all similar charges directly connected with the work will be charged at cost plus fifteen percent (15%). Mileage will be charged at the current federal mileage reimbursement rate. Expert Witness services will be charged at three (3) times listed rate and will include all time for research, deposition, court appearance and expert testimony.

PREVAILING WAGE RATES

Rates shown with Prevailing Wage "(PW)" annotation are used for field work on projects subject to federal or state prevailing wage law.



GeoSolutions, Inc.

1021 West Tama Lane, Suite 105, Santa Maria, CA 93454
(805)614-6333, (805)614-6322 fax
SBinfo@geosolutions.net

220 High Street, San Luis Obispo, CA 93401
(805)543-8539, (805)543-2171 fax
info@geosolutions.net

May 14, 2019
Project No. SL09818-1 (rev. 1)

Attn: Nick Panofsky
MNS Engineers, Inc.
811 El Capitan Way #130
San Luis Obispo, California 93401

Subject: **Proposal for Geotechnical Services**
CCSD 24-Inch Sewer Bypass Improvements
Watsonville Road to Washington Street
Castroville Area, Monterey County, California

Dear Mr. Panofsky:

1.0 INTRODUCTION

GeoSolutions, Inc. hereby presents this proposal for geotechnical services for the proposed Castroville Community Services District (CCSD) 24-inch sewer bypass project to be located between Watsonville and Washington Street in the Castroville area of Monterey County, California. MNS Engineering, Inc. (MNS) will hereafter be referred to as the "Client". We understand our services are requested to provide geotechnical recommendations for the proposed pipeline construction. This proposal presents our project understanding, proposed scope of work, estimated costs, and approximate schedule to prepare a Soils Engineering Report for the project in accordance with the standard specifications of Monterey County, the 2016 California Building Code (CBC), and/or industry standard practices. This revision was prepared as an updated to our original proposal dated July 15, 2016.

2.0 PROJECT DESCRIPTION

Our project understanding is based on information provided by MNS and our site visit performed on June 30, 2016. The proposed 24-inch bypass improvements will replace the existing sewer located along Washington Street, between Merritt Street and Tembladera Street, and continues to the southwest, beneath Highway 1, to an existing pump station located at the south end of Watsonville Road. An existing 10-inch sewer extending southwest from the corner of Tembladera Street and Washington Street will be abandoned as part of the project. The proposed

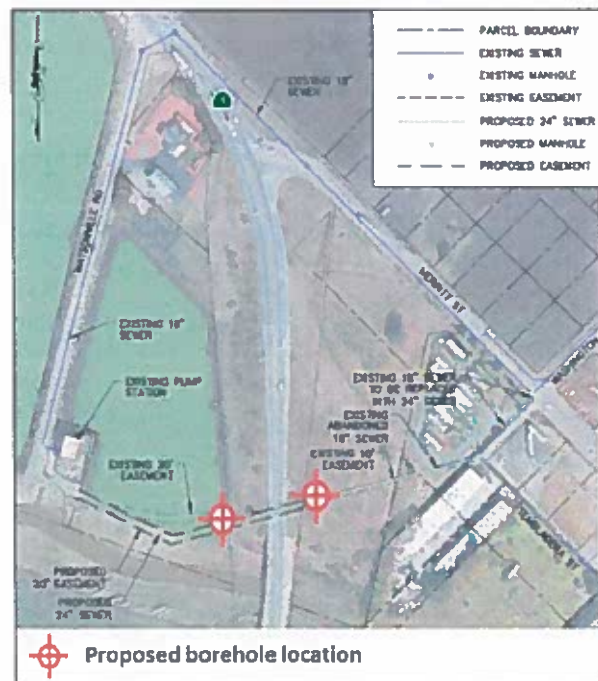


Figure 1: Preliminary Sewer Location Plan

alignment is anticipated to be about 1400 feet long per the preliminary alignment location plan presented in (provided by MNS).

Site conditions along the proposed alignment include the relatively flat farm field area east of the pump station, a rise in elevation of about 15-20 feet in the area of Highway 1 (assumed to be fill placed for road construction), and the relatively level area east of the mound and along Washington Street. The Tembladero Slough runs generally east-west just south of the project site.

It is anticipated that the majority of the alignment will be constructed using conventional cut-and-cover trenching techniques and that jack-and-bore construction will be used beneath Highway 1. We understand geotechnical information is requested for the pipeline construction.

3.0 PROPOSED WORK SCOPE

A summary of our proposed work scope is provided below and is based on our understanding of the project needs. Additional information can be found in the attachment, SCOPE OF SERVICES.

a. **Field Investigation**

We propose to advance two exploratory borings for the proposed jack and bore construction beneath Highway 1. The proposed borings will be located at the approximate locations indicated in Figure 1. The eastern boring, located in the fill area along Highway 1, will be advanced to a depth of about 40 feet below ground surface (bgs) and the west boring, located in the relatively flat farm area will extend to a depth of about 20 feet (bgs).

The western boring will be located within the existing CCSD 20-foot easement. The eastern boring will be located within Caltrans right-of-way and will require a Caltrans encroachment permit. Fees associated with the permit are included in this proposal. Prior to the field explorations, a representative of GeoSolutions, Inc. will visit the proposed exploration locations and mark for utility clearance (USA). We anticipate the fieldwork can be completed in one day, including site mobilization.

b. **Laboratory Testing**

Samples obtained during our field exploration will be tested in our laboratory in for soil classification and engineering properties.

c. **Reporting**

We will prepare a Soils Engineering Report summarizing our findings from the above tasks and providing geotechnical recommendations for the proposed construction.

4.0 SCHEDULE

a. We will submit the proposed Soils Engineering Report within approximately ten to twelve weeks of receipt of your written authorization to proceed, pending the Caltrans permitting process. A break-down of the anticipated schedule for our services associated with preparing the Soils Engineering Report for the project is as follows:

- i. The Caltrans encroachment permit application process will be submitted within approximately one week of receipt of your written authorization to proceed. We understand Caltrans may take approximately 30 to 40 days to process the encroachment permit.

- ii. Fieldwork can be scheduled immediately upon receiving the signed contract. Commencement of the field exploration can occur within approximately ten weekdays of receiving signed agreement, weather permitting and pending processing of necessary permits and coordinating site access. We anticipate the fieldwork can be completed in one day, with drill rig mobilization.
 - iii. We can provide preliminary information within ten working days of field exploration (conclusion of laboratory analysis).
 - iv. We anticipate completion of the final report in ten additional working days.
- b. To initiate the proposed services, please sign and return a copy of the included Agreement for Professional Services. Upon receipt of the signed copies of the Agreement for Professional Services, we will promptly schedule the work for the proposed services and return a counter-signed Agreement for Professional Services. Any alterations to the original Agreement for Professional Services may result in a delay of the proposed services or our inability to execute the proposed services.

5.0 FEE ESTIMATE

Our fees for the proposed geotechnical services include field investigation, Caltrans permitting, laboratory testing, and report preparation of the Soils Engineering Report. We understand this is a prevailing wage project. Our fees are based on a flat rate and are as follows:

Field Investigation

CME drill rig w/ 2-man crew (w/ site mobilization)	\$ 3,600.00
Project Engineer (1 day drilling plus 1 day USA/coordination)	\$ 3,200.00
Encroachment Permit	
Caltrans Application Fee	\$ 1,000.00
Project Engineer (1-day coordination / correspondence)	\$ 1,400.00
Subtotal.....	\$ 9,200.00

Laboratory Testing \$ 1,000.00

Soils Engineering Report Preparation \$ 1,500.00

TOTAL \$ 11,700.00

We will not incur expenditures above \$ 11,700.00 without your prior authorization.

6.0 REPORTS

The report(s) will present our findings, conclusions, and recommendations. A digital copy (pdf) of this report(s) will be emailed to the client or client representative.

7.0 TERMINATION OF SERVICES

This contract may be terminated by either party. Any fees accrued by GeoSolutions, Inc. after receipt of the signed Agreement for Professional Services and retainer will be deducted from said retainer and the remainder returned to the issuer of the retainer.

8.0 ADDITIONAL GEOTECHNICAL AND INSPECTION SERVICES

GeoSolutions, Inc. assumes that it will be retained to provide additional services during future phases of the proposed project. These services would be provided by GeoSolutions, Inc. as required by the County of Monterey, the 2016 CBC, and/or industry standard practices. These services would be in addition to those included in this document.

9.0 CLOSURE

It is the responsibility of the Client and/or the Client Representative to provide access to the project site for our testing equipment. The locating of any underground utility is the responsibility of the Client and/or the Client Representative. We will exercise caution during field exploration. However, GeoSolutions, Inc. will not be liable for damage or injury arising from damage to such utilities. If the Client/Client Representative is uncertain about the locations of underground utilities, the Client should hire a professional locating service. If paint is used to mark utility locations, GeoSolutions, Inc. will not remove paint marks. Additionally, it should be noted when drilling on or near developed properties, there is a risk of damage to the landscape, hardscape, and pavement areas. We will exercise caution during the field investigation to avoid damaging the existing landscape, hardscape, and/or pavement areas. However, GeoSolutions, Inc. will not be liable for damage to existing landscape, hardscape, and pavements.

Topographic maps and a preliminary layout should be provided to us. Any change in the layout could necessitate additional work. Review of subsequent plan changes and/or other project requirements would be charged as additional cost in accordance with our fee schedule. We request that any previous geologic or geotechnical reports conducted for the site be submitted to us.

This proposal, including, but not limited to, the terms of payment, proposed services, and schedule for proposed services, is valid for 90 days from the proposed date. Upon completion of the final report, three (3) copies will be submitted to the client. Discussion, consultation, meetings, additional fieldwork, design changes, plan review, or other services requested after the completion of the final report will be considered a separate element and billed on a "Time and Materials" basis in accordance with the current Fee Schedule.

We look forward to providing professional soils engineering services for your project. If you have any questions, please contact us to set up an appointment at your earliest convenience at (805) 543 - 8539.

Sincerely,
GeoSolutions, Inc.



Kelly Robinson, PhD, GE 3118
Principal Engineer

Attachments: **AGREEMENT FOR PROFESSIONAL SERVICES
SCOPE OF SERVICES**

SCOPE OF SERVICES

SOILS ENGINEERING REPORT

SOILS ENGINEERING REPORT

The purpose and scope of our soils engineering report will be to provide geotechnical recommendations pertaining to the proposed project in accordance with the requirements of the County of Monterey, the 2016 CBC, and/or industry standard practices. The study will include the following:

1. Pertinent published and unpublished geotechnical studies and literature of the subject project area will be reviewed under the direction of the Project Engineer.
2. Field exploration will consist of drilling two borings to depths of 20 and 40 feet below ground surface within the proposed construction area that is accessible with our drill rig. The approximate boring locations are presented in Figure 1. We anticipate the field investigation can be completed within one day, including drill rig mobilization. We anticipate approximately two days of correspondence will be required to mark the site for utility clearance and to obtain an encroachment permit from Caltrans prior to investigation (one day for each).
3. The borings will be observed under the direction of the Project Engineer and will be used to classify the subsurface materials that may be encountered during pipeline construction. Borings will be backfilled, but not compacted, with on-site material. Repair of damaged landscape will not be the responsibility of GeoSolutions, Inc.
4. During the field investigation, sub-surface soils and/or bedrock and their conditions will be recorded in Boring Logs under the direction of the Project Engineer. Bulk and relatively undisturbed soil/bedrock samples will also be obtained during the field investigation for classification and laboratory testing.
5. Selected soil samples that are considered to be representative of site conditions will be tested in our laboratory, or an equivalent laboratory, in order to ascertain or derive relevant engineering properties, which will include:
 - i. Soil classification;
 - ii. Plasticity index;
 - iii. Soil particle size analysis;
 - iv. Expansion index;
 - v. Shear strength; and
 - vi. Moisture and/or density of in-situ samples
6. Geotechnical engineering analyses will be performed using the data obtained from our literature review, field investigation, and laboratory testing. These analyses will be used to help form our geotechnical recommendations.
7. We will prepare a Soils Engineering Report providing geotechnical recommendations pertaining to the following:
 - i. General soil conditions at the site(s) and depth to groundwater, if encountered;
 - ii. Grading requirements and dewatering recommendations;
 - iii. Soil design parameters including coefficient of friction and subgrade modulus;
 - iv. Trench/wall backfill procedures; and
 - v. Lateral earth pressures (active, at-rest, and passive resistance) and sliding resistance parameters for the design of temporary shoring.