

**Request for Proposals**  
**SEWAGE COLLECTION SYSTEM STUDY**  
**For the City of Tillamook, Oregon**

Public Works Department  
City of Tillamook,  
City Hall, 2211 Third Street, Suite A,  
Tillamook, OR 97141

July 31, 2019

The City of Tillamook (City) is accepting proposals to select a qualified engineering consulting firm or consulting engineer licensed in the State of Oregon to prepare a Sewage Collection System Study (Project) that will help identify and eliminate significant Inflow and Infiltration (I/I) sources within the City's collection system. All questions regarding this Request for Proposals (RFP) shall be directed to Liane Welch, City Engineer, at [lwelch@tillamookor.gov](mailto:lwelch@tillamookor.gov), or to the Public Works Department, City Hall, 2211 Third Street, Suite A, Tillamook, OR 97141. The City will be using the Qualification Based

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Selection process in accordance with Oregon State Law. This RFP is available for viewing online at the City Website which also has links to relevant reference materials.

Proposers must register with Liane Welch as an RFP holder at [lwelch@tillamookor.gov](mailto:lwelch@tillamookor.gov). If any modifications to this RFP are developed, Liane will only send them to companies that have registered with her.

Proposals shall be submitted by firms that have a capable and demonstrable background in the type of work described in Section C, "SCOPE OF WORK," of this notice. In addition, all interested firms shall have sufficient, readily available resources in the form of trained personnel, support services, specialized consultants, and financial resources to carry out the work.

The proposals shall be submitted to the Public Works Department, City of Tillamook, City Hall, 2211 Third Street, Suite A, Tillamook, OR 97141, no later than:

**2:00 p.m. on August 27, 2019**

Each Proposer shall submit one (1) unbound, four (4) bound hard sets and one (1) electronic copy of the proposal in PDF format in accordance with **Section D, "PROPOSAL REQUIREMENTS."**

### **A. BACKGROUND**

The City of Tillamook (City) has a sewage collection system consisting of approximately 20 miles of sanitary sewer piping and 5 City-owned pump stations and approximately 60 privately-owned individual septic tank effluent pump (STEP) systems.

An **August 2005 Facility Plan** estimated the cost of \$24 million for a system-wide rehabilitation to remove I/I. From this, consultants determined it was **"not"** economically feasible to eliminate the infiltration/inflow and that it was more cost effective to convey and treat the I/I at the wastewater treatment plant (WWTP). Therefore, in 2010 the City upgraded it's WWTP to treat the excessive inflow and infiltration and discharge it to the Trask River.

In February 2019 the Oregon DEQ issued the City of Tillamook a **new NPDES Permit** requiring that:

*"By no later than May 1, 2023, the City must submit an inflow/infiltration analysis that details the extent of the inflow/infiltration and provides a cost-effective analysis that compares the costs of correcting the inflow/infiltration to the costs of transportation and treatment of the inflow/infiltration."*

The City of Tillamook has spent approximately \$4.5 million to repair sewer pipes from 2013-2016. In 2018 the City was granted another \$2.5 million Community Development Block Grant (CDBG) to repair sewer pipes, laterals and manholes to reduce I/I on the east side of Tillamook. This project is in design and will be in construction the summer of 2020.

The City is looking at the best way to obtain an updated/improved assessment of the sewage collection system. This request for proposals (RFP) is to retain an engineering consultant, who will conduct an analysis and prepare a report on the City of Tillamook's sewage collection system. The City has already retained a "Plant Capacity Consultant" who will provide the Engineering Consultant with the following:

1. Identification and analysis of flows and loads at the wastewater treatment plant (Section 6, 2005 Facility Plan (Wastewater Flows and Loads).
2. Alternatives and costs of WWTP upgrades to handle additional flow along with cost savings at WWTP for reducing flow.

### **B. GOALS AND CONSTRAINTS**

**Project Goals:** The goal of this request for proposals (RFP) is to retain an Engineering Consultant. The Engineering Consultant will conduct an analysis and prepare a report that quantifies the balance between making investments (repair or replacement) in the sewage

collection system compared to conveyance and treatment of sewage at the wastewater treatment plant. The primary purpose of this work is to satisfy a requirement of the Oregon DEQ in the City of Tillamook's NPDES Permit No. 101239, Schedule D.14 (inflow/Infiltration Analysis). A secondary goal is to update and prioritize both short and long-term collection system projects that will reduce I/I and potentially increase collection system capacity. Finally, the Report will also update selected items from Tillamook's NPDES Permit No. 101239, Schedule D.1.a (Inflow and Infiltration) as described in **Section C, "SCOPE OF WORK, Task 6."**

**Budget Constraints:** The City has budgeted \$50,000 for work (engineering and field work) on this Project in year 1; Fiscal Year 2019-2020 (July 1, 2019 to June 30, 2020). To stay within the budget, the City plans to initiate the field work during the wet season of year 1. During year 2 of the Project the City anticipates there will be an expanded budget for potentially more fieldwork and the engineering analysis.

### **C. SCOPE OF WORK**

#### **Task 1. Document Review**

##### **Background and Objectives**

The Collection System Consultant will make full use of past studies, reports and documents on the sewage collection system and related works. The following are available for review:

- August 2005, Wastewater Facility Plan (2005 Facility Plan)
- February 2006, Predesign Report, City of Tillamook WWTP Expansion
- March 2009 City of Tillamook Sanitary District System Map
- September 2015 Bid Documents, Sewer Rehabilitation Project No 1: Plans
- September 2015 Bid Documents, Sewer Rehabilitation Project No 1: Record Dwgs
- July 2016 Bid Documents, Sewer Rehabilitation Project No 2: Plans
- July 2016 Bid Documents, Sewer Rehabilitation Project No 2: Record Dwgs
- November 2018 Tillamook NPDES Permit Evaluation Report
- February 2019 Tillamook NPDES Permit
- June 2019 Tillamook Sewer Ordinance

#### **Task 2. Map the Existing Collection System**

##### **Background and Objectives**

Using existing information along with current City staff interviews and field observations the Engineering Consultant will describe the current collection system, age and probable condition. Information from **Task 1** along with newly collected data will provide a basis for completing this **Task 2**.

##### **Activities**

1. Inventory the current collection system, which may include but not be limited, to basic information:

- a. Population served,
- b. System size and condition,
- c. Pipe length, size, material and age,
- d. Manhole locations,
- e. Lift stations,
- f. Basins and sub basins,

2. Interview and document observations from the City of Tillamook Publics Work Department on the current condition of the collection system.

3. Conduct a visual inspection and document the condition of the collection system.

### **Task 3. Recommend and Prioritize Data Collection**

#### **Background and Objectives**

The City will initiate smoke testing and limited field work on the collection system during Year 1 of the Project. The Engineering Consultant will identify key locations and recommend additional data collection based on finding from **Task 2**. The prioritizing of work may include: 1) field observations/inspections, 2) smoke testing, 3) closed circuit television (CCTV) inspections and 4) flow measurements. The Engineering Consultant shall propose an I/I Field Data Collection Program and budget for Year 2 or subsequent years of the Project. The City will work with the Engineering Consultant to tailor the Program to meet the City's budget while gathering enough data to make informed decisions.

#### **Activities**

- 1. Recommend I/I Data Collection Program for the Project.
- 2. Provide the City with a budget estimate for data collection for Year 2 or subsequent years of the Project.
- 3. Present findings and recommendations to Public Works or the City Council.

### **Task 4. Contract and Oversee Data Collection**

#### **Background and Objectives**

The Engineering Consultant will carry out the field work identified and approved as part of **Task 3** or subcontract/oversee field work to I/I Subcontractors. The object of this Task is for the Engineering Consultant to carry out, oversee, collect and analyze additional data on the sewage collection system.

## Activities

1. Develop a work plan and schedule for data collection.
2. Have the work plan and schedule approved the City Staff.
3. Conduct field testing in accordance with the City approved plan.
4. Collect additional information (if needed) during both wet and dry weather. Information likely to include, but not limited to:

a) Field Observations/Inspections: Locations/ instructions for field observations will be directed by the Engineering Consultant and carried out by City of Tillamook personnel. Work products may include a log/photographs of adverse effects of high-flow events including: surcharging of the collection system, overflows or defective manholes. Visual inspections will take place on both a scheduled basis and as part of any preventive or corrective maintenance activity. Information from visual inspections will be collected largely by the City and reviewed/analyzed by the Engineering Consultant.

b) Smoke Testing: The Engineering Consultant or their Subconsultant will conduct smoke testing on priority basins identified in **Task 3** in order to detect I/I sources, to locate manholes not identified on the City's existing Sanitary District Sewage Map, and to obtain a lineal footage of the sewer line segments for the system inventory. Smoke sources will be photographically documented and located with a handheld GPS unit to allow for efficient analysis and, as necessary, repair. Although the initial purpose of the testing will not be to identify private sources of I/I, the smoke testing will likely identify some of these private sources. These sources will be recorded and, in accordance with City Sewer Ordinance, the City may request that the homeowner remove any illicit connections identified through smoke testing.

c) Closed Circuit Television (CCTV) inspections: If required in **Task 3**, the Engineering Consultant or their Subconsultant will utilize a closed-circuit television (CCTV) camera to observe the conditions on the sewer mains and detect any defects. Inspections will be conducted per the (NASSCO) Pipeline Assessment Certification Program (PACP). For each segment that is inspected, a form will be completed, data collected electronically and a videotape of the segment will be created.

d) Flow Measurements: Dry weather and wet weather flow rates may be measured as an indicator as to which priority areas experience significant I/I entering the system. The results of flow monitoring will be used to refine the priority ranking described in **Task 3** so that the City can concentrate the assessment efforts on the areas that exhibit high rates of I/I. Flow measurements performed for the purpose of quantifying I/I will be separated into a minimum of three components: base flow, infiltration, and inflow.

The City is exploring implementing a GIS system, the data provided should be able to be added to our GIS system.

## **Task 5. Evaluate Collection System Capacity and Condition**

### **Background and Objectives**

Using information in **Tasks 1** through **Task 4**, the Engineering Consultant will identify the locations and quantify the amount of I/I input into the collection system including during the 5-year 24-hour wet-weather event. The City's ultimate goal is to identify/quantify major sources of I/I so that in **Task 6**, the Engineering Consultant can perform *"an inflow/infiltration analysis that details the extent of the inflow/infiltration and provides a cost-effective analysis that compares the costs of correcting the inflow/infiltration to the costs of transportation and treatment of the inflow/infiltration"*

### **Activities**

1. Analyze and evaluate past and recent data on the collection system.
2. Identify and quantify the amount of I/I entering into the collection system.
3. Develop and prioritize alternatives for upgrading and/or replacing/repairing portions of the sewage collection system including pump stations, interceptors, manholes and flow transfer related facilities.

## **Task 6. Analyze and Report the Cost of Reducing I/I**

### **Background and Objectives**

Prior to April 1, 2022 the Engineering Consultant will utilize information, data and evaluations completed in **Tasks 1 through 5** and submit a completed **"Sewage Collection System Report"** to the City providing an inflow/infiltration analysis that details the extent of the inflow/infiltration and provides a cost-effective analysis that compares the costs of correcting the inflow/infiltration to the costs of transportation and treatment of the inflow/infiltration.

### **Activities**

1. Being given the cost of treatment at the WWTP upgrade by others, the Engineering Consultant will compare the costs of correcting the inflow/infiltration to the costs of transportation and treatment of the inflow/infiltration. (e.g. 2005 Facility Plan, Section 8.6).
2. By August 1, 2021 complete and submit a **"Draft Sewage Collection System Report"** to the City which documents all prior I/I related work and prioritizes /quantifies/ recommends collection system improvements for the City and compares the costs of correcting the inflow/infiltration to the costs of transportation and treatment of the **inflow/infiltration**. The Report will satisfy the requirement of the Oregon DEQ in the City of Tillamook's NPDES Permit No. 101239, Schedule D.14 (inflow/Infiltration Analysis). The Report will also update selected items from Tillamook's NPDES Permit No. 101239, Schedule D.1.a (Inflow and Infiltration) by providing the following:
  - a. Identification of all overflow points.

- b. Verification that sewer system overflows are not occurring up to a 24-hour, 5-year storm event or equivalent.
  - c. Monitoring information on all pump station overflow points.
  - d. Describe a process for identifying and removing all inflow sources into the sewer system over, including a time, schedule for identifying and reducing inflow.
3. Following review of the **Draft Sewage Collection System Report** by the City and other stakeholders including the Oregon DEQ, discuss and present Draft Sewage Collection System Report in Portland, Oregon (DEQ meeting).
4. Reply to comments and make necessary changes on the **Draft Sewage Collection System Report**.
5. By April 1, 2022 or 3 months after receiving review comments (whichever is greater), complete and submit a "**Final - Sewage Collection System Report**" to the City, and possible presentation to City Council.

### **Task 7. Project Management**

#### **Background and Objectives**

The Engineering Consultant will be required to communicate with the City, the Plant Capacity Consultant, the Oregon DEQ and other stakeholders concerning project related issues. The goal is for the Engineering Consultant to plan, schedule and advise others on I/I related issues by use of meetings, telephone, Email or other means.

#### **Activities**

1. Provide project oversight and direction on I/I and sewage collection related issues.
2. If necessary, retain, manage and coordinate I/I Subconsultants for data collection.
3. Communicate regularly with the City or their representative.
4. Develop and update project schedules.

#### **Deliverables**

1. Recommended Project Approach and Scope (for City Approval).
2. Develop a schedule of planned activities and milestone dates.
3. Attached to the monthly invoice, the Engineering Consultant shall provide a brief description the work completed that month and what is planned for the following month. The Engineering Consultant shall also provide the City with progress reports and invoicing on completed work.
4. Coordinate and share information with the Plant Capacity Consultant on I/I and collection system related items concerning the City of Tillamook.

### **Task 8. Deliverables and Meetings**

Maps, technical memorandums (TMs) and reports will be made available to the City as both pdf and in electronic (Word, Excel or CAD) format. The Engineering Consultant will provide the City

with ten (10) printed hard copies and an electronic version of the Draft and Final Sewage Collection System Report.

A monthly meeting either in person or phone conference on the status of the project with City staff and the Plant Capacity Study Consultant.

**At a minimum the following Deliverables are required:**

**Task 2: Draft TM No 1, Existing Collection System Description** (e.g. 2005 Facility Plan, Section 4)

**Task 2: Updated Collection System Map**, March 2009 City of Tillamook Sanitary District System Map

**Task 4: Final TM No 1, Existing Collection System Description** (e.g. 2005 Facility Plan, Section 4)

**Task 5: Final TM 2 Field Data Collection**

**Task 5: Final TM No 3, Collection System Alternatives** (e.g. 2005 Facility Plan, Section 8.1 through 8.5)

**Task 6: Draft Sewage Collection System Report** – Comparison of the cost of collection system Improvements to that of conveyance and wastewater treatment plant upgrade.

**Task 6: Final Sewage Collection System Report** – Comparison of the cost of collection system Improvements to that of conveyance and wastewater treatment plant upgrade.

The Engineering Consultant will be responsible for preparing and directing meetings associated with this project. Preparing and distributing meeting notes will also be the responsibility of the Engineering Consultant.

**At a minimum the following Meetings are anticipated:**

**Task 2: In Tillamook**, Existing Collection System Presentation to Public Works Staff.

**Task 3: In Portland**, Existing Collection System and Data Collection with the Oregon DEQ and the City.

**Task 6: In Tillamook**, Draft Sewage Collection System Report (May be included in **Task 2**) with the Public Works Staff.

**Task 6: In Portland**, Draft Sewage Collection System Report with the Oregon DEQ and City.

#### **D. PROPOSAL REQUIREMENTS**

##### **Mandatory Proposal Requirements**

Proposals must be signed by a principal member of the proposing company capable of binding the company.

**Economy of Presentation**

Proposals should be prepared simply and economically, providing a straight forward, concise presentation of the information requested. Fancy bindings, colored displays, and promotional materials, etc., are not important. Emphasis should be on completeness and clarity of content.

The City requests that the Proposer submit a concise proposal clearly addressing all of the requirements outlined in the RFP. The Proposer shall submit four (4) bound sets and one (1) electronic copy in PDF format of its proposal containing 8-1/2" x 11" sheet sizes for the text and 11" x 17" sheet sizes for any fold-out drawings. The proposal should have a page limit of 15 pages, excluding resumes and cover letter.

**Addenda**

In the event that it is necessary to amend, revise, or supplement any part of the RFP, addenda will be provide to all Proposers who have notified Liane Welch by mail at [lwelch@tillamookor.gov](mailto:lwelch@tillamookor.gov) . Addenda will also be posted on the City website at [www.tillamookor.gov](http://www.tillamookor.gov). Any addenda so issued are to be considered part of the specifications of the RFP. City is not responsible for any explanation, clarification, interpretation, or approval made or given in any manner except by written addenda issued by City.

**Proposal Ownership**

All material submitted by the proposers shall be considered property of City, and City shall not be required to return same to any proposer. The material submitted by proposers will be treated in the same manner as City’s own records. After proposal opening, all proposals become part of the public record unless exempt under Oregon Public Records Law.

**Exceptions to RFP**

If, for any reason, a proposer should find fault with the structure of this RFP or with the evaluation process, concerns may be submitted in writing to Liane Welch, City Engineer, City of Tillamook at [lwelch@tillamookor.gov](mailto:lwelch@tillamookor.gov). The City will make every effort to answer questions and, if warranted, to amend the RFP.

**Comments and Protests Procedures**

A prospective proposer may deliver to the City of Tillamook, Attention Liane Welch, City Engineer, a written request for change to any of the specifications listed in this RFP. Such request shall be delivered at least five (5) working day prior to the RFP closing date. A written request for change shall include”

- A. A detailed description of the legal and factual grounds for the request;
- B. A description of the resulting prejudice to the prospective proposer; and
- C. A statement of the form of relief or any proposal changes to the specifications.

The City will review the specification change requested and notify the prospective proposer of the decision in writing prior to the RFP closing date.

**Schedule for Selection Process**

RFP Advertised	July 31 and August 7, 2019
Proposal Closed	August 27, 2019
Evaluation Complete	September 10, 2019
Contract Negotiations through	September 17, 2019
Recommendation to City Council	September 23, 2019
Contract Award	TBD

**Late Proposals not considered**

Proposals must be received by 2:00 p.m. on August 28, 2019 at 2211 Third Street, Suite A, Tillamook, OR 97141. Any proposals received after this deadline will not be considered.

**Scoring Criteria**

<b>Criteria</b>	<b>% of score</b>
<b>Firm Qualification:</b> Please provide your firms' technical experience in performing work of a similar nature with Oregon Cities of small to modest size. Record of completing work on schedule, strength and stability of the firm. If you have subconsultants as part of you team, include information on your team member's experience in performing similar work.	25%
<b>Staff and Project Organization:</b> Please describe the qualifications of project staff, key personnel's level of involvement in performing related work, logic of project organization, adequacy of labor commitment and restriction on changes in key personnel for both the Prime firm and any subconsultants. Firms must be able to provide sufficient staffing with qualified individuals throughout the contract.	20%
<b>Demonstrated Understanding of the Project Requirements:</b> Please describe your understanding and approach to this project. Please include a list of tasks and schedule to implement the project and identify milestones, and deliverables. Describe how field data collection and analysis can be achieved with limited revenue sources available to the City.	45%
<b>Experience with Oregon DEQ:</b> Please describe your experience in working with DEQ and any negotiations that you have experienced with them.	10%
<b>References:</b> Present 3 references for projects similar in scope. Provide the name, email and phone number.	Pass/No Pass

**E. CONSULTANT SELECTION PROCEDURE**

**1. Evaluation Procedure:**

Proposals will be initially screened by the selection committee pursuant to the following minimum qualifications:

1. Proposer is an Engineer licensed to work in the State of Oregon.
2. Proposer's ability to provide the engineering work needed by City to the Standards required by the City and State.
3. Proposer is an Equal Opportunity Employer and is otherwise qualified by law to enter into the Professional Services Agreement.

Once the initial screening process is complete, the remaining proposals will be evaluated by the selection committee under the criteria and weights accorded in Section D above. If the City deems it desirable, the City may elect to interview one of more of the top candidates.

The City is using a Qualifications Based Selection (QBS) process. As a result, selection of the most qualified candidate will be made as described in **Section D, "PROPOSAL REQUIREMENTS."** If the City does not cancel the RFP, only after selecting the most qualified candidate, the City and the selected candidate enter into contract negotiations for the price of the services. The City shall direct negotiations toward obtaining written agreement of the Engineer's performance obligations, a payment

methodology that is fair and reasonable to the City, and any other provisions the City believes to be in the City's best interest to negotiate.

If the City and the selected candidate are unable to any reason to negotiate a contract at a compensation level this is reasonable and fair to the City, the City shall, either orally or in writing, formally terminate negotiations with the selected candidate. The City may then negotiate with the next most qualified candidate. The negotiation process may continue in this manner through successive candidates until an agreement is reached or the City terminates the RFP.

**2. Award:**

The successful Proposer will be asked to enter into a contract with the City reflecting the terms and conditions of the proposal plus the City's standard Professional Services Agreement requirements.

The City reserves the right to modify the scope of work and reject any or all proposals.

**F. SCHEDULE FOR SELECTION AND FINAL REPORT**

The following project timeline is provided for your scheduling information; however, it is subject to change at the discretion of the City.

<b>Project Benchmarks</b>	<b>Date (No Later Than)</b>
Request for Proposals Available	July 31, 2019
Deadline for Inquiries	August 16, 2019
Proposals Due at the City	August 27, 2019
Proposal Evaluations Complete	September 10, 2019
Award Recommended to Council	September 23, 2019
Draft Sewage Collection System Report	August 1, 2021
Final Sewage Collection System Report	April 1, 2022

**G. CONTACT PERSON**

Prospective Proposers may contact Liane Welch, City Engineer, at [lwelch@tillamookor.gov](mailto:lwelch@tillamookor.gov), or write to the Public Works Department, City Hall, 2211 Third Street, Suite A, Tillamook, OR 97141. for further information regarding general procedural questions for this RFP. The deadline for inquiries is August 16, 2019. Responses to inquiries will be provided within 5 days. Requests for interpretation should be sent in writing or Email to Liane Welch, City Engineer and must clearly include the subject line "RFP: SEWAGE