City of Orting

Re: City of Orting Sewer Plan

The city of Orting is seeking extra funding beyond the initially requested $150,000 due to the sewer plan costing $181,000. Furthermore, the city needs an additional $19,000 for grant loan administration and an asset management plan, bringing the total funding request to $200,000.

John Bielka
Capital Project Manager
City of Orting

CITY OF ORTING
General Sewer Plan

SCOPE OF SERVICES

Our proposed Scope of Services for the City of Orting General Sewer Plan includes the following tasks:

Task 1 - Project Management
Task 2 - Research and Regulatory Requirements
Task 3 - Evaluation
Task 4 - Recommendations
Task 5 - Financial Analysis
Task 6 - Plan Preparation

The significant tasks of prime and sub-consultants including milestones associated with each task are described below.

Project Understanding

Below is a general summary of the project goals:

- The goal of this project is to provide engineering services for planning purposes related to the City's wastewater collection system. Services will meet the requirements of WAC 173-240-50.
- A General Sewer Plan will be prepared as part of this project. A facility plan for the WWTP is not included in this scope.

General Assumptions

1. The project will be funded with City funds.
2. Sewer collection system exhibits will be based on the GIS or CAD files provided by the City and updated based on known changes provided from the City.
3. No sewer collection system physical or visual investigations or inspections are anticipated other than occasional spot checks and evaluation of the lift stations.
4. No sewer pump station draw down tests or electrical / efficiency testing is needed.
5. No Teir II analysis per WAC 173-201A-320 is not required for this project.
6. No updates to standard sewer details are required.

Task 1 - Project Management

This task covers the effort necessary to organize, lead, communicate with and coordinate all consultant team members (in-house and sub-consultants) and City staff needed to accomplish the work required by the Project. This task includes tracking time and budget, work elements accomplished, work items planned for the next period, manpower, scope changes, time and budget needed to complete this Scope of Services. This task includes general expenses for travel, reproduction, and misc. items. Task 1 includes the following subtasks:

Subtask 1.1 – Coordination with City

- Meet and communicate regularly with the City to keep the City's project manager informed about project progress, issues and schedule.

Subtask 1.2 – Project Schedule / Team Management / QA/QC

- Quality assurance / quality control (QA/QC) of all final documents.
    - Manage and execute quality control procedures for all deliverables.

    - Perform quality assurance review of all work products. Review will be by a principal engineer who will review calculations, plans, specifications, and contract documents for content, consistency, accuracy, and technical issues.
- Project schedule tracking.
- Coordinate the work of team members for project roles, schedules, budgets, and production.

Subtask 1.3 – Progress Reports, Invoices, and Budget Management

- Prepare and submit to the City's Project Manager, monthly invoices and progress reports with schedule and budget status.
    - Progress reports will describe the work items and percentage of work items that were accomplished, independent of budget expended.
    - Progress report will include a status of budget spent and remaining for each individual task.
    - Progress reports will identify any other issues or problems that may occur.
    - Document expenditures on a task basis, and show hours by project personnel and other direct expenses related to work.
    - Reports and invoicing will be formatted in a manner that is acceptable to the City.
- Manage subconsultant budgets and invoices.

Subtask 1.4 – Project Meetings and Site Visits

This task includes Project meetings and site visits: Prepare for, conduct, and document decisions and action items arising from meetings associated with the project.

1. **Kickoff Meeting:** Key members of the Consultant's team will attend this meeting. Review scope, schedule, budget, and interim milestones. Establish City preferred project communications and special invoicing requests. An allowance of up to one (1) kickoff meeting is included. This meeting is assumed to be virtual.
2. **City Council / Public Meeting:** This meeting will be attended by the Project Manager and will include preparation and presentation on the project. An allowance of up to one (1) City Council / Public meeting is included. This meeting is assumed to be in-person.
3. **Provisional Meetings**: These provisional meetings are set aside for either final report review, milestone submittal review, when needed, or impromptu situations where consultant input is urgent and required to promote project schedule or other requirements. An allowance of up to two (2) meetings is included. These meetings are assumed to be virtual.
4. **Coordination Meetings:** Conduct coordination conversations as needed through the project completion with key City staff and operators to discuss project status, action items, and potential areas of concern. These meetings are assumed to be virtual or via phone.

Assumptions:
1. Total project duration is twelve (12) months.
2. For project meetings, Consultant will develop an agenda and produce minutes afterward.
3. In-person meetings will be held at the City offices in Orting, WA.

City Deliverables:
1. None

Deliverables:
1. Meetings minutes.
2. Monthly invoices and progress reports for up to twelve (12) months.

Task 2 - <u>Research and Regulatory Requirements</u>

Subtask 2.1 - Background Information / Existing Facilities Research

Under this task we will review all background information on the existing sewer system to gain a complete understanding of the process and the infrastructure. This includes review of record drawings, previous Sewer Plans, maps, interviews with City staff, and other relevant data to understand the existing collection system, and operations. Also included is an evaluation of City boundaries, Sewer Service Areas, and Growth Management Implications.

Assumptions:

1. WAC 173-240-050 3 a, b, f, I, j requirements will be completed in this section.

City Deliverables:

1. Record drawings and previous Sewer Plans and Engineering Reports, previous inflow and infiltration reports or studies, relevant GIS data (if any), current and planned City boundaries and service areas.

Deliverables:

1. Summary of background information and existing conditions in the completed General Sewer Plan.

Subtask 2.2 - Regulatory Requirements

This task includes identification of all federal, state, county, and local regulations that affect the planning and design of anticipated sewer system improvements. A SEPA checklist and agency coordination for determination will be included in the plan as part of this task.

Assumptions:

1. WAC 173-240-050 3 c,d,m,n requirements will be completed in this section.

Deliverables:

1. The deliverable will be a summary of background information, regulatory requirements, and maps in the completed General Sewer Plan.
2. SEPA Checklist

Task 3 - <u>Evaluation</u>

Subtask 3.1 – Land Use, Population, and Flows and Loadings Evaluation

Work under this task will describe and analyze existing and projected flows and loadings seen in the collection system and wastewater treatment plant. The flow and loadings evaluation will consider population growth, Future Land Use, Urban Growth Areas, and Annexations. Flows and loadings will be projected over a 25-year planning period. This evaluation and projection of future flows and loadings will be used to size and determine effective treatment and sewer system improvements.

Assumptions:

1. WAC 173-240-050 3e requirements will be completed in this section.

City Deliverables:

1. None

Deliverables:

1. The deliverable will be a summary of existing flows and loadings and projection of future flows and loadings in the completed General Sewer Plan.

Subtask 3.2 - Wastewater Collection System Evaluation

This task includes the evaluation of the sewer collection system. The evaluation will include documentation of regulatory compliance, sewer system hydraulic computer model, ability to accommodate growth projections, sewer pumping systems, treated effluent outfall, assessment of existing sewer collection system facilities, and infiltration and inflow. The evaluation will include an assessment of the collection systems performance, condition and capacity.

Assumptions:

1. WAC 173-240-050 3g requirements will be completed in this section.
2. No flow monitoring is included in this scope.
3. The sewer system hydraulic model will evaluate three different scenarios: 1. Existing conditions, 2. Near-term future conditions, 3. Long-term future conditions.
4. The sewer system hydraulic model will be developed from GIS data provided by the City. The data is assumed to NOT include rim or invert elevations. It is assumed that the City will provide data collection for the sewer system including elevations for rim and inverts as well as collect data on condition and confirm pipe sizes.

Deliverables:

1. The deliverable will be a summary of the collection system evaluation in the completed General Sewer Plan, including exhibits showing existing and future system deficiencies.

Subtask 3.3 - Water Reclamation and Reuse Evaluation

This task includes an evaluation of potential water reclamation and reuse as required by RCW 90.48.112.

Deliverables:

1. The deliverable will be a summary of the evaluation in the completed General Sewer Plan.

Task 4 - <u>Recommendations</u>

Subtask 4.1 - Recommended Improvements

Work under this task will identify and describe all recommended improvements to the wastewater collection system. The final recommendations will include design calculations, conceptual site layouts, and other miscellaneous improvements.

Deliverables:

1. The deliverable will be a summary of recommended improvements in the completed General Sewer Plan.

Task 5 - <u>Financial Analysis</u>

This task estimates and describes the anticipated construction, engineering, and operations costs for recommended improvements for the collection system.

The task also includes a review of sewer rate structure and basic revenue planning along with creation of a Capital Improvement Projects (CIP) list. The CIP will include a short term and long-term list of projects and their priority and anticipated future costs. The sewer rate structure and revenue planning will include requirements for connection to the City sewer system, and funding capacity. Revenue planning will consist of a high-level comparison of current and projected revenue versus current and projected expenses (including Capital Projects and debt service), and potential rate increase scenario(s) if revenues are projected to be insufficient. This is not a formal rate study and does not include: historical financial performance review, fiscal policy review, detailed capital financing plan, detailed operating forecast, detailed revenue needs assessment, rate forecast & affordability test.

Assumptions:

1. WAC 173-240-050 3l requirements will be completed in this section.

Deliverables:

1. The deliverable will be a summary of the anticipated costs, and individual cost estimates for each recommended improvement in the completed General Sewer Plan.

Task 6 - Plan Preparation

Work under this task includes preparation of draft and final General Sewer Plan and revisions based on comments. Work also includes preparation of materials for one City Council / Public Meeting.

Assumptions:

1. None.

Deliverables:

1. Plan for City review in PDF format.
2. Final Plan for City in PDF format and three (3) hard copies.

City of Orting

General Sewer Plan

Prepared by: Scott Wilson, PE, Wilson Engineering LLC
Prepared for: City of Orting
Proposal No.:
January 31, 2024

Task Description	Direct Expenses	Principal Engineer	Senior Engineer	Engineer III	Engineer I	Senior CAD Design Technician	Inspector II	Clerical	WILSON SUBTOTAL
Rate ($/hr) =	L.S.	$215	$202	$174	$149	$146	$136	$103	
Task 1: Project Management									
Subtask 1.1 - Coordination		4	12						$ 3,284
Subtask 1.2 - Project Schedule / Team Management / QA/QC		4	18						$ 4,496
Subtask 1.3 - Progress Reports, Invoices, and Budget Management			12						$ 2,424
Subtask 1.4 - Project Meetings and Site Visits		16	32	20					$ 13,384
Sub-Total	**$ -**	**24**	**74**	**20**	**0**	**0**	**0**	**0**	**$ 23,588**
Task 2: Research and Regulatory Requirements									
Subtask 2.1 - Background Information / Existing Facilities Research		4	8	24	18			2	$ 9,540
Subtask 2.2 - Regulatory Requirements		2	4	10	14				$ 5,064
Sub-Total	**$ -**	**6**	**12**	**34**	**32**	**0**	**0**	**2**	**$ 14,604**
Task 3: Evaluation									
Subtask 3.1 - Land Use, Population, Flows and Loadings Evaluation		8	32	36	24				$ 18,024
Subtask 3.2 - Wastewater Collection System Evaluation		42	58	110	82				$ 52,104
Subtask 3.3 - Water Reclamation and Reuse Evaluation		4	6	12	32				$ 8,928
Sub-Total	**$ -**	**54**	**96**	**158**	**138**	**0**	**0**	**0**	**$ 79,056**
Task 4: Recommendations									
Subtask 4.1 - Recommended Improvements		22	54	78	63	16			$ 40,933
Sub-Total	**$ -**	**22**	**54**	**78**	**63**	**16**	**0**	**0**	**$ 40,933**
Task 5: Financial Analysis		6	22	30	18				$ 13,636
Sub-Total	**$ -**	**6**	**22**	**30**	**18**	**0**	**0**	**0**	**$ 13,636**
Task 6: Plan Preparation		2	6	22	18			8	$ 8,976
Sub-Total	**$ -**	**2**	**6**	**22**	**18**	**0**	**0**	**8**	**$ 8,976**
Project Total	**$ -**	**114**	**264**	**342**	**269**	**16**	**-**	**10**	**$ 180,793**