



**AUTHORIZATION FOR  
AGREEMENTS, MOUs, OR  
OTHER DOCUMENTS OBLIGATING  
THE CITY**

All contracts, agreements, grant agreements, memoranda of understanding, or any document obligating the city (with the exception of purchase orders), requires the completion of this form. The City Manager will sign these documents after all other required information and signatures are obtained.

Document: Engineering Services Agreement Date: 3/1/22

Statement of Purpose: Consulting Services for Wastewater Treatment Master Plan Phase II

Department Head Signature: [Signature]

Remarks, if any: Approved by City Council 2/22/22

City Attorney Review and Signature: [Signature] Date: 3/07/2022

Other Signatures as Requested by the City Attorney: \_\_\_\_\_

	Signature	Name/Position
Budget Confirmed:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	Date: _____
Certificate of Insurance Attached:	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
City Council Approval Needed:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Date: <u>2/22/2022</u>

After all the above requested information is complete and signatures obtained, return this form, along with the original document to the City Manager for signature. No documents should be executed prior to the City Manager's approval as evidenced by signature of this document.

City Manager Signature: [Signature] Date: 3-7-22

Once all signatures and certificates of insurance have been obtained, return this document, along with the original, fully-executed agreement, MOU, or other document to the City Recorder. A copy of grant agreement and all project funding documents, must be forwarded to the Finance Department for tracking and audit purposes.

City Recorder Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Date posted on website: \_\_\_\_\_



3348

**CITY OF NEWPORT**

**TASK ORDER NO. 26  
TO ENGINEERING SERVICES AGREEMENT  
(CONSULTANT OF RECORD)  
FOR THE WASTEWATER TREATMENT MASTER PLAN PHASE II**

This TASK ORDER NO. 26 to the Engineering Services Agreement dated March 09, 2017, hereinafter called Agreement, between the City of Newport, (CITY), and Brown and Caldwell, Inc., (ENGINEER).

**A. SCOPE OF SERVICES**

CITY agrees to utilize the services of ENGINEER and ENGINEER agrees to perform the services set forth in Attachment A.

**B. CITY'S RESPONSIBILITIES**

CITY to provide ENGINEER with the following information:

- The 2021 wastewater treatment plant Condition and Criticality Report completed by Waterdude Solutions.
- Responses to initial and subsequent process data requests.
- Record drawings, submittals, O&M manuals, and related documents for the wastewater treatment plant, bay crossing force mains, and Northside pump station.

CITY shall provide timely review of submitted products (2-week turnaround or as otherwise agreed upon).

**C. COMPENSATION**

1. CITY shall pay ENGINEER according to the fee schedule set forth in the Master Engineering Services Agreement.
2. CITY shall pay ENGINEER as complete compensation for the services as described in Attachment B, a fee not to exceed:

**Scope**

Phase No's 1-9: Four-hundred twenty-seven thousand, three-hundred twenty dollars (\$427,320)

**D. SCHEDULE**

ENGINEER will develop a detailed project schedule after receiving Notice to Proceed from the City.

**E. MISCELLANEOUS**

All terms and conditions of the Agreement apply to this Task Order as though fully set forth therein. In the event of a conflict between this Task Order and the Agreement, the terms of this Task Order shall apply.



The parties do mutually agree to all mutual covenants and agreements contained within this Task Order No. 26.

**CITY OF NEWPORT:**

By: 

Title: City Manager

Date: 03-07-22

**BROWN AND CALDWELL, INC.:**

By: \_\_\_\_\_

Title: Senior Manager, Client Services

Date: \_\_\_\_\_



## Attachment A

# City of Newport

## Wastewater Treatment Master Plan Phase II

# Scope of Services

The City of Newport (City) initiated a Wastewater Treatment Master Plan (WWTMP) in 2017. The purpose of the WWTMP was to evaluate existing infrastructure, operational procedures, equipment performance, projected population growth, future flows and loads, anticipated future regulations, and financial planning and develop a Capital Improvement Program (CIP) to address both current needs and plan for needs for the next 20 years.

In 2018, Phase I of the WWTMP was completed, which included an assessment of existing conditions and flows and loads, an equipment condition assessment, flow and load forecasts, and a plant capacity assessment. A key finding of Phase I was that industrial users contributed a significant portion of headworks loads. Based in part on this finding, the City elected to pause the planning process to voluntarily implement a pretreatment program.

With the pretreatment program nearing completion, the City intends to restart master planning. The original WWTMP project was organized into four phases. The revised approach is organized into three phases as follows:

- Phase I: Establish Baseline Conditions and Basis of Planning (Completed 2018)
  - Understand existing flows and loads to the facility through sampling and characterization.
  - Evaluate current operations and the condition of plant infrastructure and equipment.
  - Identify the City's future goals, constraints, and needs.
  - Identify near-term improvement projects focused on rehabilitation of the existing facilities.
- Phase II: Alternatives Development and Evaluation
  - Update key findings from the 2018 evaluation to reflect changes since 2018, including changes in industrial loads.
  - Review the 2018 Sanitary System Master Plan (SSMP) (Brown and Caldwell, 2018) and update the sanitary sewer CIP to reflect projects completed since 2018.
  - Develop capital improvement alternatives to address current and future needs. Develop conceptual cost estimates for improvement options.

- Work with City staff to develop scoring/ranking criteria for improvement options, and select preferred options based on scoring/ranking criteria and cost.
- Develop a schedule to outline timing and phasing of improvements. The schedule will consider criticality of improvements as well as the impact of timing on cash flow and funding. Develop a Capital Improvement Program (CIP).
- Document findings in the WWTMP document. The document will include the CIP.
- Coordinate work with Kennedy Jenks (KJ). KJ will evaluate alternatives for biosolids unit processes as a subconsultant to BC.
- Engage regulators, City residents, local businesses, regulatory agencies, and other stakeholders as needed.
- Phase III: Facilities Plan and Rate Structure Support
  - Update the SSMP. Develop a Facilities Plan for the improvements identified in the SSMP and WWTMP.
  - Provide assistance to the City in the development of rate structure modifications. The modified rate structure may include system development charges.

This scope of work describes activities to complete Phase II.

Portions of the plan related to solids processing will be completed by KJ as a subconsultant to BC. This includes evaluations of the sludge storage, sludge thickening, dewatering, biosolids processing systems, and hauled waste receiving facilities well as related areas and equipment such as sludge pumping, solids storage and loading, and chemical storage and handling. The solids processing scope of work is attached.

## Task 1 Project Management

This task includes the following work.

### Subtask 1-1 Project Management

- Objective** To establish internal project controls to monitor project status, budget, and schedule on an ongoing basis.
- Activities** This task will provide management of the project including coordination with the City project manager (PM), tracking project progress and milestones, ensuring quality control and quality assurance is being conducted throughout the project, and tracking contractual and fiscal conditions of the project.
- Deliverables** Monthly status reports, schedule updates, and invoices in electronic PDF format.

### Subtask 1-2 Quality Assurance / Quality Control



- Objective** Manage work quality on an ongoing basis and provide quality reviews to all calculations and written deliverables.
- Activities** This task includes the following activities:
- Develop a written Quality Management Plan (QMP) for the project.
  - Complete technical reviews for all calculations. Complete technical and readability reviews for all written deliverables. Reviews will be completed by senior BC staff experienced in wastewater planning who are not otherwise involved in day-to-day project activities.
- Deliverables** The following deliverables will be prepared:
- A project QMP.
  - Comments and comment logs for calculations and written deliverables (available for review at the City's request).

### Task 1 Assumptions

This task assumes the following:

- Project duration will be six months.
- Check-ins between the City PM and BC PM will be on average 30 minutes in duration and will be conducted biweekly via phone or Microsoft Teams.

## Task 2 Update Key Findings

This task will update key findings from the 2018 Phase I WWTMP. This task includes the following work.

### Subtask 2-1 Flows and Loads Update

- Objective** Update flows and loads from the 2018 Phase I WWTMP.
- Activities** This task includes the following activities:
- Review and, if necessary, update 2018 flow and load projections. The update will consider population changes and recent trends in industrial loads as a result of industrial pretreatment. The update will also consider the impact of hotel and short term rental occupancy on seasonal loading and peaking factors.
  - Make minor updates to the BioWin model to incorporate plant improvements (for example, upgraded aerators) completed since 2018.
  - Re-run the plant BioWin model developed for the 2018 Phase I WWTMP to reflect current conditions.
  - Update the capacity analysis from the 2018 Phase I WWTMP.
- Deliverables** Updated findings will be incorporated into the Phase II WWTMP Report, Task 5.

### Subtask 2-2 Condition and Criticality Update



- Objective** Update condition-based recommendations from the 2018 Phase I WWTMP.
- Activities** This task includes the following activities:
- Incorporate updated condition and criticality recommendations from Waterdude Solutions into the findings of the 2018 Phase I WWTMP. Waterdude Solutions completed an updated condition and criticality assessment in 2021.
  - Additionally, incorporate condition and criticality recommendations for the Northside Pump Station into the WWTMP. Waterdude Solutions completed an assessment of the pump station in 2019.
- Deliverables** Updated findings from the condition and criticality assessments will be incorporated into the Phase II WWTMP Report, Task 5.

### **Subtask 2-3 Bay Crossing Force Main Inspection Plan**

- Objective** Develop a Condition Assessment Plan (CAP) for the bay crossing force main, as well as upland portions of the force main connecting the Northside Pump Station to the plant.
- Activities** This task includes the following activities:
- Develop a CAP for critical force mains. The CAP will:
    - Plan assessment of the condition of critical force mains connecting the Northside Pump Station to the WWTP, including the Yaquina Bay crossing, the portion of the Bayside force main from the Northside Pump Station to the bay front, and the bay front force main on the north side of Yaquina Bay, located within the alignment of Bay Boulevard.
    - Identify two feasible inspection technologies for each segment of the force main.
    - Include a schedule to perform the assessment.
    - Identify any applicable permitting requirements.
    - BC will solicit preliminary quotes from vendors to perform the inspection and prepare a budgetary estimate.
  - Develop a performance specification for a force main inspection contractor, supported by drawings and schematics to identify and if necessary modify inspection tool launch and retrieval points, as well as bid documents including front end documents and technical specifications.
- Deliverables** BC will prepare the following:
- Draft force main inspection CAP.
  - Final force main inspection CAP incorporating City comments on the draft.
  - Draft inspection contractor bid documents.
  - Final inspection contractor bid documents incorporating City comments on the draft.

### **Subtask 2-4 NPDES Permit Review**

- Objective** Review the permittee review draft and public comment draft of the new plant NPDES permit, anticipated in the second quarter of 2022. Assist the City in evaluating the permit and submitting comments to DEQ.
- Activities** This task includes the following activities:
- Review the permittee review draft of the Plant's new NPDES permit, anticipated in the second quarter of 2022. Discuss with the City and prepare draft comments on the permit.
  - Review the public comment draft of the Plant's new NPDES permit, anticipated in the second quarter of 2022. Discuss with the City and prepare draft comments on the permit.
  - Assist the City staff on an on-call / as needed basis throughout the project with DEQ coordination.
- Deliverables** Draft letters including comments on the permittee review draft and public comment draft permits. Final comments will be submitted to DEQ by the City.

### Task 2 Assumptions

This task assumes the following:

- Changes to the BioWin model will be limited to updated boundary conditions and minor improvements completed since 2018.
- The updated WWTP condition and criticality report will be provided to BC by the City.
- An updated condition and criticality report is not planned for the Northside Pump Station. The condition and criticality assessment completed in 2019 will be used for the WWTMP.
- Inspection of the force main will be by either a subcontractor to BC or by an inspection provider contracted directly to the City. Inspection is not included in the fee proposal provided with this scope and an amendment is required to complete the inspection scoped by the CAP.
- BC understands the City is coordinating an outfall inspection. This task assumes outfall inspection findings will be available to incorporate into the overall condition/criticality assessment.
- Significant updates to the regulatory conditions review completed in 2018 are not anticipated. If unexpected conditions are introduced in the plant's new National Pollutant Discharge Elimination System (NPDES) permit, an amended scope to assess impacts may be authorized by the City.
- BC will provide general DEQ coordination support up to the fee authorized with this scope of work. The agreement may be amended to add specific activities.

### Task 3 Alternatives Development

This task includes the following work.



**Subtask 3-1 Site Plan**

**Objective** Develop preliminary site plan alternatives and select a preferred alternative. Update the preferred site plan (if needed) based on preferred alternatives selected in Task 3-2. Additionally, develop an updated site plan for the Northside Pump Station

**Activities** This task includes the following activities:

- Develop three preliminary site plan alternatives. Discuss alternatives with the City at the site plan workshop (see Task 6) and select a preferred alternative.
- Using the preferred alternatives selected in Task 3-2 as well as solids alternatives developed by KJ, update the site plan, if necessary, to reserve space for selected unit process alternatives. The plan will be used to reserve space for future processes and guide site development decisions.
- Develop an updated site plan for the Northside Pump Station.

**Deliverables** The site plan will be incorporated into the Phase II WWTPM Report, Task 5.

**Subtask 3-2 Alternatives Development and Business Case Evaluation**

**Objective** Develop alternatives to upgrade, expand, or replace key liquid stream processes to provide capacity, reliability, redundancy, and service life for 20 years. Develop costs and score alternatives using qualitative / quantitative criteria to select preferred alternatives.

**Activities** This task includes the following activities:

- Review the updated capacity limitations and condition / criticality needs at a workshop with City staff (see Task 6). From this list, identify the four to six most critical liquid stream processes or pieces of equipment to address by upgrading, expansion, or replacement within the next five to ten years.
- Additionally, identify other liquid stream processes and non-process plant needs (i.e., buildings, site development) that should be upgraded, expanded, or replaced within the next 20 years.
- For the high-priority projects in the five to ten year planning horizon, develop two to three alternatives for each process. Alternatives will be developed to a conceptual level sufficient to understand the effect of the upgrade, plan for space requirements, and assess costs.
- For the lower priority projects in the 20 year planning horizon, develop one conceptual alternative. Costs for this alternative will be used as a basis for CIP financial planning (Task 4).
- Develop AACE Class 4 level capital cost estimates for each alternative. Additionally, develop operations and maintenance (O&M) costs, periodic repair and refurbishment costs, and monetized risk and benefit cost for each alternative. Use these costs to calculate 20-year lifecycle costs for each alternative.
- Develop qualitative pros and cons for each alternative.

- Develop a scoring methodology, including scoring criteria, criteria weighting and preliminary scores for each alternative.
- Document unit process alternatives, costs, and scoring criteria in a draft technical memorandum (TM).
- At a workshop with City staff (see Task 6), present and discuss alternatives; capital, O&M, and lifecycle costs; proposed scoring methodology; and proposed scoring for each alternative. Adjust scoring (if necessary) based on City input and select a preferred alternative for each unit process.
- Finalize the TM to incorporate responses to City comments.

**Deliverables** Updated findings will be incorporated into the Phase II WWTPM Report, Task 5. Additionally, BC will prepare the following:

- Draft Process Alternatives Cost and Selection TM.
- Final Process Alternatives Cost and Selection TM following City review and comment on the draft.

### Task 3 Assumptions

This task assumes the following:

- Unit processes assessed will include the Northside Pump Station, Bay Crossing Force Main and Booster Pump Station, Influent Pump Station, Headworks, Oxidization Ditch, Secondary Clarifiers, Disinfection System including plant flash mix and effluent pipeline contact time and point of compliance monitoring at Northside, the vector pad, buildings, and support systems.
- KJ will provide alternatives assessments of solids processes, including prethickening / thickening, dewatering, biosolids processing, and hauled waste receiving, including the required footprint for solids alternatives. The footprint provided will represent the overall space required for the process and include all piping and solids handling equipment, support systems, working clearances, and vehicle clearances. Findings from this assessment will be incorporated into the Process Alternatives Cost and Selection TM.
- The City's PM will provide consolidated comments on draft process alternatives and the preliminary site plan alternatives, with any contradictory or conflicting comments resolved.

## Task 4 Capital Improvement Program

**Objective** Develop a CIP and schedule for improvements.

**Activities** This task includes the following activities:

- Review the 2018 SSMP and update the associated CIP to reflect work completed since 2018. A full update of the SSMP is not included.

- Working with City staff, develop a final prioritization for the sequence of improvements for the solids and liquids treatment processes. The sequence will consider capacity needs and the condition/criticality of existing equipment. It will also consider the impact of upgrades to existing processes on related processes – some upgrades may trigger additional upgrades in related processes, while others may defer the need to make improvements in related processes.
- Based on the improvements sequence, develop a schedule and CIP for improvements. The CIP will consider the priority of upgrades, City capital budget and cash flow, staff capacity to manage and execute projects, O&M staffing requirements, and other needs. The goal of the CIP will be to make needed improvements while achieving a relatively stable cash flow that avoids sudden changes in rates.
- The CIP will include both a 5-year and 20-year CIP. The 5-year CIP will include detailed breakdowns of specific project phases (such as planning, predesign, detailed design, and construction) to plan for the near term execution of projects.
- BC will submit a draft CIP to the City. Based on City comments, BC will prepare a final CIP.

**Deliverables** Updated findings will be incorporated into the Phase II WWTPM Report, Task 5. The following deliverables will be prepared:

- Draft CIP.
- Final CIP incorporating City comments on the draft.

The final CIP will be included as an appendix to the Phase II WWTPM Report.

#### **Task 4 Assumptions**

This task assumes the following:

- Rate or SDC evaluation support is not included. Work supporting rate or SDC evaluation may be authorized by an amendment to this agreement.
- The City's PM will provide consolidated comments on the draft CIP, with any contradictory or conflicting comments resolved.
- KJ will provide comments on solids alternatives in the draft CIP.

### **Task 5 Phase II WWTMP Report**

**Objective** This task incorporates the results of Task 2, 3, and 4 into a Phase II WWTMP Report.

**Activities** This task includes the following activities:

- Prepare a report incorporating updates to the flows and loads and condition / criticality assessment, alternatives evaluations, an updated site plan, and the CIP into a Phase II WWTMP Report.
- Submit a draft report to the City for review. Prepare a final report incorporating responses to City comments on the draft.



**Deliverables** The following deliverables will be prepared:

- Draft Phase II WWTP Report.
- Final Phase II WWTMP Report incorporating responses to City comments. This will also include comments originating in the CIP workshop (Subtask 6-4) as documented in the workshop minutes.

### **Task 5 Assumptions**

This task assumes the following:

- The City's PM will provide consolidated comments on the draft plan, with any contradictory or conflicting comments resolved.

## **Task 6 Workshops**

This task includes the following work.

### **Subtask 6-1 Kickoff Workshop**

**Objective** Conduct a kickoff workshop to review information needs, key findings from the condition/criticality update, and walk the site to assess site layout constraints.

**Activities** This task includes the following activities:

- Prior to the workshop, provide a request for information to update key findings.
- Facilitate a workshop for the following topics:
  - Project kickoff, including discussions to establish project goals, schedule, communication procedures, deliverables, and key decision points.
  - Discuss data and information needs at the workshop.
  - Review findings from the updated WWTP and 2019 Northside Pump Station condition and criticality assessments completed by Waterdude Solutions.
- Complete a site walk to evaluate space requirements and site layout constraints.

**Deliverables** Meeting agenda, presentation materials, and meeting notes.

### **Subtask 6-2 Site Plan and Alternatives Development Workshop**

**Objective** Conduct a workshop to review preliminary site plan alternatives, review preliminary ideas for treatment process alternatives, and establish direction for alternatives for high-priority processes.

**Activities** Facilitate a workshop for the following topics:

- Review and discuss preliminary site plans and select a preferred site plan.
- Review overview and technology screening for each unit process and the preliminary or proposed alternatives for addressing plant needs. The purpose of the discussion will be to review options for each unit process, discuss high-level pros and cons for



each option, and confirm that the City agrees with the direction of the alternatives analysis.

- The discussion will also include a brief discussion of alternatives screened out from further consideration. Reasons for dropping an alternative from further consideration may include technical feasibility, cost, or qualitative factors.

**Deliverables** Meeting agenda, presentation materials, and meeting notes.

### **Subtask 6-3 Alternatives Ranking and Project Prioritization**

**Objective** Conduct a workshop to identify preferred alternatives for near-term improvements.

**Activities** Facilitate a workshop for the following topics:

- Review findings of the updated capacity assessment and flows and loads evaluation.
- Present alternatives evaluated for high-priority improvements, including capital, O&M, and other costs. Alternative costs will be provided to the City in advance of the workshop through the Process Alternatives Cost and Selection TM (Task 3-2).
- Present and discuss scoring criteria for alternatives. Working with City staff, modify criteria as needed and apply weighting to each criterion. Calculate scores for each alternative and select a preferred alternative for each unit process. Proposed scoring criteria will be provided to the City in advance of the workshop through the draft Process Alternatives Cost and Selection TM (Task 3-2).
- Review and confirm the preliminary prioritization of improvements. This will include both near term (immediate to ten year time frame) and longer term (ten to twenty year time frame) improvements.

**Deliverables** Meeting agenda, presentation materials, and meeting notes.

### **Subtask 6-4 CIP Review Workshop**

**Objective** Conduct a workshop to review the CIP.

**Activities** Facilitate a workshop for the following topics:

- Present and discuss the proposed CIP. Obtain City feedback and discuss City comments.
- The CIP (Task 4) will be provided to the City in advance of the workshop.

**Deliverables** Meeting agenda, presentation materials, and meeting notes.

### **Subtask 6-5 Master Plan and CIP Presentation**

**Objective** Conduct a workshop with City staff and the City Council to present the Draft Phase II WWTMP and CIP.

**Activities** Facilitate a workshop for the following topics:

- Present the Phase II WWTMP.
- Present the CIP.



The Draft Phase II WWTMP will be submitted to the City for review prior to the presentation.

**Deliverables** Meeting agenda, presentation materials, and meeting notes.

### **Task 6 Assumptions**

This task assumes the following:

- Duration of each workshop is assumed to be 2 hours.
- Four workshops will be conducted on-site at the City. Some BC staff may attend remotely via Microsoft Teams. One workshop is assumed to be fully remote.
- KJ staff participation is assumed for four workshops.

## **Task 7 Solids Process**

**Objective** Develop and evaluate Phase II WWTMP solids alternatives.

**Activities** Solids process alternatives will be developed by KJ as a subconsultant to BC. BC will coordinate solids alternatives with the overall Phase II WWTP, including the site plan, CIP, tech memos and reports, and workshops. BC will review solids process deliverables, including:

- A Basis-of-Design TM.
- Solids alternatives criteria and alternatives matrix.
- A Biosolids Evaluation report.
- A Centrifuge Replacement TM.

**Deliverables** The following deliverables will be prepared:

- Draft and Final Basis-of-Design TM (to be included as an appendix to the Alternatives Cost and Selection TM).
- Draft and Final Alternatives Criteria and Alternatives Matrix (to be included as an appendix to the Alternatives Cost and Selection TM).
- Draft and Final Biosolids Alternatives Evaluation Report (to be included as an appendix to the Phase II WWTMP Report).
- Draft and Final Centrifuge Equipment Replacement TM, including equipment cut sheets, vendor quotes, and building layouts. No design drawings or AutoCAD drawings are provided.

## **Task 8 Stakeholder Coordination**

**Objective** Assist the City with public involvement and stakeholder coordination.

**Activities** Assist the City staff on an on-call / as needed basis throughout the project with stakeholder coordination (including internal stakeholders and third-party stakeholders) and with public outreach.

### **Task 8 Assumptions**

This task assumes the following:

- BC will provide general coordination support up to the fee authorized with this scope of work. The agreement may be amended to add specific activities.

## **Task 9 Optional Tasks**

Work on these tasks is included as a contingency and will only proceed with written authorization from City staff. This task includes the following work.

### **Subtask 9-1 Additional Modeling**

**Objective** Perform additional BioWin modeling to revise the capacity matrix developed in the 2018 Phase I WWTMP.

**Activities** This task includes the following activities:

- Make additional modifications to the plant BioWin model.
- Recalibrate the model using data collected in Task 2-1 and re-run the model.
- Develop a new plant capacity matrix based on the updated model.

**Deliverables** Updated findings will be incorporated into the Phase II WWTMP Report, Task 5.

### **Task 9 Assumptions**

This task assumes the following:

- The 2018 Phase I WWTMP relied on assumptions for chemical oxygen demand (COD). BC anticipates requesting authorization of Task 9-1 if data for influent COD concentrations or the ratio of COD to biochemical oxygen demand (BOD) is significantly different than assumed.



## Attachment B

# City of Newport

## Wastewater Treatment Master Plan Phase II

# Proposal Budget

Effort authorized by this agreement is shown in the Proposal Budget below. Rates are per the included Schedule of Hourly Rates.



## Brown and Caldwell, Inc. Schedule of Hourly Rates

Level	Engineering	Technical/Scientific	Administrative	Hourly Rate
A			Office/Support Services I	\$69
B	Drafter Trainee	Field Service Technician I	Office/Support Services II Project Aide Word Processor I	\$78
C	Assistant Drafter Intern II	Field Service Technician II	Office/Support Services III Sr. Project Aide Word Processor II	\$88
D	Drafter Engineering Aide Inspection Aide	Field Service Technician III	Accountant I Office/Support Services IV Project Analyst I Project Coordinator I Word Processor III	\$104
E	Engineer I Senior Drafter Senior Illustrator Inspector I	Geologist/Hydrogeologist I Scientist I Senior Field Service Technician	Admin Coordinator Accountant II Project Analyst II Project Coordinator II Word Processor IV	\$118
F	Designer Engineer II Inspector II Lead Drafter Lead Illustrator	Geologist/Hydrogeologist II Scientist II	Accountant III Administrative Supervisor Area Business Operations Mgr. Project Analyst III Sr Project Coordinator Sr Health & Safety Specialist Technical Writer Word Processing Supervisor	\$136
G	Engineer III Inspector III Senior Designer Supervising Drafter Supervising Illustrator	Geologist/Hydrogeologist III Scientist III	Accountant IV Administrative Manager Graphic Design Manager PA Manager I	\$155
H	Senior Engineer Principal Designer Senior Construction Engineer Senior Engineer	Senior Geologist/Hydrogeologist Senior Scientist	Health & Safety II Senior Technical Writer	\$180
I	Principal Engineer Principal Construction Engineer Supervising Designer	Principal Geologist Principal Hydrogeologist Principal Scientist	Health & Safety Risk Mgr III Corp. Contract Administrator	\$209
J	Supervising Engineer Supervising Constr. Engineer Supervising Engineer	Supervising Business Consultant Supervising Scientist Supervising Geologist Supervising Hydrogeologist	Assistant Controller	\$248
K	Managing Engineer	Managing Business Consultant Managing Geologist Managing Hydrogeologist Managing Scientist	Area Bus Ops Mgr IV	\$283

Level	Engineering	Technical/Scientific	Administrative	Hourly Rate
	Chief Engineer			
	Executive Engineer	Chief Scientist		
	Vice President	Chief Geologist		
L - N	Senior Vice President	Chief Hydrogeologist	Corp Marketing Comm. Mgr.	\$296

#### Notes

1. Rates valid through December 31, 2022.
2. The rate schedule may be updated annually for escalation of rates.
3. Miscellaneous project expenses (CAD computers and printers, software licenses, color graphics, copying, printing, etc.) are included in the hourly rates and not billed separately.
4. Mileage costs are based on the IRS standard mileage rate, currently \$0.56 per mile.
5. Subconsultant work is subject to a 5% markup.

Brown and Caldwell, Inc.  
6500 S Macadam Ave, Suite 200  
Portland, OR 97239





## Attachment C

# City of Newport

## Wastewater Treatment Master Plan Phase II

# Schedule

Work will be completed within six months of Notice to Proceed and authorization of the agreement for the work. A detailed schedule will be submitted upon project initiation.

Attachment D

**City of Newport**

**Wastewater Treatment Master Plan Phase II**

**Biosolids Scope of Work**





27 January 2022

Josh Johnson, PE  
Brown and Caldwell  
6500 S Macadam Ave., Suite 200  
Portland, OR 97239

Subject: Proposal for Professional Engineering Services  
City of Newport Biosolids Alternatives Evaluation  
KJ Proposal Number: P21025

Dear Mr. Johnson:

Kennedy/Jenks Consultants (Kennedy Jenks) is pleased to submit our proposal to complete the City of Newport Biosolids Alternatives Evaluation for Brown and Caldwell (BC) to support your work with the City of Newport (City) on their Wastewater Master Plan project. We have assisted several communities in Oregon with assessing biosolids management opportunities and challenges. Kennedy Jenks is excited to work with BC and the City on this very important issue. The following proposal summarizes our understanding of the project along with our proposed scope of work, schedule, and budget to complete the evaluation.

## **Introduction**

The City owns and operates the Vance Avery Wastewater Treatment Plant (WWTP) constructed in 2002 and located in South Beach, Oregon. The WWTP is an activated sludge plant that can treat up to 15 million gallons per day (MGD) and typically receives flows of approximately 2 MGD.

The current solids process includes pumping waste activated sludge (WAS) to an aerobic tank for storage and thickening, dewatering using centrifuges, and stabilization of the biosolids using RDP Technologies' lime pasteurization system resulting in a Class A Exceptional Quality (EQ) product.

The City has completed several liquids and solids related improvements over the past few years. Many of the improvements have involved corrections to Operations & Maintenance procedures. Solids improvements have included: a wastewater characterization by operations staff, implementation of a source control program (pre-treatment) a rebuild of the centrifuges to alleviate the need for emergency replacement, control panel replacement for solids system, improvements to hauled waste receiving administration (e.g., avoiding unknown biochemical oxygen demands [BOD] spikes), plant monitoring improvements, coordination on land application with the Oregon Department of Environmental Quality (DEQ) and customers, and partial completion of master planning for the WWTP.

Based on our communications with you, the City, and a site visit Newport would like to evaluate biosolids management alternatives to provide a long-term biosolids handling, treatment, and beneficial use or disposal portfolio for your WWTP operations. This includes assessing solids stabilization and production of Class B and/or Class A biosolids.

This evaluation will be incorporated into the City's Phase II Wastewater Treatment Master Plan (WWTMP) by BC.

Mr. Josh Johnson  
27 January 2022  
Brown and Caldwell  
Page 2

## **Scope of Work**

### **Task 1.1: Project Management**

Project coordination will include bi-weekly phone calls with BC's project manager to discuss work progress, schedule, and budget. Additional regular communication with the project manager will be done by phone and email to coordinate project activities. In addition, Kennedy Jenks will regularly coordinate with our project team members to ensure issues across the operations are addressed. This task also includes developing Kennedy Jenks' Project Initiation Plan, Concept and Criteria Review, Health and Safety Plan, and monthly invoicing process.

### **Task 1.2: Project Kick-Off Meeting**

Kennedy Jenks will meet with BC and City staff at the WWTP to review the Scope of Work, develop a list of initial alternatives, assess the existing WWTP solids facilities and building layouts, discuss preferred locations and logistics for Class A biosolids technologies, product load-out preferences and other such project considerations which could impact cost.

#### **Task 1: Deliverables**

- Bi-weekly phone calls
- Monthly invoices
- Review of BC's kick-off agenda and meeting notes (electronic, email format)

#### **Task 1: Assumptions**

- The kick-off meeting will be at the WWTP, include two Kennedy Jenks staff, and will be up to three hours on site.
- Monthly project invoices will include a summary of work completed, budget and schedule status.

### **Task 2: Data Collection and Basis of Design**

#### **Task 2.1: Data Collection**

A Request for Information (RFI) will be provided to BC requesting information pertinent to completing this evaluation such as solids quality and quantity data, previous technical studies pertaining to biosolids alternatives, data regarding volumes and types of hauled waste (e.g., septage), WWTP record drawings, and flows and loads projections. Kennedy Jenks will provide BC with a list of the specific items needed to complete this project.

This effort also includes coordinating with BC to discuss work completed to-date, considerations you have completed regarding the City's solids program, confirmation of flows & loads, and

obtaining an understanding of liquids process considerations that may impact our evaluation. This coordination is accounted for in Task 6 below.

## **Task 2.2: Basis of Design Technical Memorandum**

Using the information from Tasks 1.2 and 2.1, Kennedy Jenks will develop design criteria for identifying and evaluating potential solids treatment improvement alternatives. Design criteria that will be used for the Basis of Design are anticipated to include regulatory requirements and trends, flow and mass loading values, solids characteristics, and desired level of redundancy. We will also provide information on the approximate qualities and quantities of return streams (e.g., centrate, decant). The Basis of Design will be presented in a brief Technical Memorandum and included in the final Biosolids Alternatives Evaluation Report in Task 4.

### **Task 2: Deliverables**

- Up to three RFI's (electronic, email format)
- Draft and final Basis of Design Technical Memorandum (electronic, Microsoft Word and/or Adobe Acrobat PDF format)

### **Task 2: Assumptions**

- Documents, data, and information provided in the RFI process will be provided in electronic format whenever possible.
- We will be provided with waste sludge characteristics (e.g., VSS/TSS) and solids flow and mass loading values from the treatment processes (e.g., WAS, TWAS, etc.). This will include both current and projected design values.
- Modeling of existing facilities will not be completed.
- Information needed to define appropriate design parameters will be available via existing documents and/or work done by others.

## **Task 3: Biosolids Alternatives**

Kennedy Jenks will develop a list of potential biosolids treatment alternatives the City may elect to further evaluate in a preliminary design project. The screening process includes the following elements:

### **Task 3.1: Alternatives Criteria**

Develop and finalize economic and non-economic criteria that will be used for selecting and scoring biosolids alternatives. We will coordinate with BC in the development of these criteria with the liquids criteria. Some of these may be the same for both streams (i.e., solids and liquids). The criteria will be weighted based on relative importance. The criteria, for example, may include the following: cost, odor control, maturity of the technology, ease of regulatory permitting,

marketability of biosolids product, Operations & Maintenance requirements, beneficial use, and disposal requirements. We will draw from our collective knowledge and experience to develop meaningful criteria for this screening process.

### **Task 3.2: Alternatives Development**

Based on our understanding of the project and information gathered from Task 2, we will develop four general biosolids alternatives (A through D). The total number of alternatives under this task is seven (one under alternative A, two under alternative B, three under alternative C, and one under alternative D). This task will include narratives of the alternatives, equipment information, schematics and costs (Task 3.5) for the preferred alternative(s)

- A. **Solids Stabilization:** Modification of the existing solids holding tank to maximize volatile solids destruction, implementation of aerobic or anaerobic digestion. This alternative will include assumptions regarding thickening and mixing processes.
- B. **Class B Treatment:** Implementation of a Class B biosolids treatment process as a back-up to a Class A program. This may include a stand-alone system or the ability of a Class A treatment process that may also produce Class B biosolids.
- C. **Class A Treatment:** Implementation of Class A treatment alternatives to produce Class A biosolids with associated beneficial use. Three Class A technologies will be considered including the City's existing lime pasteurization process (baseline conditions), composting, and mechanical drying. Class A treatment will be evaluated both with and without upstream stabilization of the solids (e.g., digestion).
- D. **Hauled Waste Facility:** This alternative will be included as part of all above options (A through D). We will include the addition of a packaged hauled waste facility as part of this evaluation. This facility is critical to improve the handling and treatment of hauled waste at the WWTP, and to maintain biosolids quality.

Implementation of an alternative to produce unstabilized, dewatered secondary solids for disposal at a regional landfill or other municipality will not be a component of this evaluation.

### **Task 3.3: Alternatives Scoring**

The alternatives will be scored utilizing a simplified ranking system. For example, the ranking system may assign a rating of one (1), two (2), or three (3) to each criterion developed in Task 3.1. Alternatives with total "higher" scores represent options that better address the criteria (e.g., a total score of 9 is a higher ranking than a total score of 5). Relative costs will be included as one of the criteria and be quantified utilizing this simplified ranking process rather than through a conceptual or detailed costing process. Following the Alternatives Review Meeting in Task 3.4., we will provide actual conceptual level costs for up to three preferred alternatives as described in Task 3.5 below.

### **Task 3.4: Alternatives Review Meeting**

Kennedy Jenks and BC will meet to discuss the list of draft alternatives and determine which (up to three) are incorporated into Tasks 3.6. Our discussion will include an Excel matrix to facilitate our discussion of the alternatives, their scoring from Task 3.3, and overall advantages and disadvantages of each option.

### **Task 3.5: Conceptual Level Costs**

Kennedy Jenks will develop conceptual level costs for up to three preferred alternatives derived from our project team meeting in Task 3.4. This will include 20-year net present worth cost estimates for long-term operation and maintenance costs for each alternative including the hauled waste facility. Estimates for capital costs will be Class 4 as defined by the Association for the Advancement of Cost Engineering (AACE). These costs will be incorporated into the report as discussed in Task 4 below.

### **Task 3: Deliverables**

- Draft and final Alternatives Criteria (electronic, email format)
- Draft Alternatives Matrix for use at the alternatives review meeting (electronic, Microsoft Excel format)
- Agenda for Alternatives Review Meeting (electronic, Microsoft Word format)
- Meeting notes from Alternatives Review Meeting (electronic, Microsoft Word format)

### **Task 3: Assumptions**

- Dewatering of biosolids with centrifuges is assumed.
- Estimates will be developed for up to three treatment alternatives and the hauled waste facility.
- The City or BC will provide Kennedy Jenks with any costs available for chemicals, power, and natural gas. Kennedy Jenks will also utilize our recent regional experience on costs for items such as lime and/or chemicals if specific costs are unavailable from BC or the City.
- The discount rate for present worth calculations will be the “real” discount rate as contained in Appendix C of the publication, “Office of Management and Budget (OMB) circular A-94.”

## **Task 4: Biosolids Alternatives Evaluation Report**

Kennedy Jenks will develop a Biosolids Alternatives Evaluation Report that summarizes the biosolids alternatives from Task 3. The Report will include the following elements:

- Objectives of this evaluation
- Biosolids resource recovery trends
- Biosolids regulatory summary
- Technical description of the alternatives and unit processes associated with each option
- Alternatives criteria
- Table showing the alternatives relative rankings and total scoring
- Conceptual level costs for up to three preferred alternatives
- Recommended alternative for biosolids management for the City
- Site layouts of the recommended alternatives. The footprint provided will represent the overall space required for the process and include all piping and solids handling equipment, support systems, working clearances, and vehicle clearances.

### **Task 4: Deliverables**

- A virtual meeting with BC staff, and the City as desired, to coordinate and discuss results from the Draft Biosolids Alternatives Evaluation Report. This meeting is accounted for in Task 6 below.
- Draft and final Biosolids Alternatives Evaluation Report (electronic, Microsoft Word and/or Adobe Acrobat PDF format).

### **Task 4: Assumptions**

- The Report will be provided to BC for inclusion in the WWTMP.
- Any coordination regarding the WWTMP with DEQ will be done by others.
- Kennedy Jenks may coordinate with DEQ regarding elements of the Biosolids Alternatives Evaluation, only.

## **Task 5: Centrifuge Replacement Options and Cost Estimates**

### **Task 5.1: Replacement Analysis**

Kennedy Jenks understands the City's existing dewatering centrifuges are undersized and do not have sufficient capacity to meet current loading conditions and are at the end of their useful life. The purpose

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of this task is to evaluate the replacement of the existing dewatering facilities that will include two new centrifuges.

Kennedy Jenks will use equipment information gathered from experience on recent similar projects and obtain up to three vendor quotes on dewatering centrifuges, replacement sludge pumps, polymer feed and conveyors. Equipment cut sheets and costs will be tabulated and recommendations on equipment will be provided. We will present replacement options as schematics using sketches and existing design drawings provided by BC and the City.

### **Task 5.2: Centrifuge Technical Memorandum**

A Technical Memorandum summarizing results of this task will include conceptual cost estimates (AACE Class 4 level) including a 20-year net present worth analysis of Operational & Maintenance costs.

### **Task 5: Deliverables**

- Draft and final Centrifuge Replacement Technical Memorandum including equipment cut sheets, vendor quotes and building layouts will be provided (electronic, Microsoft Word and/or Adobe Acrobat PDF format).

### **Task 5: Assumptions**

- The new centrifuges would be placed within the existing dewatering building.
- New polymer feed equipment assumes use of liquid emulsion polymer.
- PDF drawings with redline markups will be completed to show schematic building and equipment layouts. No AutoCAD is provided.
- No design drawings (new or revised) are provided.

### **Task 6: Project Coordination**

The purpose of this task is to ensure coordination of the Biosolids Alternatives Evaluation by Kennedy Jenks and the WWTMP being completed by BC. Project coordination includes the following:

**Task 6.1: Data Collection Meeting.** Conduct a virtual meeting up to two hours in length with BC to discuss their work completed to-date, considerations they have completed regarding the City's solids program, confirmation of flows & loads, and obtaining an understanding of liquids process considerations that may impact the biosolids evaluation.

**Task 6.2: Draft Biosolids Alternatives Evaluation Report.** Conduct a virtual meeting up to two hours in length with BC staff, and City staff as desired, to coordinate and discuss results from the draft Report.

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**Task 6.3: Capital Improvement Program Plan.** Provide review comments on the Capital Improvement Program Plan being developed by BC. Comments will be focused on solids alternatives as well as overall phasing of the liquids and solids process recommendations within the Plan.

**Task 6.4: Wastewater Treatment Master Plan Workshop.** Participate in a two-hour workshop with City staff, City Council and BC regarding the draft WWTMP.

**Task 6.5: Capital Improvement Plan Workshop.** Participate in a two-hour workshop with City staff, City Council and BC regarding the Capital Improvement Plan.

### **Task 6: Deliverables**

- Notes from the Data Collection Meeting (electronic, Email format).
- Phone call or virtual meeting follow-up with BC and/or City staff regarding any outstanding issues regarding the Draft Biosolids Alternatives Evaluation Report Meeting.
- Comments on Capital Improvement Program Plan (electronic, Microsoft Word and/or Adobe Acrobat PDF format).
- Participate in a workshop, up to two hours in length regarding the Wastewater Treatment Master Plan Workshop at the City Hall or WWTP. A brief PowerPoint presentation outlining the recommended solids alternatives will be provided to BC for inclusion in the workshop.
- Participate in a workshop, virtually, up to two hours in length regarding the Capital Improvement Plan. Review and comments of BC's presentation materials will be completed prior to the workshop.

### **Task 6: Assumptions**

- The Wastewater Treatment Master Plan and Capital Improvement Plan Workshops are being led by others. Kennedy Jenks is not responsible for meeting coordination, agendas, meeting minutes, presentation equipment or any meeting logistics.
- Up to two Kennedy Jenks staff will attend one workshop in-person and one workshop virtually.

### **Kennedy Jenks Team**

Mark Cullington will serve as Kennedy Jenks' Project Manager and will work on each technical aspect of the project. Charles Wright will be the Project Engineer. Additional engineering staff will include Luke Werner, Ben Bosse and Matt Horton from our Eugene Office. We may draw from other local resources to assist in delivering this project. Our team is ready to work on this project, are local, and highly responsive.



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## **Budget**

We propose to perform this Scope of Work on a time and material basis using the attached Schedule of Charges (Attachment A) and Not-to-Exceed (NTE) \$149,770. The NTE amount will not be exceeded unless approved in advance by BC in writing. The detailed proposal fee estimate may be found in Attachment B.

## **Schedule**

Kennedy Jenks is prepared to commence on this project immediately. Based on our understanding of the project and Wastewater Master Plan timeline we propose completing the draft Biosolids Alternatives Evaluation Report in six months from NTE. The final Biosolids Alternatives Evaluation Report will be submitted to BC within two weeks of receiving comments on the draft version of the report.

## **Authorization**

This project will utilize BC's "Subcontract for Professional Services Rev. June 2017" along with agreed upon changes from Kennedy Jenks as the contract terms and conditions to complete the Scope of Work. We appreciate the opportunity to submit this proposal to BC and assist with completing the Biosolids Alternatives Evaluation project. If you have any questions, please call Mark Cullington at (503) 866-4188 or contact by email at [markcullington@kennedyjenks.com](mailto:markcullington@kennedyjenks.com).

Very truly yours,

KENNEDY/JENKS CONSULTANTS, INC.



Mark Cullington  
Project Manager and Vice President



Charles Wright, PE  
Project Engineer

## **Enclosures**

Attachment A: Schedule of Charges  
Attachment B: Proposal Fee Estimate

**Client/Address:** Brown and Caldwell  
6500 S Macadam Ave., Suite 200  
Portland, OR 97239

**Contract/Proposal:** City of Newport Biosolids Alternatives Evaluation  
KJ Proposal Number: P21025

## Attachment A: Schedule of Charges

**Date:** January 27, 2022

### PERSONNEL COMPENSATION

Classification	Hourly Rate
Engineer-Scientist-Specialist 1 .....	\$130
Engineer-Scientist-Specialist 2 .....	\$150
Engineer-Scientist-Specialist 3 .....	\$160
Engineer-Scientist-Specialist 4 .....	\$170
Engineer-Scientist-Specialist 5 .....	\$180
Engineer-Scientist-Specialist 6 .....	\$210
Engineer-Scientist-Specialist 7 .....	\$220
Engineer-Scientist-Specialist 8 .....	\$230
CAD Designer .....	\$150
CAD Tech .....	\$140
Project Administrator .....	\$120
Administrative Assistant.....	\$100
Aide .....	\$90

In addition to the above Hourly Rates, an Associated Project Cost charge of \$5.00 per hour will be added to Personnel Compensation for costs supporting projects including telecommunications, software, information technology, internal photocopying, shipping, and other support activity costs related to the support of projects.

### DIRECT EXPENSES

Reimbursement for direct expenses, as listed below, incurred in connection with the work, will be at cost plus ten percent for items such as:

- Maps, photographs, 3rd party reproductions, 3rd party printing, equipment rental, and special supplies related to the work.
- Consultants, soils engineers, surveyors, contractors, and other outside services.
- Rented vehicles, local public transportation and taxis, travel and subsistence.
- Project specific telecommunications and delivery charges.
- Special fees, insurance, permits, and licenses applicable to the work.
- Outside computer processing, computation, and proprietary programs purchased for the work.

Reimbursement for vehicles used in connection with the work will be at the federally approved mileage rates or at a negotiated monthly rate. Rates for professional staff for legal proceedings or as expert witnesses will be at rates one and one-half times the Hourly Rates specified above.

Excise and gross receipts taxes, if any, will be added as a direct expense.

The foregoing Schedule of Charges is incorporated into the agreement for the services provided, effective January 27, 2022 through January 26, 2023. After January 26, 2023, invoices will reflect the Schedule of Charges currently in effect.

## Attachment B: Proposal Fee Estimate

Kennedy Jenks

CLIENT Name: Brown and Caldwell  
 PROJECT Description: City of Newport Bloosolids Alternatives Evaluation  
 Proposal/Job Number: P21025  
 Date: 1/27/2022

Classification:	Project Manager (C6)	Project Engineer (C6)	QA/QC (C7)	Engineering Staff (C5)	Engineering Staff (C3)	Ryan Ray (C7)	James Hoffmann (C6)	Jake Salter (C5)	Erin Hoopri (C4)	Health & Safety (C4)	St. CAD Tech (C4)	Project Admin. (C4)	Total Hours	KJ Labor	KJ Associated Costs	KJ ODCs	KJ ODCs Markup	Total Labor	Total Sub	Total Expenses	Total Labor + Sub + Expenses
Hourly Rate:	\$250	\$210	\$220	\$180	\$160	\$220	\$210	\$180	\$170	\$170	\$140	\$120			\$5.00						
Task *** (Default)																					
Task *** (Contingency Reserve)																					
Task *** - Subtotal																					
Task 1: Project Management																					
1.1 Coordination, Set-up, Invoicing, H&S Plan, RFP, C&CR	60	12	4	4	4																
1.2 Project Kick-off Meeting (external and internal)	6	8	2	8	8	2		2	2												
Task 1 - Subtotal	66	20	6	12	12	2	0	2	2												
Task 2: Data Collection and Basis of Design																					
2.1 Request for Information	2	8		12	12																
2.2 Basis of Design TM	6	24	2	24	40	2		2	2												
Task 2 - Subtotal	8	32	2	36	52	2	0	2	2												
Task 3: Bloosolids Alternatives																					
3.1 Alternatives Criteria	2	2		2	4																
3.2 Alternatives Scoring	2	2		2	4																
3.3 Alternatives Development	4	24	8	24	40	4		4	4												
3.4 Alternatives Review Meeting	6	8		8	2																
3.5 Conceptual Level Costs	2	16	2	20	32		8														
Task 3 - Subtotal	16	52	10	56	82	4	8	4	4												
Task 4: Bloosolids Alternatives Evaluation Report																					
4.1 Draft and Final Technical Memorandum	8	16	4	40	48																
Task 4 - Subtotal	8	16	4	40	48	0	0	0	0	0	0	0									
Task 5: Centrifuge Replacement Options and Cost Estimates																					
5.1 Replacement Analysis	16	2	16	24																	
5.2 Centrifuge Technical Memorandum	2	4		8	16																
Task 5 - Subtotal	2	20	2	24	40	0	0	0	0	0	0	0									
Task 6: Project Coordination																					
Task 6.1 Data Collection Meeting	2	2		2	4																
Task 6.2 Draft Bloosolids Alternatives Evaluation Report	2	2		2	3																
Task 6.3 Capital Improvement Program Plan	1	1		1																	
Task 6.4 Wastewater Treatment Master Plan Workshop	6	6		1	2																
Task 6.5 Capital Improvement Plan Workshop	2	2		1	2																
Task 6 - Subtotal	13	13	0	7	11	0	0	0	0	0	0	0									
All Tasks Total	117	153	24	175	245	8	8	8	8	1	8	18	781	\$144,710	\$3,305	\$1,100	\$55	\$148,815	\$0	\$315	\$148,770

