#### State of Washington Capital Projects Advisory Review Board (CPARB) **PROJECT REVIEW COMMITTEE (PRC)**

#### **GC/CM PROJECT APPLICATION**

To Use the General Contractor/Construction Manager (GC/CM) Alternative Contracting Procedure

CPARB PRC will only consider complete applications: Incomplete applications may result in delay of action on your application. Responses to Questions 1-7 and 9 should not exceed 20 pages *(font size 11 or larger)*. Provide no more than six sketches, diagrams or drawings under Question 8.

#### **Identification of Applicant**

- a) Legal name of Public Body (your organization): City of Bellingham
- b) Address: 2221 Pacific Street
- c) Contact Person Name: Eric Johnston

Title: Public Works Director

d) Phone Number: 360-778-7700

E-mail: ecjohnston@cob.org

#### 1. Brief Description of Proposed Project

- a) Name of Project: Post Point Resource Recovery
- b) County of Project Location: Whatcom County
- c) Please describe the project in no more than two short paragraphs. (See Example on Project Description) The Resource Recovery Project (Project) involves the replacement of the City of Bellingham's (City) Post Point Resource Recovery Plant (PPRRP) incineration process. The current incinerators are aging, expensive to operate and maintain, and burn (rather than recover) resources. Through a comprehensive planning process including public outreach, the City selected anaerobic digestion to replace the incinerators. This project is a critical component of the City's Climate Action Plan and will significantly reduce CO<sub>2</sub> emissions. This digestion process will produce Class A biosolids suitable for beneficial use by City residents and businesses as a soil amendment product. The anaerobic digestion process will also produce biogas, which is planned for injection in the local natural gas pipeline as a renewable fuel to offset the use of carbon-based fuels.

In addition to a new anaerobic digestion process, this project includes ancillary upgrades to the solids thickening and dewatering processes, solids screening, digester biogas treatment, and electrical and instrumentation system. With Washington State Department of Ecology's implementation of a new permit to control nitrogen discharges into Puget Sound, this project also includes a treatment process to remove a significant quantity of nitrogen that is contained in a recycle flow loop from the anaerobic digestion process. A new Resource Recovery Center is included to replace aging and inadequate facilities, including operations center, environmental education, laboratory, and maintenance facilities.

#### 2. Projected Total Cost for the Project:

#### A. Project Budget

Costs for Professional Services (A/E, Legal etc.)	\$28,000,000
Estimated project construction costs (including construction contingencies):	\$156,000,000
Equipment and furnishing costs	\$ Included
Off-site costs	\$1,000,000
Contract administration costs (owner, cm etc.)	\$14,000,000*
Contingencies (design & owner)	\$9,000,000
Other related project costs (briefly describe)	\$ N/A
Sales Tax	\$13,000,000
Total	\$221,000,000
*City staff and resources not included	

#### B. Funding Status

Please describe the funding status for the whole project. <u>Note</u>: If funding is not available, please explain how and when funding is anticipated

The City was recently notified of selection to be invited to apply for a 2021 Water Infrastructure Finance and Innovation Act (WIFIA) loan administered through EPA. This federal credit program offers low interest rate financing for up to 49 percent of the total project costs. The City intends to issue tax exempt municipal bonds for the portion of the capital project not financed through WIFIA. The City has recently completed a preliminary rate study and affordability analysis to assess the impact of the project funding on ratepayers. Significant rate impacts are anticipated. The City has \$15 million in cash reserves dedicated to fund the engineering, GC/CM advisor services and GC/CM preconstruction services.

#### 3. Anticipated Project Design and Construction Schedule

Please provide:

The anticipated project design and construction schedule, including:

- a) Procurement; (including the use of alternative subcontractor selection, if applicable)
- b) Hiring consultants if not already hired; and
- c) Employing staff or hiring consultants to manage the project if not already employed or hired. (See Example on Design & Construction Schedule)

Below is a schedule summary for key activities. Please see Attachment A for a detailed project schedule.

Activity	Start	Finish
Facility Plan (Submittal to Ecology and Approval)	May 2022	August 2022
Preliminary Design	April 2021	September 2022
Project Review Committee Application and Presentation	December 2021	January 27, 2022
GC/CM Request for Qualifications Advertisement	March 16, 2022	April 27, 2022
Qualifications Review and Notification of Shortlist	April 28, 2022	May 31, 2022
GC/CM Request for Proposals Advertisement	June 7, 2022	July 20, 2022
Evaluation of Proposals and Council Approval to Contract	July 21, 2022	September 12, 2022
Detailed Design	September 2022	January 2024
Construction	April 2024	April 2027

#### 4. Why the GC/CM Contracting Procedure is Appropriate for this Project

Please provide a detailed explanation of why use of the contracting procedure is appropriate for the proposed project. Please address the following, as appropriate:

• If implementation of the project involves complex scheduling, phasing, or coordination, what are the complexities?

The PPRRP operates 24/7/365 and is considered a critical infrastructure facility that must remain operational during construction of the Project. Since this Project replaces most of the solids handling and treatment, including major upgrades to electrical and instrumentation systems, there will be significant coordination required to avoid compromising the plant's ability to treat wastewater and comply with its water quality permit.

The PPRRP is in the immediate vicinity of some of the City's environmental, cultural, and social resources. A Great Blue Heron rookery and a former bald eagle nest is located at the southwest edge of the parcel as well as a popular hiking trail loop with views of Bellingham Bay. A portion of the northeast site being developed has evidence of soil and groundwater contamination including petroleum constituents and dissolved arsenic. There are also several shell midden sites and a potential cemetery in close proximity to the Project. Working closely with the GC/CM prior to and throughout construction will be critical to mitigating these impacts and schedule risks beforehand.

Implementing a multifaceted project of this scale that affects most of the plant's critical functions will require a high degree of scheduling, phasing and coordination to successfully integrate the

improvements and minimize risk to the City. The team has prepared a preliminary construction sequence (included in Attachment B) which identified the extent of demolition, renovation, and relocation of existing facilities as well as construction of new facilities within the tight footprint. These include relocation of all major utilities serving the Project including potable water, fire water, natural gas, and electrical services. In addition, the majority of the existing solids handling processes must continue to remain operational while the solids handling building is gutted and retrofitted. Maintaining a tight schedule and phasing the work appropriately will be critical for coordinating the improvements with operation and maintenance activities.

If the project involves construction at an existing facility that must continue to operate during construction, what are the operational impacts on occupants that must be addressed?
 Note: Please identify functions within the existing facility which require relocation during construction and how construction sequencing will affect them. As part of your response you may refer to the drawings or sketches that you provide under Question 8.

Approximately 44 employees work out of the PPRRP to operate and maintain the City's water treatment plant, wastewater treatment plant, lift stations and associated collection system as well as booster pump stations and distribution system. In addition to plant access, extensive renovations of the operating solids handling systems and building, and road restrictions, the project demolishes and replaces the working space for the existing operations controls center, maintenance shop, and state accredited water quality laboratory as well as associated offices and spare parts storage. While demolition of the maintenance shop, offices, and spare parts storage will occur at the beginning of construction, relocation and startup of the new processes will occur during the latter half.

• If involvement of the GC/CM is critical during the design phase, why is this involvement critical?

The Project is a complex integration of new solids stream treatment components into the existing PPRRP, all while maintaining the continuous operation of the facility. The involvement of the GC/CM will provide crucial input into the construction sequencing, constructability, cost and value engineering and scheduling/phasing to reduce costs and minimize risk to the City. For a project of this complexity, a traditional design-bid-build process will not provide the contractor a level of upfront (i.e., during the design phase) understanding of existing conditions (e.g. tight footprint, operational constraints, access needs) or allow for the contractor to provide input during the design that is necessary to reduce costs and manage risks. Pushing contractor input to the construction phase, and relying on solely on the bid documents to communicate existing conditions and project requirements, would unnecessarily add cost and schedule by causing the contractor to react to changes later in the process. Early collaboration between the GC/CM and engineer during design process is critical for this complex project. The City's intent is to begin GC/CM procurement immediately to have them engage with the design team at approximately the 40 percent design completion level.

 If the project encompasses a complex or technical work environment, what is this environment? The PPRRP processes up to 72 million gallons of wastewater per day. This is accomplished through multiple process streams and treatment processes, connected by piping and electrical and instrumentation systems. The overall process is affected by several factors, including the varied characteristics of the wastewater coming into the plant (influent), temperature, and availability of process and equipment capacity relative to the influent flow. If any component of the mechanical, electrical, instrumentation, biological, or chemical systems is inhibited or compromised, there can be a ripple effect that impedes the ability of the plant to protect the environment and comply with its permit. Permit violations can result in serious penalties and fines.

The project includes two new biological treatment processes, which will require extensive coordination to commission and train plant staff.

If the project requires specialized work on a building that has historical significance, why is the building of historical significance and what is the specialized work that must be done?
 N/A

• If the project is declared heavy civil and the public body elects to procure the project as heavy civil, why is the GC/CM heavy civil contracting procedure appropriate for the proposed project?

Heavy civil contracting is appropriate for the project to allow for greater level of negotiated self-performed work than allowed by RCW 39.10.390. The project requires specialized construction means and methods and includes the supply and installation of specialized process equipment that together constitute a significant portion of the overall cost of the construction work. Allowing the GC/CM to self-perform this specialty work and equipment supply allows for the GC/CM to better control the project schedule and overall quality of the construction and project performance. Typical to wastewater treatment projects of similar scope, the GC/CM is responsible for mechanical equipment/piping supply and installation, yard piping, structural concrete installation, structural steel installation, and yard piping installation. Allowing the GC/CM to self-perform this material supply and installation allows them to assign staff specialized in the type of work, sequence the work to optimize the schedule, directly control the installation of systems and equipment that most impact process performance, avoid subcontractor quality issues on critical aspects of the work, and assume warranty responsibility of process equipment.

#### 5. Public Benefit

In addition to the above information, please provide information on how use of the GC/CM contracting procedure will serve the public interest (*For Public Benefit related only to Alternative Subcontractor Selection, use Supplement A or Supplement B, if your organization decides to use this selection process. Refer to Question No. 11 of this application for guidance*). For example, your description must address, but is not limited to:

· How this contracting method provides a substantial fiscal benefit; or

#### Manage Inflation:

Given the unprecedented construction materials and labor cost escalation, it will be important to engage the GC/CM to provide real-time market pricing input during the design to guide decision-making. This has the potential to lower construction costs, increase price certainty, and maintain project schedule by avoiding design and/or material changes later during construction.

#### **Risk Management:**

Early engagement with the GC/CM as part of the design can manage risk as summarized below. There is a correlating fiscal benefit associated with better management of risk in each of these areas:

- Project success Repeat work is a strong motivator for a GC/CM contractor and fosters an environment where the City's concerns are considered a high priority and resolved without formal disputes. Reducing the potential for construction claims and litigation can have significant fiscal benefits.
- Maintain schedule The GC/CM will be motivated to maintain a schedule that they were directly involved in creating. Furthermore, the schedule will be grounded in market conditions, which will improve subcontractor interest/bidding and ability to manage the overall project.
- Bid padding Since the GC/CM will be very familiar with the nature of the work before it bids, they will be less inclined to pad their bids for "unknowns" and lack of understanding of existing conditions.
- Value-engineering The GC/CM will conduct constructability and value-engineering reviews to identify potential cost reduction measures.
- How the use of the traditional method of awarding contracts in a lump sum is not practical for meeting desired quality standards or delivery schedules.

#### **Avoid Low Bid Price Selection:**

With traditional delivery, there isn't the opportunity to select a contractor based on qualifications and past performance. With the level of complexity and risk on this Project (see responses in Section 4 above), it will be critical that the City partner with a trusted contractor selected based on qualifications and pricing factors, not just low bid price. Some of the assets that will be constructed could have a service life over 50-years, putting an emphasis on high quality standards.

#### Manage Inflation:

Given the unprecedented construction materials and labor cost escalation, it will be important to engage the GC/CM to provide real-time market pricing input during the design to guide decision-making. This

has the potential to lower construction costs and maintain project schedule by avoiding design and/or material changes later during construction.

#### Align Design with Contractor Methods:

By engaging the GC/CM during the design, the team can make decisions that align with the Contractor's best practices and preferred construction technologies. With traditional delivery, the design team may develop a design that may not align with more efficient construction. By coordinating the design details early-on with the Contractor, the project may not require a multitude of substitution requests or deviations during construction that may cause delays. Furthermore, we anticipate the project cost will be lower since the design team can avoid prescriptive specifications to guard against a low bid contractor due to the coordination and interactions prior to design completion.

 In the case of heavy civil GC/CM, why the heavy civil contracting procedure serves the public interest. Allowing the GC/CM to self-perform a higher percentage of the construction work allows for better control of project schedule and quality. The specialized nature of the construction work, conducting construction within an existing and operating facility, and the criticality of process equipment introduces project risks that can result in schedule delays, change orders, performance issues, and impact to existing operations. The GC/CM supply and performance of key elements of the work allows for singular control of these risks that ultimately benefit the project outcome and the public.

#### 6. Public Body Qualifications

Please provide:

• A description of your organization's qualifications to use the GC/CM contracting procedure.

The City of Bellingham successfully delivered a GC/CM project in 2012 at the PPRRP to upgrade the liquids treatment process. Key resources from the consultant team that led the 2012 GC/CM project (Carollo) will also be engaged in providing Owner's Advisor services for this Project. In addition, the City of Bellingham routinely manages major construction projects using in-house resources. The Public Works department has several licensed engineers with facilities construction experience.

To supplement the City's resources and provide continuity from the last GC/CM project, the City has secured the services of Carollo to provides services related to securing PRC approval, GC/CM procurement, and on-going GC/CM advisory support throughout the duration of the Project. In addition, Brown and Caldwell, the prime consultant for the Project, will provide Owner's Advisor services review and support as needed. Both Carollo and Brown and Caldwell have extensive experience in delivering GC/CM projects, especially for complex treatment plant projects.

Building on the successful 2012 GC/CM delivery with a team that provides continuity and strong GC/CM expertise, the City is well-positioned to successfully implement GC/CM for this Project.

• A **Project** organizational chart, showing all existing or planned staff and consultant roles. **Note:** The organizational chart must show the level of involvement and main responsibilities anticipated for each position throughout the project (for example, full-time project manager). If acronyms are used, a key should be provided. (See Example on Project Organizational Chart)

Please see Attachment C.

Staff and consultant short biographies (not complete résumés).

#### City of Bellingham

#### Mike Olinger: Assistant Director of Operations

**<u>Role</u>**: General project oversight and liaison with City elected officials.

**Relevant Experience:** Mike Olinger has over 27 years of progressive experience in engineering design, construction, management, and policy direction on public works projects. He has 25 years of municipal public works experience including over 8 years of experience at the City of Bellingham as the Construction Manager and over 10 years of senior public works operations management. He has been

involved with a variety of projects including new roadways, street widening, bridges, signals, water and sewer pump stations, stormwater treatment, water and wastewater treatment plant improvement. He also served as the Construction Manager on the 2012 Post Point Project to upgrade the liquids treatment process, which was delivered as a GC/CM project.

#### Chad Schulhauser, PE: City Engineer

Role: General project oversight and liaison with City elected officials.

**Relevant Experience**: Chad Schulhauser has over 28 years of progressive experience in engineering design, construction, management, and policy direction on public works projects. He has 10 years of municipal public works experience including over 5 years of experience at the City of Bellingham as the City Engineer. He has been involved with a variety of projects including new roadways, street widening, bridges, signals, water and sewer pump stations, stormwater treatment, water and wastewater treatment plant improvements, conveyance systems, and comprehensive plans. He is a registered professional engineer in Washington.

#### <u>Steve Day, PE</u>: Project Manager (for design)

#### Role: Manage the design and oversee construction of the project

**<u>Relevant Experience</u>**: Steve Day has over 25 years of experience in the design, construction, and administration of both public and private infrastructure projects. His work has included new roadways, street widening, bridges, signals, water and sewer pump stations, stormwater treatment, water and wastewater treatment plant improvements, conveyance systems, buildings, light rail transit systems, and dam removal. He has developed RFPs, project scopes, bidding and construction documents as well as administering projects through close-out. He is a registered professional and structural engineer in Washington.

#### Freeman Anthony, PE: Internal Advisor

#### Role: Internal Advisor on GC/CM

**<u>Relevant Experience</u>**: Freeman Anthony has over 19 years of experience in the design, construction, and administration of both public and private infrastructure projects. He served as the project manager on the 2012 Post Point project to upgrade the liquids treatment process, which was delivered as a GC/CM project.

#### Steve Bradshaw: Project Manager (for planning)

#### Role: Superintendent of Plants

**Relevant Experience**: Steve Bradshaw has over 12 years of progressive experience in water and wastewater plants operations. He has been involved with a variety of projects including water and wastewater treatment plant improvements and bringing a Dissolved Air Floatation system online at the City's water treatment plant. During his 20 years in the Navy, Steve was involved in multiple ship overhauls as a Duty Engineer I. He holds Wastewater Operator group 3, Water Treatment Plant Operator 4, and Water Distribution Manager 4 certificates.

#### Matt Stamps: General Counsel (Senior Assistant City Attorney, City of Bellingham)

Role: Provide legal advice to the procurement, design and construction management teams

**Relevant Experience**: Matt Stamps has been an attorney for 18 years and has provided public bidding and contracting advice to the City of Bellingham since 2012. Before that, Matt was in private practice and his practice included the provision of public works contracting advice to small cities and port districts throughout Washington. Matt has experience in federal contracting as the City of Bellingham receives federal funds for a variety of infrastructure projects. The City utilized outside legal counsel to supplement its in-house legal department for the 2012 Post Point GC/CM project and may do so again for this project.

#### Paul Reed: Construction Manager

#### Role: Construction oversight and inspection

**Relevant Experience**: Paul Reed has over 30 years of progressive experience in construction surveying, inspection and construction management on public works projects. He has been involved with a variety of projects including new roadways, street widening, bridges, signals, water and sewer pump stations, stormwater treatment, water and wastewater treatment plant improvement. He also served as the Lead Inspector on the 2012 Post Point Project to upgrade the liquids treatment process which was delivered as a GC/CM project.

#### Brown and Caldwell (Consultant team Prime)

#### Mike Thorstenson: Project Manager

**<u>Role</u>**: Project Manager for the overall PPRR Project, including responsible for oversight of subconsultant Carollo, who will be point of contact for Owner Advisor Services

**Relevant Experience**: Mike has over 20 years of experience leading engineering project, program, and construction planning and implementation projects in the water, wastewater, and stormwater industry. As the Project Manager for the PPRRP Phase 3 – Facility Plan and Phase 4 – Preliminary Design project, Mike will leverage his experience with large, multi-stakeholder programs requiring coordination of multiple architectural/engineering firms, subconsultants, contractors, external governmental agencies, and other stakeholders to deliver the project moving forward into the detailed design and construction phases. Below is a summary of Mike's experience with alternative delivery projects:

- Design-Build: As Project Officer, this project is nearing completion in Q1, 2022 of Metro Vancouver's first Design-Build project for Iona Wastewater Treatment Plant's Dewatering Facilities.
- Design-Build: As Program Manager, responsible for the planning, procurement, and overall completion of access to facilities for green-field treatment plant in Loudoun County, VA.

#### Shelby Smith: Deputy Project Manager

**<u>Role</u>**: Deputy Project Manager for the overall PPRR Project, including coordination of Owner Advisor services between subconsultants (i.e. Carollo) and City stakeholders.

**Relevant Experience**: Shelby is a professional engineer with 10 years of experience delivering engineering programs and projects, including strategic wastewater utility planning, program and construction management, facility planning and design, permitting, alternative delivery method analysis and procurement, and stakeholder engagement. As the Deputy Project Manager for the PPRRP Phase 3 – Facility Plan and Phase 4 – Preliminary Design project, Shelby will leverage her experience with managing large, multi-disciplinary teams to deliver the project's future phases for detailed design and construction. Shelby's experience with alternative delivery projects includes:

- Progressive Design-Build: served as Assistant Program Manager for the City of Nampa (ID) Wastewater Program. For the Nampa WWTP Progressive Design-Build Upgrade project, supported market sounding, alternative delivery methods evaluation, and design-build procurement.
- Progressive Design-Build: as Project Engineer, supported procurement document development for the City of Everett Reservoir 3 Structural Improvements project.

#### Patrick Weber: QA/QC and Support

Role: Quality reviews for the GC/CM procurement

**<u>Relevant Experience</u>**: Patrick is a professional engineer with over 14 years of experience in project management and engineering within the water and wastewater industry. He has performed owner advisor services for over 10 projects using design-build and GC/CM. As the Technical Advisor for Owner Services representing Brown and Caldwell, Patrick will provide quality control and oversight to

the procurement and GC/CM delivery for the PPRRP. Patrick's experience with alternative delivery projects includes:

- GC/CM: Owner's Advisor for the City of Walla Walla Mill Creek Water Treatment Plant Improvements project.
- GC/CM, DBB: Owner's Advisor/Project Engineer for the City of Seattle Morse Lake Pump Plant project.
- Progressive Design-Build: Project Manager/Owner's Advisor for the City of Everett Reservoir 3 Structural Improvements project.
- Progressive Design-Build: Project Manager/Owner's Advisor for the City of Tacoma Jefferson and Hood Street Surface Water Interceptor project.
- Progressive Design-Build: Owner's Advisor for the City of Middletown Lakeside Redirect Project.

#### Carollo (Subconsultant to Brown and Caldwell):

#### Jason Garside: GC/CM Advisor

**<u>Role</u>**: Jason will assist the City with the procurement of a GC/CM and provide advice and support during the delivery of the Project. Jason will work with the City to develop the procurement documents, facilitate the scoring/interview process, and provide assistance in developing and negotiating the GMP Amendment.

**Relevant Experience:** Jason is a professional engineer with over 25 years of experience in project management and engineering within the areas of drinking water treatment/distribution, wastewater treatment/conveyance, civil engineering, and storm water management. He performs program management/owner advisor services and over the last decade has supported water and wastewater clients in delivering over 20 projects using GC/CM and design-build. A summary of Jason's alternative delivery projects is provided below:

- o GC/CM: Alternative Delivery Advisor for Oak Harbor, WA Clean Water Facility project.
- o GC/CM: Procurement Advisor for Willamette (Oregon) Water Supply Program.
- GC/CM (referred to as CM/GC): Program Manager for the City of Fort Collins (Colorado) wastewater capital improvements program.
- GC/CM (referred to as CMAR): Alternative Delivery/Procurement Advisor for Bee Ridge (Florida) WRF Expansion and AWT.
- Progressive Design-Build: Owner's Advisor Manager for the Los Angeles Advanced Water Purification project.
- Progressive Design-Build: Owner's Advisor Manager for the Thornton Water Treatment Plant Replacement project.

Jason will provide expertise in assisting the City procure a CM/GC best qualified to satisfy the objectives of the project and in conformance with State requirements, and will assist the City to successfully reach a GMP Amendment with the selected CM/GC.

#### Tadd Giesbrecht: Owner's Advisor Lead

**Role:** Tadd will be the main point of contact with the City for all issues related to the GC/CM Owner's Advisor services. As the lead for this phase of the Project, Tadd will be responsible to work with the City and Jason Garside (Carollo's GC/CM Advisor) to develop the procurement documents and facilitate the scoring/interview and implementation process through construction.

**Relevant Experience:** Tadd has over 23 years of experience in the water/wastewater industry, primarily focused on wastewater treatment plant related planning and design projects in the northwest. As project manager, he helps clients with strategic planning and all facets of project implementation. In this role, Tadd has helped Washington State clients assess project delivery options to achieve high-value solutions. A summary of Tadd's alternative delivery projects is provided below:

- Design-Build (Washington): Project Manager for the City of Everett Reservoir 6 roof replacement design-build project.
- Design-Build (Washington): Project Manager for the City of Everett Water Filtration Plant East Clearwell roof replacement design-build project.

- Progressive Design-Build (Washington): Principal-in-Charge for the City of Everett's Reservoir 3 progressive design-build project.
- GC/CM (Washington): Design engineer for elements of the City of Everett's Water Pollution Control Facility GC/CM project.
- ESCO (Washington): Project manager or principal-in-charge for multiple Energy Services Company (ESCO) projects (a form of design-build delivery).
- CM/GC (Idaho): Project manager for the City of Boise's Dixie Drain CM/GC nutrient removal project.

Tadd will provide continuity for this Project from planning through completion. He managed the planning phase (started in 2017) and remains on the project as an advisor during predesign and design phases. His knowledge of City protocols, Project drivers and desired outcomes will allow him to partner with the City to mitigate risk and establish a successful GC/CM procurement process.

#### Susanna Leung: Design Project Manager

**Role:** Project Manager for the Project preliminary design and design.

**<u>Relevant Experience</u>**: Susanna has over 21 years of experience in the water/wastewater industry. She has a long history working at the PPRRP, dating back to 2010 when she led major components of the Secondary Expansion GC/CM project. Susanna will leverage her detailed knowledge of PPRRP and experience gained from the following GC/CM projects to help the team be successful:

- GC/CM (Washington): Project Manager for the construction phase of the City of Everett Water Pollution Control Facility Secondary Expansion.
- GC/CM (Washington): Assistant Project Manager for the City of Bellingham Post Point WWTP Secondary Expansion.
- GC/CM (Washington): Permitting lead for the City of Oak Harbor Clean Water Facility.

#### Brian Matson: QA/QC

Role: Brian will provide quality reviews of the GC/CM procurement.

**<u>Relevant Experience</u>**: Brian has over 27 years of experience in the water/wastewater industry, primarily focused on wastewater treatment related planning and design projects in the northwest. Brian was the PM for the City of Bellingham Post Point WWTP Secondary Expansion GC/CM project. Brian will provide continuity from this GC/CM project and will help the team leverage lessons learned:

- GC/CM (Washington): Project Manager for the City of Bellingham Post Point WWTP Secondary Expansion.
- o GC/CM (Washington): Project Manager for the City of Oak Harbor Clean Water Facility.
- GC/CM (Washington): Principal in charge of the City of Everett Water Pollution Control Facility Secondary Expansion.
- CM/GC (Oregon): Project Manager for the Willow Lake Water Pollution Control Facility Expansion.
- Provide the **experience** <u>and role</u> on previous GC/CM projects delivered under RCW 39.10 or equivalent experience for each staff member or consultant in key positions on the proposed project. (See Example Staff\Contractor Project Experience and Role. The applicant shall use the abbreviations as identified in the example in the attachment.)

Please see Attachment D.

• The qualifications of the existing or planned project manager and consultants. Please see the 'Staff and consultant short biographies' above. • If the project manager is interim until your organization has employed staff or hired a consultant as the project manager, indicate whether sufficient funds are available for this purpose and how long it is anticipated the interim project manager will serve.

N/A. The City's design project manager (Steve Day) is full-time and assigned to this Project. As needed, the consultant project management team (overall project lead Mike Thorstenson and owner's advisor lead Tadd Giesbrecht) will provide support.

• A brief summary of the construction experience of your organization's project management team that is relevant to the project.

Please see the 'Staff and consultant short biographies' above.

• A description of the controls your organization will have in place to ensure that the project is adequately managed.

Steve Day will serve as the City's Project Manager during the design and construction phase of the Project. Steve is already engaged on the project as the planning phase wraps up. He will be supported by Chad Schulhauser (City Engineer) and Steve Bradshaw (operations).

The City routinely delivers construction projects and has established protocols and processes for executing the work, utilizing WSDOT and CSI standard specifications and special provisions depending on the type of project. The City has documented protocols and procedures for change orders, design milestone reviews, contract approvals, and invoicing.

An important takeaway from the PPRRP Secondary Expansion GC/CM project was to include a sufficient (i.e., reflective of the actual risks identified) project contingency (outside of the MACC) to cover costs associated with owner directed changes, errors/omissions, and unforeseen conditions. The City's projects controls will dictate a signature authority process for executing changes.

• A brief description of your planned GC/CM procurement process.

The following GC/CM procurement is based on lessons learned from the City's GC/CM project at Post Point in 2012, industry best practices, Carollo's experiences from other successful GC/CM projects, and adherence to RCW 39.10:

- Outreach to potential GC/CM candidates to gain market interest prior to the RFQ.
- Request for Qualifications (RFQ):
  - Issue RFQ to solicit qualifications.
  - Score and rank the SOQs.
  - Check references and shortlist the most qualified GC/CM firms.
  - Interview and score and rank the shortlisted GC/CM firms.
- Request for Final Proposals (RFFP):
  - Issue RFFP to solicit final proposals (including pricing factors) from shortlisted GC/CM firms.
  - Score the final proposals and select highest qualified GC/CM firm.
  - Request Council approval to initiate pre-construction services.
- Verification that your organization has already developed (or provide your plan to develop) specific GC/CM or heavy civil GC/CM contract terms.
  The City will likely utilize the 2012 GC/CM contract for this project. Legal counsel will review the GC/CM contract to determine if any revisions are necessary.

#### 7. Public Body (your organization) Construction History:

Provide a matrix summary of your organization's construction activity for the past six years outlining project data in content and format per the attached sample provided: (See Example Construction History. The applicant shall use the abbreviations as identified in the example in the attachment.)

- Project Number, Name, and Description
- Contracting method used
- Planned start and finish dates
- Actual start and finish dates
- Planned and actual budget amounts
- Reasons for budget or schedule overruns

#### Please see Attachment E.

In addition to these major projects, the City of Bellingham also constructs approximately \$10M of roadway and utility capital projects annually.

#### 8. Preliminary Concepts, sketches or plans depicting the project

To assist the PRC with understanding your proposed project, please provide a combination of up to six concepts, drawings, sketches, diagrams, or plan/section documents which best depict your project. In electronic submissions these documents must be provided in a PDF or JPEG format for easy distribution. (*See Example concepts, sketches or plans depicting the project.*) At a minimum, please try to include the following:

- A overview site plan (indicating existing structure and new structures)
- Plan or section views which show existing vs. renovation plans particularly for areas that will remain occupied during construction.
   Note: Applicant may utilize photos to further depict project issues during their presentation to the PRC.

Please see Attachment F for the latest site figure that depicts the location of existing and new structures.

#### 9. Resolution of Audit Findings on Previous Public Works Projects

If your organization had audit findings on *any* project identified in your response to Question 7, please specify the project, briefly state those findings, and describe how your organization resolved them. The City has not received any audit findings on these projects.

#### 10. Subcontractor Outreach

Please describe your subcontractor outreach and how the public body will encourage small, women and minority-owned business participation

The City encourages disadvantaged, minority and women-owned companies to respond to all bids and advertisements by inserting language into the advertisement and advertises projects with the Washington State Office of Minority and Women's Business Opportunities in addition to the local news outlets.

The procurement documents will require the contractor to provide their approach for outreach and to encourage participation of small, women and minority-owned, and local businesses. This will include a review of their past history related to inclusion.

#### 11. Alternative Subcontractor Selection

 If your organization anticipates using this method of subcontractor selection and your project is anticipated to be over \$3M, please provide a completed Supplement A Alternative Subcontractor Selection Application document, <u>one per each desired subcontractor/subcontract package</u>.

- If applicability of this method will be determined <u>after</u> the project has been approved for GC/CM alternative contracting or your project is anticipated to be under \$3M, respond with N/A to this question.
- If your organization in conjunction with the GC/CM decide to use the alternative subcontractor method in the future and your project is anticipated to be over \$3M, you will then complete the *Supplement B Alternative Subcontractor Selection Application*, and submit it to the PRC for consideration at a future meeting.

#### **CAUTION TO APPLICANTS**

The definition of the project is at the applicant's discretion. The entire project, including all components, must meet the criteria to be approved.

#### SIGNATURE OF AUTHORIZED REPRESENTATIVE

In submitting this application, you, as the authorized representative of your organization, understand that: (1) the PRC may request additional information about your organization, its construction history, and the proposed project; and (2) your organization is required to submit the information requested by the PRC. You agree to submit this information in a timely manner and understand that failure to do so may delay action on your application.

If the PRC approves your request to use the GC/CM contracting procedure, you also understand that: (1) your organization is required to participate in brief, state-sponsored surveys at the beginning and the end of your approved project; and (2) the data collected in these surveys will be used in a study by the state to evaluate the effectiveness of the GC/CM process. You also agree that your organization will complete these surveys within the time required by CPARB. Additionally, responding to the 2013 Joint Legislative Audit and Review Committee (JLARC) Recommendations is a priority and focus of CPARB. Data collection shall include GC/CM project information on subcontract awards and payments, and if completed, a final project report. For each GC/CM project, documentation supporting compliance with the limitations on the GC/CM self-performed work will be required. This information may include, but is not limited to: a construction management and contracting plan, final subcontracting plan and/or a final TCC/MACC summary with subcontract awards, or similar.

I have carefully reviewed the information provided and attest that this is a complete, correct and true application.

Signature:	
Name (please print): Eric Johnston, PE	(public body personnel)
Title: Public Works Director	
December 20, 2021	

Attachment A:

# **PPRR Schedule**

ID	Task Name	Duration	Start	Finish	Half 1, 2021	Half 2, 2021	Half 1, 2022	Half 2, 2022	Half 1, 2023	Half 2, 2023	Half 1, 2024	Half 2, 2024	Half 1, 2025	Half 2, 2025	Half 1, 2026	Half 2, 2026	Half 1, 2027	Ь
1	City of Bellingham Post Point Resource Recovery Project	1931 days	Mon 9/16/19	Wed 4/21/27														ĩ
2	Milestones	1931 days	Mon 9/16/19	Wed 4/21/27														
16	Facility Plan (Phase 3)	839 days	Mon 9/16/19	Tue 1/3/23														
811	Preliminary Design (Phase 4)	388 days	Thu 4/1/21	Mon 10/10/22	-			1										
812	Preliminary Design Project Coordination	360 days	Thu 4/1/21	Tue 8/30/22	-													
818	Preliminary Design for PP On-Site Biosolids Facilities	360 days	Fri 4/2/21	Tue 8/30/22	-													
962	Owner Advisor Services	217 days	Fri 12/3/21	Mon 10/10/22		1		1										
963	Approval by City Council to apply for GC/CM	1 day	Fri 12/3/21	Fri 12/3/21			h											
964	PRC Application & Presentation	38 days	Mon 12/6/21	Thu 1/27/22														
965	PRC Application Development and Review	10 days	Mon 12/6/21	Fri 12/17/21			ĥ											
966	PRC Submission	1 day	Mon 12/20/21	Mon 12/20/21			<b>K</b>											
967	PRC Review Meeting	27 days	Tue 12/21/21	Thu 1/27/22			1 King State											
968	GC/CM RFQ	86 days	Fri 1/28/22	Tue 5/31/22			-	1										
969	RFQ Development	20 days	Fri 1/28/22	Fri 2/25/22			1 🎽											
970	City Procurement Review	10 days	Mon 2/28/22	Fri 3/11/22			1 <b>1</b>											
971	Advertisement	3 days	Mon 3/14/22	Wed 3/16/22			5											
972	Qualifications Development (By GC/CMs)	29 days	Thu 3/17/22	Tue 4/26/22			1 <b>1</b>											
973	Qualifications Due	1 day	Wed 4/27/22	Wed 4/27/22			1											
974	Evaluation of Statement of Qualifications	20 days	Thu 4/28/22	Thu 5/26/22			<b>*</b>	ካ										
975	Notification of Shortlist	3 days	Fri 5/27/22	Tue 5/31/22				1										
976	GC/CM RFP	158 days	Mon 2/28/22	Mon 10/10/22			1	1										
977	RFP Development	40 days	Mon 2/28/22	Fri 4/22/22			1 <b>1</b>											
978	City Procurement Review	10 days	Mon 4/25/22	Fri 5/6/22			<b>I</b> -											
979	Final RFP Development	5 days	Fri 5/27/22	Thu 6/2/22				Ϋ.										
980	Advertisement	3 days	Fri 6/3/22	Tue 6/7/22				Γ <b>Γ</b>										
981	Proposal Development (By GC/CMs)	29 days	Wed 6/8/22	Tue 7/19/22				<b>T</b>										
982	Proposals Due	1 day	Wed 7/20/22	Wed 7/20/22				E State										
983	Evaluation of Proposals	20 days	Thu 7/21/22	Wed 8/17/22				- <b>-</b>										
984	Council Approval to Contract	17 days	Thu 8/18/22	Mon 9/12/22				<b>—</b>										
985	Contract Execution	20 days	Tue 9/13/22	Mon 10/10/22				<b>*</b>										
986	Detailed Design (Phase 5)	445 days	Wed 7/27/22	Thu 4/25/24														
1010	Construction (Phase 6)	760 days	Fri 4/26/24	Wed 4/21/27							-							
1011	Construction Placeholder (3 Years)	760 days	Fri 4/26/24	Wed 4/21/27														

Depinet: Deviced Pillom Schodul	Task		Summary	· · · · ·	Inactive Milestone	0	Duration-only	ä	Start-only	E	External Milestone	\$	Critical Split	
Date: Wed 12/15/21	Split		Project Summary		Inactive Summary		Manual Summary Rollu	ip	Finish-only	3	Deadline	•	Progress	
	Milestone	•	Inactive Task		Manual Task		Manual Summary		External Tasks		Critical		Manual Progress	
	Page 1													

Attachment B:

**PPRR Construction Sequencing** 





# Project Area and Surrounding Space

- Sequencing footprint currently limited to Post Point property only
- Index Building and Haskell Properties are ideal for staging area, but not considered available at this time (to be determined by City)



3



# Construction Constraints Used to Develop these Sequencing Options

- Engine-generator replacement will be performed as a separate project before construction begins
- All staging, laydown, and soil stockpile areas are located on-site or will be responsibility of Contractor
  - Index Building and Haskell Properties will not be available for staging
  - Open area southeast of secondary treatment will be used for staging
- Contractor may need to locate additional staging area(s) off-site
- · Keep the public trail open to the extent practical
- Potential future pipe and conduit install for nutrient removal? Three 54-inch pipes + electrical needed.

5

### Operational Constraints Used to Develop these Sequencing Options

- Incinerator 2 must remain operational during construction and on standby for at least 6 months after digesters are commissioned (*City-indicated preference to maintain solids* processing reliability)
- Raw solids will not be added to digesters until flares, cake loadout, and side stream treatment have begun commissioning
- Biosolids receiver will temporarily receive Class B or unclassified biosolids during startup or biosolids can be temporarily landfilled, if needed
- · Maintenance facilities will be established elsewhere, potentially off-site





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# Stage 6

Build digester gas cleaning and gas interconnect facility (**GIF**)

Relocate NG and water supply equipment (backflow preventers) to gas interconnect facility



13







# Stage 10

Test and commission all digesters, solids storage, and sidestream treatment tanks

Seed and startup digesters

Start adding raw solids to digesters



17



# Stage 12

Remove Incin 2 after 6 months of successful digester operation (Inside SHB)

Replace polymer (P)

Remove wet electrostatic precipitator equipment (**W**) and ash loading building (**A**)

Replace dewatering system (**DEW**) with appropriate technology: centrifuges if pathogen regrowth is not observed, screw presses if it is



19

















- What questions or concerns do you have with proposed construction sequencing?
- What additional construction phase staff impacts, constraints, or accommodations can be identified at this time?

Attachment C:

# **PPRR Organizational Chart**

# **Bellingham Public Works** Eric Johnston, PE

# Legal Counsel

- Internal: Matt Stamps (Senior Assistant City Attorney)
- External: TBD

	Bellingham Public Works – Project	Delivery Tear
Staff	Role	Procure
Mike Olinger	Assist Director of Operations	20%
Chad Schulhauser, PE	City Engineer	10%
Freeman Anthony, PE	Internal Advisor	10%
Steve Day, PE	Engineering PM	20%
Steve Bradshaw	Operations PM	5%
Paul Reed	Const. Manager	N/A

GC/CM Owner's Advisor (OA) Team												
Staff	Role	Procure	Design	Const.								
Tadd Giesbrecht, PE (Carollo)	OA Services Lead	25%	20%	5%								
Jason Garside, PE (Carollo)	GC/CM Advisor	25%	10%	5%								
Brian Matson, PE (Carollo)	OA QA/QC	5%	5%	5%								
Patrick Weber, PE (BC)	GC/CM QA/QC and Support	5%	5%	NA								

## **Consultant Project/Design Team**

- Brown and Caldwell (BC)
  - PM Mike Thorstenson, PE
  - Deputy PM Shelby Smith, PE
- Carollo PM Susanna Leung, PE
- Additional subconsultants

Design	Const.					
25%	10%					
10%	5%					
5%	5%					
100%	100%					
25%	25%					
5%	50%					
	TBD					
	C. I.					
	Subo					

Note: The consultant team for OA and design services comprises Brown and Caldwell (BC) as prime, Carollo as subconsultant, and numerous other subconsultants not listed on this chart.

Attachment D:

# **PPRR Team Experience**

Team Member	Experience	Projects Proje		Project	Role during Project Phases			
			Size	Туре	Planning	Design	Const.	
City of Bellingham								
Mike Olinger Assist. Directors of Ops	27 years of progressive experience in engineering design, construction, management, and policy direction on public works	Bellingham, WA Post Point Liquid Stream Project	\$50M	GC/CM	N/A	Construction Manager	Construction Manager	
		Diversion Dam	\$20M	D-B-B	Oversight	Oversight	Oversight	
Chad Schulhauser, PE City Engineer	28 years of experience in delivery of public works projects	Bellingham WTP Pretreatment (DAF)	\$13M	D-B-B	Oversight	Oversight	Oversight	
		Mahogany Avenue	\$6M	D-B-B	Oversight	Oversight	Oversight	
		Horton Road	\$3M	D-B-B	Oversight	Oversight	Oversight	
		Roeder Avenue	\$2M	D-B-B	Oversight	Oversight	Oversight	
		Orchard Drive	\$7M	D-B-B	Oversight	Oversight	Oversight	
		Granary Avenue	\$12M	D-B-B	Oversight	Oversight	Oversight	
		Diversion Dam	\$20M	D-B-B	Oversight	Oversight	Oversight	
Steve Day, PE Project Manager (for design)	25 years of experience in delivery of infrastructure projects	Diversion Dam	\$20M	D-B-B	PM	PM	PM	
Steve Bradshaw Project Manager (for planning)	12 years of progressive experience in water and wastewater plant operations	Bellingham WTP Pretreatment (DAF)	\$13M	D-B-B	Ops	Ops	Ops	
		Diversion Dam	\$20M	D-B-B	Ops	Ops	Ops	
Freeman Anthony, PE Internal Advisor	19 years of experience in delivery of infrastructure projects	Bellingham Post Point WWTP Secondary Expansion	\$50M	GC/CM	City PM	City PM	City PM	
		Horton Road	\$3M	D-B-B	N/A	PM	PM	
		Granary Avenue	\$12M	D-B-B	PM	PM	PM	

Team Member	Experience	Projects	Project	Project	Role during Project Phases				
			Size	Туре	Planning	Design	Const.		
Paul Reed Construction Manager	30 years of progressive experience in construction inspection and construction management	Bellingham, WA Post Point Liquid Stream Project	\$50M	GC/CM	NA	NA	Inspector		
Carollo	•	•		-			-		
Jason Garside, PE GC/CM Advisor	25 years as a professional engineer for water/ wastewater projects	Oak Harbor, WA Clean Water Facility	\$120M	GC/CM	Advisor	Advisor	Advisor		
		Fort Collins (CO) Wastewater Capital Program	\$50M	GC/CM	Program Manager	Program Manager	Program Manager		
		Bee Ridge (FL) WRF Expansion	\$250M	GC/CM	Advisor	Advisor	NA		
		Willamette (OR) Water Supply Program	\$1.5B	GC/CM	Advisor	NA	NA		
		Los Angeles Advanced Water Purification	\$90M	PDB	OA Manager	OA Manager	OA Manager		
Tadd Giesbrecht, PE Owner's Advisor Lead	23 years as professional engineer for water/ wastewater projects	Everett Reservoir 6	\$4M	DB	PM	PM	PM		
		Everett Clearwell	\$3M	FPDB	PM	PM	PM		
		Everett Reservoir 3	\$4M	PDB	PIC	NA	NA		
		Tacoma CTP Expansion	\$70M	DB	NA	NA	Sub PM		
		Boise (ID) Dixie Drain nutrient removal	\$21M	CM/GC	PM	PM	PM		

Team Member	Experience	Projects	Project	Project	Role during	Project Phase	S
			Size	Туре	Planning	Design	Const.
Brian Matson, PE QA/QC	27 years as professional engineer for water/ wastewater projects	Willow Lake Water Pollution Control Facility Expansion	\$96M	CM/GC	Asst PM	Asst PM	PM
		Everett WWRF Secondary Expansion	\$25M	GC/CM	PM	PIC	PIC
		Bellingham Post Point WWTP Secondary Expansion	\$50M	GC/CM	PM	PM	PM
		Oak Harbor Clean Water Facility	\$120M	GC/CM	PM	PM	PM
Susanna Leung, PE Design PM (Carollo)	21 years as professional engineer for water/ wastewater projects	Everett WWRF Secondary Expansion	\$25M	GC/CM			PM
		Bellingham Post Point WWTP Secondary Expansion	\$50M	GC/CM	ΑΡΜ	APM	APM
		Oak Harbor Clean Water Facility	\$120M	GC/CM	Permitting lead	Permitting lead	
Brown and Caldwell	•	•	-	-			
Mike Thorstenson, PE; Project Manager	22 years as a professional engineer for water / wastewater projects	Metro Vancouver (British Columbia), Iona Dewatering Facility	\$50M	DB	N/A	Advisor	Advisor
		Loudoun Water (VA), Trap Rock WTF Site Prep	\$10M	DB	Program Manager	Program Manager	N/A
		Denver Water (CO), Hillcrest Reservoir and Pump Station	\$100M	CMAR	N/A	N/A	Project Manager

Team Member	Experience	Projects	Project	Project	Role during Project Phases			
			Size	Туре	Planning	Design	Const.	
Patrick Weber, PE QA/QC	15 years of experience in water/wastewater planning and design	Everett Clearwell (WA)	\$3M	FPDB	N/A	Technical Lead	Technical Lead	
		Tacoma Jefferson- Hood Street Interceptor Project	\$25M	PDB	Document Lead	Oversight	N/A	
		Greater Cincinnati MSD Mill Creek WWTP Diversion Project	\$35M	PDB	Technical Lead	Oversight	Advisor	
		City of Walla Walla (WA) Water Treatment Plant Upgrade	\$16M	GC/CM	Technical Lead	Advisor	Advisor	
		Soquel Creek Treatment Plant	\$75M	PDB	Technical Advisor	Advisor	N/A	
Shelby Smith, PE Deputy Project Manager	10 years as a professional engineer for water/ wastewater projects	City of Nampa (ID) Nampa Wastewater Program	\$189M	PDB, DBB	Assistant Program Manager	Assistant Program Manager; DB Procurement Support	Assistant Program Manager; Interim CM	

Attachment E:

# **PPRR Construction History**

#### City of Bellingham - Construction History (6 years)

Project #	Project Name	Project Description	Contracting Method	Planned Const. Start	Planned Const. Finish	Actual Const. Start	Actual Const. Finish	Planned Budget	Actual Budget	Reason for Budget or schedule overrun
1	EW180 WTP Pretreatment (DAF)	Washington State Dept. of Commerce funded project to constrcut Dissolved Air Floatation pretreatment at Bellingham's water treatement plant.	D-B-B	Sep-16	May-18	Oct-16	Oct-18	\$13.5M	\$12.7M	Equipment lead time issues and additional scope (paving, fencing, etc.) were added to the project.
2	ES489 Mahogany Avenue	Construction of a new urban arterial roadway including two signalized intersections and wetland mitigation.	D-B-B	Jun-17	Mar-18	Mar-18	Nov-18	\$6.5M	\$5.4M	Delayed start due to getting design consultants under contract and wetland mitigation. Finished ahead of schedule.
3	ES399 Horton Road	Construction of a new urban arterial roadway including wetland mitigation and fish passable box culvert.	D-B-B	Feb-20	Oct-20	Mar-20	Apr-21	\$3.9M	\$2.9M	Had to winter over project due to wet soils and supply chain issues.
4	ES540 Roeder Avenue	Overlay of an existing arterial truck route with installation of new sidewalk and bicycle facilities.	D-B-B	Jan-19	May-19	Jan-19	May-19	\$2.8M	\$2.2M	N/A
5	ES440 Orchard Drive	Construction of a new urban arterial roadway including a signalized intersection, wetland mitigation, and coordination with adjacent stream restoration project.	D-B-B	Mar-21	Mar-22	Mar-21	Mar-22	\$8.6M	\$7.2M	Ongoing
6	WF1011 Granary Avenue/Laurel Street Waterfront project	Redevelopment of industrial waterfront area including construction of two new urban arterial roadways with all associated utilites, signalized intersection and railroad crossing.	D-B-B	Oct-17	Nov-18	Oct-17	Jun-19	\$10.7M	\$12.3M	Work w/in MTCA cleanup site, adjacent property owner (Port) had franchise utility come in to do work at same time so work had to be coordinated, causing a suspension of contract and delays.
7	EN047 Diversion Dam	Partial removal of the City's diversion dam to restor fish passage in the Middle Fork of the Nooksack River and installation of a revised intake for City municipal water supply.	D-B-B	Jan-20	Jul-21	Jan-20	ongoing	\$13.0M	\$19.7M	City added work, together with varying bedrock elevations and flood events caused added costs and delays to the project. Completion is expected this month.

Attachment F:

# **PPRR Site Figure**

# Post Point Resource Recovery Plant Biosolids Project Area

#### \*not to scale

