

City of Everett

State of Washington
Capital Projects Advisory Review Board (CPARB)
Project Review Committee (PRC)

APPLICATION FOR PROJECT APPROVAL

TO USE THE

GENERAL CONTRACTOR/CONSTRUCTION MANAGER (GC/CM) or DESIGN-BUILD (D-B)
ALTERNATIVE CONTRACTING PROCEDURE

Submitted By:

City of Everett

Project:

Water Pollution Control Facility, Phase C Expansion

Submitted:

July 1, 2010

July 1, 2010

Mr. Bob Dixon, Deputy Assistant Director
General Administration
Engineering & Architectural Services
P.O. Box 41012
Olympia, WA 98504-1012

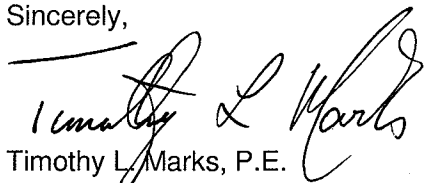
RE: City of Everett Application for Project Approval to the Project Review Committee of the Capital Projects Advisory Board

Dear Mr. Dixon:

Attached is the City of Everett application to the Project Review Committee of the Capital Projects Advisory Board. This application is for the Water Pollution Control Facility, Phase C Expansion.

If you would like any additional information or if there are any questions please call me at (425) 257-8872.

Sincerely,

A handwritten signature in black ink, appearing to read "Timothy L. Marks". The signature is written in a cursive style with a horizontal line above the first name.

Timothy L. Marks, P.E.
Project Manager
City of Everett

Attachment: Application to the Project Review Committee of the Capital Projects Advisory Review Board

1. Identification of Applicant

- (a) Legal name of Public Body: City of Everett
- (b) Address: 3200 Cedar Street, Everett, WA 98201
- (c) Contact Person Name: Timothy L. Marks, P.E.
- (d) Phone Number: (425) 257-8872
Fax: (425) 257-8882
Email: tmarks@ci.everett.wa.us

2. Brief Description of Proposed Project

Please describe project in no more than two short paragraphs.

The City of Everett (City) owns and operates the City of Everett Water Pollution Control Facility (WPCF). The WPCF provides wastewater treatment for residential, commercial, and industrial customers within the City, and purveyors (water/sewer districts) located to the south of the City. In addition, the City is negotiating an agreement with the City of Snohomish to treat wastewater that is currently treated at the Snohomish wastewater treatment plant. The City plans to make improvements to the WPCF in order to allow the plant to continue to comply with the NPDES Permit requirements.

The major project improvements include additional capacity for the liquid stream, the provision of solids thickening and solids stabilization. These are shown in Attachment F. The liquid stream improvements include the addition of Trickling Filter No. 3, the enlargement of the existing Solids Contact Basins, the addition of Secondary Clarifier No. 3 and the addition of one Effluent Discharge Pump in the existing South Effluent Pump Station. Solids thickening will be provided by rotating drum thickeners (RDTs). Three units will be provided and will be located in a new building to the east of existing Secondary Clarifier No. 2. Improvements for solids stabilization include the construction of Anaerobic Digester Nos. 1 and 2 along with the Digester Control Building. This solids stabilization facility will be located to the south of the Trickling Filters.

3. Projected Total Cost for the Project

A. Project Budget

The project budget, in 2010 dollars, is shown below. Sales tax and contingency are included within each line item.

Professional Services	\$9,000,000
Estimated project construction	\$54,000,000
Equipment and furnishing	\$8,000,000
Off-site costs	\$250,000
Contract administration costs	\$1,750,000
Other related project costs (briefly describe)	\$0
Total (with sales tax & contingency)	\$73,000,000

B. Funding Status

The City of Everett will fund this project through three basic sources:

- Capital Contributions by our wholesale customers. This will include firm commitments from Silver Lake Water and Sewer District, Alderwood Water and Wastewater District, and Mukilteo Water and Wastewater District. The City of Everett is also in negotiations with the City of Snohomish who has indicated their wish to send its sewage to Everett for treatment.
- Sewer rates
- Bonds, repaid by sewer rates and other wastewater utility sources

The planned expansion can be easily funded by the above sources. The City of Everett also intends to apply for the State Revolving Fund loans, to secure lower interest rates and therefore reduce the financial impacts to its customers.

4. Anticipated Project Design and Construction Schedule

Anticipated project design and construction schedule, including (1) procurement; (2) hiring consultants if not already hired; and (3) employing staff or hiring consultants to manage the project if not already employed or hired.

The City of Everett selected Carollo Engineers to prepare an engineering report and identify the improvements needed at the WPCF. On April 1, 2010, Carollo commenced work on the design of the Phase C Expansion. The proposed project schedule is shown in Attachment A. The proposed plan is to have the General Contractor/Construction Manager (GC/CM) contractor actively working on the project by October 2011, at which time the facility design will be approximately 30 percent complete.

Key project milestones are as follows:

Select GC/CM	
Ad for GC/CM	June 2011
Award GC/CM Contract	October 2011
WPCF Phase C Expansion	
Start Design	April 2010
Complete 30% Design Documents/Then Hold	January 2011
Resume Design @ 30%	January 2012
Negotiate MACC	December 2012
Complete Construction Documents	February 2013
Begin Construction	April 2013
Complete Construction	October 2015

In January 2010, the City hired R. W. Beck to provide owner's advisory services, including services during design and construction.

5. 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:

Between January and March 2010, the City of Everett and R. W. Beck evaluated various contracting approaches to procure design and construction services for the WPCF Phase C Expansion, including Design-Bid-Build (“DBB”), GC/CM, and Design-Build (“DB”). The methodology for evaluating the various contracting approaches incorporated the City’s experiences with the GC/CM contracting method from the WPCF Phase A Expansion. This evaluation also drew upon R. W. Beck’s expertise, and a thorough evaluation process with the City’s Design Team consisting of wastewater treatment plant operators, engineers, and Public Works Department management.

Key factors in the preference for GC/CM on the Phase C Expansion were the ability to obtain early contractor involvement that is not found in the DBB approach, and the ability for ongoing operations involvement that is not found in the DB approach. The GC/CM method also has features that would improve the constructability and operability of the facility.

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

For initial planning purposes, the expansion has been divided into separate phases. Phasing of the improvements would include construction of Anaerobic Digester No. 1 to be in service in the year 2014. This would be followed by a facility for thickening secondary solids, Anaerobic Digester No. 2, and construction of the liquid stream (trickling filters, Solids Contact tank expansion, and a third Secondary Clarifier). The lengthy construction period provides time for equipment procurement and delivery, construction of new facilities, and remodel of existing facilities.

An advantage of using GC/CM is the involvement of the GC/CM during design, which is intended to reduce construction problems and lead to more efficient management of the construction process.

In addition, the City of Snohomish and the City of Everett have yet to come to a final agreement on if and when Snohomish wastewater would be delivered to the WPCF. This does not affect the technical requirements of the improvements in the long-term, but it could have a major impact on when the components of the project need to come online. The GC/CM approach is far superior in dealing with this situation compared to the design-bid-build approach.

- **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? . (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 9.)**

The WPCF provides wastewater treatment for residential, commercial, and industrial customers within the City, and purveyors (water/sewer districts) located to the south of the City, and possibly wastewater pumped to the WPCF from the City of Snohomish. The City has service agreements with three water/sewer districts to the south of the Everett service area to provide conveyance and treatment of all or portions of the flow from these water/sewer districts. The facility operates 24 hours per day, 365 days per year. The plant must also comply with State discharge permit limits at all times. During all conditions, wastewater must flow unimpeded through the plant and must receive full treatment.

During construction, the GC/CM and subcontractors will need to work collaboratively with plant operation staff to plan and schedule work so as not to disrupt continuous smooth operation of the facility.

Shutdown of plant processes must be short, requiring rerouting of hydraulic flows, and involves detailed planning and scheduling. Construction phasing poses unique constraints and involves work throughout the facility (please refer to Attachment F). Early involvement of the contractor in the process allows for the operators and contractor to engage in discussions during design and advise the design engineer on issues important to reducing construction-related operating problems.

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

This project requires GC/CM participation during the design phase in order to properly address phasing challenges, continued operation of the facility during construction, equipment procurement and delivery, and cost control.

The facility must continue to operate during construction to maintain compliance with stringent discharge requirements. During the design process, the GC/CM will work with the design engineer to develop scenarios for phasing construction that addresses re-routing flows, shutting down and restarting systems, and working with the facility operations staff. This type of collaboration is not a normal element of conventional design-bid-build delivery.

This project requires GC/CM participation during the design phase in order to minimize construction-related operating problems. Wastewater will need to be diverted prior to

shutting down parts of the treatment process. This will require the contractor to develop an understanding of the facility's systems. Using GC/CM provides the greatest opportunity for minimizing operating disruptions.

Wastewater treatment equipment is complex and specialized, and often requires lengthy lead times for fabrication and delivery. For the project to remain on-schedule, the GC/CM, design engineer, and City staff will need to determine equipment requirements during the preconstruction services period. The GC/CM will also likely have more accurate local costing information than the design team, which will enable better design decisions.

- **If the project encompasses a complex or technical work environment, what is this environment?**

The facility comprises multiple treatment processes and buildings connected through an array of pipes and electrical systems. The facility includes processes sensitive to temperature and chemical balances that must be carefully controlled and maintained. The facility is also subject to major fluctuations in the quantity and quality of influent wastewater due to seasonal variations and periodic storm events.

Early GC/CM involvement in the design phase will help minimize disruptions to crucial operations, and potentially reduce changes during the construction phase which may impact overall project cost and schedule.

- **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?**

The project does not involve work on buildings with historical significance.

6. Public Benefit

In addition to the above information, please provide information on how use of the GC/CM or D-B contracting procedure will serve the public interest. For example, your description must address, but is not limited to:

- **How this contracting method provides a substantial fiscal benefit; or**
- **How the use of the traditional method of awarding contracts in a lump sum (the "design-bid-build method") is not practical for meeting desired quality standards or delivery schedules.**

The City can select the most qualified contractor at the best value for the project rather than solely on the lowest price. This tends to discourage unrealistically low bids which might be a problem in the current construction market. Recent changes to RCW 39.10 also extend the benefits of using GC/CM down to the subcontractor level by establishing an alternative early

selection process for mechanical and/or electrical subcontractors, providing additional fiscal benefits for the GC/CM contracting method.

Repeat work is a strong motivator for GC/CM contractors. Experienced GC/CM contractors understand that their ability to get the next project will be greatly enhanced by the City's judgment of their performance. This helps foster an environment where the City's concerns are considered a high priority and resolved without getting into dispute.

The WPCF Phase C Expansion is a complex and technical project requiring early interaction with the design team to ensure successful completion. During design the GC/CM can provide detailed input on construction issues that enhance long-term operations. The GC/CM collaborates with the City and the designer during the design phase to select materials, systems, and design details that take advantage of market conditions and facilitates constructability. The GC/CM will also allow for earlier procurement of long lead time equipment, instead of waiting for construction documents to be completed.

The GC/CM involvement during design reduces construction problems and leads to more efficient management of the construction process. The GC/CM adds price certainty by preparing a series of estimates as the design progresses to corroborate the estimates of the design engineer. Selection of a GC/CM will also include value engineering experience to identify additional cost saving activities.

The GC/CM process enables price competition on all construction subcontracts. Typically all construction costs will be bid, representing 80 to 90 percent of the project costs, which takes advantage of competitive pricing in the marketplace. The GC/CM will likely generate a broad response from subcontractor bidders by utilizing local contacts and relationships in the subcontractor community to encourage competition.

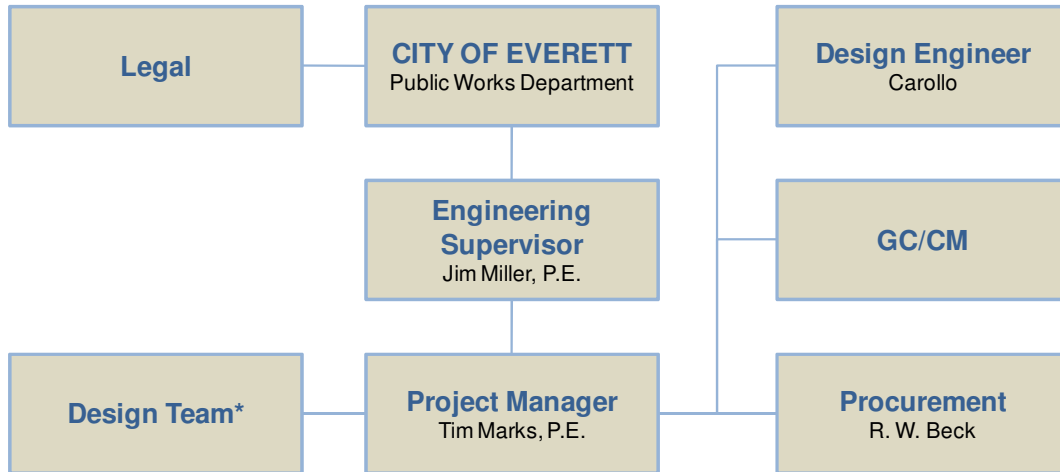
7. Public Body Qualifications

Please provide:

- **A description of your organization's qualifications to use the GC/CM or D-B contracting procedure.**

The City of Everett has been conducting and managing major construction projects for many years using in-house resources. The Public Works department has several licensed engineers with facilities construction experience. The City has successfully completed a previous GC/CM project at the EWPCF and is knowledgeable regarding how to manage the GC/CM process to the benefit of the City.

- **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.**



*Design team made up of Project Manager, staff engineers, and operation leads.

- **Staff and consultant short biographies (not complete résumés).**

Tim Marks, P.E. – Project Manager

Role: City of Everett Project Manager

Relevant Experience: Principal Engineer with the City of Everett and has been with them for the last 23 years. Mr. Marks has been responsible for every major expansion at the Water Pollution Control Facility since 1987. Mr. Marks has managed most of the challenging projects for the City of Everett Utilities including the 63” inch diameter, 2741 foot deep water outfall pipe that was installed by controlled submergence into 350 feet of water. In his 36-year history Mr. Marks has designed bridges, deperming piers, constructed modules for Kuparic and Prudhoe Bay oil fields and managed the GC/CM Phase A Expansion at the WPCF. He is also recorded as the inventor on a United States Patent.

Jim Miller, P.E. – Engineering Supervisor

Role: General project oversight

Relevant Experience: 42 years experience in the public and private sectors as an engineering manager, designer and construction manager. He is an expert in water resource and water supply issues, and is the Engineering Superintendent at the City of Everett. Mr. Miller led the Local Government Caucus in the Chelan Process working with state, tribal, and other water-related interests to develop a watershed approach for cooperatively solving regional water issues. He is the former Chair of the Washington Water Utility Council (WWUC). Presently, he is the Chair of the WWUC Water Rights Committee.

Brad Einfeld – Project Manager

Role: Project Manager for Carollo Engineers for this project.

Relevant Experience: He is a Civil Engineer with over 30 years experience in the design and construction management of municipal water and wastewater treatment facilities. He has managed the design and provided construction management for new or upgrades to existing municipal wastewater treatment plants. These include the King County Carnation Reuse Facility, City of Mount Vernon, Washington, Port of Sunnyside, Washington, City of Ellensburg, the City of Lynwood, Washington, Washington and the City of Soldotna, Alaska. He has managed the design and construction management for new or upgrades to existing municipal water treatment plants. These include plants near Tracy, California, City of Longview, Washington and the City of Kelso, Washington.

Brad has a working history with the City of Everett including managing the following City design projects: 1997 WWTF Odor Control Facility, the 1998 Collection System Odor Treatment Facilities, 1998 Upgrades to Lift Stations Nos. 7 and 8, 2002 Combined Sewer “D” Improvements and the 2010 WPCF Engineering Report.

Gary Meyerhofer – Technical Advisor

Role: Serves as Carollo’s Alternative Delivery Director. His role is to monitor all GC/CM and Design-Build projects done by the firm.

Relevant Experience: He was the Contract Manager for Carollo’s \$20 million Design-Build project for the City of Olathe, Kansas. In this role, he developed contracts for Carollo to hire a general contractor to construct the modification and 20-mgd expansion to the City’s existing water treatment plant.

Robert Bingham P.E. – Consultant

Role: Provide advice throughout the project; develop contracts and procedures for the procurement, preconstruction, construction, and closeout phases of the project.

Relevant Experience: Mr. Bingham has provided planning and engineering services for municipal utilities, particularly in the area of facility development using alternative project delivery approaches, many of which were in the state of Washington. Alternative delivery projects on which he has served as project manager and/or lead advisor include City of Everett WPCF Phase A Expansion (GC/CM), City of Tacoma Central Treatment Plant Expansion (DB), City of Seattle Tolt River Treatment Plant (DBO), Cedar River Treatment Plant (DBO), and City of Wilsonville Oregon Wastewater Treatment Plant (DBO). He additionally served as an oversight consultant on the King County Brightwater Project (GC/CM, DB, and DBB). He has implemented alternative delivery on more than 15 projects with a capital value in excess of \$1.5 billion.

Art Griffith P.E. – Project Manager

Role: Manage R. W. Beck’s consulting services throughout the project, supported by experienced project team.

Relevant Experience: Project manager for utility engineering, management consulting, and financial consulting projects for over 15 years. Mr. Griffith has been the project manager for the City of Everett’s assessment of delivery alternatives for this WPCF Phase C

Expansion. Additional alternative delivery projects on which he has served as Project Manager include: Tacoma Public Utilities delivery method assessment, Brightwater Treatment System oversight consultant (a portion of the Brightwater Treatment System is procured via GC/CM contracting), and the Regional Water Treatment Plant Authority (Colorado) management program and delivery assessment. As part of his consulting services, Mr. Griffith regularly presents management, policy, capital project procurement, and financial information to elected officials.

- **Provide the experience and role on previous GC/CM or D-B projects for each staff member or consultant in key positions on the proposed project.**

Refer to Attachment B for additional team experience on alternative delivery projects.

- **The qualifications of existing or planned for project manager and consultants.**

The project manager, Tim Marks, has worked for the City of Everett for 23 years. He has been responsible for every major expansion at the Water Pollution Control Facility (WPCF) since 1987, and has also managed most of the challenging projects for the City.

Mr. Marks worked with Jim Miller and R. W. Beck in 2002 to evaluate the GC/CM process for the WPCF Phase A Expansion. Mr. Miller oversaw the contractor selection process, with the involvement of Mr. Marks. Once the GC/CM contractor was onboard, Mr. Marks worked with the engineer and contractor throughout the design process. Mr. Miller continued to provide oversight and direction, including negotiation of the MACC. During construction, Mr. Marks worked in the field to manage the inspection and provide GC/CM oversight.

- **The qualifications of an interim project manager until your organization has employed staff or hired a consultant as the project manager. Also indicate whether sufficient funds are available for this purpose and how long it is anticipated the interim project manager will serve. Note: This information is required only if your organization has yet to select a project manager at the time of application.**

Not applicable. A project manager has been selected.

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

Attachment D summarizes the relevant construction projects from question 8 that involved the project management team.

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

The City of Everett Public Works Department developed a comprehensive manual, "Project Manager Handbook," to review the project management design/construction process for Public Works projects to ensure that they are adequately managed. Attachment E includes an introduction describing the manual and a flowchart from the manual for the Project Construction process.

- **A brief description of your planned GC/CM or D-B procurement process.**

The City's GC/CM selection process will be based on experiences from the previous GC/CM WPCF Phase A Expansion project, as well as updated guidelines in RCW 39.10, and advice from other organizations and public agencies. The GC/CM selection process will include initial proposals focused on bidder qualifications, interviews of qualified firms, and then final proposals for percent fee and specified general conditions work. The firm with the highest total score from the scoring of Proposal, Interview, and Final Proposal, will be selected to provide Preconstruction Services and MACC negotiations. In the event of a tie, the firm with lowest bid (sum total amount of the not-to-exceed price for preconstruction services, a Fixed GC/CM Fee, and the fixed lump sum amount for the general conditions) will be selected.

Below is a list of key steps:

Date	Description
July 2010	Submit Application for Project Approval to PRC
July 2010	Public PRC Meeting
August 2010	Receive Project Approval from PRC
June 2011	First publication of RFP in Seattle Daily Journal of Commerce
June 2011	Second publication of RFP in Seattle Daily Journal of Commerce
July 2011	Project Informational Meeting
July 2011	Proposal submittal deadline from interested GC/CM firms
July 2011	Selection Committee meets to evaluate and score proposals, and select most qualified firms. References contacted.
August 2011	Distribution of Request for Final Proposal (RFFP) to most qualified firms
August 2011	Final Proposal submittal deadline
August 2011	Interviews conducted with most qualified firms; selection of firm with highest total score
August 2011	Notification of successful and unsuccessful firms
September 2011	Preconstruction Work Plan due
September 2011	Submit recommendation for award of GC/CM contract for Preconstruction Services
September 2011	Everett City Council approves contract

October 2011	Issue notice to proceed to GC/CM, Agreement for Preconstruction Services executed
December 2012	Negotiate MACC

- **Verification that your organization has already developed (or provide your plan to develop) specific GC/CM or D-B contract terms.**

Between July 2010 and July 2011, the City will review their previous GC/CM contract terms and conditions, and modify as necessary to reflect changes in RCW 39.10 and specifics of the Phase C expansion project. The City will work internally with its attorney, in-house staff, and consultants, to produce language that addresses the requirements specific to the GC/CM alternate procurement method, including the State’s General Conditions and Everett Municipal Code.

8. Public Body 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:

- **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**

Refer to Attachment C for the matrix summary.

9. Preliminary Concepts, sketches or plans depicting the project

Attachment F includes a site plan schematic depicting the project. A Water Pollution Control Facility Engineering Report was completed in April 2010 by Carollo that includes additional project details and plans.

10. Resolution of Audit Findings on Previous Public Works Projects

If your organization had audit findings on any project identified in your response to Question 8, please specify the project, briefly state those findings, and describe how your organization resolved them.

There are no audits for projects identified in Question 8.

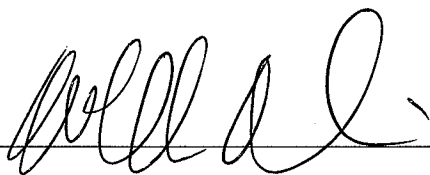
Caution to Applicants

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 shall render your application incomplete.

Should the PRC approve your request to use the GC/CM or D-B 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 or D-B process. You also agree that your organization will complete these surveys within the time required by CPARB



Name (please print): Dave Davis, P.E.

Title: Public Works Director

Date: 6/29/10

Attachment A – Project Schedule

Attachment B – Additional Team Experience

Team Experience with Alternative Delivery Projects

Name	Experience	Org	Projects	Construction Amount	Project Type	Role During Project Phases	
						Design	Const.
James Miller, P.E.	42 years experience in the public and private sectors as an engineering manager, designer and construction manager	City of Everett	WPCF Phase A Expansion	\$36 million	GC/CM	EM	EM
Timothy Marks, P.E.	36 years experience in the public and private sectors leading design and construction efforts	City of Everett	WPCF Phase A Expansion	\$36 million	GC/CM	PM	CM
Brad Einfeld, P.E.	37 years experience as a consulting engineer providing design and construction services	Carollo	Mountain House Water Treatment Facility	\$50 million	D-B	PM	PM
Jim Hagstrom, P.E.	As a partner with Carollo, Jim has 23 years experience as a professional engineer	Carollo	City of Lake Forest WTP Upgrade	\$20 million	GC/CM	PM	PM
Gary Meyerhofer	Alternative Delivery Director, monitors all firm GC/CM and Design-Build projects	Carollo	City of Olathe, Kansas WTP No. 2 Evaluation, Expansion Study and 30% Design/Build	\$20 million	D-B	PIC	
Ross Bichel	Ross has 14 years experience as a special inspector	Material Testing Consultant	Tulalip Hotel	\$140 million	D-B		Inspection
			Everett WPCF Phase A	\$36 million	GC/CM		Inspection
			Tulalip Casino	\$80 million	D-B		Inspection

EM-Engineering Manager, PM – Project Manager, APM – Assistant PM, CM – Construction Manager, PIC – Partner-in-charge

Name	Experience	Org	Projects	Construction Amount	Project Type	Role During Project Phases	
						Design	Const.
Robert Bingham, P.E.	34 years experience in utility engineering, planning, design and Alternative Project Delivery	R. W. Beck	WPCF Phase A Expansion	\$36 million	GC/CM	Consultant PM	Consultant PM
			King County Brightwater Wastewater TP	\$440 million	GC/CM & DBB	Oversight Consultant	Oversight Consultant
			King County Brightwater Marine Outfall	\$29 million	DB	Oversight Consultant	Oversight Consultant
			Tacoma Central Treatment Plant Expansion	\$80 million	DB	Consultant PM	Consultant Advisor
			Seattle Public Utilities Tolt River Treatment Plant	\$100 million	DBO	Consultant PM	Consultant Advisor
			Seattle Cedar River Treatment Plant	\$78 million	DBO	Consultant PM	Consultant PM
			Wilsonville, Oregon Wastewater Treatment Plant	\$50 million	DBO	Consultant Advisor	Consultant Advisor
Art Griffith, P.E.	15 years experience in utility engineering, planning, project oversight and financial analysis	R. W. Beck	King County Brightwater Wastewater TP	\$440 million	GC/CM & DBB	Oversight Consultant	Oversight Consultant
			King County Brightwater Marine Outfall	\$29 million	DB	Oversight Consultant	Oversight Consultant

EM-Engineering Manager, PM – Project Manager, APM – Assistant PM, CM – Construction Manager, PIC – Partner-in-charge

Attachment C – City of Everett Construction Experience

City of Everett - Construction History of Projects over \$1 Million

*Indicates projects completed by project management team.

Project Number	Project Name	Description	Year Completed	Contracting Method	Date of Notice to Proceed	Beginning Contract Duration	Working or Calendar Days	Ending Contract Duration	Planned Budget Amounts	Actual Budget Amount	Reason for Budget and Schedule Overruns
2939	112th St SW Improvements, Airport Rd to Evergreen Way	Widen 112th St SW from 2 lanes to 5 lanes with bicycle lanes including curbs, gutters, sidewalk, drainage and landscaping.	2004	D B B	3/24/2003	90	Working	120	\$1,643,128.00	\$1,723,053.93	The bulk of the increase was due to over run quantities in unit rate work items.. The remainder was required to protect a 16" water main and reconstruct a portion of Paine Field Way.
3122 *	Combined Sewer Improvements "E"	Provide for the design and construction of combined sewer collection mains to replace approximately 3,700 lineal feet of deteriorated mains. The location of the improvements will be in alleys and streets in the north end combined sewer system. One specific location to be completed is in the alley between Nassus and Federal, from Hewitt to Pacific. Additional locations of improvements are to be determined. Construction will take place in 2003. Est cost \$1.1M.Est completion 12/2003	2004	D B B	7/29/2003	65	Working	105	\$940,082.60	\$1,027,830.67	Increased construction costs were the result of a field change order that relocated 2 drainage culverts from private property to a new location within an easement area.
UP 3185 *& PW 3211*	Water Main Replacement "F"	Design and construction of water main piping to replace (1) approx 1880 LF of undersized and deteriorated 6' AC piping on W View Dr from 52nd St SE to 47th St SE; (2) approx 2075 LF of deteriorated 8" AC piping on Madison St from Beverly Ln to Fleming St; and (3) approx 2724 LF of undersized and deteriorated 6' AC piping on 63rd St SE and Berkshire Dr from Evergreen Way to Beverly Blvd.	2005	D B B	11/22/2004	100	Working	100	\$878,850.00	\$1,013,480.64	The final costs of this project was the result of accumulated quantity over runs of unit rate items.
UP 3148*	Emergency Water Transmission Pipeline Repairs	In 1999 an evaluation and recommendation was completed for the Transmission Line #5 crossing of Ebey Slough following reports that the line had been exposed for several years. In 2001 a dive showed that the pipeline exposure was limited to a portion of the western bank and to a 20-foot long section from the toe of the east bank towards the center of the slough with a maximum of half of the pipe being exposed.	2005	contractor was selected based on the declaration of an emergency by the City Council	10/22/2004	30	working	30	\$1,200,000.00 force account estimate	\$1,117,722.00	
SP 2952-3	Everett Landfill & Tire Fire Perimeter Landfill Gas Collection and Disposal System Project	The landfill gas collection work at the Everett Landfill is being done as required under the April 2, 2001 Consent Order with the Department of Ecology. Landfill gas was migrating beyond the landfill boundary. This project was to collect and dispose of the landfill gas.	2005	D B B	10/13/2003	75	Working	146	\$922,880.00	\$1,043,162.00	The system as designed failed to collect all of the landfill gas as required by the Consent Decree. This change order expanded the gas collection system. The time extension included additional evaluation and design time.

City of Everett - Construction History of Projects over \$1 Million

*Indicates projects completed by project management team.

Project Number	Project Name	Description	Year Completed	Contracting Method	Date of Notice to Proceed	Beginning Contract Duration	Working or Calendar Days	Ending Contract Duration	Planned Budget Amounts	Actual Budget Amount	Reason for Budget and Schedule Overruns
UT 2880A*	South Effluent Pump Station	Create a 32 mgd pump station using the existing chlorine contact channel as a wet well. Plans called for the use of 4- 500 hp pumps.	2005	D B B	4/14/2003	350	Calendar	690	\$2,157,500.00	\$2,232,425.85	The 3.1% cost increase was the accumulation of 19 minor items. The significant increase in contract time stemmed from a failure of the supplier to place pumps in its fabrication schedule. This had serious implications to the contract completion date.
UP 3189*	North End Basement Flood Reduction "F"	Provide for design and construction of combined sewer collection mains to replace undersized, deteriorated mains between Rockefeller and McDougall and from 32nd to 36th and between Rainier and Baker from 15th to 17th.	2005	D B B	8/19/2004	100	Working	124	\$1,729,890.00	\$1,724,130.00	Minor modifications to the work resulted in the need for additional time. 5 weeks were added the contract time.
UP 2885*	Portal #4 Modification	Renovate Portal #4 to bring it up to a new condition. Renovation will include the removal of the slide gate that control flow to water transmission lines and replace them with butterfly valves and the addition of new 48" intertie valves between 3 different transmission lines.	2005	D B B	9/10/2001	110	Working	230	\$767,754.00	\$1,036,683.83	Staff at the WFP continued to modify the scope of work and added new scope as the project proceeded. Late valve deliveries and late decisions to add 48" valves contributed to cost overruns and increased construction time.
2595 & 2697	41st St Overcrossing - Structure	Riverside Pkwy / Simpson Site Access, supplementary improvements to the Everett Riverfront Walkway constructed between Rotary Park and Pacific Ave. Improvements include a pedestrian overpass, restrooms, lights, and lookout	2005	D B B	7/23/2001	130	Working	150	\$3,494,020.00	\$3,568,504.33	Minor corrections were made during construction that resulted in a 2.1% increase in contract cost and a 15% increase in time.
UP2993-20*	WPCF Maintenance Building	The project provided a new maintenance shop with additional office space for the maintenance staff.	2005	D B B	9/2/2004	392	Calendar	414	\$2,164,249.50	\$2,271,495.38	29 separate items contributed to the 5% increase in contract cost.
3183*	Water Transmission Line #2 Replacement, Phase 8-A	The work under this phase (Phase 8A) will consist of replacing approximately 2500 ft of 48-inch diameter steel pipe (pipeline 2) located in COE ROW between Hwy 9 and S Lake Stevens Rd. Transmission Line 2 is buried and is reaching the end of its useful life.	2005	D B B	2/22/2005	50	Working	69	\$1,386,582.50	\$1,386,293.66	Late delivery of pipe resulted in the increase in contract time. There was no direct cost associated with the late delivery that was transferred to the City.
UP 3229*	WPCF Phase A Expansion	The project increased the treatment capacity of the WPCF. In addition it modified various systems to control odor, safety and plant performance.	207	GC/CM	3/14/2005	690	Calendar	780	\$40,956,477.00	\$34,641,652.00	A 90 day extension was granted because of a redesign of the chlorine delivery system. Significant savings ere realized during the bidding of the subcontracts. An excellent working relationship was maintained between the City and the GC/CM contractor.

City of Everett - Construction History of Projects over \$1 Million

*Indicates projects completed by project management team.

Project Number	Project Name	Description	Year Completed	Contracting Method	Date of Notice to Proceed	Beginning Contract Duration	Working or Calendar Days	Ending Contract Duration	Planned Budget Amounts	Actual Budget Amount	Reason for Budget and Schedule Overruns
2957	Holly Dr Pedestrian / Bicycle Improvements	Construct 5' and 8' shoulders for Ped & Bike facilities. Former Snohomish County Project. Federal Project	2007	D B B	7/18/2005	150	Working	161	\$2,456,715.50	\$2,509,025.05	There were no major changes during construction of this project.
UP 3206*	Sewer System Replacement "H" Project	This project included construction of sewer mains in four areas: 1) 1275 LF of 8" and 10" sewer main in the 2000, 2100, and 2200 blocks of the Rucker / Hoyt alley. 2) 440 LF of 8" sewer main in the 2600 block of the W Marine View Dr / Grand alley. 3) 1,100 LF of 30" sewer main near Jackson Park in North Everett. 4) 1410 LF of 12" to 15" sewer main in the 2300, 2400, and 2500 blocks of the State / Highland alley.	2007	D B B	8/21/2006	100	Working	140	\$1,706,097.13	\$1,756,670.51	A 30 day time extension was granted because of the failure of the Snohomish County PUD to relocate an electric pole that was interfering with a side sewer. \$50,000. was added because of the need for the contractor to provide bypass pumping. This was a change in scope.
UT 2600-4*	Biosolids & Backwash Solids Removal Project	This is a 3 phase project for dredging and dewatering of biosolids from the aeration ponds at the WPCF. Phase 1 began in 2002 and phase 3 ended in 2007	2007	D B B	6/14/2002	1683	Calendar	1698	\$1,945,283.00	\$2,494,397.37	The Phase A expansion at the WPCF demolished the work site for the dredger. The contractor was compensated for providing electrical, and pumping dredge spoils and decanted water both ways.
UP 3300-3*	Sewer System Replacement "F" Project, Schedule C	Replace sewer in the same location. A total of 4100 LF of sewer main ranging from 8" to 18" diameter, 14 manholes and 71 side sewers will be replaced. Sewer replacement will be done on the following streets: 3300 and 3400 blocks of Kromer, 3200 to 3700 blocks of Federal Ave, 33rd St from Kromer to Federal Ave, Charles Ave west of Federal Ave	2008	D B B	5/29/2007	100	Working	160	\$1,221,839.00	\$1,932,760.69	There were significant increases in unit quantities that lead to and increase in contract price. In addition several blocks of curb gutter and sidewalks were added to the project after it was bid.
3291	2007 Hot Mix Overlay	Construction of HMA, 1 1/2in thick on selected streets & utility adjustments.	2008	D B B	8/13/2007	60	Working	60	\$1,806,186.30	\$1,817,196.11	
UP 3193*	Water Filtration Plant Hypochlorite Facility	Replace existing chlorine building at the WFP. Building will provide for storage and handling of chlorine disinfectant for ultimate plant capacity.	2008	D B B	3/5/2007	325	Calendar	373	\$4,151,000.00	\$4,343,858.88	The major over run on this project was \$158,000.00 in piles and pile driving costs.
3320	2008 Hot Mix Overlay	Construction of HMA 1 1/2 in thick, on selected streets & utility adjustment.	2009	D B B	5/2/2008	50	Working	50	\$1,494,003.25	\$1,663,944.77	

City of Everett - Construction History of Projects over \$1 Million

*Indicates projects completed by project management team.

Project Number	Project Name	Description	Year Completed	Contracting Method	Date of Notice to Proceed	Beginning Contract Duration	Working or Calendar Days	Ending Contract Duration	Planned Budget Amounts	Actual Budget Amount	Reason for Budget and Schedule Overruns
UP 3263* & UP 3264*	Sewer System Replacement "I", Water Main Replacement "J"	Construction of approximately 2,000 LF of 12" water main on 16th St from Hoyt Ave to Broadway. Construction of 5,240 LF of sewer mains in North Everett. Locations include: 1) 960 LF of 8' sewer main in the 1400 and 1500 blocks of the Colby/Wetmore alley. 2) 1400 LF of 8" sewer main in the 1400, 1500, and 1600 blocks of the Wetmore/Rockefeller alley. 3) 1400 LF of 15", 18", and 24" sewer main along 16th St from Hoyt to Broadway. 4) 430 LF 8" sewer main in the 1600 block of the Rockefeller/Oakes alley. 5) 430 LF 8" sewer main in the 1600 block of the Oakes/Lombard alley. 6) 430 LF 24" sewer main in the 1600 block of the Lombard/Broadway alley.	2009	D B B	9/24/2007	180	Working	193	\$2,930,271.00	\$3,486,754.67	Numerous problems occurred during construction including a heave in the road way as a result of pipe bursting. The City paid for 173' of 21" dia PVC sewer pipe only to find it damaged the road. We then had to remove and replace the pipe using conventional methods. The City also added \$81,000 in concrete roadway slab that was not in the original bid. Another significant addition was the increase of gravel borrow by 7,200 tons which added \$120,000. to the project cost.
RD 3310* & RD 3316*	Everett Riverfront Surcharge Project, Schedule A & B	Provide a 15' surcharge on the Riverfront site to prepare it for construction. Much of the area had to be filled to final grade before it could be surcharged. Approximately 3/4 million tons of material had to be haul onto the site and compacted. Much of the material was moisture sensitive (50% fines) and needed to be place is dry weather. The bulk of the work was completed in a 90 day period. The contract was kept open so the contractor would fix any sloughing of the slopes during the winter months.	2009	D B B	6/16/2008	507	Calendar	507	\$9,034,054.56	\$9,631,354.56	An under estimation of the material quantities resulted in a need for additional common borrow and additional gravel borrow. This material over run resulted in the \$600,000. cost increase.
UP 3271*	Sewer System Replacement "K" (Capacity Improvements), 3rd Ave SE; 108th St SE- SE Eve Mall Way	Construct of approximately 2,950 linear feet sewer main on 3rd Ave SE between 108th St SE and SE Everett Mall Way. This project will provide additional capacity to convey sewage from Lift Station #24 to the Central Interceptor. The need for these projects was identified in the 2005 Comprehensive Sewer Plan.	2009	D B B	6/14/2008	270	Working	255	\$4,493,949.00	\$4,276,069.21	

**Attachment D – Relevant Project Management Team
Construction Experience**

City of Everett - Relevant Project Management Team Construction Experience

Project Number	Project Name	Description	Year Completed	Contracting Method	Actual Budget Amount
3122 *	Combined Sewer Improvements "E"	Provide for the design and construction of combined sewer collection mains to replace approximately 3,700 lineal feet of deteriorated mains. The location of the improvements will be in alleys and streets in the north end combined sewer system. One specific location to be completed is in the alley between Nassus and Federal, from Hewitt to Pacific. Additional locations of improvements are to be determined. Construction will take place in 2003. Est cost \$1.1M. Est completion 12/2003	2004	D B B	\$1,027,830.67
UP 3185 *& PW 3211*	Water Main Replacement "F"	Design and construction of water main piping to replace (1) approx 1880 LF of undersized and deteriorated 6' AC piping on W View Dr from 52nd St SE to 47th St SE; (2) approx 2075 LF of deteriorated 8" AC piping on Madison St from Beverly Ln to Fleming St; and (3) approx 2724 LF of undersized and deteriorated 6' AC piping on 63rd St SE and Berkshire Dr from Evergreen Way to Beverly Blvd.	2005	D B B	\$1,013,480.64
UP 3148*	Emergency Water Transmission Pipeline Repairs	In 1999 an evaluation and recommendation was completed for the Transmission Line #5 crossing of Ebey Slough following reports that the line had been exposed for several years. In 2001 a dive showed that the pipeline exposure was limited to a portion of the western bank and to a 20-foot long section from the toe of the east bank towards the center of the slough with a maximum of half of the pipe being exposed.	2005	contractor was selected based on the declaration of an emergency by the City Council	\$1,117,722.00
UT 2880A*	South Effluent Pump Station	Create a 32 mgd pump station using the existing chlorine contact channel as a wet well. Plans called for the use of 4- 500 hp pumps.	2005	D B B	\$2,232,425.85
UP 3189*	North End Basement Flood Reduction "F"	Provide for design and construction of combined sewer collection mains to replace undersized, deteriorated mains between Rockefeller and McDougall and from 32nd to 36th and between Rainier and Baker from 15th to 17th.	2005	D B B	\$1,724,130.00
UP 2885*	Portal #4 Modification	Renovate Portal #4 to bring it up to a new condition. Renovation will include the removal of the slide gate that control flow to water transmission lines and replace them with butterfly valves and the addition of new 48" intertie valves between 3 different transmission lines.	2005	D B B	\$1,036,683.83

City of Everett - Relevant Project Management Team Construction Experience

Project Number	Project Name	Description	Year Completed	Contracting Method	Actual Budget Amount
UP2993-20*	WPCF Maintenance Building	The project provided a new maintenance shop with additional office space for the maintenance staff.	2005	D B B	\$2,271,495.38
3183*	Water Transmission Line #2 Replacement, Phase 8-A	The work under this phase (Phase 8A) will consist of replacing approximately 2500 ft of 48-inch diameter steel pipe (pipeline 2) located in COE ROW between Hwy 9 and S Lake Stevens Rd. Transmission Line 2 is buried and is reaching the end of its useful life.	2005	D B B	\$1,386,293.66
UP 3229*	WPCF Phase A Expansion	The project increased the treatment capacity of the WPCF. In addition it modified various systems to control odor, safety and plant performance.	207	GC/CM	\$34,641,652.00
UP 3206*	Sewer System Replacement "H" Project	This project included construction of sewer mains in four areas: 1) 1275 LF of 8" and 10" sewer main in the 2000, 2100, and 2200 blocks of the Rucker / Hoyt alley. 2) 440 LF of 8" sewer main in the 2600 block of the W Marine View Dr / Grand alley. 3) 1,100 LF of 30" sewer main near Jackson Park in North Everett. 4) 1410 LF of 12" to 15" sewer main in the 2300, 2400, and 2500 blocks of the State / Highland alley.	2007	D B B	\$1,756,670.51
UT 2600-4*	Biosolids & Backwash Solids Removal Project	This is a 3 phase project for dredging and dewatering of biosolids from the aeration ponds at the WPCF. Phase 1 began in 2002 and phase 3 ended in 2007	2007	D B B	\$2,494,397.37
UP 3300-3*	Sewer System Replacement "F" Project, Schedule C	Replace sewer in the same location. A total of 4100 LF of sewer main ranging from 8" to 18" diameter, 14 manholes and 71 side sewers will be replaced. Sewer replacement will be done on the following streets: 3300 and 3400 blocks of Kromer, 3200 to 3700 blocks of Federal Ave, 33rd St from Kromer to Federal Ave, Charles Ave west of Federal Ave	2008	D B B	\$1,932,760.69
UP 3193*	Water Filtration Plant Hypochlorite Facility	Replace existing chlorine building at the WFP. Building will provide for storage and handling of chlorine disinfectant for ultimate plant capacity.	2008	D B B	\$4,343,858.88

City of Everett - Relevant Project Management Team Construction Experience

Project Number	Project Name	Description	Year Completed	Contracting Method	Actual Budget Amount
UP 3263* & UP 3264*	Sewer System Replacement "I", Water Main Replacement "J"	Construction of approximately 2,000 LF of 12" water main on 16th St from Hoyt Ave to Broadway. Construction of 5,240 LF of sewer mains in North Everett. Locations include: 1) 960 LF of 8' sewer main in the 1400 and 1500 blocks of the Colby/Wetmore alley. 2) 1400 LF of 8" sewer main in the 1400, 1500, and 1600 blocks of the Wetmore/Rockefeller alley. 3) 1400 LF of 15", 18", and 24" sewer main along 16th St from Hoyt to Broadway. 4) 430 LF 8" sewer main in the 1600 block of the Rockefeller/Oakes alley. 5) 430 LF 8" sewer main in the 1600 block of the Oakes/Lombard alley. 6) 430 LF 24" sewer main in the 1600 block of the Lombard/Broadway alley.	2009	D B B	\$3,486,754.67
RD 3310* & RD 3316*	Everett Riverfront Surcharge Project, Schedule A & B	Provide a 15' surcharge on the Riverfront site to prepare it for construction. Much of the area had to be filled to final grade before it could be surcharged. Approximately 3/4 million tons of material had to be haul onto the site and compacted. Much of the material was moisture sensitive (50% fines) and needed to be place is dry weather. The bulk of the work was completed in a 90 day period. The contract was kept open so the contractor would fix any sloughing of the slopes during the winter months.	2009	D B B	\$9,631,354.56
UP 3271*	Sewer System Replacement "K" (Capacity Improvements), 3rd Ave SE; 108th St SE- SE Eve Mall Way	Construct of approximately 2,950 linear feet sewer main on 3rd Ave SE between 108th St SE and SE Everett Mall Way. This project will provide additional capacity to convey sewage from Lift Station #24 to the Central Interceptor. The need for these projects was identified in the 2005 Comprehensive Sewer Plan.	2009	D B B	\$4,276,069.21

Attachment E – Extract from Project Manager Handbook

PROJECT MANAGER HANDBOOK
Standard Operating Procedures
Revised 07-22-09

INTRODUCTION

The following process was developed to review the project management design/construction process for Public Works projects.

After review of the process, the need for definition and change was discovered. The goal of the new process is to define responsibilities and to reduce design omissions, quantity overruns, construction errors, change orders and in field design changes.

The focus of the new process is to improve communication between all employees involved in the design/construction process. Communication between design group, field crew and inspectors should be enhanced from conception of design to completion of construction.

This process is intended to change as the need arises. Any change in the process must first be reviewed by the full QAT Team to insure that the changes will not affect the ability of other work groups to perform their part of the process.

This process is also intended to empower members of the Team and insure that the information they receive is complete and accurate to the best of our abilities. This includes the full process from concept, design, construction, to completion of record keeping. Through changes in the review process, quality control and construction meetings, the communication between work groups should foster a better understanding of the needs of other work groups. As understanding improves, the problems related to our process can be worked out as they arise and fixes can be developed to end recurring problems.

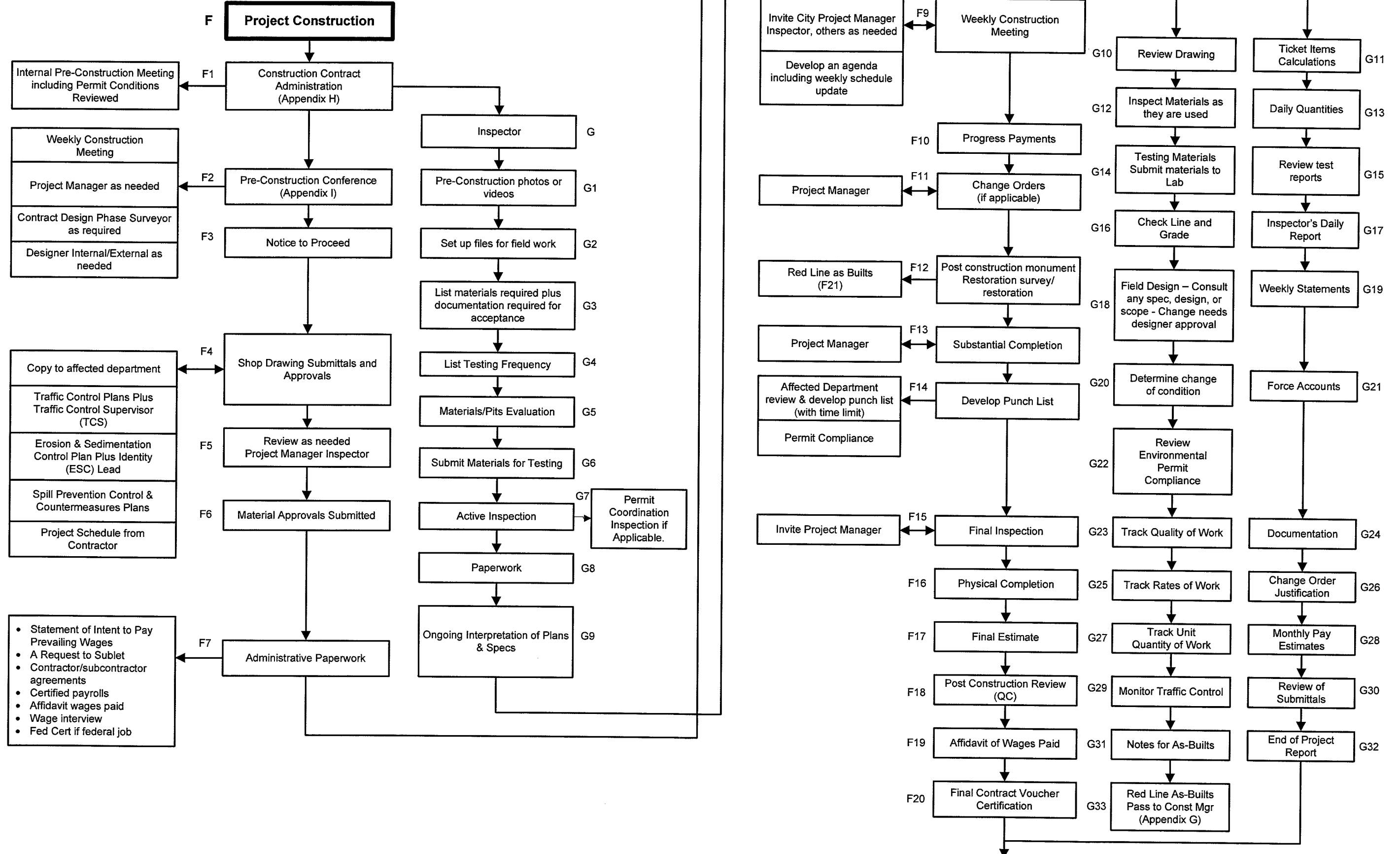
TEAM MEMBERS:

Ryan Sass
Jay Magill
Tom Hood
Kirk Brooks

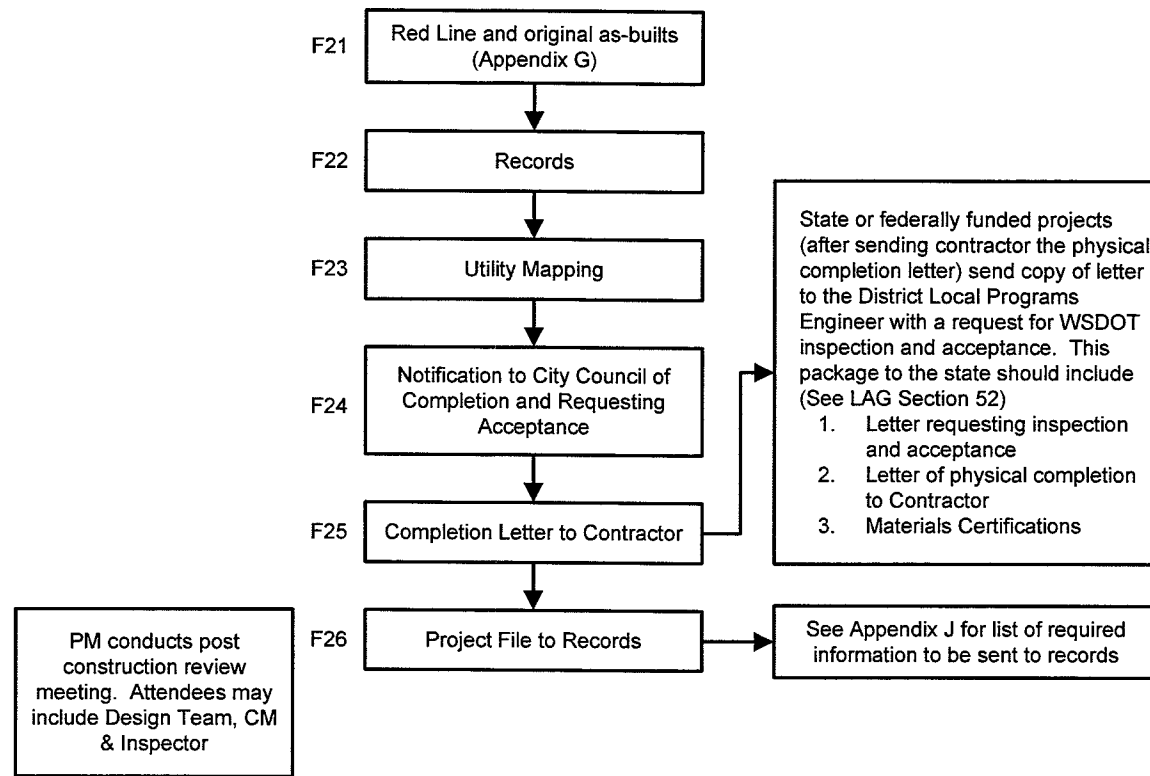
Jim Miller
Tom Fuchs
Souheil Nasr
Jenifer Galatas

Mark Sadler
Paul Crane
Roy Harris

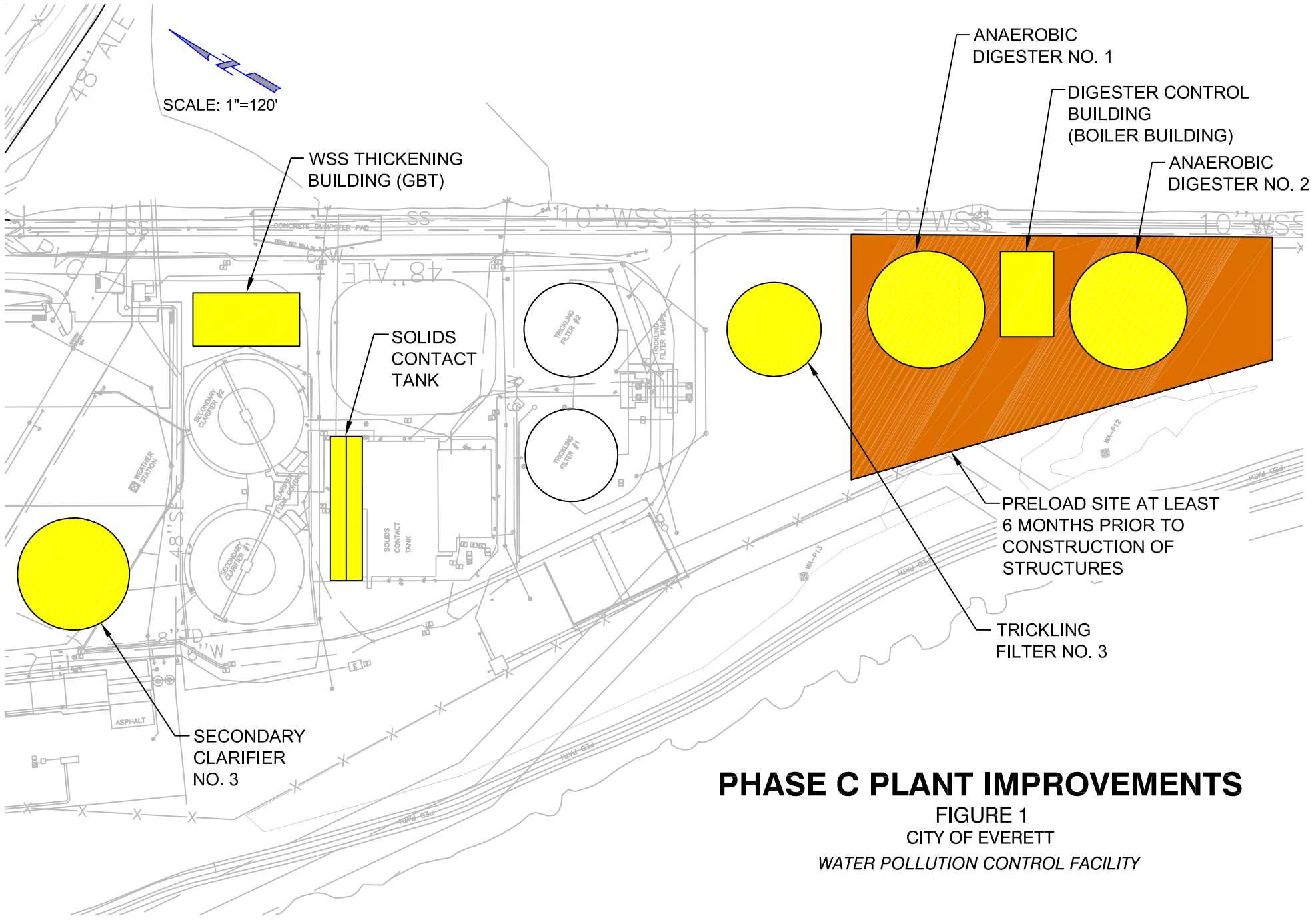
PROJECT MANAGER FLOW CHART (5)



PROJECT MANAGER FLOW CHART (6)



Attachment F – Site Plan



PHASE C PLANT IMPROVEMENTS

FIGURE 1
CITY OF EVERETT
WATER POLLUTION CONTROL FACILITY

