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)
Alternative Contracting Procedure

Identification of Applicant

a) Legal name of Public Body (your organization): **City of Quincy, WA**
b) Address: **115 1st Avenue SW, PO Box 338, Quincy, WA 98848**
c) Contact Person Name: **Ariel Belino** Title: **City Engineer**
d) Phone Number: **(509) 787-3523 , ext. 258** E-mail: **abelino@quincywashington.us**

1. Brief Description of Proposed Project

a) Name of Project: **Quincy Water Reuse Project**
b) County of Project Location: **Grant**
c) Please describe the project in no more than two short paragraphs.

The City of Quincy is located near the center of Washington State, about 150 miles from Seattle and just 10 miles North of I-90. Quincy is the gateway to the Wenatchee Valley, Leavenworth and the Okanogan Valley if you are traveling from the South or East. Tourism is a major part of its economy with the Gorge Amphitheater, which draws an estimated 3,000 to 20,000 people per concert, located 10 miles southwest of Quincy.

Recently a number of technology firms have located facilities in Quincy which has required the expansion of its infrastructure and development of the Quincy Water Reuse Project (QWRP). Phase 1 and 2 of the utility will need to be completed by the end of 2020 to meet the industrial client requirements. At the same time, The U.S. Bureau of Reclamation (Reclamation) has required that Quincy's industrial wastewater treatment plant cease discharge to an irrigation wasteway. All work to create a new replacement outfall must be completed by 2022 in accordance with an agreement with Reclamation.

The main component of the QWRP is the industrial reuse water treatment plant (IRWTP). An engineering report for IRWTP Stage 1 was approved by the Washington Department of Ecology and forms the basis for the project described herein. Currently, portions of Stage 1 components are in place and operating. This project will construct the remaining components of Stage 1 and portions of Stage 2. The QWRP and IRTWP Stage 1 are being built out in partnership with Microsoft, who will be the first and major customer of the utility and whose water and wastewater needs have established the Stage 1 capacity.

Recent changes and growth at Microsoft's two data center campuses in Quincy have created the need for multiple areas of minor modifications in the existing utility along with the buildout of Stage 1. The layout of the facility is shown in the figure below. Work will occur at the industrial wastewater treatment plant (IWTP), in and around the Ultrafilter and Water Softener locations and at five to seven locations along the utility major corridor. Percolation, Aquifer Storage and Recovery (ASR) and Crop Production are not included in this GC/CM project.

The multiple components of the project to be constructed are listed in Section 8 of this application.

2. Projected Total Cost for the Project:

A. Project Budget

Costs for Professional Services (A/E, Legal etc.)	$ 2,000,000
Estimated project construction costs (including construction contingencies):	$ 20,000,000
Equipment and furnishing costs	Included above
Contract administration costs (owner, cm etc.)	$ 750,000
Contingencies (design & owner)	$ 1,500,000
Sales Tax	$ 2,000,000
Total	$ 25,250,000

B. Funding Status

Please describe the funding status for the whole project.

The project is fully funded through secured loans backed through major corporations using the facilities.

3. Anticipated Project Design and Construction Schedule

Please provide:

The anticipated project design and construction schedule, including:

a) Procurement;
b) Hiring consultants if not already hired; and
c) Employing staff or hiring consultants to manage the project if not already employed or hired.

The City has hired the design team and the consultant to assist them in the selection and management of the GC/CM – Heavy Civil. Design is underway and will continue through mid-2019.

	2018		2019				2020			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Complete Design										
Select GC/CM										
Pre-Construction Services										
Bid & Award Subcontracts										
Early Package(s)										
Construction										

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

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

  This project includes construction at more than ten (10) sites as well as work with many roads located throughout the city thereby requiring significant coordination by the GC/CM contractor with the City and businesses located throughout the area. The GC/CM process will provide opportunities for the City, design teams and contractor to work in collaboration at these various sites and in the roadways.

  Design is underway on the 10 sites and the design team and City are looking for input from the CMAR to finalize the design and stage the work. The staging will add to the complexity of the project.

  Many City streets will be under construction so that staging, maintenance of traffic and safety for workers and the public are key to the success of this project. Getting the GC/CM on board to stage the work, develop a maintenance of traffic strategy and safety protocols are key to the success of the project.

- **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?**

  The project will have some effect on existing QWRP operations. While the existing system includes multiple backups and alternative utility routings to allow portions of the utility to be taken momentarily off line, it is critical to have a GC/CM on board to plan for those utility connections. They will be able to develop a plan that addresses these constraints.

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

  There are five areas where involvement from the GC/CM during the design phase that will be critical to success of the project. These include sequencing and phasing of the work, developing the maintenance of traffic plan, identification of subcontractors, locating existing utilities, and value engineering to optimize project costs.

  With the work taking place in at least ten (10) areas around the City, sequencing and phasing the work by the GC/CM that will be performing the work is critical. The GC/CM will be able to take into account and optimize its resources to perform the work in a cost effective manner. A clear understanding of QWRP processes to support critical sequencing of project components and subcomponents will be critical to the project's success. The City's program manager has developed draft construction sequencing guidelines which will be one of the first instruments of management by the city with the GC/CM.

  The GC/CM will need to develop its maintenance of traffic plan. Much of the work will occur in City streets and rights of way so that GC/CM will be able to develop a plan, review it with the City in advance of developing the MACC.

  Since the work is taking place more than 150 miles from major construction markets of Seattle or Spokane, finding subcontractors and resources that can perform the work could be a challenge in this robust construction market. We anticipate that the GC/CM will be able to leverage industry relationships to provide qualified subcontractors and resources.

  The GC/CM's critical involvement during design is related to field verification of existing, buried conditions (pot holing) as there are a number of buried utilities within the project footprint.

  As the City finalizes the design, the City will be looking for the GC/CM to provide value engineering recommendations. The City is planning on these recommendations to aid in keeping the project within budget and provide suggestions on minimizing the impacts to the community.

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

  The project does not encompass a complex or technical work environment.

- **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?**

  The City of Quincy is proposing to use heavy civil GC/CM for this project. The majority of the work on this project includes installation of underground pipe, pump stations, control and mechanical systems as well as excavation and paving. Contractors performing this type of construction usually self-perform more than the 30% of the work that Washington State's traditional GC/CM affords. Using the heavy civil contracting procedure will provide flexibility and optimum use of subcontracts to execute the work.

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 example, your description must address, but is not limited to:

- **How this contracting method provides a substantial fiscal benefit;**

  Risk Management – When the GC/CM comes on board during the design phase, cost and schedule predictability is much higher than with the traditional design-bid-build method. Bringing in a partner with their pulse on market conditions, material costs, and labor factors as well as schedule information will be

beneficial to the project and reduce risks. Recognizing that Quincy is located more than 150 miles from major construction markets, this input will be critical to the project's success.

After the GC/CM comes on board, the City consultants and design team will meet to develop a risk management plan. This opportunity translates into less financial risk when the Owner and GC/CM contractor cooperatively make sound business decisions with the best interests of the project in mind.

Schedule Management - The potential for the GC/CM and the City's project team to plan and schedule procurement and construction packages will increase the probability of meeting the project schedule milestones and project budget.

Open Book Accounting - The GC/CM alternative contract delivery method allows for open book cost accounting and verification process. This method meets the objectives of the Quincy Water Reuse Utility stakeholders.

Use of Qualified Subcontractors - The GC/CM method of contracting is much more likely to result in identifying and attracting subcontractors that have worked in areas like Quincy. Recognizing the project is located more than 150 miles from the major construction markets and there is a shortage of construction workers in the region, the GC/CM can develop a subcontracting plan that meets technical and schedule requirements with specialty contractors.

- **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 traditional D-B-B contract method will not provide the City with the benefit of the contractor's perspective during the design and construction planning phases. There will be added benefit gained through using the GC/CM's expertise in value added measures, value engineering, constructability reviews in all phases of the design. GC/CM recommendations on product or quality standards and developing a complete, understandable and cost-effective construction document set controls costs.

Collaborating with the GC/CM to build a safe, simple and productive construction phasing plan is critical to the success of this project. This will minimize impacts on the City and ensure we meet Reclamation's deadline.

The GC/CM process provides for negotiation and construction of early packages while the City completes design of the remaining work. With traditional D-B-B, the City would have to bid and manage multiple bid packages or wait until the designs are 100% complete before bidding the work. This could potentially delay completion of the project and potentially miss Reclamation's deadline.

- **In the case of heavy civil GC/CM, why the heavy civil contracting procedure serves the public interest.**

The heavy civil GC/CM will serve the public well on this type of project in that more than 40% of this type work is traditionally performed by the contractor. If the GC/CM was limited to perform only 30% of the work, this could add to the complexity of finding subcontractors willing to travel to Quincy thereby increasing the costs to the City. The City is concerned the distance of Quincy from major construction markets in the State, will make it more challenging to find subcontractors in this market willing to work in Quincy.

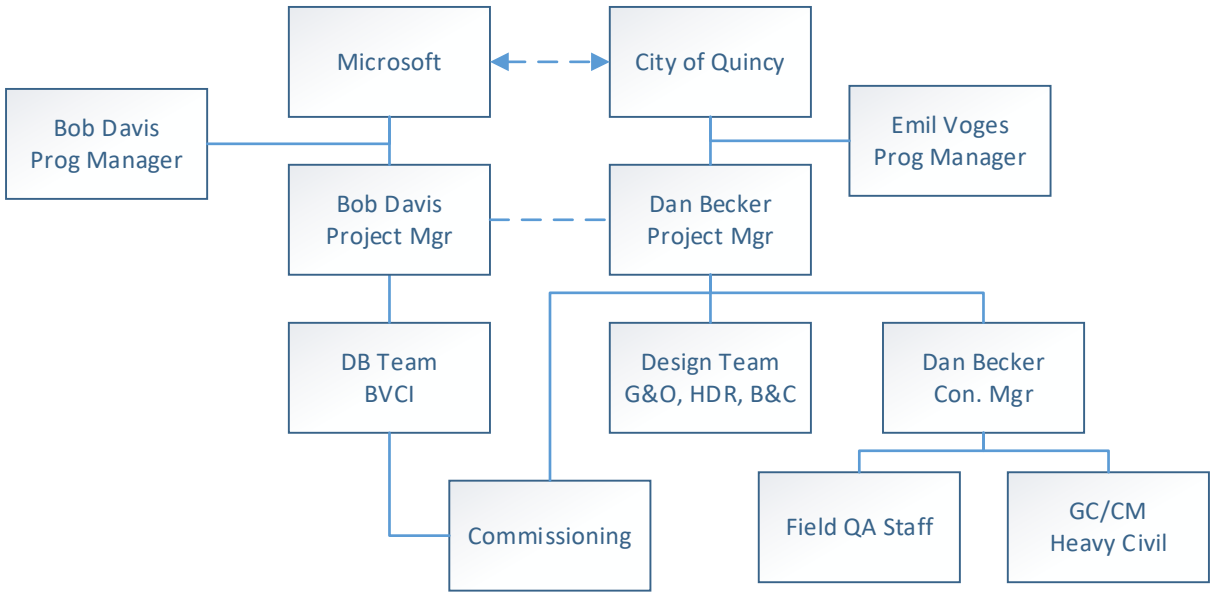
6. Public Body Qualifications

Please provide:

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

  The City has contracted with HDR to lead the selection and contracting using GC/CM. HDR staff have worked with other jurisdictions in Washington State as well as Oregon, California and other states using GC/CM, CM/GC and Construction Management at Risk (CMAR). Dan Becker from HDR will lead the effort for this project. He has worked with 9 agencies, including four in Washington State using RCW 39.10, to develop their RFQ/RFP, contract documents and applicable general requirement (division 1) sections and manage GC/CM contracts.

- A ***Project*** organizational chart, showing all existing or planned staff and consultant roles.



- **Staff and consultant short biographies (not complete résumés).**
- **Provide the experience and role 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.**
- **The qualifications of the existing or planned project manager and consultants.**

The City will use consultants to assist with advertising, selecting and managing the GC/CM.

The following City staff and Consultants will be responsible for executing the work.

Tim Snead – As City Administrator, Tim is responsible for the day to day operations of the City. He will have responsibility for oversee the GC/CM contract and consultant contracts.

Ariel Belino – City Engineer Ariel is responsible for all work in the streets of Quincy and will be coordinating with the project team. He issues street use permits and coordinates with other groups within the City

Allan Galbraith - City Attorney Allan will be responsible for ensuring the procurement and contract documents are in compliance with the City ordinances and State statutes. He will address legal issues

that arise during the procurement and construction phase and will consult with other construction law specialists in doing so.

Emil Voges – Crete Consulting, Program Manager. Emil has been working for the City on the long range planning of the QWRP for 10 years and has been the project manager on multiple design projects for the utility. As lead planner, Emil also transitioned into the program management role three years ago and has been coordinating the efforts of multiple consultants and contractors since then. Emil has more than 20 years of experience as a civil-environmental engineer specializing in water and wastewater system planning and design. Emil has participated in both traditional D-B-B projects as well as progressive design build projects in which the D-B approach allowed issuing design packages for sequenced construction.

Dan Becker – HDR Engineering, Project/Construction Manager. Dan will be responsible for leading the procurement efforts including developing the RFQ, RFP, Agreement, General Conditions and Division 1 specifications, selecting the GC/CM and then managing the GC/CM through the construction phase of the work. He has over 35 years' experience in project and construction management working for public agencies and private owners on design-bid-build, design-build and GC/CM projects ranging in value from $500,000 to over $300 million. The table below identifies the GC/CM, CM/GC and CMAR projects he has worked on.

Dan has also worked with public agencies in resolving construction claims. He is delegate and member of the Engineers Joint Construction Document Committee (EJCDC) where is has worked on development of Construction, CMAR, and Design-Build contracts.

Project	**Contracting Method**	**Owner**	**Activity**
Budd Wastewater Treatment Plant Expansion	GC/CM – following RCW 39.10	LOTT Alliance, Olympia, WA	Prepared RFQ, RFP, contract and GC's. Worked with client to select GC/CM. Trained staff on the process and management of the contract. Provided management oversight including negotiating MACC.
North Transfer Station	GC/CM – following RCW 39.10	Seattle Public Utilities	Worked with City Attorney to develop RFQ, RFP, contract and GC's. Worked with client to select GC/CM.
Walla Walla Water Treatment Plant	GC/CM – following RCW 39.10	City of Walla Walla, WA	Prepared RFQ, RFP, contract and GC's. Worked with client to select GC/CM. Trained staff on the process and management of the contract. Provided management oversight including negotiating MACC.
E335	Heavy Civil GC/CM following RCW 39.10	Sound Transit	Interim manager of the GC/CM contract during the design phase.
Newport Water Treatment Plant Expansion	CM/GC	City of Newport, OR	Prepared RFQ, RFP, contract and GC's. Trained staff on the process and management of the contract. Provided management oversight.

Project	Contracting Method	Owner	Activity
Newberg Wastewater Treatment Plant Expansion	CM/GC	City of Newberg, OR	Prepared RFQ, RFP, contract and GC's. Trained staff on the process and management of the contract. Provided management oversight.
Water Facilities	CM/GC	City of Bend, OR	Prepared RFQ, RFP, contract and GC's.
Hardeeville Water Reclamation Facility Expansion	CMAR	Beaufort-Jasper Water & Sewer Authority, Hardeeville, SC	Worked with the team and legal team to develop RFQ, RFP, contract and GC's.
R.B. Simms Water Treatment Facility Improvements	CMAR	Spartanburg Water, Spartanburg South Carolina	Worked with the team and legal team to develop RFQ, RFP, contract and GC's.

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

Organizational Controls

The project's approval, budget and contract authority resides with the City of Quincy's Council. Approval of the pre-construction agreement, MACC Amendment and all changes and invoices will be approved by the Council.

City Administrator has overall responsibility for day-to-day management and operations of the City and this project. The City traditionally uses consultants to manage projects and will continue that practice on this project. The Program Manager for this project is Emil Voges, P.E. from Crete Consulting, who will oversee multiple consultant designers as well as the project/construction manager, Dan Becker, from HDR Engineering.

HDR will augment Emil Voges with its significant GC/CM procurement and project expertise and services. HDR will work with the PM and City to develop the controls and reporting systems to effectively manage the scope, schedule, and budget for the project.

As the design progresses, cost estimates will be prepared by the City and GC/CM. After review of the estimates, the costs will be reconciled to confirm the design is within City's budget. If the project costs are exceeding the budget, the City will convene a value engineering session to identify areas for savings.

As the project design reaches 90% completion, the City will update the cost estimate and start negotiations of the MACC. After agreement on the MACC, the City will issues an amendment for construction. The MACC will include a contingency for design growth that will be monitored by the project management team.

The project's master milestone schedule includes design, pre-construction services, permitting, contract buy-out, construction, and closeout. Schedule progress will be reviewed and tracked on a monthly basis. Inclusion of permitting meetings and approval timelines, potential early site and bid packages approved by the City and HDR will be incorporated into the master project schedule as the design matures.

After the GC/CM comes on-board, the master schedule will be turned over to the GC/CM for further development and maintenance.

Adherence to the established scope, phasing of the work and project budget is critical. Initially, bi-weekly design meetings will be held with City, the project team, and the selected GC/CM to monitor, update and

align the budget, scope of the work and the contract documents. The GC/CM will be required to develop and maintain a log as the design phase is completed to capture all design decisions, deviations or additions to project. The GC/CM will assist the project team with updated market costs to aid decision makers in making timely decisions.

Once the GC/CM MACC contract amendment is approved, the Project Manager, GC/CM, and HDR will closely monitor the work to determine if there are changes that may impact the agreed upon MACC. If so, then changes will be incorporated into the design to bring the budget into alignment.

The GC/CM will be responsible to review the specifications and drawings for constructability issues. The GC/CM will work with the design team to develop construction packages for the various project components. This will support the GC/CM's subcontracting plan and development of the MACC.

Administration of the GC/CM contract will be by HDR. Dan Becker from HDR will lead that effort. On a monthly basis, HDR will review monthly invoices and schedules submitted by the GC/CM. HDR will provide the City with a report on the status of the project. The report will also identify any design growth contingencies needed for the project.

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

  The City will follow a 2 step procurement process for Heavy Civil GC/CM. After approval from the PRC, the City will advertise for statements of qualifications from potential GC/CM. The advertisement will run for 4 weeks. Early in the advertisement period, the City will conduct a pre-proposal meeting for potential contractors. If we hear in that meeting that they need additional time, we will take that into consideration and potentially extend the advertisement period.

  The advertisement will identify the work to be constructed so that those contractors experienced in pipeline, pump station and mechanical systems construction will understand the scope of work. The advertisement will also include the scope of services during the pre-construction phase.

  The City will review the statements of qualifications and select firms that meet those qualifications to construct the work as defined in the advertisement. After selecting the qualified contractors, the City will send out the Request for Proposals. That will include the GC/CM agreement, general conditions, and cost proposal form. At this time, we anticipate the cost proposal form to include the fixed cost general conditions, fee and pre-construction services rates.

  The firm with the best proposal will be awarded a pre-construction contract. That City anticipates that the contract can be extended after we come to agreement on the Maximum Allowable Construction Cost (MACC).

- **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 be creating a GC/CM contract and general conditions using their attorney and consultant. The City's attorney has worked for over 20 years developing construction documents for various capital projects throughout the City and region. The City will contact Tom Wolfendale, from KL Gates for additional support on the contact documents. The City's consultant, Dan Becker with HDR, has worked with attorneys in 8 public agencies in the past 5 years to develop design-build, GC/CM, CMAR and CM/GC contracts for their projects. He also serves on the Engineers Joint Construction Document Committee (EJCDC) that has developed division 0 construction documents.

7. Public Body (your organization) Construction History:

Please see Attachment "A", City projects

8. Preliminary Concepts, sketches or plans depicting the project

The project includes the following components;

Component	Description
A	Temporary water connection to water softener building (WSB), radio antenna
B1	4,500 ft of brine pipeline
B2	Cooling wastewater and brine pump stations
C&F	13th Avenue pipeline tie-ins
D	Temporary pipeline crossover
E	Extend IRW pipeline south of tracks.
G	Port Industrial & 13th Avenue Piping Tie-Ins
H	Industrial Reuse Water Pump Station D Street Piping Tie-Ins
J	Minor upgrades to RO building based on condition assessment.
K1	WSB ion exchange piping and instruments modifications
K2	Reuse wastewater emergency outfall
L	Reuse wastewater central facility (RWCF)
M5	Brine Pond No. 5
N	SBR decant diversion
O	Primary clarifiers
P	Lime, brine and biological solids management facility
R	~ 2 miles of reuse water and wastewater pipelines to Quincy east side data centers
S	Municipal water reclamation facility (MWRF) pipeline to percolation rerouting

Attachment "B" provides the utility layout with a list of the project elements.

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 of Quincy has not had any audit findings.

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 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.

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

Signature: _____

Name *(please print)*: Tim Snead

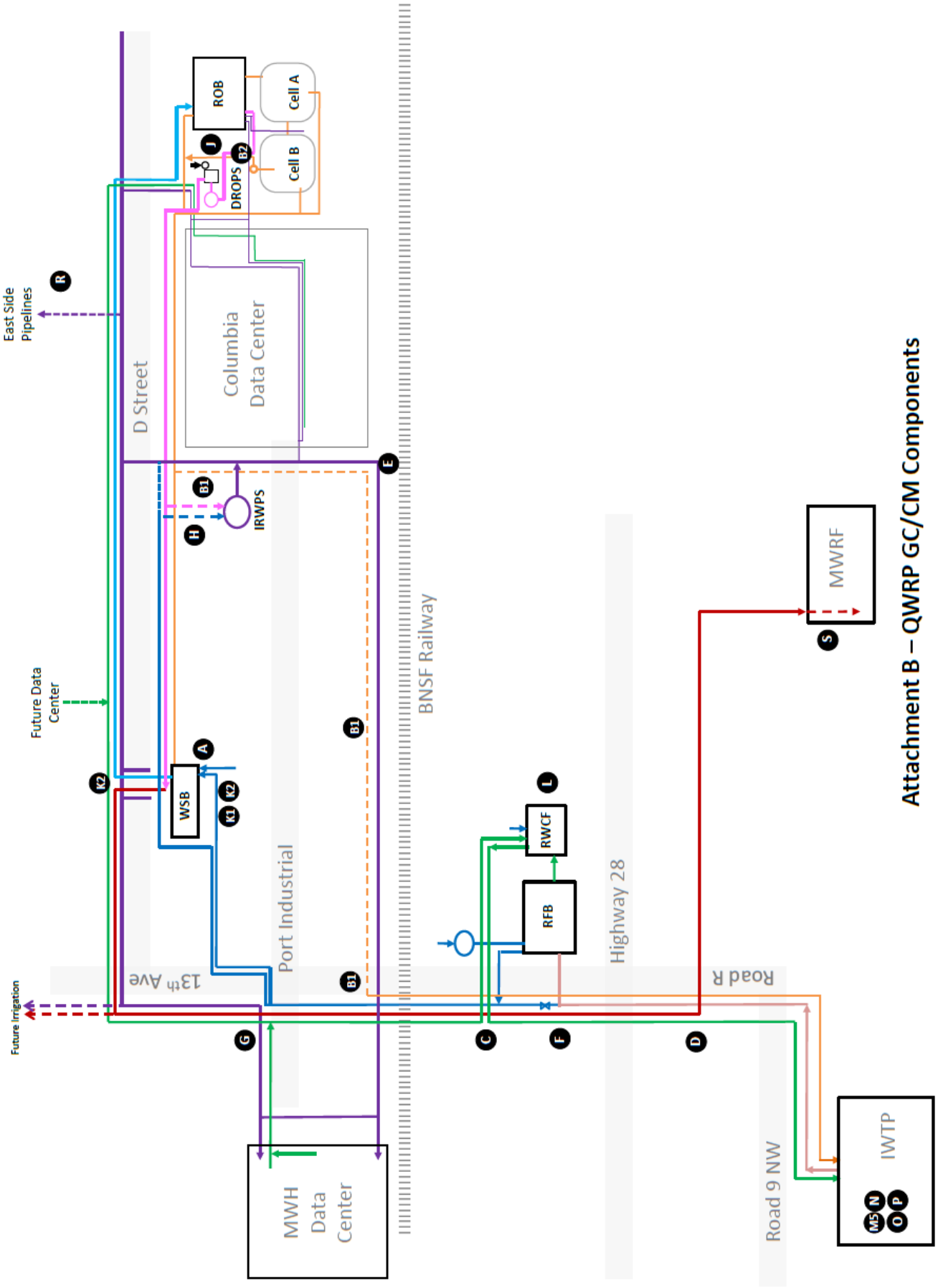
Title: City Administrator

Date: August 20, 2018

City of Quincy

Attachment A
Capital Project List

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	METHOD USED	PLANNED START DATE	PLANNED COMPLETION	ACTUAL START DATE	ACTUAL COMPLETION	ESTIMATED BUDGET	ACTUAL BUDGET	REASON FOR BUDGET OVERRUN
QPW-13-S01	Division Street East Phase 4	Reconstruction of approximately 0.5 miles of Division Street East starting from 6th Avenue SE and terminating at Columbia Way. Work include but is not limited to clearing and grubbing, recycling of existing asphalt pavement, excavation, grading, installation of curb, gutter and sidewalk, installation of storm drainage, placement of crushed rock and HMA surface, illumination and other work.	DBB	3/24/2014	7/11/2014	3/25/2014	8/1/2014	$1,194,000.00	$1,048,800.00	
10-6410-026	Quincy Library	Construction of new library building.	DBB	3/21/2011	11/16/2011	3/21/2011	12/19/2011	$1,457,081.00	$1,502,570.00	Change order to correct site condition. Discovered a pile of garbage that is buried 12 feet deep, that needed to be removed, and bring in imported material for structural fill.
QPW-14-R01	Quincy Community Stage	Construction of new stage at Lauzier Park	DBB	4/12/2014	10/15/2014	4/7/2014	9/2/2014	$800,000.00	$586,000.00	
07-01-06731	City of Quincy Water Reuse Utility Phase 2, Design Package 1	Construction and modification of existing industrial wastewater treatment plant, industrial reuse water treatment plant, piping works to connect existing industrial conveyance system to brine evaporation pond, conversion of existing clarifier facility to ultra-filtration facility and yard piping.	DBB	12/6/2013	3/21/2004	12/6/2013	12/24/2014	$3,395,600.05	$3,467,673.57	Change Order due to unforeseen site conditions.
14050	Industrial InfrastructureImprovements	Construction/installation of approximately 1290 feet of HDPE and PVC gravity sewer, force main and fiber conduit along city roadways, reconstruction of roadways that include installation of approximately 4,400 feet of curb and gutter and 17,000 S.Y. of HMA paving.	DBB	10/14/2014	3/14/2015	10/13/2014	6/11/2015	$4,594,083.00	$3,765,857.80	Actual bid and contract amount came in lower than that of the engineer's estimate.
07-01-06731	Industrial Reuse Water Treatment Plant (IRWTP) Reverse Osmosis Equipment Procurement.	Procurement of Reverse Osmosis Membrane.- Equipment	DBB/RFP	4/14/2016	8/12/2016	4/29/2016	9/14/2016	$911,197.00	$928,927.00	Change order for modification of electrical panel due to differing temperature of the plant. During install of the unit.
07-01-06731	City of Quincy 1 Water IRWTP Reverse Osmosis System Design Package 4	Installation of Reverse Osmosis System equipment, and connect the RO system to the existing city reuse wastewater infrastructure.	DBB	8/1/2016	12/28/2016	8/1/2016	12/29/2016	$1,500,000.00	$1,557,288.33	Minor change for additional work that was not included in the original scope.
QPW-17-UFM02	City of Quincy 1 Water Ultra-Filtration Membrane Procurement	Procurement of Ultra-filtration membrane - Equipment	DBB/RFQ	6/27/2017	3/31/2018	6/27/2017	Dec. 2017	$1,374,365.46	$1,688,384.21	Change order for engineering support services from the vendor.
149926	City of Quincy 1 Water Brine Evaporation Ponds Cell 3 Design Package 5	Construction of third cell of the brine evaporation ponds.	DBB	3/3/2017	5/20/2017	3/3/2017	5/12/2017	$718,832.25	$720,506.62	Minor change for differing site condition work.
	City of Quincy 1 Water Lime Coagulation-Sedimentation Site Prep. amd Brine Evaporation Ponds Cell 4 Design Package 7	Construction of Brine Evaporation Pond cell 4 and site preparation for the Lime Softening System Facility.	DBB	10/30/2017	3/2/2018	10/30/2017	7/27/2018	$1,025,909.64	$1,196,270.86	Additiional scope and materials. Native soil quantity and condition is not sufficient to be used as structural fill for the brine pond.
QPW-17-RFP08	City of Quincy 1 Water - Reuse Filter Building Pumping System Design Package 8	Installation of pupmping system for the industrial reuse utility.	DBB	5/1/2017	6/30/2017	5/1/2017	5/15/2018	$826,039.67	$837,906.08	Minor change for additional materials.
MWRF-16-01	City of Quincy Municipal Water Reclamation Facility Aeration Upgrades for SBR's	Installation of aeration equipment and diffusers for the City's municipla waer reclamation facility.	DBB	8/22/2016	10/17/2016	8/22/2016	9/30/2017	$369,630.00	$513,415.02	Budget overrun from change orders, demobilization and remobilization from suspension of work due to weather, add'l.
16382B	Municipal Water ReclamationFacility - Blower Upgrades	Installation of owner procured blower equipment to replace and upgrade the municipal water reclamation facility blowers. Work include removal and relocation of two existing blowers, installation of three new blower units, modification of electrical room and blower building.	DBB	5/22/2017	8/22/2017	5/22/2017	9/1/2017	$400,000.00	$426,500.00	Local agency requested for the contractor to add a concrete pad behind the blower building and install the old blowers as back up.


Attachment B – QWRP GC/CM Components
ROB
Cell A
Cell B
DROPS
IRWPS
East Side Pipelines
D Street
Columbia Data Center
Future Data Center
WSB
BNSF Railway
Port Industrial
13th Ave
Future Irrigation
RWCF
RFB
Highway 28
Road R
MWRF
MWH Data Center
Road 9 NW
IWTP