



INFORMATIONAL MEMORANDUM

TO: Transportation and Infrastructure Committee
 FROM: Henry Hash, Public Works Director
 BY: Ryan Larson, Senior Program Manager
 CC: Mayor Ekberg
 DATE: November 21, 2018
 SUBJECT: Surface Water Fund - East Marginal Way South Stormwater Outfalls
 Project No. 91041204, Contract No. 14-010
 Contract Amendment No. 6

ISSUE

Execute Contract Amendment No. 6 to Contract No. 14-010 with KPG for final design and construction management.

BACKGROUND

Drainage along the northern portion of East Marginal Way South is conveyed to the Duwamish River through four separate outfalls. The outfalls are owned by Jorgensen Forge, the City of Tukwila, and two by the King County International Airport. The Jorgensen Forge outfall was abandoned in 2012 under an order from the Environmental Protection Agency (EPA) and flows have been temporarily diverted to a King County Airport outfall.

The current consultant contract with KPG developed the 90% plans and design report to divert surface water discharges from the Jorgensen Forge drainage to the Boeing Z Line outfall. This requires a new conveyance system along East Marginal Way South that includes a small pump station, installation of pervious pavement within the two way left turn lane, lining a section of existing outfall pipe, and installing water quality treatment.

DISCUSSION

The East Marginal Way S Stormwater Outfall project has been on hold since 2016 following the loss of final design and construction grant funding. The grant funding has now been restored and the project can proceed with final design and construction. KPG completed design through the 90% level and Amendment No. 6 will finish the design and provide construction management services during construction. Staff has been satisfied with KPG's work on this project as well as other projects that they have completed construction management services.

FISCAL IMPACT

KPG has prepared the attached contract, scope of work, and fee estimate to complete design and provide the necessary construction management services. The CIP budget has \$75,000 for design that has not been expended and the 2019 CIP has \$271,000 budget for construction management.

	<u>Amendment No 6</u>	<u>2019 Proposed CIP</u>
KPG Amendment No. 6	<u>\$263,508.00</u>	<u>\$271,000.00</u>

The original contract for the design report and the 90% engineering was for \$139,593.72. The new contract total of \$403,101.72 now includes full design and construction management services.

RECOMMENDATION

Council is being asked to authorize the Mayor to execute Contract Amendment No. 6 to Contract No. 14-010 in the amount of \$263,508.00 for the East Marginal Way Stormwater Outfall Project and consider this item on the Consent Agenda at the December 3, 2018 Regular Meeting.

ATTACHMENTS

KPG Contract No. 14-010, Amendment No. 6



CONTRACT FOR SERVICES

Amendment #6

Between the City of Tukwila and KPG, Inc.

That portion of Contract No. 14-010 between the City of Tukwila and KPG, Inc. is amended as follows:

Section 2: Scope of Services, shall be supplemented with the following:

The Consultant agrees to provide final design and construction services in accordance with the scope of work included as Exhibit A.

Section 3: Duration of Agreement; Time for Performance, shall be modified as follows:

This Agreement shall be in full force and effect for a period commencing upon execution and ending July 31, 2020, unless sooner terminated under the provisions hereinafter specified. Work under this Agreement shall commence upon written notice by the City to the Consultant to proceed. The Consultant shall perform all services and provide all work product required pursuant to this Agreement no later than July 31, 2020 unless an extension of such time is granted in writing by the City.

Section 4: Payment, shall be modified as follows:

Payment for work provided by Consultant shall be made as provided on Exhibit B, attached hereto, provided that the total amount of payment to the Consultant for this work not exceed \$263,508.00 without express written modification of the Agreement signed by the City. The new total contract shall not exceed \$403,101.72 without express written modification of the Agreement signed by the City.

All other provisions of the contract shall remain in full force and effect.

Dated this _____ day of _____, 20_____.

CITY OF TUKWILA

CONTRACTOR

Allan Ekberg, Mayor

Printed Name/Title: _____

ATTEST/AUTHENTICATED

APPROVED AS TO FORM

City Clerk

City Attorney

EXHIBIT A

City of Tukwila

East Marginal Way South Stormwater Outfalls Project

Supplement No. 6 Final Design and Construction Services

Scope of Work

November 12, 2018

Drainage from East Marginal Way South historically discharged through outfalls owned and operated by the Boeing Company, Jorgensen Forge, and two King County Airport storm systems. The Jorgensen Forge outfall was abandoned in 2012 under orders from the Department of Ecology (DOE) due to contaminants within the conveyance pipe and this East Marginal Way South discharge has been temporarily diverted to the King County Airport outfall.

Improvements are proposed to utilize the Boeing Z Line outfall in lieu of the King County Airport. This project will improve water quality in the Duwamish River through the installation of conveyance, stormwater treatment facilities, and permeable pavement, as well as lining a leaky storm pipe along East Marginal Way. The project will provide water quality treatment for total suspended solids (TSS) and will reduce groundwater contamination.

Under previous contract authorization, KPG prepared topographic survey, a pre-design report, limited environmental approvals, and preliminary design in the format required for the *2013-15 Municipal Stormwater Capacity Grant Program*. DOE has provided comments to this report and determined that the project remains eligible for final design and construction grant funds; however, these funds were put on hold in 2015 due to a lack of available funds. Funding was recently re-authorized by DOE to complete final design and construction.

This supplement is provided to complete environmental documentation, geotechnical analysis, final design, bid period services, and construction management in accordance with the attached scope of work and grant funding requirements.

TASK 1 – MANAGEMENT / COORDINATION / ADMINISTRATION

- 1.1 The Consultant will provide continuous project management for the project duration (8 months for final design).
- 1.2 The Consultant shall prepare monthly progress reports identifying work in progress, upcoming work elements, and reporting of any delays, problems, or additional information needs. The monthly progress reports shall be submitted with invoices.

Task 1 Deliverables:

- *Monthly progress reports during design period (8 months).*

TASK 2 – PERMITTING

- 2.1 The Consultant shall prepare a draft and final SEPA checklist describing the project improvements for submittal and coordination by the City.
- 2.2 The Consultant shall prepare and submit an Inadvertent Discovery Plan (IDP) in accordance with DOE grant requirements. The IDP will be included as an appendix to the final project specifications.

Task 2 Deliverables:

- *Draft and Final SEPA checklist, 2 paper copies and 1 pdf.*
- *IDP uploaded to DOE EAGL site for approval.*

Task 2 Assumptions:

- *No other permits will be required.*
- *Previous EO 05-05 approval from DAHP remains valid.*
- *Fees, signage, and public notice of SEPA will be by the City.*

TASK 3 – GEOTECHNICAL EXPLORATION

- 3.1 Previous geotechnical analysis by GeoDesign under subcontract to the Consultant will be utilized for final design. We have included a \$5,000 budget for final design support and to incorporate comments on the draft geotechnical report in order to prepare the final geotechnical report.

TASK 4 – UTILITY AND AGENCY COORDINATION

- 4.1 Washington Department of Ecology: The Consultant shall prepare for and attend up to two (2) coordination meetings and provide necessary phone and email communication with DOE and the City for review and comment of the pre design and design submittal.

- 4.2 Boeing: The Consultant shall prepare for and attend up to two (2) coordination meetings with the City and Boeing to coordinate access and design information for work on Boeing property.
- 4.3 Private Utilities (gas, water, sewer, power, telephone, cable): The Consultant shall distribute design submittals to utility owners and identify and conflicts and potholing needs. Utility provided potholes shall be surveyed by the Consultant and incorporated into base maps.

Task 4 Deliverables:

- *Plan distribution to private utilities.*

Task 4 Assumptions:

- *Potholing of existing private utilities, if required, will be performed by the utility owner and is not included in this scope of work.*
- *No permits will be required by BNSF for work in the City right of way.*
- *Obtaining easements from Boeing is not included in this scope of work.*

TASK 5 – FINAL DESIGN

The Consultant shall prepare Final Plans, Specifications and Estimates for review and approval by the City based on City and DOE comments received at the preliminary design submittal and DOE grant requirements. Plans shall be formatted to provide sufficient detail for convenient field layout of all proposed facilities. City standard details and WSDOT standard plans will be supplemented with project specific details as required.

- 5.1 The Consultant shall review and update previous design report and preliminary design based on comments received in 2015 from the City and DOE. Design Report and 90 percent plans, specifications, and estimate will be uploaded to the DOE EAGL site as required by the grant.
- 5.2 Respond to up to two (2) rounds of DOE comments in order to obtain DOE acceptance of the Design Report and 90% Plans.
- 5.3 The Consultant shall prepare draft Bid Plans for submittal to the City and upload to the DOE EAGL site as required by the grant. Mechanical and electrical support for stormwater pump station design will be provided by the City's proprietary pump system supplier, Calvert Technical Services, Inc. A \$5,000 allowance is provided for design review and input from Calvert Technical Services, Inc.
- 5.4 The Consultant will calculate quantities and prepare construction cost opinions in support of the 90% and Final Bid Plans and upload to DOE EAGL site as required by the grant.
- 5.5 The Consultant will prepare 90% and Final Bid Specifications for review and approval by the City and DOE. Specifications will be based on 2018 WSDOT Standard Specifications, using contract boilerplate and general special provisions provided by the City.
- 5.6 Prepare a preliminary Construction Schedule in accordance with DOE grant requirements and upload to EAGL site. The Construction Schedule will be used for determining contract working

days; however, the actual schedule and sequencing will be determined by the Contractor in accordance with Contract requirements.

- 5.7 Upload final Bid Documents to BXWA.com in .pdf format for bidding. The Consultant shall respond to bidder inquiries, prepare necessary addenda, attend bid opening, and prepare recommendation for award letter for City consideration.

Task 5 Deliverables:

90% and Bid Submittals

- One (1) ½-size unbound, seven (7) ½-size bound of the Construction plans. Upload to DOE EAGL site.
- One (1) hard copy, and two (2) electronic version (PDF and Excel) of the Engineer's Estimate of Probable Cost. Upload to DOE EAGL site.
- One (1) electronic version of the Special Provisions and seven (7) hard copies. Upload to DOE EAGL site.
- One (1) hard copy and .pdf with a summary of responses to the previous submittal. Upload to DOE EAGL site.
- One (1) hard copy and .pdf of preliminary construction schedule. Upload to DOE EAGL site.
- Addenda, Bid Tabulation, and Recommendation to either award or reject low bidder, .pdf.

Task 5 Assumptions:

- Topographic survey prepared under previous authorization will be used for final design.
- Scope of improvements for final design will be in general accordance with 2015 design report and preliminary design.

TASK 6 – CONSTRUCTION PHASE SERVICES

This work will provide construction management services for the construction contract. These services will include design support, project management, documentation control, inspection, materials testing, and contract administration during the construction of the project, as detailed below. The objective and purpose of this task is for the Consultant to successfully deliver the construction of the Project to the City by ensuring that the improvements are constructed in accordance with the approved Plans and Specifications, as may be amended or revised, that all of the required Project documentation is accounted for. The following general assumptions were used for developing this budget estimate:

General Assumptions:

- The **proposed project team** will include one part-time documentation control specialist, a part-time resident engineer during construction activities, a full-time inspector, sub-consultants to provide services for materials testing, and other supporting tasks as deemed necessary. It is anticipated that full-time site observation will be required for the entirety of the project.
- The level of service is based on a construction project duration of approximately **40 working**

days.

- KPG estimates a total project construction duration of 60 working days (12 weeks) including preconstruction service, construction services, and project closeout. No suspensions or stop work periods are anticipated during this duration; however, a procurement suspension may be considered prior to beginning construction if requested by the Contractor.
- It is anticipated that the KPG will develop the Record of Materials (ROM). This scope of services provides the management of the ROM and scheduling of required materials testing respectively.
- It is anticipated that the City will review and execute the insurance, bonds, and the Construction Contract.
- The design engineers from KPG will be available during construction to answer questions during construction and review RAM's, shop drawings, and answer RFI's that require a level of engineering expertise outside of the capabilities of the field personnel.
- Services will be performed in accordance with the Contract plans & special provisions, and City engineering standards.

6.1 Provide overall project management, coordination with the City, monthly progress reports, and invoicing during the construction phase. This effort will include the following elements.

- Organize and layout work for project staff. Prepare project instructions on contract administration procedures to be used during construction.
- Review monthly expenditures and CM team scope activities. Prepare and submit project progress letters to the City along with invoices describing CM services provided each month. Prepare and submit reporting required by funding source(s).

6.2 **Preconstruction Conference:** The Consultant will prepare an agenda for, distribute notices of, and conduct a preconstruction conference in the City's offices. The Consultant's project manager, resident engineer, inspector, and document control specialist will attend the preconstruction conference. The Consultant will prepare a written record of the meeting and distribute copies of the minutes to all attendees and affected agencies, staff, etc.

At the Pre-construction conference, the Consultant shall facilitate discussions with the Contractor concerning the plans, specifications, schedules, issues with utilities, unusual conditions, Federal, State, and local requirements and any other items that will result in better project understanding among the parties involved.

6.3 **Field Construction Services** shall include:

A. On-site Observation: The Consultant shall provide the services of one full time inspector during construction activities and other tasks necessary to monitor the progress of the work. Construction staff shall oversee the following items of work, on the project site, and will observe the technical progress of the construction, including providing day-to-day contact with the Contractor and the City:

Field inspection staff will perform the following duties as a matter of their daily activities:

- i. Observe technical conduct of the construction, including providing day-to-day contact with construction contractor, City, utilities, and other stakeholders, and monitor for adherence to the Contract Documents. The Consultant's personnel will act in accordance with Sections 1-05.1 and 1-05.2 of the Standard Specifications.
- ii. Observe material, workmanship, and construction areas for compliance with the Contract Documents and applicable codes, and notify construction contractor of noncompliance. Advise the City of any non-conforming work observed during site visits.
- iii. Document all material delivered to the job site in accordance with the contract documents.
- iv. Prepare daily inspection reports, recording the construction contractor's operations as actually observed by the Consultant; includes quantities of work placed that day, contractor's equipment and crews, and other pertinent information.
- v. Interpret Contract Documents in coordination with the City and KPG.
- vi. Resolve questions which may arise as to the quality and acceptability of material furnished, work performed, and rate of progress of work performed by the construction contractor.
- vii. Establish communications with adjacent property owners. Respond to questions from property owners and the general public.
- viii. Coordinate with permit holders on the Project to monitor compliance with approved permits, if applicable.
- ix. Prepare field records and documents to help assure the Project is administered in accordance with the funding requirements.
- x. Collect and calculate delivery tickets and salesman's daily reports of aggregate. All tickets will be initialed with correct bid item and stationing identified (Construction Manual 10-2).
- xi. Attend and actively participate in regular on-site weekly construction meetings.
- xii. Take periodic digital photographs during the course of construction, and record locations.
- xiii. Coordinate with the City's maintenance personnel.
- xiv. Punch list. Upon substantial completion of work, coordinate with the Client and affected agencies, to prepare a 'punch list' of items to be completed or corrected. Coordinate final inspection with those agencies.

B. Substantial Completion: Upon substantial completion of work, coordinate with the City and other affected agencies, to perform a project inspection and develop a comprehensive list of deficiencies or 'punchlist' of items to be completed. A punchlist and Certificate of Substantial Completion will be prepared by the Consultant and issued by the City.

C. Materials Testing: Coordinate the work of the materials testing technicians and testing laboratories in the observation and testing of materials used in the construction; document and evaluate results of testing; and address deficiencies. Frequency of testing shall be determined by the resident engineer.

Assumptions:

- Consultant will provide observation services for the days/hours that the contractor's personnel are on-site.
- Consultant will provide qualified personnel for inspection of all bid item work.
- The Consultant's monitoring of the construction contractor's activities is to ascertain whether or not they are performing the work in accordance with the Contract Documents; in case of noncompliance, Consultant will reject non-conforming work, and pursue the other remedies in the interests of the City, as detailed in the Contract Documents. The Consultant cannot guarantee the construction contractors' performance, and it is understood that Consultant shall assume no responsibility for: proper construction means, methods, techniques; project site safety, safety precautions or programs; or for the failure of any other entity to perform its work in accordance with laws, contracts, regulations, or City's expectations.

Deliverables:

- Daily Construction Reports with project photos – submitted on a weekly basis
- Punch List, Certificate of Substantial Completion
- Review test reports for compliance

6.3 Office Construction Services shall include:

- A. **Document Control.** Original documentation will be housed at the Consultant's office, and filed in accordance with standard filing protocol. A copy of working files will be maintained in the field office.
- Document Control consists of:
- Final Estimate (Approving Authority File)
 - Comparison of Preliminary and Final Quantities (Approving Authority File)
 - Final Records (Approving Authority File)
 - Record of Material Samples and Tests
 - Affidavit of Wages Paid
 - Release for the Protection of Property Owners and General Contractor
- B. **Project Coordination:** Liaison with City, construction contractor, engineer, utilities and property owners on a regular basis to discuss project issues and status.
- C. **Plan Interpretations:** Provide technical interpretations of the drawings, specifications, and contract documents, and evaluate requested deviations from the approved design or specifications. Coordinate with City for resolution of issues involving scope, schedule, and/or budget changes.
- D. **Weekly Meetings:** Lead weekly meetings, including preparation of agenda, meeting minutes, and distribution of minutes to attendees. Outstanding issues to be tracked on a weekly basis.
- E. **Initial Schedule Review:** Perform detailed schedule review of contractor provided CPM for conformance with the contract documents.
- F. **Lump Sum Breakdown:** Evaluate construction contractors' Schedule of Values for lump sum items. Review the Contract Price allocations and verify that such allocations are

made in accordance with the requirements of the Contract Documents. Lump Sum Breakdowns for payment each month will be calculated with detailed data.

- G. **Monthly Pay Requests:** Prepare monthly requests for payment, review with the City, contractor and approve as permitted. Utilize City provided format for pay estimates, or Consultant format.
- H. **Monthly Schedule Review:** At the monthly cutoff, review contractor's updated schedule and compare with field-observed progress, as described in Section 1-08 of the Special Provisions. In addition, perform schedule analysis on contractor provided CPM updates and review schedule for delays and impacts. Coordinate with Contractor in the development of recovery schedules, as needed, to address delays caused by either events or issues within the Contractor's control or other events or issues beyond the Contractor's control.
- I. **Certified Payroll:** Process and track all certified payroll per State Prevailing Wage Requirements. This includes verifying the initial payroll for compliance and 10% of all payrolls submitted thereafter. Tracking payroll each week.
- J. **Weekly Statement of Working Days:** Prepare and issue weekly statement of working day report each week.
- K. **Subcontractor Documentation:** Process / Approve all required subcontractor documentation. Request to Sublets will be verified and logged. This includes checking System Award Management System (SAMS), verifying business licensing, reviewing insurance documentation, verifying city business licensing, Intent to Pay Prevailing Wage and Affidavit of Wages Paid. All subcontractor documentation will be logged into KPG's subcontractor logs.
- L. **Record Drawings:** Review record drawings prepared by the Contractor, and prepare a conformed set of project record drawings based on Contractor provided information and from inspection notes. Record drawings to be verified on a monthly basis, as part of the progress payment to the Contractor. Upon project completion, contractor provided markups will be verified for completeness and supplemented with inspection information. The Consultant will provide the marked up plan sheets with both the contractors and inspectors as-built information as well as CAD updates incorporating these markups.
- M. **Physical Completion Letter:** Following completion of all punchlist work, prepare physical completion letter to the contractor, and recommend that City and/or Utilities accept the project.
- N. **Project Closeout:** Transfer all project documents to the City for permanent storage.
 - Schedule review comments
 - As-built schedule
 - Meeting agendas and notes
 - Monthly Pay Estimates
 - Subcontractor Packets
 - Cost Projection
 - Physical Completion Letter
 - Final Project Documents

6.4 Submittal and RFI processing

- A. **Submittals:** Coordinate review process for shop drawings, samples, traffic control plans, test reports, and other submittals from the Contractor for compliance with the contract documents. Key submittals to be transmitted to the City for their review and approval. Submittals shall be logged and tracked.

- B. **Request for Information (RFI):** Review and respond to RFI's. RFI's shall be logged and tracked.
- C. **Record of Materials (ROM):** Utilize ROM prepared by KPG and update based on Special Provisions and Plans for use on the project, based on the contract specifications. The ROM will be maintained by the Resident Engineer. The ROM will track all of the materials delivered to the site including manufacturer/supplier, approved RAM's, QPL items, material compliance documentation, and all other required documentation.

Deliverables

- Submittal log
- RFI Log
- Completed Record of Material for Material Certification

6.5 Change Management

- A. **Case Log:** Develop and maintain a case log which includes change orders, RFP's, Field Work Directives
- B. **Change Orders:** Develop change orders and provide technical assistance to negotiate change orders, and assist in resolution of disputes which may occur during the course of the project. Each change order will be executed in accordance with WSDOT Standard Specifications and contain the following:

- Change order
- Independent Cost Estimate
- Time Impact Analysis
- Contractor's Pricing
- Verbal Approval Memo
- Back up documentation

- C. **Field Work Directives:** Prepare field work directives as necessary to keep the contractor on schedule.
- D. **Minor Change Orders:** Develop minor change orders per WSDOT Standard Specifications. Each minor change order will be executed and contain the following:

- Independent Cost Estimate
- Verbal Approval Memo
- Back up documentation

- E. **Force Account:** Track contractor force account labor, equipment and materials. All force account calculations will be verified by the engineer and double checked by the documentation specialist.

Deliverables

- Change Order(s)
- Case Management Log
- RFI Log
- Minor Change Order(s)
- Force Account Records

Additional Services

The City may require additional services of the Consultant in order to advance the project corridor through final design, bidding and/or construction. This work may include items identified in the current task authorizations as well other items, which may include, but are not necessarily limited to the following:

- Right of way and easement research and/or acquisition
- Additional design or construction assistance

These services will be authorized under a future contract supplement if necessary. At the time these services are required, the Consultant shall provide a detailed scope of work and an estimate of costs. The Consultant shall not proceed with the work until the City has authorized the work and issued a notice to proceed.

Exhibit B

City of Tukwila
 East Marginal Way Stormwater Outfalls
 Supplement 6 - Final Design and Construction Management
 November, 2018



Task No.	Task Description	Labor Hour Estimate														Total Hours and Labor Fee Estimate by Task		
		Principal	Engineering Mgr	Sr. Engineer	Construction Mgr	Sr. Transp. Planner	Project Engineer	Design Engineer	Project Land. Arch.	CAD Technician	Engineering Technician	Survey Crew I	Survey Crew II	Office Admin	Engineering Assistant	Hours	Fee	
			Sr. Const Mgr	Aviation Mgr	Urban Design Mgr	CAD Mgr	Project Surveyor	Resident Engineer	Construction Office Engr	Documentation Specialist	Landscaping Technician			Construction Admin				
Task 1 - Management, Coordination, Administration																		
1.1	Project Management (8 months)	8				4									8		28	\$ 3,880.00
1.2	Prepare monthly progress reports	4					4										16	\$ 2,360.00
	Task Total	12	0	0	0	4	4	0	0	0	0	0	0	0	8	0	44	\$ 6,240.00
Task 2 - Permitting																		
2.1	Prepare and submit SEPA checklist	2		4						8	8						30	\$ 4,066.00
2.2	Prepare IDP	2								8							14	\$ 2,026.00
	Task Total	4	0	4	0	0	0	0	0	16	8	0	0	0	4	0	44	\$ 6,092.00
Task 3 - Geotechnical Exploration																		
3.1	Geotechnical coordination for final design	2		4						8	4						20	\$ 3,050.00
	Task Total	2	0	4	0	0	0	0	0	8	4	0	0	0	0	0	20	\$ 3,050.00
Task 4 - Utility and Agency Coordination																		
4.1	DOE coordination	4		8						16	8						40	\$ 6,100.00
4.2	Boeing coordination									4							8	\$ 1,012.00
4.3	Franchise utility coordination									8	8						20	\$ 2,600.00
	Task Total	4	0	8	0	0	0	0	0	28	16	0	0	0	0	0	68	\$ 9,712.00
Task 5 - Final Plans, Specifications, and Estimates																		
5.1	Update Design Report and 90% Plans	4		16						40	24						108	\$ 14,908.00
5.2	Response to DOE comments	2		4						8	8						22	\$ 3,338.00
5.3	Prepare Draft Bid Documents	4		8						40	40						108	\$ 14,588.00
5.4	Calculate quantities and prepare cost opinions	2		4						8	8						22	\$ 3,338.00
5.5	Prepare specifications	4		8						16	8						44	\$ 6,548.00
5.6	Prepare preliminary construction schedule		8														8	\$ 1,616.00
5.7	Bid Period Services	2		4						8	8						30	\$ 4,066.00
	Task Total	18	8	44	0	0	0	0	0	120	96	0	0	0	0	0	342	\$ 48,402.00
Task 6 - Construction Phase Services																		
6.1	Management, Coordination and Administration	24			24												72	\$ 12,000.00
6.2	Preconstruction Services										32		32				112	\$ 12,928.00
6.3	Field Construction Services										100		400				500	\$ 60,000.00
6.4	Office Construction Services										80						400	\$ 45,280.00
6.5	Submittal and RFI processing									60							200	\$ 24,492.00
6.6	Change Management									20	30						98	\$ 11,812.00
	Total Labor Hours and Fee	64	8	60	24	4	24	24	4	256	426	0	432	432	0	88	1,900	\$ 240,008.00
Subconsultants																		
Geotechnical - GeoDesign allowance \$ 5,000.00																		
City pump supplier allowance \$ 5,000.00																		
Construction Materials Testing Allowance \$ 10,000.00																		
Total Subconsultant Expense \$ 20,000.00																		
Reimbursable Direct Non-Salary Costs																		
Mileage at current IRS rate \$ 2,000.00																		
Reproduction and Field Supplies \$ 1,500.00																		
Total Reimbursable Expense \$ 3,500.00																		
Total Estimated Budget \$ 263,508.00																		