

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Authorizing the City Manager to Execute an Amendment in the Amount of \$64,407 for the Professional Services Contract with Brown and Caldwell for the 2017 Surface Water Master Plan Update
DEPARTMENT:	Public Works
PRESENTED BY:	Uki Dele, Surface Water and Environmental Services Manager
ACTION:	<input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution <input checked="" type="checkbox"/> Motion <input type="checkbox"/> Discussion <input type="checkbox"/> Public Hearing

PROBLEM/ISSUE STATEMENT:

The City of Shoreline retained Brown and Caldwell to prepare an update to its Surface Water Master Plan that will guide the Surface Water Utility (Utility) for the next five to 10 years. This work is being completed in accordance with the original services contract (Contract No. 8401), effective July 7, 2016 and amended on March 9, 2017. As worked progressed, several of the tasks were modified and effort was adjusted to accommodate new information, respond to unanticipated needs of City staff, or provide additional support. Tonight’s action would authorize the City Manager to further amend Contract No. 8401 with Brown and Caldwell in the amount of \$64,407 to provide for the completion of the Surface Water Master Plan Update project.

RESOURCE/FINANCIAL IMPACT:

The proposed adjustment for the contract with Brown and Caldwell is \$64,407, and the 2017 Surface Water Capital Improvement Program budget has sufficient funds to cover the additional cost. The total proposed amended contract will be \$696,397.

Table 1. Budget Summary and Proposed Amendment

Contracted Budget	Proposed Adjustment	Proposed Amended Budget
\$631,990	\$64,407	\$696,397

RECOMMENDATION

Staff recommends that Council move to authorize the City Manager to execute an amendment to Contract No. 8401 with Brown and Caldwell for \$64,407 to provide completion of the Surface Water Master Plan Update project.

Approved By: City Manager **DT** City Attorney **MK**

BACKGROUND

The 2017 Surface Water Master Plan (Master Plan) is a vision document that establishes a management strategy for the Surface Water Utility to help meet the established level-of-service goals and NPDES permit requirements. It also includes the development of both financial and policy processes for the Utility to implement the strategy. Staff are working with consultants Brown and Caldwell and FCS Group to update the City's 2011 Surface Water Master Plan (2011 Master Plan). The purpose of the Master Plan is to address drainage and water quality challenges associated with growth, increasing regulations, and aging infrastructure. The Master Plan will guide the Utility for the next five to 10 years including recommendations for capital improvements, programs, and a financial plan for long-term asset management.

Brown and Caldwell's work to update the Master Plan is being completed in accordance with the original services agreement between the City and Brown and Caldwell (Contract No. 8401), which became effective July 7, 2016 and was amended on March 9, 2017. As work progressed, several of the tasks were modified and effort was adjusted to accommodate new information, respond to unanticipated needs of City staff, or provide additional support.

DISCUSSION

Table 2 below summarizes the proposed adjustments to the contracted budget with Brown and Caldwell. This is followed by highlights of some key tasks that include scope adjustment. More details on the proposed amendment is provided in Attachment A.

Table 2. Proposed Amendment by Task

Scope Task	Contracted Budget, \$	Proposed Adjustment, \$	Proposed Amended Budget, \$
1. Review and consolidate data	12,705	0	12,705
2. Define levels of service (LOS)	33,176	0	33,176
3. Update asset management process	82,743	6,965	89,708
4. Regulatory Compliance	16,304	-13,056	3,249
5. Stormwater Treatment	15,914	0	15,914
6. Develop recommendations	44,674	33,000	77,674
7. Develop rate structure/financial planning	35,380	9,805	45,185
8. Evaluate utility billing	30,219	-2,384	27,835
9. Utility management policy review	37,683	2,820	40,503
10. Prepare master planning document	68,518	0	68,518
11. Present to City Council and public	47,807	-10,000	37,807
12. Project Management	69,004	19,000	88,004
13. Condition Assessment	38,177	8,665	46,842
14. System Capacity	49,512	0	49,512
15. Operations and Maintenance	35,174	9,592	44,766
16. Additional services (optional)	15,000	0	15,000
Total	631,990	64,407	696,397

Task 3: Update asset management process

The purpose of this task is to advance the Utility’s asset management program as a framework for monitoring the condition and evaluating the performance of the Utility. This task is complete and will be closed to further charges.

Additional effort for this task included:

- The Asset Management Work Plan required additional effort to reconcile the results of the Utility Business Management Evaluation with anticipated staffing challenges.
- The discussion of the review of the AMWP was extensive and included a concentrated examination of each of the asset management recommendations with respect to timing, resources, and current activities to resolve potential conflicts. This meeting led to additional revisions to the Asset Management Work Plan.

Table 3. Task 3 Proposed Budget Adjustments

Contracted Budget	Proposed Adjustment	Proposed Amended Budget
\$82,743	\$6,965	\$89,708

Task 6: Develop project and program recommendations for CIP

The purpose of this task is to develop and prioritize project and program recommendations for inclusion in the Capital Improvement Program (CIP). This task is in progress. Remaining effort includes responding to reviewers’ comments and questions during draft Master Plan document review.

Additional effort for this task included:

- The number of project recommendations carried forward from the basin plans was larger than expected. The City’s spreadsheet contained 116 projects that had to be systematically screened for further prioritization.
- An additional workshop with City staff was held to review the screening process and results. The workshop required additional effort for preparing presentation materials, attending, and follow-up communications.
- The number of projects carried forward for detailed prioritization was greater than expected – 25 five projects/programs were scoped, but 40 projects were screened and 25 new programs were developed for a total of 65 projects and programs.
- Brown and Caldwell developed a detailed project prioritization spreadsheet tool that was not originally scoped. The tool has been provided to the City and may be useful for future prioritization efforts.
- Two prioritization workshops were conducted with City staff. Only one workshop was originally scoped for this effort. The second workshop required additional time for preparation, attendance, and follow-up.
- The level of effort required to evaluate three distinct project and program packages, or management strategies, was underestimated in the original scope. The Brown and Caldwell/FCS team worked with the City to determine how these packages should be developed and presented to Council. Three unanticipated meetings were held between City staff and the Brown and Caldwell/FCS team.

- The City requested that Brown and Caldwell develop a detailed cost break down for the 40 CIP projects and two CIP-related programs for the selected management strategy. This effort includes QA/QC reviews and conference calls with City staff to inputs and data needs.

Table 4. Task 6 Proposed Budget Adjustments

Contracted Budget	Proposed Adjustment	Proposed Amended Budget
\$44,674	\$33,000	\$77,674

Task 11: Present to City Council and Public

With the majority of Master Plan recommendations addressed by the City Council as of the August 7, 2017 Council meeting, less effort will be needed for the remaining presentation, which will cover key performance indicators and measures for new and enhanced programs. This task is in progress.

Table 5. Task 11 Proposed Budget Adjustments

Contracted Budget	Proposed Adjustment	Proposed Amended Budget
\$47,807	\$-10,000	\$37,807

COUNCIL GOAL ADDRESSED

This project amendment will address City Council Goal #2: Improve Shoreline’s Utility, transportation and environmental infrastructure.

RESOURCE/FINANCIAL IMPACT

The proposed adjustment for the contract with Brown and Caldwell is \$64,407, and the 2017 Surface Water Capital Improvement Program budget has sufficient funds to cover the additional cost. The total proposed amended contract will be \$696,397.

Table 6. Budget Summary and Proposed Amendment

Contracted Budget	Proposed Adjustment	Amended Budget
\$631,990	\$64,407	\$696,397

RECOMMENDATION

Staff recommends that Council move to authorize the City Manager to execute an amendment to Contract No. 8401 with Brown and Caldwell for \$64,407 to provide completion of the Surface Water Master Plan Update project.

ATTACHMENTS

Attachment A: Proposed Scope Amendment for Contract No. 8401 with Brown and Caldwell

Attachment A: Proposed Scope Amendment for Contract 8401

Surface Water Master Plan

The City of Shoreline (City) retained Brown and Caldwell (BC) to prepare an update to its Surface Water Master Plan that will guide the Surface Water Utility (Utility) for the next five to 10 years. This work is being completed in accordance with the original services agreement effective July 7, 2016 and amended on March 9, 2017. The City has identified the need for changes and additions to several tasks, and has asked BC to revise the scope of work, budget, and timeline accordingly. These changes are described in this Amendment 2.

Table 1 summarizes the proposed adjustments to the contracted budget. The table is followed by a task-by-task breakdown of the scope changes, including a summary of the current task budgets and proposed adjustments for each task. Estimates of the remaining balance on each of the task budgets are provided based on BC labor through September 14, 2017 and subconsultant invoices through August 18, 2017.

Table 1. Budget Summary for Amendment 2

Scope Task	Contracted task budget	Amount spent	Amount remaining ¹	Proposed adjustment	Amended budget	Amended amount remaining ¹
1. Review and consolidate data	12,705	12,705	0	0	12,705	0
2. Define levels of service (LOS)	33,176	33,176	0	0	33,176	0
3. Update asset management process	82,743	89,708	-6,965	6,965	89,708	0
4. Regulatory Compliance	16,304	3,249	13,056	-13,056	3,249	0
5. Stormwater Treatment	15,914	13,910	2,004	0	15,914	2,004
6. Develop recommendations	44,674	74,287	-29,613	33,000	77,674	3,387
7. Develop rate structure/financial planning	35,380	36,354	-974	9,805	45,185	8,831
8. Evaluate utility billing	30,219	27,835	2,384	-2,384	27,835	0
9. Utility management policy review	37,683	40,503	-2,820	2,820	40,503	0
10. Prepare master planning document	68,518	28,911	39,608	0	68,518	39,608
11. Present to City Council and public	47,807	30,952	16,855	-10,000	37,807	6,855
12. Project Management	69,004	77,250	-8,246	19,000	88,004	10,754
13. Condition Assessment	38,177	46,842	-8,665	8,665	46,842	0
14. System Capacity	49,512	46,368	3,145	0	49,512	3,145
15. Operations and Maintenance	35,174	41,766	-6,592	9,592	44,766	3,000
16. Additional services (optional)	15,000	0	15,000	0	15,000	15,000
TOTAL	631,990	603,815	28,176	64,407	696,397	92,582

1. BC labor through September 14, 2017. FCS group labor through August 18, 2017.

Task 1: Review and consolidate data

This task is complete and closed to further charges.

Task 2: Define levels of service (LOS)

This task is complete and closed to further charges.

Task 3: Update asset management process

The purpose of this task is to advance the Utility's asset management program as a framework for monitoring the condition and evaluating the performance of the Utility. The Asset Management Work Plan required additional effort to reconcile the results of the Utility Business Management Evaluation (UMBE) with anticipated staffing challenges. A 5-hour meeting was held with on March 13, 2017, the City to vet each of the asset management recommendations with respect to timing, resources, and current activities to resolve potential conflicts. This meeting led to additional revisions to the Asset Management Work Plan.

Proposed Budget Adjustments

Contracted task budget:	82,743	
Current amount remaining:	-6,965	100% spent
Proposed adjustment:	6,965	↑
Amended task budget:	89,708	
Amended amount remaining:	0	100% spent

This task is complete and will be closed to further charges.

Task 4: Regulatory compliance

The purpose of this task is to evaluate City policies and programs with respect to the anticipated requirements of the 2018-2022 NPDES Phase II Stormwater Permit. However, the permit has been delayed by one year to 2019 and little additional information has become available about what to expect. Additionally, Amendment 1 added scope to this task for review and prepare recommendations to changes in the Shoreline Municipal Code 13.10 Surface Water Utility (Surface Water Code) based on policy changes and anticipated regulatory needs. This Amendment 2 would eliminate the remaining scope for this task so the budget can be reallocated to other, higher-priority tasks.

Proposed Budget Adjustments

Contracted task budget:	16,304	
Current amount remaining:	13,056	20% spent
Proposed adjustment:	-13,056	↓
Amended task budget:	3,249	
Amended amount remaining:	0	100% spent

This task will be closed to further charges.

Task 5: Stormwater treatment

No proposed changes.

Task 6: Develop project and program recommendations for CIP

The purpose of this task is to develop and prioritize project and program recommendations for inclusion in the Capital Improvement Program (CIP). This task represents the bulk of the work completed in recent months as it has grown to include a greater number of projects, additional programs, costs and recommendations that pertain to both capital and operating budgets, as well as detailed evaluations of existing programs and staffing needs. Amendment 2 would cover the following additional efforts or changes from the original scope:

- **Additional Effort for Project Screening.** The number of project recommendations carried forward from the basin plans was larger than expected. The City's spreadsheet contained 116 projects that had to be systematically screened for further prioritization. This required an additional workshop with City staff to review the screening process and results. The workshop—which was held on February 13, 2017—required additional effort for preparing presentation materials, attending, and follow-up communications.

- **Additional Effort for Project Prioritization.** The number of projects carried forward for detailed prioritization was greater than expected. The original scope assumed that the “screening process will result in no more than 25 projects/programs for inclusion in the CIP.” However, a total of 40 projects were carried forward from the screening process. In addition, the effort required to develop the prioritization process and implement the prioritization scoring was greater than originally anticipated, as described below:
 - BC developed a detailed prioritization spreadsheet tool in Excel to manage the number of projects, as well as provide a prioritization scoring system that is transparent, repeatable, and based on over 20 criteria that stem from defined level of service targets. The development of a tool was not in our original scope. Note that this tool will be provided to the City and may be useful for future prioritization efforts.
 - BC conducted two prioritization workshops with City staff. The first workshop, which was held on March 17, 2017, addressed prioritization criteria and a weighted scoring system. The second workshop—held on April 27, 2017—addressed preliminary prioritization results and comments on project-specific scoring. Only one workshop was originally scoped for this effort. The second workshop required additional time for preparation, attendance, and follow-up.
- **Additional effort to develop program recommendations for utility operations.** As mentioned above, the original scope assumed a total of 25 projects and programs would be included in the CIP recommendations. In addition to the 40 projects listed above, 25 program recommendations were developed either as completely new programs or enhancements to existing programs. Moreover, the programs were evaluated as operational activities, which required some additional manipulation to integrate recommended improvements with existing processes and staffing needs, as described below:
 - Developing new programs required coordination with existing utility operations, determining staff assignments for new activities and/or the requisite breakdown between City staff and contracted services, estimating level of effort based on unit-costs as well as full time equivalents (FTEs) by Utility staff position (e.g., water quality specialist, engineering technician, CIP engineer, etcetera), and estimating non-labor costs associated with program activities.
 - Developing recommendations for enhanced existing programs required researching existing labor and non-labor costs, estimating increased effort (labor and non-labor) for specific enhancements, and developing FTE estimates by Utility staff position.
 - A modified prioritization approach had to be developed for the programs because of differences in how the scoring criteria would be applied.
- **Additional Effort for Management Strategies.** While it was recognized that some variations in project selection and activities corresponding to desired levels of service would be evaluated for the Master Plan, BC did not anticipate the effort required to evaluate three distinct project and program packages, or management strategies. BC and FCS Group worked with the City to determine how these packages should be developed and presented to Council. This process required three additional meetings with the City:
 - On May 8, 2017 three members of the BC/FCS Group team attended a meeting with City staff to discuss levels of service and how both projects and programs would be evaluated relative to these levels of service, in addition to the process for connecting levels of service to utility operations and performance metrics.
 - On May 22, 2017 three members of the BC/FCS Group team attended a meeting with City staff to discuss the development of “management strategies” such that three options could be presented to Council, along with three corresponding rate adjustments to cover the financial requirements.
 - On Jun 1, 2017 four members of the BC/FCS Group team attended a meeting with City staff to discuss the three management strategy options, propose a breakdown of they would be comprised, and explain how they would be evaluated.
- **Additional Effort for CIP Project and Program Cost Breakdown.** The City requested that BC develop a detailed cost break down for the 40 CIP projects and two CIP-related programs for the selected management strategy. Capital costs were divided into annual expenditures and then divided into the following cost categories: administration, real estate acquisitions, and construction—which is the required breakdown for input to the City’s CIP Budget Model. BC then escalated all of the costs across the planning horizon. This effort includes QA/QC reviews and conference calls with City staff to inputs and data needs.

Proposed Budget Adjustments

Contracted task budget:	44,674	
Current amount remaining:	-29,613	166% spent
Proposed adjustment:	33,000	↑
Amended task budget:	77,674	

Amended amount remaining: 3,387 96% spent

This task is in progress.

Task 7: Develop rate structure and financial planning recommendations

The purpose of this task is to determine the amount of revenue required from rates to meet the O&M, debt service, and capital improvement costs associated with meeting the desired LOS. The additional effort was needed to run multiple iterations and incorporate new information into the revenue requirement model. New operating costs, changes to the project selections and programming, and edits to taxes and rents required model updates including new rate projections and estimated debt issuances for all management strategies. These updates were made after the initial completion of the revenue requirements and review by the City.

After the City Council approved the recommended *Proactive* management strategy and associated rate increases, BC and FCS Group assisted the City with incorporating financial data into their CIP Budget Model for 2018. This effort was expedited and included three conference calls between the BC/FCS Group team and City staff to respond to questions and assist with data inputs and appropriate assumptions.

Proposed Budget Adjustments

Contracted task budget:	35,380	
Current amount remaining:	-974	103% spent
Proposed adjustment:	9,805	↑
Amended task budget:	45,185	
Amended amount remaining:	8,831	80% spent

This task is in progress.

Task 8: Evaluate utility billing

The purpose of this task is to review the process and data associated with the King County administered utility billing, and cost evaluation of in-house billing for surface water customers. Task was completed under budget; therefore, BC is requesting that the remaining budget be reallocated to other tasks.

Proposed Budget Adjustments

Contracted task budget:	30,219	
Current amount remaining:	2,384	92% spent
Proposed adjustment:	-2,384	↓
Amended task budget:	27,835	
Amended amount remaining:	0	100% spent

This task is complete and will be closed to further charges.

Task 9. Utility management policy review

The surface water utility has several programs and policies that have not kept pace with redevelopment within the city and, in some cases, do not have documented approaches to making surface water-related decisions. The purpose of this task is to assist the City with developing policies to address these issues.

During the May 15th Council meeting, the City Council requested additional research on the self-certification policy. To respond to this request, BC performed additional research and prepared an evaluation that compared “status quo” with a self-certification approach to maintenance of private surface water facilities. BC interviewed the self-certification program manager at Seattle Public Utilities and reviewed data from the Shoreline and King County private facility programs. BC prepared two program summaries and estimated the relative efforts needed for each program.

Proposed Budget Adjustments

Contracted task budget:	37,683	
Current amount remaining:	-2,820	107% spent
Proposed adjustment:	2,820	↑

Amended task budget: 40,503
 Amended amount remaining: 0 100% spent

This task is complete and will be closed to further charges.

Task 10: Prepare master planning document

BC will use the results of the previous tasks to prepare the Master Plan document. No scope changes are proposed for this task. However, our original cost estimate for this task assumed a concise document and a streamlined approach for City document review and comment. The following assumptions are provided for clarification:

- One set of review comments will be addressed for the Preliminary Draft Master Plan, and one set of review comments will be addressed for the Draft Master Plan.
- The City will need to compile all internal reviews into one set of consolidated comments, it is the City's responsibility to resolve any conflicting or ambiguous comments, and to eliminate superfluous comments.
- Comments that cannot be addressed, or are outside the scope of work, will be responded to in a brief comment response matrix and discussed with the City Project Manager.
- Preliminary Draft Master Plan submitted electronically via e-mail in PDF; if desired, the draft report can also be provided in Word format to facilitate comments and editing.
- Draft Master Plan submitted electronically via e-mail in PDF; if desired, the draft report can also be provided in Word format to facilitate comments and editing.

Thus, maintaining a concise document and streamlined approach to document reviews will be essential to avoiding an overage on this task.

Proposed Budget Adjustments

Contracted task budget: 68,518
 Current amount remaining: 39,608 42% spent
 Proposed adjustment: 0
 Amended task budget: 68,518
 Amended amount remaining: 39,608 42% spent

This task is in progress.

Task 11. Present to City Council and Public

Considerable effort was expended on this task to support the development of staff reports and prepare for City Council Meetings in July and August, for which we presented key information on management strategies and rate impacts. With the majority of Master Plan recommendations requested of and addressed by City Council as of the August 7th meeting, less effort will be needed for the remaining two City Council meetings. The finalize rate schedule will be presented as part of the budget for adoption in September/October and the overview of the Draft Master Plan in November. If we assume that BC will prepare one draft and one final version of a PowerPoint presentation for each of these and that no iteration is required on these presentation materials, then a portion of this task budget could be reallocated to other tasks.

Proposed Budget Adjustments

Contracted task budget: 47,807
 Current amount remaining: 16,855 65% spent
 Proposed adjustment: -10,000 ↓
 Amended task budget: 37,807
 Amended amount remaining: 6,855 82% spent

This task is in progress.

Task 12. Project management

This task covers team coordination, staff supervision, budget and schedule controls, status reports, and adherence to QA/QC procedures. The level of effort for this task has been greater than anticipated due the following:

- Correspondence with City staff to respond to questions and/or responding with interim data transmittals when needed, such as questions that arise during the City's internal meetings, or in preparation for City Council meetings
- Managing multiple parallel efforts and scope changes that occur while responding to the City's concerns.
- Extended project schedule due to additional requests and expanded scope within several tasks.
- Preparing project amendment documents including staff report for City Council.

Proposed Budget Adjustments

Contracted task budget:	69,004	
Current amount remaining:	-8,246	112% spent
Proposed adjustment:	19,000	↑
Amended task budget:	88,004	
Amended amount remaining:	10,754	88% spent

This task is in progress.

Task 13: Condition assessment

The purpose of this task is to work with the City to advance their condition assessment program by reviewing existing data, approaches, and activities and preparing an updated Condition Assessment Management Plan (CAMP). Per the original scope, BC developed automatic queries and GIS tools to expedite the prioritization processes. However, these efforts were expanded from just one method (applied to pipes) to three, with two additional tools developed to prioritize catch basins and manholes.

In addition to the activities in the original scope, the City asked BC to conduct a training session to demonstrate the tools, answer questions, and help with operating the tools on the City's hardware and software systems. BC conducted the training session, and then prepared a more detailed User's Guide based on staff questions during the training. The revised User's Guide contains new examples that address potential changes in prioritization criteria and GIS field updates.

BC also prepared a second update to the CAMP document to incorporate previously missing manhole data and additional research on pump station condition assessments. This additional research became necessary due to lack of data available from the Cityworks system.

Proposed Budget Adjustments

Contracted task budget:	38,177	
Current amount remaining:	-8,665	123% spent
Proposed adjustment:	8,665	↑
Amended task budget:	46,842	
Amended amount remaining:	0	100% spent

This task is complete and will be closed to further charges.

Task 14: System capacity

No proposed changes.

Task 15: Operations and maintenance

The purpose of this task is to develop a draft and final O&M Manual. BC completed a draft O&M Manual and received comments from City staff. The following is a list of unanticipated efforts or changes from the original scope based on review comments: The City's comments on the draft O&M Manual resulted in substantial changes and requests for new information and visuals. The requested additions required an additional meeting with the City's maintenance staff to discuss standard operating procedures (SOPs), review photographs of facilities and activities, and detailed discussions regarding the current inspection methods for 22 assets. The comments also resulted in reorganizing each of the 22 standard operating procedures (SOPs). A review of Cityworks and GIS demonstrated the potential inclusion of nine SOPs in the O&M Manual (e.g., culverts, infiltration galleries, constructed wetlands, etc.). Additional effort included the investigation and recommended inclusion for these assets in the Cityworks and GIS systems and where appropriate a

new SOP or an update to an existing SOP. A second meeting at the City was needed to resolve comments from multiple City staff reviewers.

Addition effort is estimated to address staff comments on the final draft including reviewing and responding to staff comments and revision to text and tables. A new graphic (work process flow chart) developed by staff will need to be reformatted for inclusion in the document.

Proposed Budget Adjustments

Contracted task budget:	35,174
Current amount remaining:	-6,592 <i>119% spent</i>
Proposed adjustment:	9,592
Amended task budget:	44,766
Amended amount remaining:	3,000 <i>93% spent</i>

This task is in progress.

Task 16: Additional services (optional)

This task was added as part of Amendment 1 to cover additional efforts such as those described the tasks above. While the current task budget of \$15,000 could be reallocated to other tasks to cover some of the above-described changes, BC proposes to preserve this budget to cover any additional support activities identified by the City Project Manager. BC would conduct activities, such as these, only when authorized in writing by the City Project Manager. The Consultant’s total level of effort will be limited to the budget currently allocated for this task (\$15,000).