Report #2023-08

WATER SYSTEM PIPELINE MANAGEMENT PROGRAM FY 2021 AGREEMENT AUDIT

NUMBER OF RECOMMENDATIONS

PRIORITY 1

PRIORITY 2

PRIORITY 3

City of Glendale Internal Audit

06.22.2023



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Acknowledgment

We would like to thank staff from Glendale Water & Power, Community Development, Public Works, and City Attorney's Office for the support and assistance provided to us throughout this project.

For questions regarding the contents of this report, please contact the lead auditor, Natalie Minami-Valdivia, Sr. Internal Auditor, or Jessie Zhang, Internal Audit Manager at InternalAudit@glendaleca.gov

This report is also available online at https://www.glendaleca.gov

A. Overview

Key Outcomes

Glendale Water & Power (GWP) Water Services Division (Water) administers the Water System Pipeline Management Program to replace the pipeline infrastructure of the City's water system to improve overall system performance and reliability. GWP Water entered into a Water System Pipeline Management Program FY 2020-21 – Phase I Design-Build Agreement (Agreement). GWP Water has established a standardized approach to organize contract required documents related to planning, design, construction, and financials. There is also an unofficial Water Engineering Project Management Handbook drafted by GWP staff based on best practices that provides detailed contract management procedures. These tools and written manual are good controls to administer contracts. Internal Audit reviewed the Agreement provisions and supporting documents and noted seven improvement opportunities related to revising and/or enforcing the Design-Build agreement terms in the areas of change order, required submittals, and issuing the Certificate of Completion in a timely manner.

Impact Dashboard

This table summarizes the applicable value-added categories (total 17) for the seven recommendations based on their prority rankings.¹

	Value Added Categories			
	Compliance Cost Saving Efficiency		Risk Reduction	
Priority 1	0	0	0	0
Priority 2	6	0	3	6
Priority 3	1	0	0	1

¹ Each audit recommendation may have more than one value-added category. The Definitions of Priority Rankings and Value-Added Categories are located at Appendix 1.

B. Action Plan and Target Completion Dates

The action plan and target completion dates are summarized in the table below. Internal Audit will perform quarterly status follow-up to provide assurance that management is taking appropriate and timely corrective action to address audit recommendations.

Ref.	Management Action Plan	Completion Date				
	Priority 2					
1.	Issue change orders in a timely manner and document the scope change, any adjustment in the contract sum and/or contract time. Value added: Compliance, Risk Reduction	12/31/2023				
2.	Require Design-Builder's proposals/change order requests to include impacts to time for the extra work. Value added: Compliance, Efficiency, Risk Reduction	12/31/2023				
3.	Require Design-Builder's proposals/change order requests to calculate the Allowable Markups on the difference between the Extra Work and deleted work on a going-forward basis. Value added: Compliance, Risk Reduction	12/31/2023				
4.	Enforce the Solid Waste Disposal and Diversion requirement, separate subcontractor line items, and monthly submission of certified payroll. Value added: Compliance, Efficiency, Risk Reduction	12/31/2023				
5.	Review and update the submittal log and require the form to be completed for each project. Value added: Compliance, Risk Reduction	12/31/2023				
6.	Issue the Certificate of Completion in a timely manner. Value added: Compliance, Efficiency, Risk Reduction	12/31/2023				
	Priority 3					
7.	Review and replace the "Business Tax Registration" requirement in future agreements. Value added: Compliance, Risk Reduction	03/31/2024				

C. Background

Internal Audit has completed a contract compliance audit of the Water System Pipeline Management Program FY 2020-21 – Phase I Design-Build Agreement between the City of Glendale and W.A. Rasic Construction Company, Inc. (Design-Builder). The Water System Pipeline Management Program is an ongoing program, administered by the GWP Water Services Division, to replace the pipeline infrastructure of the City's water system to improve overall system performance and reliability. The program goals are to replace pipeline that has reached its useful life and to replace or install pipeline to improve system operations, fire flow performance at fire hydrants and water quality. The FY 2020-21 Project is for the design and construction of approximately 11,282 linear feet of 8-inch diameter ductile-iron water pipeline at various locations throughout the City of Glendale.

The Agreement between the City and the Design-Builder was executed on January 7, 2021. The Design-Builder agreed to achieve Substantial Completion of the Work in four hundred calendar days from the date of commencement specified in the City's Notice to Proceed and to achieve final Completion of the Work within thirty calendar days after Substantial Completion. Date of Commencement was established as February 18, 2021, the Required Date of Substantial Completion was March 24, 2022, and the Actual Date of Substantial Completion was July 20, 2022. As of the report date, the Certificate of Substantial Completion has not been issued by the City of Glendale to the Design-Builder and the Agreement has not been closed pending the final progress payment.

D. Objective, Scope and Methodology

The objective of this audit is to determine whether the City has established adequate controls to ensure the Agreement provisions are properly administered by GWP Water and followed by the Design-Builder.

The scope of the audit covered the period of February 18, 2021 to December 31, 2022.

In order to accomplish the audit objective, Internal Audit performed the following:

- Interviewed GWP Water personnel regarding the Agreement and corresponding processes.
- Reviewed the Agreement between the City and the Design-Builder, including the Request for Proposal to identify Agreement provisions.
- Conducted detailed testing of the invoices received from the Design-Builder to
 ensure mathematical accuracy, payment agrees to the invoiced amount,
 cumulative payments did not exceed the Agreement total, and that the expenses
 were recorded to the appropriate general ledger account.

- Conducted detailed testing of extra work performed to ensure that the change order requests and change orders met the allowable criteria established within the Agreement and were properly approved in a timely manner.
- Conducted detailed testing of the required submittals to ensure that they were received in a complete and timely manner.

As a result of these audit procedures performed, seven observations were identified and are detailed in the Observations, Recommendations, and Management Responses Matrix beginning on the following page.

E. Observations, Recommendations, & Management Responses Matrix

Ref	Observation	Recommendation	Management Response
		Recommendation	management Response
1.	Change Orders		
Priority 2	According to RFP Article 6.1.1, Owner may authorize changes in the work consisting of additions, deletions, or other revisions, with the contract sum and contract time by change order. Water Engineering Project Management Handbook, Section I.11 states that extra work reports and change orders should be prepared as needed, not remain unresolved for more than two weeks, be approved by the General Manager of GWP when amounts are within the approved contingency, and be converted to a change order within three weeks. According to the GWP Management, a two-week turnaround time for change orders is too short and unreasonable to employ or comply with. In practice, a "Field Directive" is used to direct the Vendor to perform extra work prior to issuing a change order and states that a formal change order will be issued at a later date. Two change order requests, for work completed as late as September 2022, have not been documented in a change	the following: 1. Issue change orders in a timely manner and document the scope change, any adjustment in the contract sum and/or contract time. 2. Evaluate the identified discrepancies between the current practice and the Water Engineering Project Management Handbook and/or Agreement terms and update the Handbook and future contract language as appropriate.	Agreed and will implement by December 31, 2023.

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Ref	Observation	Recommendation	Management Response
Nei I	order or approved for additional cost or days by the General Manager of GWP. According to GWP Management, a verbal agreement was made with the Design-Builder to only process one change order at the end of the project that would include a credit for the differential cost between slurry and native compacted backfill. The Design-Builder has not provided the data necessary for the City to compute the credit amount to be included in the change order. Without a change order that includes additional days, the project was completed 117 calendar days after the required substantial completion date and is potentially subject to \$210,600 in liquidated damages that could be used to pay for related expenses such as third-party inspector costs.	Recommendation	Mariagement Response

		Recommendation	Management Response	
2.	Design-Builder's Proposal/Change Order Request – Content			
Priority 2	RFP Section 6.7 regarding Owner Originated Proposal Request states that (1) a Design-Builder's proposal shall include an analysis of impacts to cost and time, if any, to perform additional work, or delete Work, as applicable, including the effects and impacts, if any, on unchanged Work, estimates of costs and (2) if the Owner desires that the proposed change be performed, the Work shall be authorized according to the Change Order or Unilateral Change Order procedures. A review of the two GWP Water originated proposal requests that resulted in work performed identified that the cost impact was included, but time impact was not specified by the Design-Builder on their proposals. According to the GWP Management, the time impact for the two extra work items was one and four days. Instead of asking the Design-Builder to re-issue the change order request, the four-day time impact was included in the field directive.	On a going forward basis, GWP Water management will enforce the requirement that the Design-Builder's proposals include the impacts to time. This should be documented in the Water Engineering Project Management Handbook.	Agreed and will implement by December 31, 2023.	

Ref	Observation	Recommendation	Management Response
3.	Design-Builder's Proposal/Change Ord	der Request – Allowable Markups	
Priority 2	RFP Section 6.6.6 states that if any one scope change involves both Extra Work and deleted work in the same portion of the Work and the additive allowable costs exceed the deductive allowable costs, the Allowable Markups on the Extra Work will be only the difference between the two amounts. Based on a review of the GWP Water originated proposal requests, it was noted that for one proposal the 7% allowable markup was calculated based on the subcontractor's extra work and not calculated on the difference between the extra work and deleted work as required.	GWP Water management include contract change order request review procedures within the Water Engineering Project Management Handbook. These procedures should include, but not be limited to, the requirement that Design-Builder's proposals/change order requests calculate the Allowable Markups on the difference between the Extra Work and deleted work on a going-forward basis.	Agreed and will implement by December 31, 2023.

Ref	Observation	Recommendation	Management Response
4.	Monthly Progress Payments		
	A detailed review of the monthly progress payments identified the following:	GWP Water management perform the following:	Agreed and will implement by December 31, 2023.
Priority 2	 Solid Waste Disposal and Diversion forms and supporting documents were not submitted as required by RFP Section 16.3. The Agreement does not specify the acceptable recyclers and/or disposal sites and there are no procedures established for the City's internal processing of the submitted forms. Per Agreement Section 5.1.5, the Schedule of Values shall show Design-Builder performed Work, Subcontractor performed Work (by Subcontractor name and trade), Change Orders and such other categories of cost designated by City on separate line items. However, the Schedule of Values does not show separate line items for Subcontractor performed Work by Subcontractor name and trade as required. Certified payroll records were not submitted with each progress payment as required by RFP Section 7.3.1.7. 	 Require the Design-Builder to submit the form and supporting documents. Work with the City Attorney's Office and Public Works to determine if future agreements should specify or reference the acceptable recyclers and/or disposal sites. Additionally, work with Public Works to determine the submission frequency, deadlines, and the proper recipient of the Solid Waste Disposal and Diversion forms. Review Section 5.1.5 with the City Attorney's Office to determine whether this requirement is applicable to this type of contract and should require Design-Builder separately list Subcontractor performed Work by name and trade and Change Order costs within the Schedule of Values on a going forward basis. Require certified payroll records with each progress payment. 	

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Ref	Observation	Recommendation	Management Response		
5.	Project Submittals				
Priority 2	GWP Water has created a Submittals Log to track all required submittals per RFP Detailed Specifications, Section 41. Upon review, the following were noted: 1. 7 items were not received, including Chlorination Emergency Response Plan, DBE's Daily Work Report, Project Schedule Update, Certified Payroll, Payroll Certification Letter, Certification of Fringe Benefits Paid, and Submission of "Summary of Solid Waste Disposal and Diversion" form. 2. Submittals required to be provided within 14 days after the Date of Commencement were not provided timely. According to the GWP Management, 14 days is not reasonable for design-build type of project, but more applicable for design-bid-build projects.	GWP Water management review the missing submittals and required timelines, identify any submittals that should be removed from the Water Engineering Project Management Handbook and/or future agreement based on project type, and obtain those that remain applicable for project closure.	Agreed and will implement by December 31, 2023.		

Ref	Observation	Recommendation	Management Response
6.	Certificate of Substantial Completion		
Priority 2	The Certificate of Substantial Completion for the Water System Pipeline Management Program FY 2020-21 project that reached substantial completion as of July 20, 2022 has not been issued.	GWP Water management perform a periodic review of the project schedule and ensure that the Certificate of Substantial Completion is filed timely.	Agreed and will implement by December 31, 2023.
7.	Business Tax Registration		
Priority 3	Agreement Section 6.1.3 requires the Design-Builder and all Subcontractors to obtain a "Business Tax Registration" from the City of Glendale Permits Services prior to commencement of Work. However, the City does not have a "Business Tax Registration".	GWP Water management work with Community Development Department and the City Attorney's Office to review and update the Design-Build agreement as appropriate.	Agreed and will implement by March 31, 2024.

Appendix 1: Definitions of Priority Rankings and Value-Added Categories

Definitions of Priority Rankings

The priority rankings are assigned by internal auditors based on their professional judgment. They are also agreed to by management based on their evaluation of the alignment with the strategic goals, priorities and available resources. A timeline has been established based on each priority ranking:

- a. **PRIORITY 1** Critical control weakness that exposes the City to a high degree of combined risks. Priority 1 recommendations should be implemented within **3 months** from the first day of the month following report issuance or sooner if so directed.
- b. **PRIORITY 2** Less than critical control weakness that exposes the City to a moderate degree of combined risks. Priority 2 recommendations should be implemented within **6 months** from the first day of the month following the report issuance or sooner if so directed.
- c. **PRIORITY 3** Opportunity for good or better practice for improved efficiency or reduce exposure to combined risks. Priority 3 recommendations should be implemented within **9 months** from the first day of the month following the report issuance or sooner if so directed.

Definitions of Value-Added Categories

The four value-added impact categories are defined based on their impact from the audit recommendations:

- a. **COMPLIANCE** adherence to laws, regulations, policies, procedures, contracts, or other requirements.
- b. **COST SAVING** lower the costs related to conducting City business.
- c. **EFFICIENCY** ability to avoid wasting resources (money or time) in achieving goals.
- d. **RISK REDUCTION** lower the risks related to strategic, financial, operations and compliance.