

AGREEMENT AMENDMENT NO.1
WPCF PROCESS AIR IMPROVEMENTS

This Amendment No. 1 to Agreement WPCF process air improvements projects("Amendment") is effective as of the date last signed below ("Amendment No.1") and is entered into by and between the City of Las Vegas, Nevada, a municipal corporation and political subdivision of the State of Nevada ("CITY") and Jacobs Engineering Group ("CONSULTANT").

RECITALS

WHEREAS, the CITY and CONSULTANT entered that certain Process Air Improvements Project, # 190258-DD, effective July 9, 2019 (the "Agreement").

WHEREAS, the parties may amend the Agreement pursuant to Section Three (Changes to Consultant's Services) of the Agreement.

WHEREAS, CITY and CONSULTANT now wish to amend the terms of the Agreement as more particularly set forth below.

WHEREAS, the parties wish to amend the Agreement to add additional tasks to the Scope of Services.

In consideration of the above recitals, the mutual provisions contained herein and other good and valuable consideration, the receipt and sufficiency of which the parties acknowledge, CITY and CONSULTANT agree as follows:

1. The numbered paragraph 1.01 of Section One (Consultant Responsibilities) of the Agreement is hereby deleted in its entirety and replaced with the following:

"Description of Consultant's Services. For the compensation set forth in Section Seven, the Consultant agrees to perform the basic services set forth in the Scope of Services Exhibit "A" and Exhibit "A-I" attached hereto and incorporated herein as part of this Contract and, if so requested, the additional services set forth in the Additional Compensation, Exhibit "E" attached hereto and incorporated herein as a part of this Contract and to provide the submittals described in the Required Submittals Exhibit "B" attached hereto."

2. A new Exhibit A-I, "Additional Scope of Services," is added to the Agreement and attached hereto as Attachment No. 1.
3. Exhibit "D" Fee Breakdown is hereby amended total compensation of the entire Agreement referenced herein by \$903,856 from \$1,451,732 to \$2,355,588. Exhibit D-IA Amendment No. 1 Basic Service Fee Breakdown is added to the Agreement and attached hereto as Attachment No. 2.

All other Terms of Payment, Obligations of the Engineer, Obligations of the Owner, and General Legal Provisions of the original AGREEMENT remain in effect for this Amendment.

IN WITNESS WHEREOF, the CITY has made and executed this Agreement and caused the seal of said CITY to be affixed hereto, and the CONSULTANT has hereinto set his hand this day and year written.

CITY OF LAS VEGAS

Tonya Kemble

Manager, Purchasing & Contracts

Date

ATTEST:

LuAnn D. Holmes, MMC

City Clerk

Date

APPROVED AS TO FORM:

DocuSigned by:

Timothy J. Gerwein

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Deputy City Attorney

2/8/2023 | 3:50 PM PST

Date

Jacobs Engineering Group

DocuSigned by:

Ken Gilbreth

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Ken Gilbreth, Vice President

2/9/2023 | 10:14 AM PST

Date

“Exhibit A-1: Additional Scope of Services”

This Scope of Work is for Amendment to the Prime Design Services Agreement (Agreement No. 190258-DD, dated July 9, 2019) between the City of Las Vegas (CITY) and Jacobs Engineering Group (CONSULTANT) for design services for the WPCF Process Air Improvements Project. Section 4 in the Agreement is an Allowance for Additional Services to be used only upon authorization by the CITY.

Project Description

The City is currently in the process of completing the WPCF Process Air Improvements Project. The CITY has requested CONSULTANT to provide design services for additional items covered under Amendment No. 1. The objective of the works are the following:

- Provide a solution for compressed air piping to blowers that are currently functioning incorrectly
- Provide a specification for shade structures to cover 19 MV pad-mount transformers and 8 G&W switchgear control cabinets located across the site
- Upgrade existing G&W 12.47 kV padmount switchgear with new 600 A bushings.
- New time-current coordination study
- Introduce a 95% submittal review hold-point (additional round of review) prior to proceeding to 100% design
- Provide Services During Construction

Scope

Task 1: Project Management

Provide project management responsibilities for supervision of design disciplines, including interfacing with CITY to ensure the design meets operational requirements.

Task 2: Field Investigations

CONSULTANT will conduct a field investigation to understand the current condition of the corrosion control system to determine whether the system is to be replaced.

Task 3: Design works

CONSULTANT will undertake the following design works in two stages (70% and 100%):

Task 3.1: Compressed Air works

CONSULTANT will provide a design to rectify the current compressed air piping feeding the blowers by providing the following

- Addition of a refrigerated air dryer in the Blower Building
- Provide a sloped installation with the correct orientation of branches.
- Addition of condensate collection with auto-drain at the low point of piping.

Task 3.2: Shade Structures for Transformers and Switchgear

CONSULTANT will provide a performance specification to provide shade structures to 19 transformers and 8 Switchgears located across the site based on the DCARD project provided by the CITY.

Task 4: 95% Submittal Review

CONSULTANT and CITY representatives will conduct a submittal review of the entire project before proceeding to 100% design.

Task 5: Services During Construction

The CONSULTANT will provide services during construction (SDC) as defined below.

Subtask 5.1: Project Management

- **Project Administration.** As required by the CITY, the CONSULTANT will provide project instructions, work planning, scheduling, budget control, records management, communication protocols, and related functions for managing the CONSULTANT's Project Team. The CONSULTANT will prepare monthly invoices and project status reports.
- **Communications.** As required by the CITY, the CONSULTANT will provide routine communications with the City's Construction Manager. The CONSULTANT will log all communications and provide the CITY's Construction Manager with a copy of the log. All formal communications will only be with the Construction Manager.
- **Coordination.** As required by the CITY, the CONSULTANT will coordinate periodic site visits by design team members to review the progress and general quality of the work. The CONSULTANT will coordinate the activities of its sub-consultants.
- **Kick-Off Meeting.** As required by the CITY, the CONSULTANT will prepare for and attend a project kick-off meeting with the CITY. The purpose of this meeting will be to review roles and responsibilities, procedures, record keeping, and other information pertinent to the performance of the work. The CITY will prepare the minutes of this meeting and distribute them to attendees.
- **Preconstruction Conference.** As required by the CITY, the CONSULTANT will attend the preconstruction conference with the Contractor and the OWNER. The OWNER will prepare materials for this meeting, lead it, and prepare meeting minutes.

Subtask 5.2: Submittal Review

- **Document Tracking.** As required by the CITY, the CONSULTANT will receive, log, distribute, track and return shop drawings, other submittals, and documents from the CITY.
- **Shop Drawing Review.** As required by the CITY, the CONSULTANT will review the Contractor's shop drawings, samples, and other submittals for general conformance with the design concept and the requirements of the Contract Documents. Such review shall not relieve the Contractor from its responsibility for performance in accordance with the contract for construction, nor is such review a guarantee that the work covered by the shop drawings, samples, and submittals is free of errors, inconsistencies, or omissions. For the purposes of estimating the cost and level of effort, it is assumed that 30 original submittals and 15 re-submittals will be reviewed.
- **Certifications, O&M Manuals, and Record Documents.** As required by the CITY, the CONSULTANT will review these documents for compliance with the Contract Documents. One hard copy set of final O&M Manuals will be assembled and submitted to the CITY's Construction Manager before the Final Completion of the work.

- **Schedules and Other Administrative Submittals.** As required by the CITY, the CITY will receive and track the submission of schedules and other administrative submittals. The CITY's Construction Manager will be responsible for monitoring progress schedules and comparing them with the schedule of submittal submissions and schedule of values to verify conformance with the requirements of the Contract Documents. However, as directed by the CITY, the CONSULTANT may perform a detailed schedule analysis, and recommendations for Contractor action will be made to the CITY accordingly. The CITY shall perform communication of required actions to the Contractor.

Subtask 5.3: Modifications (Change Orders)

- **Substitution of Materials and Equipment.** As required by the CITY, the CONSULTANT will assist the CITY in reviewing and responding to the Contractor's requests for substitution of materials and equipment. CONSULTANT will review such requests and advise the CITY on the acceptability of such substitutions.
- **OWNER Initiated Changes.** As required by the CITY, the CONSULTANT will assist the CITY in reviewing and issuing CITY-initiated changes. Design and engineering services to prepare drawings, specifications, and other information for CITY-initiated change shall be considered an Additional Service. It shall entitle the CONSULTANT to additional compensation for the design services of changes.
- **Contractor Initiated Changes.** As required by the CITY, the CONSULTANT will assist the CITY in reviewing Contractor initiated changes to the Construction Contract. The CONSULTANT will make recommendations to the CITY regarding the acceptability of the Contractor's request and assist the CITY, if requested, in negotiating the requested change. Upon agreement and approval, if requested, the CONSULTANT will assist the CITY in preparing documentation for the change order. The CITY will prepare the actual change order to the Construction Contract.

Subtask 5.4: RFIs and Clarifications

- As required by the CITY, the CONSULTANT will review the Contractor's requests for information (RFI's) or clarification of the Contract for Construction forwarded to the CONSULTANT by the CITY's Construction Manager. The CONSULTANT will coordinate such review with the design team and the OWNER as appropriate. The CONSULTANT will coordinate and issue responses to the requests and log and track the Contractor's requests. For the purposes of estimating the cost, it is assumed that 15 RFIs will be reviewed and responses provided.

Subtask 5.5: Site Inspections

- **Specialty Inspections.** As required by the CITY, the CITY's Construction Manager will provide day-to-day and specialty inspections that may be required for the PROJECT. If the CITY requests, the CONSULTANT will provide on-site specialty inspections for work such as electrical, mechanical equipment placement, structures, architectural, HVAC, I&C, site civil.
- **Mechanical Equipment Factory Performance Testing.** As required by the CITY, the CONSULTANT will witness the factory testing of major mechanical equipment. It is anticipated that factory performance testing will be performed on major equipment such as blowers.
- **I&C Equipment Factory/Performance Testing.** As required by the CITY, the CONSULTANT will participate in the factory test, operational readiness test, and performance acceptance testing of I&C equipment.
- **Inspection for Substantial Completion.** As required by the CITY, the CONSULTANT will conduct an inspection in the company of the CITY's Construction Manager and Contractor to determine Substantial Completion of the Project in accordance with the Contract Documents. The CONSULTANT will prepare a list of items to be completed or corrected and assist the CITY in preparing a punch list. This will also include the instrumentation and control system punch lists based on observations during on-site testing.

Subtask 5.6: Construction Meetings

- As required by the CITY, the CONSULTANT will attend routine construction progress meetings with the CITY and the Contractor. The CONSULTANT will also attend other meetings as may be required to review particular issues.

Subtask 5.7: Health and Safety

CONSULTANT will manage the health, safety, and environmental activities of its staff and the staff of its sub-consultants to achieve compliance with applicable health and safety laws and regulations.

CONSULTANT will coordinate its health, safety, and environmental program with the responsibilities for health, safety, and environmental compliance specified in the Contract for Construction. The CONSULTANT will coordinate with responsible parties to correct conditions that do not meet applicable federal, state, and local occupational safety and health laws and regulations, when such conditions expose CONSULTANT staff, or staff of CONSULTANT sub-consultants, to unsafe conditions.

CONSULTANT will notify affected personnel of any site conditions posing imminent danger to them that the CONSULTANT observes.

The CONSULTANT is not responsible for the health or safety precautions of construction workers. CONSULTANT is not responsible for the Contractor's compliance with the health and safety requirements in the construction contract or with federal, state, and local occupational safety and health laws and regulations.

Task 6: Start-up Support

The CONSULTANT will assist in planning and executing start-up activities, specifically the following tasks:

- Participate in start-up planning meetings
- Review performance, functional test plans, and start-up procedures
- Witness manufacturer equipment testing on-site or at the factory
- Witness on-site performance and functional testing
- Assist in troubleshooting

Task 7: Bushings Replacement

The CONSULTANT will provide a design to upgrade the existing four (4) G&W 12.47 kV padmount switchgears; bushings to be upgraded from 200 A to 600 A which will require the purchase of one (1) new padmount switchgear (3-ways) and one (1) new padmount switchgear (4-ways) in order to swap existing padmount switchgear for shipment and upgrading in G&W's factory facility. There are currently four (4) four (4) 4-way G&W switches associated with the Process Air improvement project that would need to be upgraded. The swap out will consist of the removal of one G&W switch at a time with a G&W switch that has upgraded bushings. When the last two switch types are upgraded, they will be returned back to CLV WPCF and held as spare in the facility's warehouse. Upgrading the bushings from 200 A to 600 A will require the 12.47 kV cables to be upgraded from approximately 300 A capacity to a minimum of 600 A capacity.

Task 8: Time Coordination Study

The CONSULTANT will conduct a new time-current coordination study of the City's 12.47 MV network. The network will need to be reassessed by a Protection Engineer (ECI) to develop new digital SEL overcurrent relay settings for all feeder relays in the power distribution building and all digital SEL overcurrent relays will be engineered to the new 12.47 kV power system capacities. Construction support will be provided during commissioning to set, test, and oversee re-energization of 12.47 kV circuits.

Assumptions

- The standard of care applicable to the CONSULTANT's services will be the degree of skill and diligence normally employed by professional engineers or Jacobs performing the same or similar Services at the time said services are performed. The CONSULTANT will reperform any services not meeting this standard without additional compensation.
- CONSULTANT will reasonably rely on the accuracy, timeliness, and completeness of the information provided by CLV
- CONSULTANT assumes there will be no changes to the current electrical and control philosophy
- CONSULTANT will specify all new installations be coated steel
- CONSULTANT will limit compressed air design improvements to the blower system
- CITY's preferred contractor will lead, coordinate and perform start-up support; the CONSULTANT will be called upon in a support role to review and participate in meetings

**EXHIBIT D-1A FEE
BREAKDOWN**

	Total
TASKS	\$
Task 1 - Project Management	\$ 5,587
Task 2 Field Investigation	\$ 1,296
Expense	\$ 650
Task 3 - Design	
Compressed Air Service Improvements	\$ 11,900
Switchgear shade structures	\$ 11,031
Task 4 - 95% Submittal Review	
	\$ 8,952
Task 5 - Services During Construction *	\$ 590,660
Task 6 - Start-up Support **	\$ 151,330
Task 7 - Bushings	\$ 13,652
Task 8 - Time Coordination Study**	\$ 108,800
TOTAL - Current Amendment	\$ 903,856