



**AMENDMENT NO. 1 TO
DESIGN SERVICES AGREEMENT**

**Water Reclamation Facility Improvements Phase 3
Project No. WW2401.201**

Council Date: September 12, 2024

THIS AMENDMENT NO. 1 ("Amendment No. 1") to the professional services agreement dated March 19, 2024, (the "Agreement") is made by and between the City of Chandler, an Arizona municipal corporation, ("City") and **Wilson Engineers, LLC.**, an Arizona limited liability company, ("Consultant"), on this ____ day of _____, 2024, ("Effective Date" by Clerk). (City and Consultant may individually be referred to as "Party" and collectively referred to as "Parties").

RECITALS

- A. The Parties entered into the Agreement for **Design Services** ("Services") for the Water Reclamation Facility Improvements Phase 3 project.
- B. The Parties have determined that it is necessary and desirable for the Consultant to perform services for the City under the terms and conditions set forth in this Amendment No. 1 and the Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and mutual promises contained in the Agreement and this Amendment No. 1, the Parties agree to amend and modify the Agreement as follows.

SECTION I – CONSULTANT’S SERVICES

The Consultant’s Services are modified as described in the Exhibit "A" attached to and made part of this amendment by reference.

SECTION II – PERIOD OF SERVICE

The Period of Service remains the same as described in the Agreement.

SECTION III – PAYMENT OF COMPENSATION AND FEES

The Fees are increased by \$1,027,795.60 and will be payable in accordance with Exhibit "B" attached to and made part of this amendment by reference, for a revised total not to exceed \$3,601,875.60.

SECTION IV – CONFLICT AMONG DOCUMENTS

The Agreement, this amendment, and any previous amendments constitute the complete agreement between the Parties concerning the subject matter of the Agreement and replace any prior oral or written communications between the Parties. If a conflict or ambiguity arises between the Agreement and this amendment, the instrument in the following order prevails and controls: (1) this amendment; (2) any previous Amendments from most recent to oldest; and (3) the Agreement.

SIGNATURE PAGE TO FOLLOW

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment No. 1 to be duly executed. Each Party warrants and represents that its respective signatories whose signatures appear below have been and are on the date of signature duly authorized to execute this Amendment No. 1.

"CITY" CITY OF CHANDLER

"CONSULTANT"

Wilson Engineers, LLC.

MAYOR

 8/14/24
Signature Date

RECOMMENDED BY:

Uday Kumar Gandhe
Print Name



Daniel Haskins, P.E.
CIP City Engineer

Principal
Title

APPROVED AS TO FORM:

Uday.gandhe@wilson-engineers.com
Signer Email Address



City Attorney



ATTEST:

City Clerk

Seal

Amendment No. 1 (cont.)
Project No. WW2401.201

These changes result in the following adjustments of Agreement amount and/or time:

Amendment authorized by Owner name: Josef Kennis		Date: 8/8/2024
Consultant email: srengaraj@wilson-engineers.com		
Original Agreement amount:	\$2,574,080	
Previous Amendment(s) total:	\$0	
Last Agreement amount approved by Council:	\$2,574,080	
This Amendment:	\$1,027,795.60	
This Amendment + previous Amendment(s) not approved by Council total:	\$1,027,795.60	
Revised Agreement total:	\$3,601,875,60	
Council Approval Required (yes indicates approval required)	Yes	No
Amendment(s) total over \$100,000:	☒	☐
Amendment(s) total causes Agreement to exceed \$100,000:	☒	☐
Agreement Time		
Agreement time prior to this Amendment (including previous amendments):	<u>545</u> Calendar Days	
Net change resulting from this Amendment:	<u>0</u> Calendar Days	
Revised Agreement time (including this Amendment):	<u>545</u> Calendar Days	
Council Approval (if applicable)		
Council Approval Date: <u>September 12, 2024</u>		

cc: Project Manager, Consultant, Owner, File

EXHIBIT A

SCOPE OF WORK

**WATER RECLAMATION FACILITIES
PHASE 3 IMPROVEMENTS PROJECT
SCOPE OF SERVICES
CITY PROJECT NUMBER: WW 2401-201
August 09, 2024**

The City of Chandler (CITY) selected Wilson Engineers (ENGINEER) to complete the Water Reclamation Facilities Improvements design at both the Airport and the Ocotillo WRFs to replace and rehabilitate existing processes. As part of the first phase of this project effort, the ENGINEER has completed the assessment of treatment facilities and identified the rehabilitation and replacement work needed for operational improvements and rehabilitation of existing infrastructure at both facilities. The original project scope included some already known rehabilitation and improvements items. However, as a result of the current assessment, additional items that were previously not identified or anticipated earlier would need to be included in the currently ongoing project. The following list briefly identifies the additional items.

1. Process Air System upgrades at AWRF to replace all blowers and flow control valves with automatic control
2. AWRF Administration Building modifications
3. Vector Truck Dump Station at AWRF
4. 10,000 gallon fuel storage tank each at AWRF and OWRF

The scope of services for this phase is identified in the following paragraphs.

SCOPE OF SERVICES

The ENGINEER will complete the following scope for Design Phase of the project. Subsequent phases of work, if any, such as construction-related services for the Project will be provided under separate contracts.

TASK 1 - PROJECT MANAGEMENT

The ENGINEER will perform various project management and monitoring activities throughout the project, as delineated in the following tasks and sub-tasks. The ENGINEER shall prepare and submit regular monthly invoices and shall include a summary of the work completed for each billing cycle. The ENGINEER shall prepare authorization for Use of Allowance and obtain CITY's approval prior to beginning of any allowance work.

Prepare and distribute agenda and minutes for each meeting. Agenda will be submitted to the CITY at least two (2) days prior to the meeting. Minutes will be submitted to the CITY no more than five (5) days following each meeting.

Project Meetings: Conduct additional periodic project meetings with CITY representatives throughout the Project to keep the CITY informed of the project progress and obtain input and direction as required. The meeting objectives will include the presentation of alternative evaluations for CITY review and approval; results from data collection, and other outstanding project issues. The anticipated additional number of periodic meetings during this phase shall be six.

Project Workshops: Conduct an additional coordination workshop with CITY and other project stakeholders as necessary to obtain input and feedback for the Airport WRF Administration Building modifications and dump station. This workshop will facilitate interaction with CITY operations and maintenance (O&M) staff regarding the building layout and to identify current and future needs. This workshop will assist the Project Architect to move forward with the detailed modifications to the building.

TASK 200- PRELIMINARY DESIGN DEVELOPMENT

Preliminary Design Report (PDR): The ENGINEER will provide summary description for improvements of processes or systems that have been added to the project. The ENGINEER shall advance the design concepts and provide preliminary design criteria, document the preliminary alternatives, schematics, layouts, and criteria developed and evaluated in previous tasks into an overall combined Preliminary Design Report for both facilities. The PDR for the additional items shall include the following elements:

- Compilation of the anticipated preliminary design criteria for the recommended improvements and supporting facilities, compiled from the preliminary criteria developed under previous tasks.
- Preparation of a budgetary-level preliminary opinion of probable construction cost with project-related administrative, general conditions, bonds, insurance and other indirect costs (including design and construction management related fees) will be included to determine a total project cost estimate.

Preliminary Design Report will identify and finalize key design decisions to transition into detailed design. The draft PDR with additional items will be submitted to CITY for review. Along with the PDR, 30% design drawings will also be submitted for City's review. Upon receipt of comments, the ENGINEER will make appropriate revisions and submit a final PDR to the CITY.

Deliverables: Draft and Final Preliminary Design Report (6 copies each and electronic copy)

Drainage Reports: The ENGINEER will prepare a Drainage Report and preliminary Grading and Drainage Plan to document the incidental site drainage changes for this scope of work around the dump station. The Drainage Report will be submitted to the CITY along with the Agency Review submittal. The report will be included as an addendum to the PDR.

Deliverables: Drainage Report (electronic copies)

Develop Process Control Descriptions: The process air system improvements at AWRF requires updated or new process control descriptions. The ENGINEER will coordinate and develop process control descriptions prior to the 30% design and will include them in the PDR. Once the descriptions are reviewed by the City and finalized, they will be part of the Project Specifications.

Deliverables: Process Control Descriptions will be part of PDR at 30% and Project Specifications from 60% onwards (electronic copies)

3. DETAILED DESIGN DEVELOPMENT

The ENGINEER will prepare detailed construction documents for the Project. In the event the City determines to select a CMAR for the project, the documents will be used by the CMAR to prepare the construction cost model and corresponding GMP, project schedule, equipment and subcontractor procurement; as well as by the regulatory agencies to issues applicable permits for the construction and operation of the Project. Alternatively, the detailed design documents can be used for procuring the contractor using the bid method.

Preparation of construction drawings and technical specifications will be as follows:

1. Drafting and CADD Standards: The organization and preparation of construction drawings shall be in accordance with the City drafting guidelines.
2. Technical Specifications: Technical specifications shall be prepared using the City's Standard Specifications Guide Documents, Divisions 1 through 17.

The Engineer will prepare progress submittal packages when the design, drawings, and specifications are considered 30, 60, and 90 percent (%) complete as described in this scope of services. Two (2) copies of the progress submittal packages will be included with each submittal for City review. The level of detail on the drawings in each progress submittal should be as given below.

30% Progress Submittal: These level of drawings are used to convey information about the Project's overall appearance and configuration to the City and other Project stakeholders. These drawings are not intended for construction. The lists of drawings and specifications for each discipline shall be ready for

City review. The 30% drawings shall include Civil, Structural/Architectural, Electrical and Instrumentation Drawings.

Process and Instrumentation Devices (P&ID) should be developed to a degree which depicts the following:

- General instrumentation and control philosophy.
- Type of instrumentation.
- All primary and secondary control devices.
- Process area designation, drawing and equipment numbering system identified.

Preliminary Process Control strategies should be complete. Process control strategies shall be discussed and reviewed with the plant personnel at a project workshop prior to the 30% submittal. The draft process control strategies shall be submitted to the City prior to the meeting to provide sufficient time for City staff review. No specification submittal will be required at this time. The 30% Progress Submittal will be made along with the PDR discussed in Task 200 above.

Deliverables: Half size drawings (6 copies and a pdf copy). General instrumentation philosophy document and conceptual process overview schematic.

60% Progress Submittal: The drawings and specifications for each discipline are coordinated and have progressed where the design intent is established and must show the work in sufficient detail that a contractor can recognize elements and requirements for construction. All comments from the 30% submittal are satisfactorily addressed. The set of drawings shall include a cover sheet and an index sheet, Civil, Architectural, Structural, Mechanical, Electrical and Instrumentation Drawings. Draft Specifications for major equipment shall be included in the submittal.

The ENGINEER shall finalize the process control narratives for the additional elements at the WRFs along with all other design items, prior to completion of the 60% detailed design documents and after a detailed review of the narratives with the City staff.

Deliverables: Half size drawings (6 copies and a pdf copy). Draft specifications for major equipment for the project along with a list of equipment vendors for City's review. Process Control Descriptions for all processes that are included in the project including descriptions for any new processes that are added.

90% Progress Submittal (Agency Review Set): Drawings and details in all disciplines should be complete for all the additional design elements along with the other design items. Specifications should be essentially complete. Design calculations in all disciplines shall be essentially complete and checked. Comments on design, drawings and specifications from previous reviews must have appropriate responses before the 90% progress submittal is submitted. Comments from both the 30 and 60 percent

reviews by City staff, any constructability reviews, and review comments from regulatory agencies must have appropriate responses or actions.

Deliverables: Half size drawings (6 copies and a pdf copy), 3 full-size copies to be submitted to agencies for review.

Final (100%) Contract Documents: Drawings and specifications should be complete and accepted by the City. All construction documents should be complete and ready for construction pricing of the work.

Deliverables: Half size drawings (6 copies, 1 full size copy and pdf and AutoCAD files), 1 full-size copy.

Maintenance of Plant Operations (MOPOs): The ENGINEER shall identify additional preliminary MOPO list that will identify areas of construction of additional facilities that interfaces with the existing facilities. The additional preliminary MOPO list shall be added to the other MOPO list along with the 30% Submittal and included in the preliminary design report. The preliminary MOPO list shall be used as the basis for development of the MOPO activities during the detailed design phase.

MOPO development shall occur during preparation of drawings and specifications and the ENGINEER's will include the following:

- Assist CMAR in developing additional draft MOPOs to be added to the current design elements list with input from City operation and maintenance staff.
- Incorporate additional MOPO requirements into the drawings and specifications.
- Participate in a site walk-through with CMAR and the City operation and maintenance staff. Assist the CMAR in determining the MOPO durations, constraints, and shared responsibilities for MOPOs.
- Review MOPOs prepared by the CMAR, incorporate the MOPOs in the specifications.

The MOPO list for City review will be included in the 60% and 90% Submittals. The final MOPOs developed by the CMAR must have City approval and will be included in the construction documents with the final submittal.

4. PERMITTING

The ENGINEER will perform permitting coordination activities throughout the Design Phase, as delineated in the following tasks and sub-tasks. Specific permits, plans and reviews anticipated under this Project include:

- City of Chandler- Building Permit (and Building Plan Review)
- City of Chandler- Civil Plan Review
- MCESD- Approval to Construct

- ADEQ Minor Amendment Application

5. PROJECT DELIVERY METHOD ASSISTANCE

The ENGINEER will assist the CITY with the CMAR project delivery method. The scope of work for this task is identified below.

CMAR Coordination: In the event the City's chooses to use the Construction Manager at Risk project delivery method, the CM at Risk will be contracted to provide design phase services and then during construction will provide all services required of a general contractor. The relationship between the CM at Risk and the Engineer is intended to be collaborative and proactive, both participating as advisors to the City during the design phase. The City wants to incorporate a contractor's perspective and input to the Project planning and design decisions and have the ability to select certain components of the Project for construction prior to full completion of design.

Design Phase services by the CM at Risk may include:

- Provide a conceptual and progressively more detailed cost model to confirm budgets and guide design decisions;
- Provide detailed independent cost estimating and knowledge of market conditions;
- Provide a construction management plan and schedule;
- Provide alternate systems evaluation and constructability studies;
- Provide long-lead procurement studies and possibly initiate procurement of long-lead items;
- Provide procurement services for selection of subcontractors and suppliers;
- Prepare the Guaranteed Maximum Price (GMP) for construction;

The Engineer's effort to coordinate with the CM at Risk will consist of:

- Solicit CM at Risk input during design development as appropriate;
- Provide information for cost estimating;
- Provide assistance with long-lead procurement activities;
- Evaluate alternative systems suggested by CM at Risk;
- Respond to constructability review comments;
- Attend subcontractor pre-selection meetings conduct by CM at Risk;
- Assist and review during GMP development;
- Perform GMP proposal review and prepare recommendation to City;
- Assist City with review of the subcontractor/supplier bid and selection process.

The City may request the CM at Risk to proceed with early construction of certain project features before full project design is complete and request a GMP for that portion of the work. The Engineer will prepare the appropriate construction documents for such work. This may include;

- Early Procurement of Long-Lead Equipment Items (items that may be included consists of: blowers, iris valves, and electrical equipment) to be identified by the Project Team.
- Balance of Work

In addition to coordination with the CMAR, attend meetings with the third party cost consultant and provide them with the project submittals to facilitate their review of CMAR's GMP. The ENGINEER will attend up to a total of four meetings with the cost consultant for two separate GMP packages.

NOTE: A parallel cost estimate will not be performed as the CITY intends to hire a third-party cost estimator for additional cost model and GMP validation.

6. Other Direct Costs

Geotechnical Investigation: The ENGINEER will perform a geotechnical investigation with assistance from sub-consultant, which will include the drilling and sampling of up to four (4) test borings to determine subsoil conditions and provide samples for laboratory testing. The ENGINEER will submit draft Geotechnical Investigation Report to the CITY for review. The ENGINEER will further coordinate and consult with geotechnical sub-consultant to obtain geotechnical design data for construction any new facilities. The geotechnical investigation is limited to the OWRF site (as no new structures are anticipated at the Airport WRF as part of this project).

The CMAR shall review the Geotechnical Investigation Report and supporting data, and coordinate any additional investigations that they may determine to be necessary to be borne directly by the CMAR.

Deliverables: Draft and Final Geotechnical Investigation Report (electronic copies)

Topographical Site Survey: The ENGINEER with assistance from a sub-consultant will perform a site topographical survey to document the current conditions and surface features of the area proposed for the dump station at AWRF, the fuel storage tanks at the AWRF and OWRF and incidental paving/grading. Site survey will be based on City of Chandler datum and will include existing spot elevations for use in developing new contours; location and establishment of perimeter property lines based on existing legal descriptions, available survey reviews, and existing and future right-of-ways; and identification of above-ground structures, other identified facilities, and existing trees. Site survey will also include identification of staked geotechnical borings and horizontal grid development for design.

Deliverables: Draft Site Topographical Maps (electronic copies)

HVAC Services: The ENGINEER will provide HVAC engineering services including structural drawings and specifications as required to support the preliminary and detailed design services for proposed improvements.

Deliverables: HVAC Drawings and Specifications (electronic copies)

Architectural Services: The ARCHITECT will provide architectural services including architectural drawings and specifications as required to support the preliminary and detailed design services for Administration Building modifications at the AWRF.

Additional Engineering Allowance: This allowance is included for any new scope of work that the City may desire to be added to the project. Use of this allowance requires prior approval from the City.

END OF SCOPE OF WORK

EXHIBIT B
FEE SCHEDULE

City of Chandler
WRFs Phase 3 Improvements Project - Contract Amendment 01
City Project No.: WW2401.201
EXHIBIT "B-1"
Cost Plus Reimbursible Per Task



<u>TASK DESCRIPTION</u>		<u>SUBTOTAL</u>
1. Project Management		\$ 48,590.00
Kick off Meeting	\$ -	
Project Meetings	\$ 27,760.00	
Project Workshops	\$ 20,830.00	
Project Schedule	\$ -	
2. Preliminary Design Development		\$ 97,740.00
Preliminary Design Report	\$ 75,940.00	
Drainage Reports	\$ 7,770.00	
Develop Process Control Descriptions	\$ 14,030.00	
3. Detailed Design Development		\$ 668,120.00
30% Progress Submittal	\$ 109,200.00	
60% Progress Submittal	\$ 176,860.00	
90% Progress Submittal (Agency Review Set)	\$ 267,330.00	
Final (100%) Contract Documents	\$ 95,390.00	
MOPOs	\$ 19,340.00	
4. Permitting		\$ 14,090.00
City Permitting	\$ 3,670.00	
MCESD Permitting	\$ 4,830.00	
ADEQ APP Coordination	\$ 5,590.00	
ADWR Coordination	\$ -	
5. Project Delivery Method Assistance		\$ 32,860.00
Coordination with CMAR	\$ 32,860.00	
6. Other Direct Costs		\$ 126,865.00
Geotechnical Investigation	\$ 10,000.00	
Topographical Site Survey	\$ 2,500.00	
Architectural Services	\$ 54,065.00	
HVAC Services	\$ 30,300.00	
Reimbursable Expenses (Permit Fees, Printing etc)		
Additional Engineering Allowance	\$ 30,000.00	
7. Owner's Allowance		\$ 39,530.60
TOTAL COST:		\$ 1,027,795.60

City of Chandler
WRFs Phase 3 Improvements Project - Contract Amendment 01
City Project No.: WW 2401.201
EXHIBIT "B-2"
Hours and Rates



	Principal	Sr. PM	Sr. PM (E/I, Str., Process)	Sr. Engr.	Project Engineer / Proj. Prof	Lead EI&C	CADD Technicians	Admin	< PROJECT ROLE
	Uday Gandhe	Sreeram R. Jaco K. Luis C.	Damien T. Tony L. Jason G. Chris Y. Scott L.	Katie G. Alex G. Sean Z. Vineet A.	Sydney A. Muthu K. Sai N. Yago Freire Channing A. Minhee P. Xavier G.	Elvin R. Sai C.	Kam C., Chase M. Amber A. Erin B. Calvin G.	Paulina D. Mikayla R.	< NAME OF PERSON
	\$ 265.00	\$ 245.00	\$ 225.00	\$ 190.00	\$ 145.00	\$ 175.00	\$ 125.00	\$ 95.00	< HOURLY RATES
TASK DESCRIPTION									TOTAL HOURS PER TASK
1. Project Management	8	16	28	76	104	8	32	14	286
Kickoff Meeting									0
Project Meetings	4	8	12	40	64	8	24	8	168
Project Workshops	4	8	16	36	40	0	8	6	118
Project Schedule									0
2. Preliminary Design Report	14	30	48	104	224	32	120	32	604
Preliminary Design Reports	12	24	36	80	160	32	100	24	468
Drainage Report	0	2	4	8	24	0	8	4	50
Develop Process Control Descriptions	2	4	8	16	40	0	12	4	86
3. Detailed Design Development	36	160	288	680	1408	338	1178	156	4244
30% Progress Submittal	8	32	60	120	240	40	160	12	672
60% Progress Submittal	8	32	80	160	360	100	360	40	1140
90% Progress Submittal (Agency Review Set)	12	60	100	260	560	150	500	80	1722
Final (100%) Contract Documents	4	24	40	120	200	40	150	20	598
MOPOs	4	12	8	20	48	8	8	4	112
4. Permitting	0	6	0	16	40	0	12	24	98
City of Chandler Coordination		2	0	4	8	0	4	8	26
MCESD Coordination		2	0	4	16	0	4	8	34
ADEQ APP Coordination		2	0	8	16	0	4	8	38
ADWR Coordination									0
5. Project Delivery Method Assistance	4	16	24	40	80	8	12	4	188
Coordination with CMAR	4	16	24	40	80	8	12	4	188
6. Other Direct Costs	0	0	0	0	0	0	0	0	0
7. Owner's Allowance									
TOTAL HOURS:	62	228	388	916	1856	386	1354	230	5420