



PROFESSIONAL SERVICES AGREEMENT
Design Services
BROOKS CROSSING WATER PRODUCTION FACILITY REHABILITATION
Project No. WA2408.201
Council Date: December 12, 2024

This Agreement ("Agreement") is made and entered into on the ____ day of _____, 2024 ("Effective Date"), by and between City of Chandler, an Arizona municipal corporation, ("City"), and **Wilson Engineers, LLC**, an Arizona corporation, ("Consultant") (City and Consultant may individually be referred to as "Party" and collectively referred to as "Parties").

RECITALS

- A. City proposes to engage Consultant to provide **Design Services** for **BROOKS CROSSING WATER PRODUCTION FACILITY REHABILITATION** project as more fully described in **Exhibit "A"**, which is attached to and made a part of this Agreement by this reference.
- B. Consultant is ready, willing, and able to provide the services described in **Exhibit "A"** for the compensation and fees set forth and as described in **Exhibit "B"**, which is attached to and made a part of this Agreement by this reference.
- C. City desires to enter into an Agreement with Consultant to provide these services under the terms and conditions set forth in this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and the mutual promises contained in this Agreement, City and Consultant agree as follows:

SECTION I--CONSULTANT'S SERVICES

Consultant must perform the services described in **Exhibit "A"** to City's satisfaction within the terms and conditions of this Agreement and within the care and skill that a person who provides similar services in Chandler, Arizona exercises under similar conditions. All work or services furnished by Consultant under this Agreement must be performed in a skilled and workmanlike manner. All fixtures, furnishings, and equipment furnished by Consultant as part of the work or services under this Agreement must be new, or the latest model, and of the most suitable grade and quality for the intended purpose of the work or service.

SECTION II--PERIOD OF SERVICE

Consultant must perform the services described in **Exhibit "A"** for the term of this Agreement. Unless amended in writing by the Parties, the Agreement term expires **400** calendar days after the Notice to Proceed (NTP) Date.

SECTION III--PAYMENT OF COMPENSATION AND FEES

Unless amended in writing by the Parties, Consultant's compensation and fees as more fully described in **Exhibit "B"** for performance of the services approved and accepted by City under this Agreement must not exceed **\$1,144,056.20** for the full term of the Agreement. Consultant may not increase any compensation or fees under this Agreement without the City's prior written consent. Consultant must submit monthly requests for payment of services approved and accepted during the previous billing period and must include, as applicable, detailed invoices and receipts, a narrative description of the tasks accomplished during the billing period, a list of any deliverables submitted, and any subconsultant's or supplier's actual requests for payment plus similar narrative and listing of their work. Consultant must submit an Application and Certification for Payment Sheet with the monthly request for payment to: CapitalProjects.Payables@chandleraz.gov. Payment for those services negotiated as a lump sum will be made in accordance with the percentage of the work completed during the preceding billing period. Services negotiated as a not-to-exceed fee will be paid in accordance with the work effort expended on the service during the preceding month. All requests for payment must be submitted to City for review and approval. City will make payment for approved and accepted services within 30 calendar days of City's receipt of the request for payment. Consultant bears all responsibility and liability for any and all tax obligations that result from Consultant's performance under this Agreement.

SECTION IV--CITY'S OBLIGATIONS

As part of Consultant's services under this Agreement, City will provide furnished items, services, or obligations as detailed in **Exhibit "D"**.

SECTION V--GENERAL CONDITIONS

5.1 Notices. Unless otherwise provided herein, demands under this Agreement must be in writing and will be deemed to have been duly given and received either (a) on the date of service if personally served on the party to whom notice is to be given, or (b) on the third day after the date of the postmark of deposit by first class United States mail, registered or certified, postage prepaid and properly addressed as follows:

To City:	City of Chandler - Public Works & Utilities Department Attn: CIP City Engineer: Daniel Haskins, P.E. P.O. Box 4008, Mail Stop 407 Chandler, AZ 85244-4008 Phone: 480-782-3335 Email: Daniel.Haskins@chandleraz.gov	
With a copy to:	City of Chandler - Public Works & Utilities Department Attn: Sandra Story, Project Manager P.O. Box 4008, Mail Stop 407, Chandler, AZ 85244-4008 Phone: 480-782-3588 Email: Sandra.Story@chandleraz.gov	
To Consultant:	LEGAL COMPANY NAME:	Wilson Engineers, LLC
	Mailing Address:	1620 W. Fountainhead Parkway, Suite 501, Tempe, AZ 85282
	Physical Address:	SAME
	Statutory Agent Name:	Corporation Service Company
	Statutory Agent Mailing Address:	8825 N. 23 rd Avenue, Suite 100, Phoenix, AZ 85021
	Statutory Agent Physical Address:	SAME
	CONSULTANT'S AUTHORIZED PROJECT REPRESENTATIVE	
	Name:	Alan Palmquist
	Title:	Principal Associate
	Phone:	480-893-8860
	Email:	Alan.Palmquist@wilson-engineers.com

5.2 Records/Audit. Records of Consultant's direct personnel payroll, reimbursable expenses pertaining to this Agreement and records of accounts between City and Consultant must be kept on the basis of generally accepted accounting principles and must be made available to City and its auditors for up to three years following City's final acceptance of the services under this Agreement (this requirement is increased to five years if construction of this project is federally funded). City, its authorized representative, or any federal agency, reserves the right to audit Consultant's records to verify the accuracy and appropriateness of all cost and pricing data, including data used to negotiate this Agreement and any amendments. City reserves the right to decrease the total amount of Agreement price or payments made under this Agreement or request reimbursement from Consultant following final Agreement payment on this Agreement if, upon audit of Consultant's records, the audit discloses Consultant has provided false, misleading, or inaccurate cost and pricing data. Consultant will include a similar provision in all of its Agreements with subconsultants who provide services under the Agreement to ensure that City, its authorized representative, or

the appropriate federal agency, has access to the subconsultants' records to verify the accuracy of all cost and pricing data. City reserves the right to decrease Agreement price or payments made on this Agreement or request reimbursement from Consultant following final payment on this Agreement if the above provision is not included in subconsultant agreements, and one or more subconsultants refuse to allow City to audit their records to verify the accuracy and appropriateness of all cost and pricing data. If, following an audit of this Agreement, the audit discloses Consultant has provided false, misleading, or inaccurate cost and pricing data, and the cost discrepancies exceed 1% of the total Agreement billings, Consultant will be liable for reimbursement of the reasonable, actual cost of the audit.

5.3 Alteration in Character of Work. Whenever an alteration in the character of work results in a substantial change in this Agreement, thereby materially increasing or decreasing the scope of services, cost of performance, or Project schedule, the work will be performed as directed by City. However, before any modified work is started, a written amendment must be approved and executed by City and Consultant. Such amendment must not be effective until approved by City. Additions to, modifications, or deletions from this Agreement as provided herein may be made, and the compensation to be paid to Consultant may accordingly be adjusted by mutual agreement of the Parties. It is distinctly understood and agreed that no claim for extra services or materials furnished by Consultant will be allowed by City except as provided herein, nor must Consultant do any work or furnish any materials not covered by this Agreement unless such work is first authorized in writing. Any such work or materials furnished by Consultant without prior written authorization will be at Consultant's own risk, cost, and expense, and Consultant hereby agrees that without written authorization Consultant will make no claim for compensation for such work or materials furnished.

5.4 Termination. City and Consultant hereby agree to the full performance of the covenants contained herein, except that City reserves the right, at its discretion and without cause, to terminate or abandon any service provided for in this Agreement, or abandon any portion of the Project for which services have been performed by Consultant. In the event City abandons or suspends the services, or any part of the services as provided in this Agreement, City will notify Consultant in writing and immediately after receiving such notice, Consultant must discontinue advancing the work specified under this Agreement. Upon such termination, abandonment, or suspension, Consultant must deliver to City all drawings, plans, specifications, special provisions, estimates and other work entirely or partially completed, together with all unused materials supplied by City. Consultant must appraise the work Consultant has completed and submit Consultant's appraisal to City for evaluation. City may inspect Consultant's work to appraise the work completed. Consultant will receive compensation in full for services performed to the date of such termination. The fee will be paid in accordance with Section III of this Agreement, and as mutually agreed upon by Consultant and City. If there is no mutual agreement on payment, the final determination will be made in accordance with the "Disputes" provision in this Agreement. However, in no event may the fee exceed the fee set forth in Section III of this Agreement nor as amended in accordance with Section "Alteration in Character of Work." City will make the final payment within 60 days after Consultant has delivered the last of the partially completed items and the Parties agree on the final fee. If City is found to have improperly terminated the Agreement for cause or default, the termination will be converted to a termination for convenience in accordance with the provisions of this Agreement.

5.5 Indemnification. To the extent permitted by law, the Consultant ("Indemnitor") must indemnify, save and hold harmless City and its officers, officials, agents and employees ("Indemnitee") from any and all claims, actions, liabilities, damages, losses or expenses (including court costs, attorneys' fees and costs of claim processing, investigation and litigation) ("Claims") caused or alleged to be caused, in whole or in part, by the wrongful, negligent or willful acts, or errors or omissions of Consultant or any of its owners, officers, directors, agents, employees, or subconsultants in connection with this Agreement. This indemnity includes any claim or amount arising out of or recovered under workers' compensation law or on account of the failure of Consultant to conform to any federal, state or local law, statute, ordinance, rule, regulation or court decree. Consultant must indemnify Indemnitee from and against any and all Claims, except those arising solely from Indemnitee's own negligent or willful acts or omissions. Consultant is responsible for primary loss investigation, defense and judgment costs where this indemnification applies. In consideration of the award of this Agreement, Consultant agrees to waive all rights of subrogation against Indemnitee for losses arising from or related to this Agreement. The obligations of Consultant under this provision survive the termination or expiration of this Agreement.

5.6 Insurance Requirements. Consultant must procure insurance under the terms and conditions and for the amounts of coverage set forth in **Exhibit "C"** against claims that may arise from or relate to performance of the work under this Agreement by Consultant and its agents, representatives, employees, and subconsultants. Consultant and any subconsultant must maintain this insurance until all of their obligations have been discharged, including any warranty periods under this Agreement. These insurance requirements are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement. City in no way warrants that the minimum limits stated in **Exhibit "C"** are sufficient to protect Consultant from liabilities that might arise out of the performance of the work under this Agreement by Consultant, Consultant's agents, representatives, employees, or subconsultants. Consultant is free to purchase such additional insurance as may be determined necessary.

5.7 Cooperation and Further Documentation. Consultant agrees to provide City such other duly executed documents as may be reasonably requested by City to implement the intent of this Agreement.

5.8 Successors and Assigns. City and Consultant each bind itself, its partners, successors, assigns, and legal representatives to the other party to this Agreement and to the partners, successors, assigns, and legal representatives of such other party in respect to all covenants of this Agreement. Neither City nor Consultant may assign, sublet, or transfer its interest in this Agreement without the written consent of the other party. In no event may any contractual relation be created between any third party and City.

5.9 Disputes. In any dispute arising out of an interpretation of this Agreement or the duties required not disposed of by agreement between Consultant and City, the final determination at the administrative level will be made by City Engineer.

5.10 Completeness and Accuracy of Consultant's Work. Consultant must be responsible for

the completeness and accuracy of Consultant's services, data, and other work prepared or compiled under Consultant's obligation under this Agreement and must correct, at Consultant's expense, all willful or negligent errors, omissions, or acts that may be discovered. Correction of errors disclosed and determined to exist during any construction of the project on architectural or engineering drawings and specifications must be accomplished by Consultant. The cost of the design necessary to correct those errors attributable to Consultant and any damage incurred by City as a result of additional construction costs caused by such engineering or architectural errors will be chargeable to Consultant and will not be considered a cost of the Work. The fact that City has accepted or approved Consultant's work will in no way relieve Consultant of any of Consultant's responsibilities.

5.11 Reporting. Written monthly reports, along with updated work schedules, will be made by Consultant in the format prescribed by City. These reports will be delivered to City per schedule. When requested by City, Consultant will attend Council meetings and provide finished documents including correspondence for Council action, supporting charts, graphs, drawings and colored slides of same.

5.12 Withholding Payment. City reserves the right to withhold funds from Consultant's payments up to the amount equal to the claims City may have against Consultant until such time that a settlement on those claims has been reached.

5.13 City's Right of Cancellation. The Parties acknowledge that this Agreement is subject to cancellation by City under the provisions of Section 38-511, Arizona Revised Statutes (A.R.S.).

5.14 Independent Consultant. For this Agreement Consultant constitutes an independent contractor. Any provisions in this Agreement that may appear to give City the right to direct Consultant as to the details of accomplishing the work or to exercise a measure of control over the work means that Consultant must follow the wishes of City as to the results of the work only. These results must comply with all applicable laws and ordinances.

5.15 Project Staffing. Prior to the start of any work under this Agreement, Consultant must submit to City detailed resumes of key personnel that will be involved in performing services prescribed in the Agreement. City hereby acknowledges its acceptance of such personnel to perform services under this Agreement. At any time hereafter that Consultant desires to change key personnel while performing under the Agreement, Consultant must submit the qualifications of the new personnel to City for prior approval. Key personnel include, but are not limited to, principals-in-charge, project manager, and project Consultant. Consultant will maintain an adequate and competent staff of qualified persons, as may be determined by City, throughout the performance of this Agreement to ensure acceptable and timely completion of the Scope of Services. If City objects, with reasonable cause, to any of Consultant's staff, Consultant must take prompt corrective action acceptable to City and, if required, remove such personnel from the Project and replace with new personnel agreed to by City.

5.16 Consultants or Subconsultants. Prior to beginning the work, Consultant must furnish City for approval the names of consultants or subconsultants to be used under this Agreement. Any subsequent changes are subject to City's written prior approval.

5.17 Force Majeure. If either party is delayed or prevented from the performance of any act required under this Agreement by reason of acts of God or other cause beyond the control and without fault of the Party (financial inability excepted), performance of that act may be excused, but only for the period of the delay, if the Party provides written notice to the other Party within ten days of such act. The time for performance of the act may be extended for a period equivalent to the period of delay from the date written notice is received by the other Party.

5.18 Compliance with Federal Laws. Consultant understands and acknowledges the applicability of the Americans with Disabilities Act, the Immigration Reform and Control Act of 1986 and the Drug Free Workplace Act of 1989 to it. Consultant agrees to comply with these laws in performing this Agreement and to permit City to verify such compliance.

5.19 No Israel Boycott. By entering into this Agreement, Consultant certifies that Consultant is not currently engaged in, and agrees for the duration of the Agreement, not to engage in a boycott of Israel as defined by state statute.

5.20 Legal Worker Requirements. A.R.S. § 41-4401 prohibits City from awarding an Agreement to any consultant who fails, or whose subconsultants fail, to comply with A.R.S. § 23-214(A). Therefore, Consultant agrees Consultant and each subconsultant it uses warrants their compliance with all federal immigration laws and regulations that relate to their employees and their compliance with § 23-214, subsection A. A breach of this warranty will be deemed a material breach of the Agreement and may be subject to penalties up to and including termination of the Agreement. City retains the legal right to inspect the papers of any Consultant's or subconsultant's employee who provides services under this Agreement to ensure that Consultant and subconsultants comply with the warranty under this provision.

5.21 Lawful Presence Requirement. A.R.S. §§ 1-501 and 1-502 prohibit City from awarding an Agreement to any natural person who cannot establish that such person is lawfully present in the United States. To establish lawful presence, a person must produce qualifying identification and sign a City-provided affidavit affirming that the identification provided is genuine. This requirement will be imposed at the time of Agreement award. This requirement does not apply to business organizations such as corporations, partnerships, or limited liability companies.

5.22 Covenant Against Contingent Fees. Consultant warrants that no person has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, and that no member of the Chandler City Council, or any City employee has any interest, financially, or otherwise, in Consultant's firm. For breach or violation of this warrant, City may annul this Agreement without liability or, at its discretion, to deduct from the Agreement price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

5.23 Non-Waiver Provision. The failure of either Party to enforce any of the provisions of this Agreement or to require performance of the other Party of any of the provisions hereof must not be construed to be a waiver of such provisions, nor must it affect the validity of this Agreement or any part thereof, or the right of either Party to thereafter enforce each and

every provision.

5.24 Disclosure of Information Adverse to City's Interests. To evaluate and avoid potential conflicts of interest, Consultant must provide written notice to City, as set forth in this Section, of any work or services performed by Consultant for third parties that may involve or be associated with any real property or personal property owned or leased by City. Such notice must be given 7 business days prior to commencement of the services by Consultant for a third party, or 7 business days prior to an adverse action as defined below. Written notice and disclosure must be sent in accordance with Section 6.7 above. An adverse action under this Agreement includes, but is not limited to: (a) using data as defined in the Agreement acquired in connection with this Agreement to assist a third party in pursuing administrative or judicial action against City; or (b) testifying or providing evidence on behalf of any person in connection with an administrative or judicial action against City; or (c) using data to produce income for Consultant or its employees independently of performing the services under this Agreement, without the prior written consent of City. Consultant represents that except for those persons, entities, and projects identified to City, the services performed by Consultant under this Agreement are not expected to create an interest with any person, entity, or third party project that is or may be adverse to City's interests. Consultant's failure to provide a written notice and disclosure of the information as set forth in this Section constitute a material breach of this Agreement.

5.25 Data Confidentiality and Data Security. As used in the Agreement, "data" means all information, whether written or verbal, including plans, photographs, studies, investigations, audits, analyses, samples, reports, calculations, internal memos, meeting minutes, data field notes, work product, proposals, correspondence and any other similar documents or information prepared by, obtained by, or transmitted to Consultant or its subconsultants in the performance of this Agreement. The Parties agree that all data, regardless of form, including originals, images, and reproductions, prepared by, obtained by, or transmitted to Consultant or its subconsultants in connection with Consultant's or its subconsultant's performance of this Agreement is confidential and proprietary information belonging to City. Except as specifically provided in this Agreement, Consultant or its subconsultants must not divulge data to any third party without City's prior written consent. Consultant or its subconsultants must not use the data for any purposes except to perform the services required under this Agreement. These prohibitions do not apply to the following data provided to Consultant or its subconsultants have first given the required notice to City: (a) data which was known to Consultant or its subconsultants prior to its performance under this Consultant or its subconsultants by a third party, who to the best of Consultant's or its subconsultants' knowledge and belief, had the legal right to make such disclosure and Consultant or its subconsultants are not otherwise required to hold such data in confidence; or (c) data which is required to be disclosed by virtue of law, regulation, or court order, to which Consultant or its subconsultants are subject. In the event Consultant or its subconsultants are required or requested to disclose data to a third party, or any other information to which Consultant or its subconsultants became privy as a result of any other Agreement with City, Consultant must first notify City as set forth in this Section of the request or demand for the data. Consultant or its subconsultants must give City sufficient facts so that City can be given an opportunity to first give its consent or take such action that City may deem appropriate to protect such data or other information from disclosure. All data must continue to be subject to the confidentiality agreements of this Agreement. Consultant or its

subconsultants assume all liability to maintain the confidentiality of the data in its possession and agrees to compensate City if any of the provisions of this Section are violated by Consultant, its employees, agents or subconsultants. Solely for the purposes of seeking injunctive relief, it is agreed that a breach of this Section must be deemed to cause irreparable harm that justifies injunctive relief in court. Consultant agrees that the requirements of this Section must be incorporated into all subagreements entered into by Consultant. A violation of this Section may result in immediate termination of this Agreement without notice.

5.26 Personal Identifying Information-Data Security. Personal identifying information, financial account information, or restricted City information, whether electronic format or hard copy, must be secured and protected at all times by Consultant or its subconsultants. At a minimum, Consultant or its subconsultants must encrypt or password-protect electronic files. This includes data saved to laptop computers, computerized devices, or removable storage devices. When personal identifying information, financial account information, or restricted City information, regardless of its format, is no longer necessary, the information must be redacted or destroyed through appropriate and secure methods that ensure the information cannot be viewed, accessed, or reconstructed. In the event that data collected or obtained by Consultant or its subconsultants in connection with this Agreement is believed to have been compromised, Consultant or its subconsultants must immediately notify City contact. Consultant agrees to reimburse City for any costs incurred by City to investigate potential breaches of this data and, where applicable, the cost of notifying individuals who may be impacted by the breach. Consultant agrees that the requirements of this Section must be incorporated into all subcontracts entered into by Consultant. It is further agreed that a violation of this Section must be deemed to cause irreparable harm that justifies injunctive relief in court. A violation of this Section may result in immediate termination of this Agreement without notice. The obligations of Consultant or its subconsultants under this Section must survive the termination of this Agreement.

5.27 Jurisdiction and Venue. This Agreement is made under and must be construed in accordance with and governed by the laws of the State of Arizona without regard to the conflicts or choice of law provisions thereof. Any action to enforce any provision of this Agreement or to obtain any remedy with respect hereto must be brought in the courts located in Maricopa County, Arizona, and for this purpose, each Party hereby expressly and irrevocably consents to the jurisdiction and venue of such court.

5.28 Survival. All warranties, representations, and indemnifications by Consultant must survive the completion or termination of this Agreement.

5.29 Modification. Except as expressly provided herein to the contrary, no supplement, modification, or amendment of any term of this Agreement will be deemed binding or effective unless in writing and signed by the Parties.

5.30 Severability. If any provision of this Agreement or the application to any person or circumstance may be invalid, illegal or unenforceable to any extent, the remainder of this Agreement and the application will not be affected and will be enforceable to the fullest extent permitted by law.

5.31 Integration. This Agreement contains the full agreement of the Parties. Any prior or

contemporaneous written or oral agreement between the Parties regarding the subject matter is merged and superseded.

5.32 Time is of the Essence. Time of each of the terms, covenants, and conditions of this Agreement is hereby expressly made of the essence.

5.33 Date of Performance. If the date of performance of any obligation or the last day of any time period provided for should fall on a Saturday, Sunday, or holiday for City, the obligation will be due and owing, and the time period will expire, on the first day after which is not a Saturday, Sunday or legal City holiday. Except as may otherwise be set forth in this Agreement, any performance provided for herein will be timely made if completed no later than 5:00 p.m. (Chandler time) on the day of performance.

5.34 Third Party Beneficiary. Nothing under this Agreement will be construed to give any rights or benefits in the Agreement to anyone other than City and Consultant, and all duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of City and Consultant and not for the benefit of any other party.

5.35 Conflict in Language. All work performed must conform to all applicable City of Chandler codes, ordinances, and requirements as outlined in this Agreement. If there is a conflict in interpretation between provisions in this Agreement and those in **Exhibit "A"**, the provisions in this Agreement prevail.

5.36 Document/Information Release. Documents and materials released to Consultant, which are identified by City as sensitive and confidential, are City's property. The document/material must be issued by and returned to City upon completion of the services under this Agreement. Consultant secondary distribution, disclosure, copying, or duplication in any manner is prohibited without City's prior written approval. The document/material must be kept secure at all times. This directive applies to all City documents, whether in photographic, printed, or electronic data format.

5.37 Exhibits. The following exhibits are made a part of this Agreement and are incorporated by reference:

Exhibit A - Scope of Services / Schedule

Exhibit B - Compensation and Fees

Exhibit C - Insurance Requirements

Exhibit D - Special Conditions

Exhibit E - Subconsultant Documents with Consultant (if applicable)

Exhibit F - Federal Requirements (if applicable)

5.38 Special Conditions. As part of the services Consultant provides under this Agreement, Consultant agrees to comply with and fully perform the special terms and conditions set forth in **Exhibit "D"**, which is attached to and made a part of this Agreement.

5.39 Non-Discrimination and Anti-Harassment Laws. Consultant must comply with all applicable City, state, and federal non-discrimination and anti-harassment laws, rules, and regulations.

5.40 Licenses and Permits. Beginning with the Effective Date and for the full term of this Agreement, Consultant must maintain all applicable City, state, and federal licenses and permits required to fully perform Consultant's services under this Agreement.

5.41 Warranties. Consultant must furnish a one-year warranty on all work and services performed under this Agreement. Consultant must furnish, or cause to be furnished, a two-year warranty on all fixtures, furnishings, and equipment furnished by Consultant, subconsultants or suppliers under this Agreement. Any defects in design, workmanship, or materials that do not comply with this Agreement must be corrected by Consultant (including, but not limited to, all parts and labor) at Consultant's sole cost and expense. All written warranties and redlines for as-built conditions must be delivered to City on or before City's final acceptance of Consultant's services under this Agreement.

5.42 Cooperative Purchasing Agreement (S.A.V.E. – Strategic Alliance for Volume Expenditures). In addition to City of Chandler and with the approval of Consultant, this Agreement may be extended for use by other municipalities, school districts, and government agencies of the State. Any such usage by other entities must be in accordance with the ordinance, charter, or procurement rules and regulations of the respective political entity.

5.43 Budget Approval into Next Fiscal Year. This Agreement will commence on the Effective Date and continue in full force and effect until it is terminated or expires in accordance with the provisions of this Agreement. The Parties recognize that the continuation of this Agreement after the close of the City's fiscal year, which ends on June 30 of each year, is subject to the City Council's approval of a budget that includes an appropriation for this item as an expenditure. The City does not represent that this budget item will be actually adopted. This determination is solely made by the City Council.

5.44 Forced Labor of Ethnic Uyghurs Prohibited. By entering into this Agreement, Contractor certifies and agrees Contractor does not currently use and will not use for the term of this Agreement: (i) the forced labor of ethnic Uyghurs in the People's Republic of China; or (ii) any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; or (iii) any contractors, subcontractors or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.

5.45 License to City for Reasonable Use. With this Agreement, Consultant and its subconsultants hereby grant a license to City, its agents, employees, and representatives for an indefinite period of time to reasonably use, make copies, and distribute as appropriate the Documents, works or deliverables developed or created as a result of the Project and this Agreement. This license also includes the making of derivative works.

This Agreement will be in full force and effect only when it has been approved and executed by the duly authorized City officials.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the Effective Date.

"CITY" CITY OF CHANDLER

"CONSULTANT"

WILSON ENGINEERS, LLC

MAYOR

Signature

Date

RECOMMENDED BY:

Daniel Haskins

Daniel Haskins, P.E.
CIP City Engineer

Print Name

Title

Signer Email Address

APPROVED AS TO FORM:

City Attorney

ATTEST:

City Clerk

Seal

EXHIBIT "A"
SCOPE OF SERVICES/SCHEDULE

CITY OF CHANDLER
BROOKS CROSSING WATER PRODUCTION FACILITY REHABILITATION
CITY PROJECT NO.: WA2408.201

EXHIBIT A

I. PROJECT DESCRIPTION

The City of Chandler has initiated this project to conduct a condition assessment and rehabilitation of the Brooks Crossing Water Production Facility (WPF). Brooks Crossing WPF was initially constructed in approximately 1983 and is located adjacent to Brooks Crossing Park in Chandler, Arizona. The facility provides potable water for the surrounding customers which include residential, commercial, and industrial properties. The steel reservoir is filled with potable water via an on-site groundwater well and previously from the City's potable water system via a 12" connection which is currently disconnected. The reservoir supplies potable water directly to an industrial customer to the south, as well as, a booster pump station for Chandler's potable water system. The WPF consists of the following major components:

- Two (2) million gallon steel reservoir
- Booster pump station (BPS) with four pumps and pump cans
- Submersible recirculation pump and pump can
- Tablet chlorinator in a dedicated enclosure
- Groundwater well and discharge piping
- Drain pump station with three submersible pumps
- Emergency diesel generator with an above-ground fuel tank (dual contained)
- Electrical equipment including a Motor Control Center, Service Entrance Section and an Automatic Transfer Switch
- Instrumentation equipment including a PLC/RTU

The rehabilitation and modifications planned for this project include the following, but not limited to, other miscellaneous modifications:

- Condition assessment and evaluation of the existing site and equipment.
- Rehabilitation of the existing 2 million gallon steel reservoir including the side shell, bottom plate, ventilation, reservoir mixing, access ladder and safety devices as well as structural support members.
 - Reservoir load requirements to meet AWWA D100 standard upon completion of project
 - Connections from the floor to the side wall to meet API 653 standard once corrosivity of underlying soils are confirmed
 - Up to five (5) vents provided to meet air exchange needs of filling/drainage the reservoir
 - Overflow pipe sizing to be confirmed with system operation and upsized, if required
 - Up to two (2) mixing systems to be provided within reservoir
 - Booster pump station suction line(s) from reservoir to booster pump station to be modified from the side wall to bottom penetrations into the reservoir
 - System feed line to be re-connected to reservoir
- Rehabilitation of the existing BPS including below ground mechanical piping, booster pumps and motors, valves, and controls/devices.
- Rehabilitation of existing well pump-to-waste and pump discharge piping system. A new well pump will be considered for inclusion into the project.

- Rehabilitation of the existing drain pump station which includes three submersible pumps, discharge piping and associated controls. Pump station sizing to be confirmed.
- Remove and replace the Motor Control Center, Service Entrance Section and an Automatic Transfer Switch housed in a climate-controlled building.
- Remove and replace the existing emergency generator and connect to the existing fuel storage tank.
- New liquid chlorine feed system housed in a climate-controlled FRP building. Building to include insulation meeting minimum City standards for R-value.
- General site improvements.

The Scope of Work generally encompasses the following items:

- Site investigations, data collection and equipment condition assessment.
- Alternative evaluations, cost estimates and conceptual designs and recommended approach.
- Design progress workshops to evaluate alternatives and select final approach.
- Conceptual (30%) Preliminary Design Report, Intermediate (60%) Design Documents (Drawings and Specifications), Agency Review (90%) and Final Design Documents (Drawings and Specifications).
- Design Review workshops at the 30%, 60%, and 90% stages.
- CMAR or Design-Bid-Build project delivery support.

II. SCOPE OF SERVICES

The Design Phase engineering services to be provided under this Project are as follows:

TASK 1.0 DESIGN DEVELOPMENT

Subtask 1.1 Conduct and Attend Meetings

The Engineer will conduct meetings and/or workshops with City staff to discuss specific technical aspects of the condition assessment and design; progress in the development of the design, drawings, and specifications; and related issues that may affect Project results. The meetings or workshops will consist of the following:

- Workshops – The Engineer will conduct a total of five workshops. It is anticipated that there will be two workshops to discuss MOPOs, the assessment condition protocol, and results (Meeting Nos. 1 and 2), one workshop to discuss hydraulic modeling strategy and results (Meeting No. 3), one workshop to discuss well drilling, development and testing (Meeting No. 4) and one workshop to discuss future rehabilitation work items with the City Engineering and Plant Staff (Meeting No. 5)
- Monthly Progress Meetings – The Engineer will conduct a total of ten monthly design review and project progress meetings with City Engineering and Plant Staff (when workshops are scheduled, monthly progress will be discussed during the workshop and monthly meetings will not be held). Monthly meetings will be used to review preliminary design report, 30%, 60%, and 90% drawing reviews and CMAR cost model reviews (Meeting Nos. 6 thru 15);

The Engineer will prepare and distribute meeting agenda, presentation material, and document meeting results for each meeting and workshop.

Subtask 1.2 Data Collection and Review

As part of this Task, the Engineer shall obtain any existing equipment information that is currently in the City's database. This database will serve as the basis for development of the facility database for this project.

The Engineer shall also use the existing project drawings and specifications to supplement the information included in the database. The Engineer will review the available documents and reports that are available to be used for the assessment phase.

Subtask 1.3 Determine Basis of Design

The Engineer will document the basis of design including the primary thought processes and assumptions behind design decisions and provide the explanations of the ideas, logic, evaluations, concepts, and criteria that are considered important to the City.

Design computations, details of connections, etc., are not required as part of the basis of design, but general computations supporting decisions such as system selection, mechanical and electrical loads, etc should be made. Documentation for the basis of design shall, as a minimum, provide the following information in narrative or tabular format:

- General site layout
- Process flow diagrams with pumps, valves, flow meters, chemical feed points, reservoir connections, etc.
- Electrical, gas, telephone and other utility information
- City or regulatory requirements for standby power
- Preliminary geotechnical information
- Initial site survey
- Chlorine building layout
- Chlorine feed – dosage, storage, feed pump(s), tanks, analyzers, etc.
- Hydraulic data – flow rates, velocity, etc.
- Process equipment selections and equipment lists
- HVAC system requirements
- Equipment requirements – size, type, and horsepower
- Electrical systems description
- Process control and instrumentation system description
- Special instruction from the City (equipment preferences, new technologies, etc.)

Subtask 1.4 Determine Site Conditions

The proposed Project site must be analyzed through a series of investigations to understand the opportunities and constraints that may be imposed upon a project and its design. The Engineer will conduct studies to evaluate existing site conditions. These studies may include, but are not limited to, geotechnical reports, land surveys, and utility surveys. This effort should identify the work site's specific location and identify factors such accessibility, environmental limitations, regulatory factors, etc., that is important considerations to the Project.

The Project and site are analyzed to determine their compatibility. The preliminary design report should present how the site analysis findings impact and are incorporated into the Project scope and cost estimate. For example, if the site analysis determines the need for storm water control, the site plan should show the potential location and the construction cost estimate should include the cost.

Subtask 1.5 Perform Asset Condition Assessment

Based on the discussions and results in the workshop from Task 1.1, the Engineer shall utilize the developed condition assessment protocol for the Brooks Crossing WPF that defines the methodology for evaluating the condition of assets, inspection requirements, testing protocols, scoring and forms that will be utilized

for the physical and performance condition assessment of the WPF's assets. Utilizing the assessment protocol, field inspections shall be performed to obtain asset condition information. The Engineer will perform assessment of the civil, mechanical, structural, electrical and instrumentation assets at the Brooks Crossing WPF. The Engineer will keep a comprehensive spreadsheet for each assessed piece of equipment, including its age, condition, performance, reliability, and criticality. The Engineer will perform a field condition assessment of those identified assets to assign a physical and a performance condition score used to establish the remaining life of the assets. The Engineer will use the following procedures to establish the above criteria:

- Visually inspect the equipment
- Check the related equipment instrumentation to determine the asset's physical condition and operation characteristics
- Collect relevant measurements, readings, or other pertinent information deemed appropriate
- Review available repair, rebuild, and replacement records
- Consult with manufacturers as appropriate
- Inspect readily accessible parts and surfaces for any installation problems; excessive noise, vibration, or temperature; the condition of coatings; signs of wear or corrosion; and leakage of any fluids.
- For the steel reservoir, field activities to be completed during the dry inspection include:
 - Ultrasonic testing (ASTM E164-08), where warranted
 - Weld inspections (NACE SP-0178)
 - Pit depth measurements
 - Extensive dry film thickness
 - Adhesion testing (ASTM 3359)
 - Heavy metals testing, where warranted
 - Cathodic protection (CP) adequacy assessment
 - Evaluation of existing CP equipment for future potential reuse
- Inspection areas of the steel reservoir include but are not limited to the side shell, roof, roof supporting structure, bottom plate, hatches, manways, ventilation, ladders, rod bottles, and instrumentation.
- For electrical equipment, connected running loads will be verified and analyzed with respect to code, industry, and City requirements. Spare capacity will be noted for possible future usage. For equipment that is identified as overloaded, recommendations for improvements to bring the equipment into compliance will be provided.
- For SCADA communication coordinate fiber optic extension from planned Brooks Crossings Park hut to site and connection to network. Radio communication to still be utilized as a back-up system.

The field assessment will help categorize assets into groups for possible rehabilitation or replacement as part of the project or for rehabilitation or replacement as part of a future rehabilitation project. Inspections will be completed primarily by the Engineer's staff and an allowance is included for other consultants if necessary.

In order to access the required areas for inspection, it is assumed that the City will assist with removal of pumps, piping, fittings, hatches, etc. for the required inspections to take place. Additionally, any confined space entry support, including but not limited to ventilation, and rescue support is provided by the City as required. It is our understanding that the City team will ensure that contract means with a Contractor are valid when work is scheduled.

The Engineer and/or subcontractors will perform a condition assessment of the Brooks Crossing WPF facility assets. The following table summarizes the overall facilities and associated assets to be included in the assessment as a part of this project:

Brooks Crossing WPF – Overall Equipment List Summary

1.0	Booster Pump Station
1.1	<i>Booster Pumps and Motors</i>
1.2	<i>Pump Cans</i>
1.3	<i>Recirculation Pump and Motor</i>
1.4	<i>Mechanical Piping (see 5.0)</i>
2.0	Steel Reservoir
2.1	<i>Side Shell and Roof Structure</i>
2.2	<i>Bottom Plate and Soil Condition</i>
2.3	<i>Coating System</i>
2.4	<i>Piping Connections (see 5.0)</i>
3.0	Chlorine System
3.1	<i>Chlorinator Building</i>
3.2	<i>Sodium Hypochlorite Storage and Feed System</i>
3.3	<i>Injection Points</i>
4.0	Drain Pump Station
4.1	<i>Submersible Pumps, Motors and Supports</i>
4.2	<i>Mechanical Piping (see 5.0)</i>
4.3	<i>Drain Pump Station Structure</i>
5.0	Mechanical Piping
5.1	<i>BPS Suction and Discharge Piping</i>
5.2	<i>Pump Cans</i>
5.4	<i>Well Discharge and Pump-to-waste Piping</i>
5.5	<i>Steel Reservoir Fill and Drain Piping</i>
5.6	<i>Drain Pump Station Discharge</i>
6.0	Electrical and Instrumentation
6.1	<i>SCADA Computer Hardware</i>
6.2	<i>Electrical Distribution</i>
6.3	<i>Electrical Systems</i>
6.4	<i>Instrumentation & Controls</i>
6.5	<i>Stand-by Generator</i>
7.0	Miscellaneous
7.1	<i>Sample Pumps</i>
7.2	<i>Grading and Paving</i>
7.3	<i>Site Security System</i>

Subtask 1.6 Prepare Draft and Final Condition Assessment Report

The Engineer shall prepare a draft report identifying the condition assessment approach, risk analysis results, and recommended rehabilitation or replacement. The recommended rehabilitation will be based on the condition assessment results and ranked based on City and Plant Staff input. As described in Task 1.1, a series of workshops and meetings will be conducted to review the asset condition findings to develop the list of rehabilitation items. Conceptual level cost estimates will be developed for the future identified projects to create project budgets. Replacement and rehabilitation cost estimates will be based on recent project costs of similar facilities, vendor cost estimates, contractor estimates, or other recent project cost data. Costs will be presented in 2025 dollars and escalated to the projected year in which the rehabilitation project will be conducted. The Engineer will incorporate comments received from the City and prepare a final sealed version of the Asset Condition Assessment Report.

Subtask 1.7 Thirty Percent (30%) Progress Submittal

The design scheme is decided and working drawings are prepared. These 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 are ready for City review.

1. Process and hydraulic design:
 - Hydraulics: Hydraulic analysis required for design (e.g., pipeline hydraulics, pump selection, etc) is complete and calculations are checked.
 - Process: Where water process design applies (e.g., chemical dosage, specialty equipment selection, etc) all system calculations are completed and checked. Preliminary specialty equipment review is complete (e.g. chemical feed pumps, etc.).
2. Civil:
 - Existing utilities are plotted; existing facility horizontal controls and elevations are confirmed with current survey.
 - Preliminary drawings include overall site layout, large diameter pipe, yard piping and major grading elements.
 - Preliminary plan and profile sheets are prepared (as applicable for pipeline design).
 - Demolition plans, as applicable, are prepared.
 - Conceptual drawings showing drainage patterns and means for control and disposal.
3. Structural:
 - The main structural system and detailed design approach for each structural component is established.
 - Layout plan drawings and principal sections are started.
 - Preliminary plans and sections and/or renderings are prepared.
4. Mechanical (Includes equipment, plumbing, HVAC, and fire suppression):
 - Preliminary layout of major equipment completed.
 - All major equipment and piping elevations, pipe sizes, work clearances, equipment spacing, access, code requirements are shown.
 - Preliminary equipment schedule is started.
 - Preliminary piping schedule is started.
 - System flow diagrams are complete.

- Specifications for major equipment are in draft form.
5. Electrical:
- Preliminary single line diagrams of major distribution system and motor control centers are prepared.
 - Partial equipment control schematic diagrams are prepared.
 - Preliminary electrical plans showing locations of transformer and panel are prepared.
6. Instrumentation:
- 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.
 - All instrumentation shown.
 - Process area designation, drawing and equipment numbering system identified.
 - Preliminary Process Control strategies should be complete.
 - Instrumentation and control (I&C) specifications for I&C devices should be started.

Subtask 1.8 Preliminary Facility Design Report and Cost Estimate

The Engineer shall provide a recommended preliminary design report with associated costing for the City's review along with alternate value engineering approaches or phasing options to approach the design and construction. This will be reviewed at a 30% design review workshop with City staff. The 30% design will consist of a site layout, mechanical and electrical plan sheets, and equipment cut sheets. The Engineer shall evaluate potential new water line alignments and prepare preliminary layout figures. Decisions made on the project approach shall be the basis for the 60% design phase.

The Engineer shall present the preliminary design to City Staff in the form of a MS PowerPoint Presentation or equivalent. The Engineer shall incorporate comments received from the City during the progress submittal review meetings as part of the detailed design effort.

NOTE: City to provide new booster pump station flowrate and discharge hydraulic grade elevation. The information will be utilized as the design point for facility operation. City to utilize existing groundwater well without any modifications. Hydrogeologic support services are NOT included in this scope of services.

TASK 4.0 DETAILED DESIGN

Subtask 4.1 60% Construction Documents

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 builder can recognize general building elements and requirements for construction. All comments from the 30% submittal are satisfactorily addressed. The set of drawings will include a cover sheet and an index sheet. The set of specifications will include a table of contents with not included specifications clearly identified.

- Civil:
 - All facilities are shown and located.

- Grading plans and demolition plans are substantially complete.
- Plan sheets are substantially complete.
- Design calculations are complete.
- Draft specifications are assembled.

- Structural:
 - Steel reservoir plans are essentially complete.
 - Retaining wall plans and sections are partially complete.
 - Other structural detail plans and sections are partially complete.
 - Design calculations are complete.
 - Structural detailing is partially complete.
 - Draft specifications are assembled.

- Mechanical:
 - Mechanical plans and sections are essentially complete.
 - Mechanical details are partially complete.
 - Equipment and valves are included in equipment schedules. Piping schedules are complete.
 - Specifications for the major equipment items are essentially complete. Additional specifications are in progress.
 - Design calculations are complete.

- Electrical:
 - Single line diagrams and motor control diagrams are partially complete.
 - Power and control plans are partially complete.
 - Panel, light fixtures and cable/conduit schedules are complete.
 - Duct bank and pull box details are partially complete.
 - Lighting and receptacle plans are partially complete.
 - Specifications for major equipment items have been drafted. Additional specifications are in progress.
 - Design calculations are complete.
 - Control schematic diagrams are partially complete.

- Instrumentation:
 - P&IDs are essentially complete and tag numbers are shown.
 - SCADA equipment numbering system is identified and included per City standards.
 - Process Control Strategies are essentially complete and tag numbers are included in descriptions.
 - I & C details are partially complete.
 - Specifications for instrumentation devices are started.

Subtask 4.2 90% Construction Documents

Drawings and details in all disciplines should be complete. 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% reviews by City

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

Subtask 4.3 Maricopa County / Development Services Submittal

One (1) set of the 90% plans and specifications will be submitted to Maricopa County Environmental Services Department for review. One (1) review meeting will be conducted to discuss comments received from the County as required.

For City Plan Review, one (1) set of drawings will be submitted at the 90% progress submittal for review. The site grading plan, completed in the 60% submittal, will be provided as a separate submittal to the City Plan Review to obtain early review comments. One (1) review meeting will be conducted to discuss comments received from the City Plan Review Department.

NOTE: A \$5,000 allowance has been included for MCESD ATC permitting fees. It is assumed all other permit review fees will be the responsibility of the City.

Subtask 4.4 Building/Fire Code Compliance

The City requires that design and construction of new site facilities and modifications to existing site facilities be reviewed and inspected for building code compliance. Building permits are generally required for any building or construction involving plumbing, electrical, mechanical, or structural elements. Building Code compliance is determined by the Official assigned to the City of Chandler Building Permit Department.

The Engineer will continue to assist the City with the reviews and coordination of the Project with City's Building Permit Department. The reviews and coordination will require the following:

- Prepare the necessary documents and information to use during meetings with Building Permit Department;
- Prepare any follow-up reports resulting from above meetings;
- Prepare the required construction drawings to submit to Permit Department for review and respond to review comments after consulting with Water Services staff;
- Assist in obtaining any permits from the Permit Department in advance of construction.

Drawings and other documents that are submitted to Permit Department must be prepared with enough detail to show code compliance.

The Engineer will conduct a formal review meeting with the Fire Department and then submit the pre-final drawings for Fire Department review and approval. The Engineer will receive the review comments or requirements and after consulting with and advising the City Project Manager about those comments or requirements, revise the drawings and specifications and obtain Fire Department approval.

Subtask 4.5 Develop Process Control Description

The Engineer will write control descriptions of each process area to be configured in the computer control system. The Engineer will obtain information from a combination of process design personnel, contract documents, preliminary equipment supplier schematics, and City programmers for details and examples of past descriptions. The control descriptions will be coordinated with the process and instrumentation diagrams and the process design intent. The control descriptions will be guidelines for the computer control system configuration. Control descriptions will be developed to provide a process description and basic

operating instructions that can also be used for the Operations Manual. All descriptions will be developed using Microsoft Word. The control descriptions will consist of the following:

1. Background information of the equipment and process
2. Purpose of local and computer control at the facility
3. Description of local control
4. Description of computer manual control
5. Description of computer automatic control
6. List of indicators and alarms available at the local panels
7. List of indicators and alarms available at the computer control system
8. List of trends to be recorded at the computer control system

When the control descriptions are completed for each process area, they will be submitted to the City for review. A review meeting will be held with the City to obtain comments. The control descriptions will be revised in response to City comments and submitted to the City for their use.

Control descriptions will be developed for areas that require control via SCADA and that are being rehabilitated or modified. Control descriptions will be developed as required for the following facilities:

- Booster Pump Station
- Groundwater Well
- Chlorine Feed Facility

Subtask 4.6 Final (100%) Submittal

Drawings and specifications should be complete and accepted by the City and incorporate any comments and changes required from reviews by the MCESD and City's Building Permit Department. All construction documents should be complete and ready for construction pricing of the work.

TASK 5.0 PROJECT DELIVERY METHOD ASSISTANCE

Subtask 5.1 Project Delivery Method Assistance

The ENGINEER will assist the City with the CMAR or Design-Bid-Build project delivery method. The ENGINEER's effort to coordinate with the CM at Risk or Design-Bid-Build project delivery method will consist of:

CMAR Delivery Method:

- 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 conducted by CM at Risk;
- Assist and review during GMP/cost development;
- Perform GMP/cost proposal review and prepare recommendation to City;
- Assist City with review of the subcontractor/supplier bid and selection process.

Design-Bid-Build Delivery Method:

- Modify Contract Documents to assist in facilitating design-bid-build project delivery.
- Prepare and complete modifications to bid item list based on comments received from the City.
- Attend pre-bid conference to answer questions pertaining to the Contract Documents.
- Receive and respond to bidder inquiries after each pre-bid conference.
- Review equipment submittals presented for prior approval (according to the City's requirements) and prepare addenda required to clarify or modify the Contract Documents.
- Attend each bid opening, review bids, and make recommendation for award.

+ END SCOPE OF SERVICES +

Brooks Crossing Water Production Facility Rehabilitation Project
City Project No.: WA2408.201
Preliminary Design Project Schedule

TASK DESCRIPTION	Jan '25	Feb '25	Mar '25	April '25	May '25	June '25	July '25	Aug '25	Sept '25	Oct '25	Nov '25	Dec '25	Jan '26	Feb '26	Mar '26	April '26	May '26	June '25	July '25	Aug '25	Sept '25	Oct '26	Nov '26	Dec '26
DESIGN PHASE	Year 1												Year 2											
Condition Assessment & Alternative Evaluation																								
Data Collection																								
JOC Preparation for Site Shutdown																								
Electrical Inspections																								
Structural Inspections / Geotechnical Investigation																								
Mechanical/ CCTV Pipe Inspections																								
Draft Condition Assessment Report																								
City Review																								
Final Condition Assessment Report																								
Design Report and 30% Submittal																								
30% Design Drawings																								
Draft Design Report																								
Level 4 Cost Estimate																								
City Review																								
Final Design Report																								
60% Progress Submittal																								
60% Design Drawings & Specifications																								
Updated Level 4 Cost Estimate																								
City Review																								
90% (Agency) Progress Submittal																								
90% Design Drawings & Specifications																								
Updated Level 4 Cost Estimate																								
MCESD Review																								
City DSD Review																								
100% (Final) Design Submittal																								
Project Delivery Method Assistance																								
	Jan '25	Feb '25	Mar '25	April '25	May '25	June '25	July '25	Aug '25	Sept '25	Oct '25	Nov '25	Dec '25	Jan '26	Feb '26	Mar '26	April '26	May '26	June '25	July '25	Aug '25	Sept '25	Oct '26	Nov '26	Dec '26

**CITY OF CHANDLER
BROOKS CROSSING WPF
REHABILITATION PROJECT**

SHEET LIST

Sheet No.	Drawing No.	Description
1	G-1	Cover Sheet
2	G-2	General Notes 1
3	G-3	General Notes 2 and Sheet Index
4	G-4	Legends, Symbols, and Abbreviations
5	G-5	Vicinity Map
6	G-6	Site Process Flow Diagram
7	G-7	Survey Control Sheet
8	D-1.0	Overall Demolition View of WPF
9	D-2.0	WPF Site Demolition
10	D-3.0	Demolition Building Elevations
11	D-4.0	Demolition Piping and Equipment Plan
12	D-5.0	Demolition Reservoir Plan and Sections
13	D-6.0	Demolition Drainage Pump Station Plan and Sections
14	D-7.0	Demolition Well Plan and Sections
15	D-8.0	Demolition Electrical System Plan and Sections
16	D-9.0	Demolition Photos 1
17	D-10.0	Demolition Photos 2
18	C-1.0	Piping Plan and Profile 1
19	C-2.0	Piping Plan and Profile 2
20	C-3.0	Piping Plan and Profile 3
21	C-4.0	Grading and Drainage Plan
22	A-1.0	Prefabricated Building Plan
23	A-2.0	Prefabricated Building Sections
24	P-1.0	WPF 3D Rendering
25	P-2.0	Reservoir Lower Layout
26	P-3.0	Reservoir Upper Layout
27	P-4.0	Reservoir Sections 1
28	P-5.0	Reservoir Sections 2
29	P-6.1	Booster Pump Station Plan
30	P-6.2	Booster Pump Station Sections
31	P-7.0	Well Plan and Sections
32	P-8.0	Drainage Pump Station Plan and Sections
33	P-9.0	Chemical Feed Plan and Sections
34	P-10.0	Site Signage Details
35	P-11.0	Civil and Mechanical Details 1
36	P-11.1	Civil and Mechanical Details 2
37	P-11.2	Civil and Mechanical Details 3
38	P-11.3	Civil and Mechanical Details 4
39	P-11.4	Civil and Mechanical Details 5
40	P-11.5	Civil and Mechanical Details 6
41	S-1.0	General Structural Notes 1
42	S-2.0	General Structural Notes 2
43	S-3.0	Overall Plan
44	S-4.0	Reservoir Demolition Plan
45	S-5.0	Reservoir Roof Framing Plan
46	S-6.0	Reservoir Floor Plan
47	S-7.0	Booster Pump Plan and Repair Details
48	S-8.0	Well Plan

**CITY OF CHANDLER
BROOKS CROSSING WPF
REHABILITATION PROJECT**

SHEET LIST

Sheet No.	Drawing No.	Description
49	S-9.0	Roof Framing Sections and Details
50	S-10.0	Roof Truss Specifications
51	S-11.0	Reservoir Sections and Details
52	S-12.0	Structural Details 1
53	S-12.1	Structural Details 2
54	S-12.2	Structural Details 3
55	H-1.0	Building HVAC System Plan
56	H-1.1	Building HVAC System Details
57	E-1.0	Electrical Abbreviations
58	E-2.0	Electrical Symbols and Legend
59	E-3.0	Single Line Diagram
60	E-4.0	Load Summaries
61	E-5.0	Panel Schedules and Calculations
62	E-6.0	Electrical Site Plan
63	E-7.0	Electrical Distribution Equipment Enlarged Power and Lighting Plan
64	E-8.0	Reservoir Enlarged Power Plan
65	E-9.0	Booster Pump Station Enlarged Power Plan
66	E-10.0	Drain Pump Station Enlarged Power Plan
67	E-11.0	Well Enlarged Power Plan
68	E-12.0	Chlorine Feed System Power and Lighting Plan
69	E-13.0	Schematic Diagram 1
70	E-14.0	Schematic Diagram 2
71	E-15.0	Schematic Diagram 3
72	E-16.0	Schematic Diagram 4
73	E-17.0	Power Conduit Block Diagram 1
74	E-18.0	Power Conduit Block Diagram 2
75	E-19.0	Control Conduit Power Diagram 1
76	E-20.0	Control Conduit Power Diagram 2
77	E-21.0	Electrical Details 1
78	E-21.1	Electrical Details 2
79	I-1.0	Instrumentation Symbols and Legend
80	I-2.0	Instrumentation Extensions
81	I-3.0	Reservoir P&ID
82	I-4.0	Booster Pump Station P&ID
83	I-5.0	Well Pump P&ID
84	I-6.0	Chlorine Feed System P&ID
85	I-7.0	System Communication Architecture

EXHIBIT "B"
COMPENSATION AND FEES

City of Chandler
Brooks Crossing Water Production Facility
City Project No.: WA2408.201
EXHIBIT "B-1"
Cost Plus Reimbursible Per Task



<u>TASK DESCRIPTION</u>		<u>SUBTOTAL</u>
1. Design Development		\$ 357,015.00
	Conduct and Attend Meetings	\$ 15,450.00
	Data Collection and Review	\$ 13,660.00
	Determine Basis of Design	\$ 16,440.00
	Determine Site Conditions	\$ 21,260.00
	Perform Asset Condition Assessment	\$ 29,700.00
	Prepare Draft and Final Condition Assessment Report	\$ 33,725.00
	Thirty Percent (30%) Progress Submittal	\$ 186,470.00
	Preliminary Facility Design Report and Cost Estimate	\$ 40,310.00
2. Detailed Design		\$ 553,090.00
	60% Construction Documents	\$ 187,680.00
	90% Construction Documents	\$ 214,400.00
	Maricopa County / Development Services Submittal	\$ 11,530.00
	Building / Fire Code Compliance	\$ 6,260.00
	Develop Process Control Description	\$ 28,790.00
	Final (100%) Submittal	\$ 104,430.00
3. Project Delivery Method Assistance		\$ 43,050.00
	Project Delivery Method Assistance	\$ 43,050.00
4. Other Direct Costs		\$ 90,901.20
	Geotechnical Investigation	\$ 35,000.00
	Topographic Survey	\$ 8,360.00
	Coatings Inspection	\$ 2,200.00
	Reservoir Floor Magnetic Flux Leakage Testing	\$ 12,841.20
	CCTV Inspections	\$ 22,500.00
	Reimbursable Expenses (Permit Fees, Printing etc)	\$ 10,000.00
5. Owner's Allowance		\$ 100,000.00
TOTAL COST:		\$ 1,144,056.20

City of Chandler
Brooks Crossing Water Production Facility
City Project No.: WA2408.201
EXHIBIT "B-2"
Hours and Rates



		Principal	Sr. PM	Sr. PM (E/I, Str.)	Sr. Engr.	Project Engineer	Lead EI&C	CADD Technicians	Admin	< PROJECT ROLE	
		Uday Gandhe	Alan Palmquist	Mike Churchill, Jaco Kruger, Chris Yarn	Brandon Olson, Ray Pulver	Majid Zarif, Andrea Amavisca, Mikalie Caldwell	Elvin Rombaoa, Sai Chilakalapudi	Kam Casey, Diana Evangelista, Amber Andrade, Erin Begay, Calvin Gonzales	Brandy Nixon, Paulina Domingez, Amiee Dunneback	< NAME OF PERSON	
		\$ 265.00	\$ 245.00	\$ 225.00	\$ 205.00	\$ 190.00	\$ 170.00	\$ 125.00	\$ 95.00	< HOURLY RATES	
TASK DESCRIPTION										TOTAL HOURS PER TASK	
1. Design Development		15	110	90	384	635	308	404	38	1984	
	Conduct and Attend Meetings	10	16	8	16	15			10	75	
	Data Collection and Review		8		20	40				68	
	Determine Basis of Design		16		24	40				80	
	Determine Site Conditions		8	12	24	40	24			108	
	Perform Asset Condition Assessment		15	15	30	60	30			150	
	Prepare Draft and Final Condition Assessment Report	1	15	15	30	60	30	24	8	183	
	Thirty Percent (30%) Progress Submittal	2	20	24	200	300	200	340	12	1098	
	Preliminary Facility Design Report and Cost Estimate	2	12	16	40	80	24	40	8	222	
2. Detailed Design		18	182	130	570	950	600	560	54	3064	
	60% Construction Documents	4	80	60	200	300	200	160	16	1020	
	90% Construction Documents	4	40	40	240	360	240	280	12	1216	
	Maricopa County / Development Services Submittal	2	8		20	24			4	58	
	Building/Fire Code Compliance		4		10	16			2	32	
	Develop Process Control Description	4	10	20	20	50	40		4	148	
	Final (100%) Submittal	4	40	10	80	200	120	120	16	590	
3. Project Delivery Method Assistance		2	16	8	64	80	16	40	8	234	
	Project Delivery Method Assistance	2	16	8	64	80	16	40	8	234	
4. Other Direct Costs		0	0	0	0	0	0	0	0	0	
5. Owner's Allowance											
TOTAL HOURS:		35	308	228	1018	1665	924	1004	100	5282	

EXHIBIT "C"

INSURANCE REQUIREMENTS

1. General.

- 1.1 At the same time as execution of this Agreement, Consultant must furnish City a certificate of insurance on a standard insurance industry ACORD form. The ACORD form must be issued by an insurance company authorized to transact business in the State of Arizona possessing a current A.M. Best, Inc. rating of A-7, or better and legally authorized to do business in the State of Arizona with policies and forms satisfactory to City. Provided, however, the A.M. Best rating requirement will not be deemed to apply to required Workers' Compensation coverage.
- 1.2 Consultant and any of its subconsultants must procure and maintain, until all of their obligations have been discharged, including any warranty periods under this Agreement are satisfied, the insurances set forth below.
- 1.3 The insurance requirements set forth below are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement.
- 1.4 City in no way warrants that the minimum insurance limits contained in this Agreement are sufficient to protect Consultant from liabilities that might arise out of the performance of the Agreement services under this Agreement by Consultant, its agents, representatives, employees, subconsultants, and Consultant is free to purchase any additional insurance as may be determined necessary.
- 1.5 Failure to demand evidence of full compliance with the insurance requirements in this Agreement or failure to identify any insurance deficiency will not relieve Consultant from, nor will it be considered a waiver of its obligation to maintain the required insurance at all times during the performance of this Agreement.
- 1.6 Use of subconsultants: If any work is subcontracted in any way, Consultant must execute a written Agreement with subconsultant containing the same Indemnification Clause and Insurance Requirements as City requires of Consultant in this Agreement. Consultant is responsible for executing the Agreement with the subconsultant and obtaining Certificates of Insurance and verifying the insurance requirements.

2. Minimum Scope and Limits of Insurance. Consultant must provide coverage with limits of liability not less than those stated below.

- 2.1 *Professional Liability.* If the Agreement is the subject of any professional services or work performed by Consultant, or if Consultant engages in any professional services or work adjunct or residual to performing the work under this Agreement, Consultant must maintain Professional Liability insurance covering errors and omissions arising out of the work or services performed by Consultant, or anyone employed by Consultant, or anyone whose acts, mistakes, errors and omissions Consultant is legally liable, with a liability limit of \$1,000,000 each claim and \$2,000,000 all claims. In the event the Professional Liability insurance policy is written on a "claims made" basis, coverage must extend for 3 years past

completion and acceptance of the work or services, and Consultant, or its selected Design Professional will submit Certificates of Insurance as evidence the required coverage is in effect. The Design Professional must annually submit Certificates of Insurance citing that the applicable coverage is in force and contains the required provisions for a 3 year period.

2.2 *Commercial General Liability-Occurrence Form.* Consultant must maintain "occurrence" form Commercial General Liability insurance with a limit of not less than \$2,000,000 for each occurrence, \$4,000,000 aggregate. Said insurance must also include coverage for products and completed operations, independent contractors, personal injury and advertising injury. If any Excess insurance is utilized to fulfill the requirements of this paragraph, the Excess insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

2.3 *Automobile Liability-Any Auto or Owned, Hired and Non-Owned Vehicles Vehicle Liability:* Consultant must maintain Business/Automobile Liability insurance with a limit of \$1,000,000 each accident on Consultant owned, hired, and non-owned vehicles assigned to or used in the performance of Consultant's work or services under this Agreement. If any Excess or Umbrella insurance is utilized to fulfill the requirements of this paragraph, the Excess or Umbrella insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

2.4 *Workers Compensation and Employers Liability Insurance:* Consultant must maintain Workers Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of Consultant employees engaged in the performance of work or services under this Agreement and must also maintain Employers' Liability insurance of not less than \$1,000,000 for each accident and \$1,000,000 disease for each employee.

3. Additional Policy Provisions Required.

3.1 *Self-Insured Retentions or Deductibles.* Any self-insured retentions and deductibles must be declared and approved by City. If not approved, City may require that the insurer reduce or eliminate any deductible or self-insured retentions with respect to City, its officers, officials, agents, employees, and volunteers.

3.1.1. Consultant's insurance must contain broad form contractual liability coverage.

3.1.2. Consultant's insurance coverage must be primary insurance with respect to City, its officers, officials, agents, and employees. Any insurance or self-insurance maintained by City, its officers, officials, agents, and employees will be in excess of the coverage provided by Consultant and must not contribute to it.

3.1.3. Consultant's insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

3.1.4. Coverage provided by Consultant must not be limited to the liability assumed under the indemnification provisions of this Agreement.

- 3.1.5. The policies must contain a severability of interest clause and waiver of subrogation against City, its officers, officials, agents, and employees, for losses arising from Work performed by Consultant for City. (Does not apply to Professional Liability coverage.)
- 3.1.6. Consultant, its successors and or assigns, are required to maintain Commercial General Liability insurance as specified in this Agreement for a minimum period of 3 years following completion and acceptance of the Work. Consultant must submit a Certificate of Insurance evidencing Commercial General Liability insurance during this 3-year period containing all the Agreement insurance requirements, including naming City of Chandler, its agents, representatives, officers, directors, officials and employees as Additional Insured as required.
- 3.1.7. If a Certificate of Insurance is submitted as verification of coverage, City will reasonably rely upon the Certificate of Insurance as evidence of coverage, but this acceptance and reliance will not waive or alter in any way the insurance requirements or obligations of this Agreement.

3.2. *Insurance Cancellation During Term of Agreement.*

- 3.2.1. If any of the required policies expire during the life of this Agreement, Consultant must forward renewal or replacement Certificates to City within 10 days after the renewal date containing all the required insurance provisions.
- 3.2.2. Each insurance policy required by the insurance provisions of this Agreement must provide the required coverage and must not be suspended, voided or canceled except after thirty (30) days prior written notice has been given to City, except when cancellation is for non-payment of premium, then ten (10) days prior notice may be given. Such notice must be sent directly to Chandler Law-Risk Management Department, Post Office Box 4008, Mailstop 628, Chandler, Arizona 85225. If any insurance company refuses to provide the required notice, Consultant or its insurance broker must notify City of any cancellation, suspension, non-renewal of any insurance within seven (7) days of receipt of insurers' notification to that effect.

3.3 *City as Additional Insured.* The policies are to contain, or be endorsed to contain, the following provisions:

- 3.3.1. The Commercial General Liability and Automobile Liability policies are to contain, or be endorsed to contain, the following provisions: City, its officers, officials, agents, and employees are additional insureds with respect to liability arising out of activities performed by, or on behalf of, Consultant; Products and Completed operations of Consultant; and automobiles owned, leased, hired, or borrowed by Consultant.
- 3.3.2. City, its officers, officials, agents, and employees must be additional insureds to the full limits of liability purchased by Consultant even if those limits of liability are in excess of those required by this Agreement.

EXHIBIT "D"

SPECIAL CONDITIONS

Standard Details and Specifications. Consultant must be familiar with City's latest revision of the MAG Specifications and MAG Standard Details as amended by City. City's current amendment to the MAG Specifications, part of City's Unified Development Manual, may be found and downloaded from City's website at <http://www.chandleraz.gov/udm>.

City Ownership of Project Documents. All work products (electronically or manually generated) including, but not limited to: plans, specifications, cost estimates, field notes, tracings, studies, investigations, design analyses, original drawings, original mylars, Computer Aided Drafting and Design (CADD) file diskettes which reflect all final drawings, and other related documents which are prepared in the performance of this Agreement (collectively referred to as "Documents") are to be and remain the property of City and are to be delivered to the Project Manager before the final payment is made to Consultant. In the event these Documents are altered, modified or adapted without the written consent of Consultant, which consent Consultant must not unreasonably withhold, City agrees to hold Consultant harmless to the extent permitted by law from the legal liability arising out of City's alteration, modification or adaptation of the Documents.

Re-use of Documents. The parties agree the documents, drawings, specifications and designs, although the property of City, are prepared for this specific project and are not intended nor represented by Consultant to be suitable for re-use for any other project. Any re-use without written verification or adaptation by Consultant for the specific purpose intended will be at City's sole risk and without liability or legal exposure to Consultant.

Documents to Bear Seal. Consultant and its subconsultants must endorse by professional seal all plans, works, and deliverables prepared by each for this Agreement as required by state law.

1. Contract Worker Access Controls, Badge and Key Access Requirements. A Contract Worker from Consultant's firm must not be allowed to begin work in any City facility without: (A) The prior completion and City's acceptance of the required background screening; and (8) when required, the Contract Worker's receipt of a City issued badge. A badge will be issued to a Contract Worker solely for access to City facility(s) to which the Contract Worker is assigned. Each Contract Worker who enters a City facility must use the badge issued to the Contract Worker.
2. Badges. After receipt of the badge application, the Contract Worker will proceed to the Badging Office for processing of the badge application and issuance of the badge. City will not process the badge application until the Contract Worker satisfies the required Background Screening (as defined herein). The Contract Worker must comply with all requirements and furnish all requested information as requested by the Badging Office. Any and all fees associated with security badging will be assessed in compliance with Chandler City Code §4-22.

3. Key Access Procedures. If the Contract Worker's services require keyed access to enter a City facility(s), a separate key issue/return form must be completed and submitted by Consultant for each key issued.
4. Stolen or Lost Badges or Keys. Consultant must report lost or stolen badges or keys to City immediately. A new badge application or key issue form must be completed and submitted along with payment of the applicable fees prior to issuance of a new badge or key.
5. Return of Badges or Keys. All badges and keys are the property of City and must be returned to City at the Badging Office within one (1) business day of when the Contract Worker's access to a City facility is no longer required to furnish the services under this Agreement. Consultant must collect a Contract Worker's badge and key(s) upon the termination of the Contract Worker's employment; when the Contract Worker's services are no longer required at the particular City facility(s); or upon termination, cancellation or expiration of this Agreement.
6. Consultant's default under this Section must include, but is not limited to the following: (1) Contract Worker gains access to a City facility(s) without the proper badge or key; (2) Contract Worker uses a badge or key of another to gain access to a City facility; (3) Contract Worker commences services under this Agreement without the proper badge, key or Background Screening; (4) Contract Worker or Consultant submits false information or negligently submits wrong information to City to obtain a badge, key or applicable Background Screening; or (5) Consultant fails to collect and timely return Contract Worker's badge or key upon termination of Contract Worker's employment, reassignment of Contract Worker to another City facility or upon the expiration, cancellation or termination of this Agreement. Consultant acknowledges and agrees that the access control, badge and key requirements in this Section are necessary to preserve and protect public health, safety and welfare. Accordingly, Consultant agrees to properly cure any default under this Section within three (3) business days from the date notice of default is sent by City. The parties agree that Consultant's failure to properly cure any default under this Section must constitute a breach of this Section. In addition to any other remedy available to City at law or in equity, Consultant must be liable for and must pay to City the sum of one thousand dollars (\$1,000.00) for each breach by Consultant of this Section. The parties further agree that the sum fixed above is reasonable and approximates the actual or anticipated loss to City at the time and making of this Agreement in the event that Consultant breaches this Section. Further, the parties expressly acknowledge and agree to the fixed sum set forth above because of the difficulty of proving City's actual damages in the event that Consultant breaches this Section. The parties further agree that three (3) breaches by Consultant of this Section arising out of any default within a consecutive period of three (3) months or three (3) breaches by Consultant of this Section arising out of the same default within a period of twelve (12) consecutive months will constitute a material breach of this Agreement by Consultant and City expressly reserves all of its rights, remedies and interests under this Agreement, at law and in equity including, but not limited to, termination of this Agreement.

EXHIBIT "E"
SUBCONSULTANT DOCUMENTS WITH CONSULTANT

Any subconsultant assumptions, clarifications, exclusions, terms & conditions, signature blocks, etc. included are strictly between the Consultant and their subconsultants, and do not apply to the Agreement between the Consultant and the City.



September 20, 2024
Mr. Brandon Olson
Wilson Engineers
1620 West Fountainhead Parkway, Suite 501
Tempe, AZ 85282

RE: City of Chandler Brooks Crossing BPS Pipeline CCTV Inspection

Mr. Olson,
Thank you for the opportunity to provide closed circuit televising (CCTV) inspection services for the City of Chandler's pipes and pump cans at the Brooks Crossing Booser Pump Station (Attachment A). AMKA Services will be utilizing a Deep Trekker A-150 Pipe Crawler (Attachment B) that is potable water dedicated and can be utilized in 8-inch and larger pipelines. It is understood that the following pipelines sizes and distances will be completed as part of this inspection:

Area	Diameter	Quantity		Type
	IN	LF	EA	
BPS Suction	24	100		Potable
Pump Can	20		5	Potable
BPS Discharge	16	75		Potable
Well Discharge	12	40		Potable
Reservoir Fill	12	150		Potable
Well PTW	18	140		Non-Potable
Reservoir Drain	16	25		Non-Potable
Drain PS	18	175		Non-Potable

The deliverable from the inspection of these pipelines will be a link to a cloud-based digital file of the completed video footage captured during these inspections, as well as a technical memo summarizing the data captured and recommendations for addressing any defects.

In order to complete this work, the following items are assumed to be completed by others:

- Access into site and buildings
- Pipeline dewatering and cleaning (if necessary)
- Removal of pump or blind flanges on pump cans
- Excavations or mechanical work to gain access into pipes
- Access into vaults and confined space support

AMKA Services
70 South Val Vista Drive Suite A3 – 487 Gilbert, AZ 85296
602-228-5040 | mike@amkaservices.com
AZ ROC: 342285



The proposed costs for the items noted in this proposal includes the following items:

Task	Unit Cost	Quantity	Cost
Mobilization	\$5,000/each	1 each	\$5,000.00
Inspection of Pipelines and Pump Cans Using Potable Water Camera	\$12,500/each	1 each	\$12,500.00
Technical Memo	\$5,000/each	1 each	\$5,000.00
Total Cost (tax exempt)			\$22,500.00

Assumptions, Terms, and Conditions:

- Net 30 days payment terms
- Permits by others (if necessary)
- Project is tax exempt

It is expected this work will be completed in January 2025 and that

We thank you for the opportunity to provide this proposal for inspection services for Wilson Engineers and your client the City of Chandler. If you have any questions, please feel free to contact me at 602-228-5040.

Respectfully submitted,

Mike Ambroziak

Mike Ambroziak, P.E.
Principle
AMKA Services

AMKA Services
70 South Val Vista Drive Suite A3 – 487 Gilbert, AZ 85296
602-228-5040 | mike@amkaservices.com
AZ ROC: 342285

September 20, 2024
Proposal No. 12PHX02-06125

Mr. Brandon Olson, PE
Assistant Project Manager
Wilson Engineers
1620 West Fountainhead Parkway, Suite 501
Tempe, Arizona 85282

Subject: Proposal to Provide Geotechnical Engineering Services
 Brooks Crossing Water Production Facility Improvements
 1345 West Calle Del Norte
 Chandler, Arizona

Dear Mr. Olson:

Ninyo & Moore is pleased to submit this proposal to provide geotechnical engineering services for the above-mentioned project. This proposal is based on the information that we received from your office. It outlines our scope of services, project assumptions, anticipated schedule, and fee for this project.

SITE AND PROJECT DESCRIPTION

The project site is located within the existing Brooks Crossing Water Production Facility at 1345 West Calle Del Norte in Chandler, Arizona, and include various improvements to the facility. These improvements will generally include replacing the underground booster pump station piping; providing a new electrical/chemical building; and rehabilitating/replacing the reservoir pending findings of a future condition assessment.

SCOPE OF SERVICES

Our scope of services for this project is summarized below:

- Obtain permission from the City of Chandler to access the site to conduct our field work.
- Perform a site reconnaissance and conduct geological mapping.
- Review available published geotechnical data and aerial photographs applicable to the project site.
- Conduct a site visit to select and mark out the proposed boring locations.

- Contact Arizona 811 to evaluate underground utilities at our proposed boring locations.
- Perform a geotechnical exploration, which will include the excavating up to six soil borings extended up to 50 feet below the ground surface. The borings will be advanced with a truck mounted drill rig using hollow-stem augers.
- Collect soil samples in the borings for laboratory testing and analysis. The boreholes will be backfilled with soil spoils. Ninyo & Moore personnel will log the borings in general accordance with the Unified Soil Classification System and ASTM D2488 by observing cuttings and split-spoon samples. The soil samples will be transported to a Ninyo & Moore laboratory for testing.
- Perform laboratory testing that will evaluate the on-site soil's index, strength, and chemical characteristics.
- Prepare a geotechnical report to include logs of the exploratory borings and results of the laboratory testing. The report will include a cover letter sealed by a Professional Engineer licensed in the State of Arizona. The report will include the following:
 - Site vicinity map and boring plan map;
 - Description of work scope, laboratory, and field procedures;
 - Encountered subsurface soil and groundwater conditions;
 - General seismic characteristics in accordance with International Building Code;
 - Geologic hazards;
 - Excavation characteristics of on-site soils;
 - Excavation side slope stability;
 - Vertical shoring guidelines;
 - Earthwork factors;
 - Potential for re-use of on-site soils;
 - Alternatives for storage tank subgrade improvement preparation measures; including the use of geogrid to help reduce settlement estimates (if needed);
 - Recommendations for special soil conditions such as expansive, collapsible, or highly compressible soils;
 - Allowable net soil bearing pressures for spread foundations and recommended dimensions and depths;
 - Estimated settlements (total and differential settlements) for the recommended foundation types and sizes;
 - New pavement sections for various traffic volumes and recommendations for pavement construction for parking lots, light truck traffic and heavy truck traffic;

- Recommendations relative to site drainage;
- Active and at-rest pressures for design of freestanding and restrained retaining walls and passive pressures for resisting lateral loads;
- Guidelines relative to the design of retaining walls; and
- Discussion of soil corrosivity to steel and concrete.

ASSUMPTIONS

We have made the following assumptions in the preparation of this proposal:

- The site is accessible to normal, two-wheel drive, truck-mounted drilling equipment.
- Some ground disturbance should be expected as a result of our field work.
- No traffic control measures will be needed for this project.
- Ninyo & Moore will not need to obtain any environmental clearance as a part of this project.

SCHEDULE

We are prepared to initiate this project immediately and could begin the field work immediately. The fieldwork should be finished within four to six weeks from notice-to-proceed. We anticipate issuing our report within about 10 to 12 weeks from the date we receive notice-to-proceed. Preliminary recommendations can be provided about one week after the field work is done.

FEE

We propose to perform the geotechnical work scope described above for a fee of \$35,000 (Thirty-Five Thousand Dollars). The fees are based on the scope of services presented above and our understanding of the project. Any additional services, not included in the aforementioned scope, will be charged on a time-and-materials basis in accordance with our current Schedule of Fees. To authorize our services, please sign and return the attached Work Authorization and Agreement.



STANDARD SERVICES AGREEMENT

PNL REF. #: 24-241272 **DATE:** Friday, September 20, 2024

CLIENT NAME: Wilson Engineers

BILLING ADDRESS: 1620 W. Fountainhead Pkwy
Suite 501
Tempe, AZ 85282

PRIMARY: 480-893-8860 Ext. 8330

OTHER: 602-245-9737

ATTN: Chris Yarn **MOBILE:** 602-245-9737

EMAIL ADDRESS: cyarn@wilson-engineers.com

PROJECT NAME: Brooks Crossing Tank MFL

SERVICE LOCATION: 1345 w. Calle Del Norte, Chandler, AZ 85224

TYPE OF SERVICE: Nondestructive

APPROX. SERVICE DATE: 2025

CODE/STANDARD: API 653

ACCEPT. CRITERIA: API 653

SPECIFICATION: API 653

PNL PROCEDURE(S): MFL-1-Magnetic Flux Leakage of Tank Floors

We have prepared the scope of services and fees based on our telephone conversation.

This agreement is in accordance with our standard Schedule(s) of Services and Fees at the time of issue. Services, Fees, and quantities are estimates only based on our understanding of the project and may vary up or down depending upon project schedules, results of inspections or tests, and actual end amount of services required. Additional services requested will be billed in accordance with our current services and fee schedule at the time of request. We will bill only for services provided. General Conditions of Service Contract form an integral part of this agreement. Client or Client's representative may authorize services under this agreement in any of the following ways:

- a) by returning a signed copy of this agreement, or
- b) by issuance of a purchase order, contract, notice to proceed, or other written authorization referencing this agreement, or
- c) providing verbal consent to PNL's authorized representative to initiate service. A written authorization referencing this agreement must be received within three (3) days.

PNL will only initiate services as directed by one of the conditions above.

Respectfully,

PHOENIX NATIONAL LABORATORIES, LLC.

Matt Sorce
Advanced NDE Supervisor

SCOPE OF SERVICES

Provide inspection services as follows:

Description of Tank(s) to be examined	Tank Material:	Carbon Steel
	Diameter:	120'
	Floor Thickness:	Unknown - ½" maximum
	Internal Liner/Thickness:	Unknown
	Total Number of Plates:	Unknown
	Floor Obstructions:	Unknown
Type of Inspection	X Mapped ☐ Manual	
Details of Services	Perform MFL screening on the floor plate to the fullest extent possible. Floors with existing patch plates, supports, mounts, etc. will have a more limited inspection due to the part geometry. All plates are to have manual UT scan/thickness measurements at dead zones (plate corners and plate edges). All limited areas of suspect bottom side or topside corrosion will have a UT and VT prove up to verify the remaining wall thickness.	
Floor Cleaning	All tank content including water shall be 100% removed from the inside of the tank prior to the inspection besides the designed interior coating. PNL recommends that all the floor surface area be sandblasted to a SSPC-SP6 condition. Scale and other remnant materials left on the tank floor surface can slow down tank inspection with false calls or could mask potential small diameter indications with deep depths.	
Accessibility to the areas requiring examination	Client is to provide access to the areas including ladders, scaffolds, lifts where required.	
Project Schedule and Number of Callouts expected	PNL estimates 40 hours, portal to portal to examine the tank. Various factors will effect the actual time needed including floor cleanliness, floor flatness, and number of indications found. Each tank will have an additional eight hours of reporting time. All time will be billed on a time and material basis. Quoted time is based on an estimation that the floor is cleaned properly, does not have complex floor geometry, and has minimal indications. The general process is as follows: Examine floor for adequate cleaning. Measure each floor plate and input data into MFL software program. Lay out plates with reference marks. Linear plate scans using Mark IV unit. Radial floor scans using Mark IV Edge unit. Review data/mark areas for UT prove up. Perform UT prove ups (limited depending on number of indications) Prepare final report.	
Safety Concerns	PNL will perform work in a safe manner and in accordance with our safety manual and any additional on site safety criteria provided to us during safety orientations. Entry into the tank will be in accordance with Client's confined space entry and permit program. Client to provide all air monitoring, ventilation, and rescue service where needed. Pre-task safety reviews will be conducted daily by our personnel.	



CLIENT: Wilson Engineers
PROJECT: Brooks Crossing Tank MFL

PNL REFERENCE NO: 24-241272

REPORTING

Reports will be generated in the field and submitted to Client's designated field contact or appropriate contractor, if available, at the completion of the work each day. These reports are preliminary, subject to review by PNL's Project Manager (PM). If there are any questions or discrepancies on the field generated report(s), the PNL PM shall be contacted for disposition. Reviewed and approved reports will be submitted electronically to the Client's specified distribution list in PDF format. The reviewed reports may be either handwritten or typed. Approved reports will also be submitted with invoicing, either electronically or hard copy as directed by Client. Client also takes responsibility to review the content of the reports for accuracy and to report any discrepancy in a timely manner to the PNL PM.

SCHEDULE OF FEES

PAY ITEM	DESCRIPTION	QTY	PRICE	COST
224S.NDE.2.R	Hours, Two man NDE Crew, Regular	32	\$219.00	\$7,008.00
224S.NDE.2.O	Hours, Two man NDE Crew, Overtime	8	\$295.65	\$2,365.20
224S.PV	Day, Light Equipment Vehicle - Local Area	4	\$125.00	\$500.00
224S.MFL.MARK IV	Day, MFE Mark IV Magnetic Flux Leakage Floor Scan equipment	4	\$325.00	\$1,300.00
224S.UTPA.MX-X.DAY	Day, Olympus Omniscan MX-X with encoding scanner	4	\$189.00	\$756.00
224S.NDE.R	Hours, Nondestructive Examination Technician, Regular, Reporting	8	\$114.00	\$912.00
TOTAL				\$12,841.20

PAYMENT TERMS: Due on Receipt This proposal is valid for 90 days at which time a review may be required (see remarks).

REMARKS: Services and fees not listed will be quoted upon request. Work will be performed in accordance with the purchase order provided by the client. If no purchase order is provided, services will be performed as otherwise agreed upon. Rates for field services are portal to portal and apply to any shift with 24-hour notification given. A minimum charge of 4 hrs. will be applied to all radiographic field services. A minimum charge of 3 hrs. will be applied to all other metro-area field services. A minimum charge of 8 hrs. will be applied to all out-of-town services each day. Overtime rates will be applied at 1.35x the hourly rate for services provided more than 8 hrs. per day, Saturday, Sunday, and Holidays. Emergency services with less than 24 hrs. notification during normal weekdays (M-F) will be charged at 1.35x the hourly rate. Emergency services on the weekend or holidays will be charged at 1.7x the hourly rate. Standby time due to delays beyond our control and travel time portal to portal will be charged at the applicable rate. Jigs, fixtures, calibration blocks, transducers, probes unique to a job and equipment rentals will be charged at cost+15%. For lab services, a minimum lab charge of \$150 may apply depending on the complexity of the testing requested. Results will be provided within normal laboratory procedures outlined in the scope of services. If requested & workload permits, expedited services are available for an additional charge. The unit rates are valid for one (1) year from the proposal date. A 5% processing fee will be applied to credit card payments equal to or greater than \$500. Services & fees subject to the General Conditions of Service Contract.

RFI CONSULTANTS LLC

*NACE Certified Coating Inspectors & Protective Coatings Specialists
Veteran Owned & Operated*

Date: September 19, 2024

To,
Brandon Olson P.E., Assistant Project Manager
Wilson Engineers
1620 W. Fountainhead Pkwy, Suite 501
Tempe, AZ 85282

From:
RFI Consultants LLC
2225 West Speer Trail
Phoenix AZ 85086

Sub: Chandler Books Crossing WPF - 2 MG Water Tank Inspection
Proposal for Coating System Assessment

RFI Consultants LLC is pleased to provide a proposal for the coating system assessment of the interior and exterior of the above subject tank. Assessment procedures will be completed in accordance with applicable NACE, SSPC, AWWA, ISO or ASTM Standards.

Steel Water Tank

Evaluation: Can consist of one or more of the following:

- Visually inspect the coating system and the structure looking for defects, potential defects, non-compliant items.
- ASTM D 714 (Standard Test Method for Evaluating Degree of Blistering of Paints)
- ASTM D 610 - Standard Practice for Evaluating Degree of Rusting on Painted Steel Surfaces.
- SSPC-PA2 - Procedure for Determining Conformance to Dry Coating Thickness Requirements
- ASTM D4138 - Standard Practices for Measurement of Dry Film Thickness of Protective Coating Systems by Destructive, Cross-Sectioning Means.
- NDT - UTG Readings for Steel Thickness
- Use of pit gauge
- ASTM D 3359 Method A (Measuring Adhesion by Tape Test)
- ASTM D 6677 (Evaluating Adhesion by Knife)

Provide written coating system assessment with photographs

RFI CONSULTANTS LLC

*NACE Certified Coating Inspectors & Protective Coatings Specialists
Veteran Owned & Operated*

Rate:

Dry Reservoir Coatings Inspection Price: \$1,200.00

Optional: NDT - UTG Readings for Steel Thickness: Roof Plates: \$1,000.00

Notes:

- Minimum 48 hours notice for all inspections
- Responsibilities for cleaning out of the infrastructure for assessment to be provided by others
- Responsibilities for accessibility, confine space entry and exit, equipment, permits and all other related confine space procedures to be provided by others.
- RFI will provide our own safety harnesses, PPE clothing, respirators, monitors etc as required.

We appreciate the opportunity to be of service and looking forward to working on the project. If you have any questions, please do not hesitate to call us at 480-560-7182 or send us an e-mail at eric_rfi@yahoo.com

Respectfully Submitted

Eric Brackman

Eric Brackman

RFI Consultants LLC

NACE CIP & PCS Lead Instructor

NACE CCI Level 3 w/ Bridge #14458

NACE PCS #14458

NASSCO Certified Manhole Rehab Inspector

AarmorLok Certified Protective PVC Liner Inspector



September 18, 2024

Civil Engineering
Water Resources
Land Survey
Construction Management

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Mr. Alan Palmquist, PE
Wilson Engineers
1620 West Fountainhead Parkway, Suite 501
Tempe, Arizona 85282

602.821.8666
Alan.Palmquist@wilson-engineers.com

Re: **Brooks Crossing Water Production Facility Rehabilitation**
Topographic Survey Agreement
Chandler, Arizona

Dear Mr. Palmquist:

Wood, Patel & Associates, Inc. (WOODPATEL) is pleased to provide **Wilson Engineers** (Client) with this Topographic Survey Agreement for the above-referenced site located northwest of the NXP Semiconductor site per the attached exhibit.

SCOPE OF SERVICES

1. Topographic Survey

We will prepare a Topographic Survey for this site with contours and spot elevations based on City of Chandler datum. We will field locate surface evidence of utilities and other features within the walls of the facility. We will plot the boundary of the parcel based on Document 1983-0340960 as noted on the County Assessor's GIS website.

The survey shall be performed to the appropriate standards of precision and accuracy consistent with local practice and the requirements of law. The survey shall employ proper field procedures, instrumentation, and adequate survey personnel in order to achieve these accuracies.

As necessary, we will coordinate our work with Mr. Palmquist. An electronic AutoCAD file will be submitted for Client's use and a Control Map will be prepared at Client's request.

EMERITUS

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Jett M. Thies, PE
Clint Morris, PE
Lane Thompson, PE

FEE SUMMARY

1.	Topographic Survey	\$8,360
	TOTAL	\$8,360

EXHIBIT "F"
FEDERAL REQUIREMENTS

N/A