



**PROFESSIONAL SERVICES AGREEMENT**  
**Construction Management Services**  
**HUNT HIGHWAY WATER PRODUCTION FACILITY GROUND SUBSIDENCE MITIGATION**  
**Project No. WA2107.451**  
**Council Date: July 14, 2022      Item No.**

**THIS AGREEMENT** ("Agreement") is made and entered into on the \_\_\_\_ day of \_\_\_\_\_, 2022 ("Effective Date"), by and between City of Chandler, an Arizona municipal corporation, ("City"), and **Arcadis U.S., Inc.**, a Delaware 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 Construction Management Services for **HUNT HIGHWAY WATER PRODUCTION FACILITY GROUND SUBSIDENCE MITIGATION** 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 contract 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 **150** 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 **\$164,796** 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<br>Attn: Acting CIP City Engineer<br>P.O. Box 4008, Mail Stop 407<br>Chandler, AZ 85244-4008<br>Phone: 480-782-3349      Email: kimberly.moon@chandleraz.gov |                                                    |
| With a copy to: | City of Chandler - Public Works & Utilities Department<br>Attn: Project Manager<br>P.O. Box 4008, Mail Stop 407<br>Chandler, AZ 85244-4008                                                                          |                                                    |
| To Consultant:  | <b>LEGAL COMPANY NAME:</b>                                                                                                                                                                                          | Arcadis U.S., Inc.                                 |
|                 | Mailing Address:                                                                                                                                                                                                    | 410 N. 44th Street, Suite 1000, Phoenix, AZ, 85008 |
|                 | Physical Address:                                                                                                                                                                                                   | 410 N. 44th Street, Suite 1000, Phoenix, AZ, 85008 |
|                 | Statutory Agent Name:                                                                                                                                                                                               | CT Corporation System                              |
|                 | Statutory Agent Mailing Address:                                                                                                                                                                                    | 3800 N. Central, Ste. 460, PHX 85012               |
|                 | Statutory Agent Physical Address:                                                                                                                                                                                   | 3800 N. Central, Ste. 460, PHX 85012               |
|                 | <b>CONSULTANT'S AUTHORIZED PROJECT REPRESENTATIVE</b>                                                                                                                                                               |                                                    |
|                 | Name:                                                                                                                                                                                                               | Kim A. Tanner                                      |
|                 | Title:                                                                                                                                                                                                              | Principal Engineer                                 |
|                 | Phone:                                                                                                                                                                                                              | 602-797-4636                                       |
|                 | Email:                                                                                                                                                                                                              | kim.tanner@arcadis.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 contract 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 contracts 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 Contract 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 a contract 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 a contract 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 contract 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 contract 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** - 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.

SIGNATURE PAGE TO FOLLOW

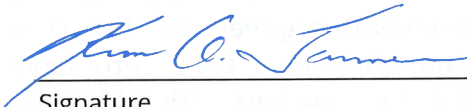
This Agreement will be in full force and effect only when it has been approved and executed by the duly authorized City officials.

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

**"CITY" CITY OF CHANDLER**

**"CONSULTANT"**  
**Arcadis U.S., Inc.**

\_\_\_\_\_  
MAYOR

  
Signature

5/31/22

\_\_\_\_\_  
Date

**RECOMMENDED BY:**

\_\_\_\_\_  
Kim A. Tanner

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Title

\_\_\_\_\_  
kim.tanner@arcadis.com

\_\_\_\_\_  
Signer Email Address

  
\_\_\_\_\_  
Kimberly Moon, P.E.  
Acting CIP City Engineer

**APPROVED AS TO FORM:**

\_\_\_\_\_  
City Attorney



**ATTEST:**

\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Seal

**EXHIBIT "A"**  
**SCOPE OF SERVICES/SCHEDULE**

## **EXHIBIT "A"**

### **CONSTRUCTION MANAGEMENT SCOPE OF SERVICES**

#### **PROJECT TASKS**

##### **1. PRE-CONSTRUCTION ASSISTANCE**

###### **A. Task 1.1 Revise Construction Drawings and Specifications**

Consultant will revise the prior construction drawings and specifications to modifying the previously prepared construction drawings and specifications based on recommendations in the Subsidence Mitigation Additional Investigations Technical Memo dated April 27, 2022, by Arcadis. Consultant will also submit plans and specifications for City permit review.

###### **B. Task 1.2 Attend Pre-Construction Meetings**

- i. Consultant must attend the pre-construction meeting.
- ii. Consultant must attend the pre-construction public meeting.

##### **2. CONSTRUCTION MANAGEMENT**

###### **A. Task 2.1 Weekly Construction Meetings**

- i. Consultant must conduct weekly construction meetings. Each meeting includes agenda and minutes; Request for Information (RFI); Shop Drawing; Request for Information (RFI); Field Directive (FD); Material Certification; and Allowance Logs. Consultant assumes sixteen (16) weekly meetings will be held.

###### **B. Task 2.2 CPM Schedule**

- i. Consultant must review and evaluate Contractor's initial CPM schedule and provide recommendations for acceptance.
- ii. Consultant must review Contractor's monthly CPM schedule updates submitted with each payment application, identify CPM tasks behind schedule that may affect critical path items, project substantial and final completion dates and initiate correspondence to City regarding those tasks. Consultant assumes five (5) reviews of updated CPM schedule.

###### **C. Task 2.3 Requests for Information (RFI's)**

- i. Consultant must review, evaluate, and respond to Contractor Requests for Information (RFI's); and prepare and maintain a submittal log of all RFI's. Consultant assumes a maximum of twenty (20) RFI responses.

###### **D. Task 2.4 Shop Drawing Submittals**

- i. Consultant must review, evaluate, and respond to Contractor shop drawing submittals; and prepare and maintain a submittal log of all shop drawing submittals. Consultant assumes a maximum of thirty (30) reviews.

###### **E. Task 2.5 Requests for Proposal (RFP)**

- i. Consultant must prepare Requests for Proposal (RFP) documents detailing requested additional work tasks; review and evaluate Contractor RFP responses (cost derivations) with approval recommendations; and prepare and maintain a submittal log list of all RFP's. Consultant assumes five (5) RFPs.

###### **F. Task 2.6 Field Directives (FD's)**

- i. Consultant must prepare Field Directive (FD) documents detailing requested additional work tasks; review and evaluate Contractor FD responses with

approval recommendations; and prepare and maintain a submittal log list of all FD's. Consultant assumes five (5) FD's.

**G. Task 2.7 Contractor Payment Applications**

- i. Consultant must review and evaluate Contractor monthly payment applications and make recommendation for payment; maintain a weekly record of constructed pay quantities and compile monthly totals; and coordinate payment application with the City quantity report and the inspectors' daily logs. Consultant assumes a maximum of four (4) payment applications, with two (2) reviews each.

**3. CONSTRUCTION INSPECTION**

**A. Task 3.1 Inspection Services**

- i. Consultant must provide weekly construction inspection to verify materials and installations conform to construction documents; prepare daily inspection reports documenting Contractor construction activities and progress during field inspection visits; and perform intermittent erosion control inspections. Consultant assumes one (1) inspector full time an average of (2) times per week for four (4) months.

**B. Task 3.2 Project Closeout**

- i. Consultant must compile non-conformance list prior to Substantial Completion; schedule and conduct Substantial Completion inspection; prepare Substantial Completion punch list generated from Substantial Completion inspection; track items on punch list and note completed items; and complete and distribute Substantial Completion certificates.
- ii. Consultant must schedule and conduct Final Completion inspection; and complete and distribute Final Completion certificates.

**4. MATERIALS TESTING**

**A. Task 4.1 Quality Assurance (QA) Test Program**

- i. Consultant must review and verify Contractor's Quality Assurance material test and frequencies are consistent with City and MAG; and review and evaluate all Contractor sampling, test, and inspection results for conformance with construction documents.

**B. Task 4.2 Quality Control (QC) Test Program**

- i. Consultant must coordinate with Contractor's testing representative to obtain required QA tests and samples; and coordinate and provide QC review of testing results of soil compaction, underpinning system and concrete for new pipe supports.

**5. RECORD DRAWINGS**

**A. Task 5.1 Record Drawings**

- i. Review and monitor Contractor's weekly updates on red-line drawing set.
- ii. Transfer red-line comments to City's construction plans to create record drawings.
- iii. Provide and deliver record drawings in mylar, paper and digital pdf format to the City as required for as-built submittal process at city permit counter.

**ASSUMPTION, CLARIFICATIONS, AND EXCLUSIONS**

- 1. Application fees for City reviews and permits will be paid by CITY.

2. The Owner's Allowance will only be utilized with prior written approval from the City representative.
3. The Direct Expense Allowance will be used for normal reimbursable expenses on the project. Items must be billed at cost and backup must be provided with pay applications.

**EXHIBIT "B"**  
**COMPENSATION AND FEES**

Arcadis U.S., Inc.  
410 N. 44th Street  
Suite 1000  
Phoenix  
Arizona 85008  
Tel 602 438 0883  
Fax 602 438 0102  
www.arcadis.com

WA2107.451  
**EXHIBIT B-1**  
Fee Schedule

| HUNT HIGHWAY WPF GROUND SUBSIDENCE MITIGATION<br>CONSTRUCTION MANAGEMENT TASK DESCRIPTIONS |                                                                | SUBTOTAL             |
|--------------------------------------------------------------------------------------------|----------------------------------------------------------------|----------------------|
| <b>1. Pre-Construction Assistance</b>                                                      |                                                                | <b>\$ 21,108.00</b>  |
| 1.1                                                                                        | Revise Drawings and Specifications                             | \$ 19,308.00         |
| 1.2                                                                                        | Attend Pre-Construction Meetings                               | \$ 1,800.00          |
| <b>2. Construction Management</b>                                                          |                                                                | <b>\$ 29,962.00</b>  |
| 2.1                                                                                        | Weekly Construction Meetings                                   | \$ 5,500.00          |
| 2.2                                                                                        | CPM Schedule                                                   | \$ 1,764.00          |
| 2.3                                                                                        | Requests for Information (RFI's)                               | \$ 5,372.00          |
| 2.4                                                                                        | Shop Drawing Submittals                                        | \$ 8,014.00          |
| 2.5                                                                                        | Requests for Proposal (RFP)                                    | \$ 2,294.00          |
| 2.6                                                                                        | Field Directives (FD's)                                        | \$ 2,294.00          |
| 2.7                                                                                        | Contractor Payment Applications                                | \$ 4,724.00          |
| <b>3. Construction Inspection</b>                                                          |                                                                | <b>\$ 51,800.00</b>  |
| 3.1                                                                                        | Inspection Services                                            | \$ 47,360.00         |
| 3.2                                                                                        | Project Closeout                                               | \$ 4,440.00          |
| <b>4. Materials Testing</b>                                                                |                                                                | <b>\$ 2,010.00</b>   |
| 4.1                                                                                        | Quality Assurance (QA) Test Program                            | \$ 370.00            |
| 4.2                                                                                        | Quality Control (QC) Test Program                              | \$ 1,640.00          |
| <b>5. Record Drawings</b>                                                                  |                                                                | <b>\$ 4,732.00</b>   |
| 5.1                                                                                        | Record Drawings                                                | \$ 4,732.00          |
| <b>Subconsultants</b>                                                                      |                                                                | <b>\$ 29,184.00</b>  |
|                                                                                            | Gannett Fleming (Structural Underpinning Design)               | \$ 14,184.00         |
|                                                                                            | Ninyo & Moore (Geotechnical Inspection & QC Materials Testing) | \$ 15,000.00         |
| <b>6. Allowances</b>                                                                       |                                                                | <b>\$ 26,000.00</b>  |
|                                                                                            | Construction Vehicle                                           | \$ 6,000.00          |
|                                                                                            | Owner's Contingency                                            | \$ 20,000.00         |
| <b>PROJECT TOTAL</b>                                                                       |                                                                | <b>\$ 164,796.00</b> |

WA2107.451  
**EXHIBIT B-2**  
Hours and Rates

Arcadis U.S., Inc.  
410 N. 44th Street  
Suite 1000  
Phoenix  
Arizona 85008  
Tel 602 438 0883  
Fax 602 438 0102  
www.arcadis.com

| HUNT HIGHWAY GROUND SUBSIDENCE MITIGATION<br>CONSTRUCTION MANAGEMENT HOURS AND RATES |                                         | Principal /<br>Technical<br>Expert | Certified<br>Construction<br>Manager | Engineer  | Technician /<br>CAD<br>Designer /<br>Project<br>Assistant | < PROJECT<br>ROLE       |
|--------------------------------------------------------------------------------------|-----------------------------------------|------------------------------------|--------------------------------------|-----------|-----------------------------------------------------------|-------------------------|
|                                                                                      |                                         | K. Tanner / B.<br>Newhouse         | S. Swenson                           | J. Emmons | J. Ray / J.<br>Morrison                                   | < NAME OF<br>PERSON     |
|                                                                                      |                                         | \$ 265.00                          | \$ 185.00                            | \$ 159.00 | \$ 142.00                                                 | < HOURLY                |
| TASK DESCRIPTIONS                                                                    |                                         |                                    |                                      |           |                                                           | TOTAL HOURS<br>PER TASK |
| <b>1. Pre-Construction Assistance</b>                                                |                                         | <b>28</b>                          | <b>4</b>                             | <b>60</b> | <b>24</b>                                                 | <b>116</b>              |
|                                                                                      | 1.1 Revise Drawings and Specifications  | 24                                 |                                      | 60        | 24                                                        | 108                     |
|                                                                                      | 1.2 Attend Pre-Construction Meetings    | 4                                  | 4                                    |           |                                                           | 8                       |
| <b>2. Construction Management</b>                                                    |                                         | <b>16</b>                          | <b>96</b>                            | <b>34</b> | <b>18</b>                                                 | <b>164</b>              |
|                                                                                      | 2.1 Weekly Construction Meetings        | 4                                  | 24                                   |           |                                                           | 28                      |
|                                                                                      | 2.2 CPM Schedule                        |                                    | 8                                    |           | 2                                                         | 10                      |
|                                                                                      | 2.3 Requests for Information (RFI's)    | 8                                  | 8                                    | 4         | 8                                                         | 28                      |
|                                                                                      | 2.4 Shop Drawing Submittals             |                                    | 16                                   | 30        | 2                                                         | 48                      |
|                                                                                      | 2.5 Requests for Proposal (RFP)         | 2                                  | 8                                    |           | 2                                                         | 12                      |
|                                                                                      | 2.6 Field Directives (FD's)             | 2                                  | 8                                    |           | 2                                                         | 12                      |
|                                                                                      | 2.7 Contractor Payment Applications     |                                    | 24                                   |           | 2                                                         | 26                      |
| <b>3. Construction Inspection</b>                                                    |                                         | <b>0</b>                           | <b>280</b>                           | <b>0</b>  | <b>0</b>                                                  | <b>280</b>              |
|                                                                                      | 3.1 Inspection Services                 |                                    | 256                                  |           |                                                           | 256                     |
|                                                                                      | 3.2 Project Closeout                    |                                    | 24                                   |           |                                                           | 24                      |
| <b>4. Materials Testing</b>                                                          |                                         | <b>2</b>                           | <b>8</b>                             |           | <b>0</b>                                                  | <b>10</b>               |
|                                                                                      | 4.1 Quality Assurance (QA) Test Program |                                    | 2                                    |           |                                                           | 2                       |
|                                                                                      | 4.2 Quality Control (QC) Test Program   | 2                                  | 6                                    |           |                                                           | 8                       |
| <b>5. Record Drawings</b>                                                            |                                         | <b>0</b>                           | <b>16</b>                            | <b>4</b>  | <b>8</b>                                                  | <b>28</b>               |
|                                                                                      | 5.1 Record Drawings                     |                                    | 16                                   | 4         | 8                                                         | 28                      |
| <b>6. Allowances</b>                                                                 |                                         | <b>0</b>                           | <b>0</b>                             | <b>0</b>  | <b>0</b>                                                  | <b>0</b>                |
|                                                                                      | N/A                                     |                                    |                                      |           |                                                           | 0                       |
|                                                                                      |                                         |                                    |                                      |           |                                                           | 0                       |
| <b>TOTAL HOURS:</b>                                                                  |                                         | <b>46</b>                          | <b>404</b>                           | <b>98</b> | <b>50</b>                                                 | <b>598</b>              |

Team Members / Roles

Kim Tanner, PE - Principal, Civil Technical Expert  
Brian Newhouse, PE - Civil Principal Engineer  
Jeff Ray - CAD Technician  
Janet Morrison - Data Analyst

**Arcadis, LLC**  
**City of Chandler**  
**Hunt Highway Water Production Facility**  
**Pipe Support Concrete Slab**  
*Proposal for Structural Design Services*

**Structural Scope of Services**

Gannett Fleming, Inc. (GF) will provide structural design services for a concrete slab on grade supported on helical piers and approximately 12 concrete pipe supports supported on the concrete slab on grade at the City of Chandler Hunt Highway Water Production Facility. The concrete slab on grade will be designed for loading from the pipes and a live load of 100 psf. The concrete slab on grade will be designed for HS-20 loading assuming the pipes have been removed from the slab. The concrete pipe supports will be designed for the applicable pipe thrust (if required) and pipe dead loads. These services shall be performed in accordance with the 2018 IBC with the City of Chandler addendums and the standard of care for structural engineering in the State of Arizona.

The project will consist of a rectangular slab on grade with a maximum dimension of 8'-6" x 65'-6" in plan. The slab will support approximately 12 concrete pipe supports and the slab will be supported on helical piers. The design of the helical piers will be provided by the helical pier manufacturer.

**Assumptions and Conditions**

1. There will be no site visit during design.
2. Arcadis will provide GF a geotechnical report for the proposed site improvements.
3. Arcadis will provide record drawings as needed.
4. Arcadis will provide pipe thrust (if required) loads if required for the design of the pipe supports.

**Items Excluded from the Scope of Work**

1. Architectural, mechanical, electrical, civil etc. will be provided by others.
2. Construction services and construction inspections are not included in this proposal.
3. The design of the helical piers will be provided by the helical pier manufacturer.

**Compensation and Payments**

Work shall be billed on an hourly basis. For a list of tasks and rates see Schedule A. Gannett Fleming Inc. proposes to perform the structural discipline services described in the schedule for **Cost Plus to a Maximum** compensation as follows:

**Structural Design Services**

**\$ 14,183.64**

**Gannett Fleming, Inc.**

Arcadis, LLC  
City of Chandler  
Hunt Highway Water Production Facility  
Pipe Support Concrete Slab  
Proposal for Structural Design Services

| <b>Schedule A</b>      |                     | <b>Structural Design Services</b> |                  |                  |                        |                    |
|------------------------|---------------------|-----------------------------------|------------------|------------------|------------------------|--------------------|
| Task/Item              | Sr Project Engineer | Project Manager                   | Project Engineer | Sr CADD Designer | Admin Asst             |                    |
| Project Management     |                     | 2                                 | 2                |                  | 2                      |                    |
| <b>Design</b>          |                     |                                   |                  |                  |                        |                    |
| GSN                    |                     | 2                                 | 12               | 16               |                        |                    |
| Typical Details        |                     | 2                                 | 12               | 16               |                        |                    |
| Slab Plan and Sections |                     | 2                                 | 12               | 16               |                        |                    |
| QA/QC                  | 2                   | 2                                 | 6                | 6                |                        |                    |
| Total Hours            | 2                   | 10                                | 44               | 54               | 2                      |                    |
| Hourly Rate            | \$210.73            | \$174.20                          | \$146.11         | \$101.15         | \$64.62                |                    |
| Totals                 | \$421.46            | \$1,742.00                        | \$6,428.84       | \$5,462.10       | \$129.24               | \$14,183.64        |
|                        |                     |                                   |                  |                  |                        |                    |
|                        |                     |                                   |                  |                  | <b>Use Total Fee =</b> | <b>\$14,183.64</b> |
|                        |                     |                                   |                  |                  |                        |                    |
| Additional Personnel   | hourly rate         |                                   |                  |                  |                        |                    |
| Project Principal      | 250.07              |                                   |                  |                  |                        |                    |
| Senior Project Manager | 213.54              |                                   |                  |                  |                        |                    |
| Engineer               | 126.44              |                                   |                  |                  |                        |                    |
| CADD Designer          | 92.72               |                                   |                  |                  |                        |                    |
| Designer (EIT)         | 92.72               |                                   |                  |                  |                        |                    |



May 9, 2022  
Project No. 606536001

Mr. Kim Tanner  
ARCADIS  
410 North 44<sup>th</sup> Street, Suite 1000  
Phoenix, Arizona 85008

Subject: Proposal to Provide Materials Testing Services  
Hunt Highway Water Production Facility (WPF) Ground Subsidence  
2022 East Hunt Highway  
Chandler, Arizona

Dear Mr. Tanner:

Ninyo & Moore is pleased to submit this proposal to provide materials testing services for the above-mentioned project. This proposal is based on the information that we received from your office and our subsequent conversations. It outlines our scope of services, project assumptions, and estimated fee for this phase of work.

## **SITE/PROJECT DESCRIPTION**

The Hunt Highway WPF is located at 2022 East Hunt Highway in Chandler, Arizona. This facility was constructed in 1998. At this facility, recent ground subsidence has been experienced around the pump station pump cans that are situated southeast of the main steel reservoir. There are a total of six pump cans within the pump station, each extending about 16 feet below grade.

In November 2020, Ninyo & Moore prepared a geotechnical report addressing rehabilitation recommendations for the facility. We understand that these repairs will occur soon. We have been asked to prepare this proposal to conduct materials testing services during these repairs.

## **SCOPE OF SERVICES**

The scope of services we will perform for the project will include below:

- Attend pre-construction meeting on site.
- Provide as-needed helical anchor testing during installation.
- Provide as-needed concrete testing during construction of the pipe supports.

- Provide as-needed laboratory testing during construction.
- Provide as-needed office project coordination during construction.
- Prepare, sign and seal a report once the project is finished (if needed).

## ASSUMPTIONS

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

- Our services will be billed on a time-and-material basis in accordance with the attached Schedule of Fees.
- Our services will not exceed 80 hours in the field.

## ESTIMATED FEE

We propose to perform the following tasks for an estimated fee of \$15,000 (Fifteen Thousand Dollars). If this proposal meets your expectations, please provide formal authorization in the form of a subconsultant agreement, purchase order, or work authorization form.

Ninyo & Moore appreciates the opportunity to provide services on this project and we look forward to working with you.

Respectfully submitted,  
**NINYO & MOORE**



Steven D. Nowaczyk, PE  
Managing Principal Engineer

SDN/tlp

Attachment: Fee Schedule

## Schedule of Fees

### Hourly Charges for Personnel

#### Professional Staff

|                                                                                           |        |
|-------------------------------------------------------------------------------------------|--------|
| Principal Engineer/Geologist/Environmental Scientist/Certified Industrial Hygienist ..... | \$ 180 |
| Senior Engineer/Geologist/Environmental Scientist .....                                   | \$ 150 |
| Senior Project Engineer/Geologist/Environmental Scientist .....                           | \$ 140 |
| Project Engineer/Geologist/Environmental Scientist .....                                  | \$ 120 |
| Senior Staff Engineer/Geologist/Environmental Scientist .....                             | \$ 115 |
| Staff Engineer/Geologist/Environmental Scientist .....                                    | \$ 110 |
| GIS Analyst .....                                                                         | \$ 100 |
| Technical Illustrator/CAD Operator .....                                                  | \$ 75  |

#### Field Staff

|                                                                                          |        |
|------------------------------------------------------------------------------------------|--------|
| Certified Asbestos/Lead Technician .....                                                 | \$ 140 |
| Field Operations Manager .....                                                           | \$ 100 |
| Nondestructive Examination Technician (UT, MT, LP) .....                                 | \$ 85  |
| Special Inspector (Concrete, Masonry, Structural Steel, Welding, and Fireproofing) ..... | \$ 80  |
| Supervisory Technician .....                                                             | \$ 75  |
| Senior Technician .....                                                                  | \$ 75  |
| Technician .....                                                                         | \$ 70  |

#### Administrative Staff

|                                                       |       |
|-------------------------------------------------------|-------|
| Geotechnical/Environmental/Laboratory Assistant ..... | \$ 55 |
| Information Specialist .....                          | \$ 55 |
| Data Processor .....                                  | \$ 55 |

### Other Charges

|                                                          |                |
|----------------------------------------------------------|----------------|
| Concrete Coring Equipment (includes technician) .....    | \$ 190/hr      |
| Anchor Load Test Equipment (includes technician) .....   | \$ 190/hr      |
| GPR Equipment .....                                      | \$ 180/hr      |
| Inclinometer .....                                       | \$ 100/hr      |
| Hand Auger Equipment .....                               | \$ 80/hr       |
| Rebar Locator (Pachometer) .....                         | \$ 25/hr       |
| Vapor Emission Kit .....                                 | \$ 65/kit      |
| Nuclear Density Gauge .....                              | \$ 12/hr       |
| X-Ray Fluorescence .....                                 | \$ 70/hr       |
| PID/FID .....                                            | \$ 25/hr       |
| Air Sampling Pump .....                                  | \$ 10/hr       |
| Field Vehicle .....                                      | \$ 10/hr       |
| Expert Witness Testimony .....                           | \$ 450/hr      |
| Direct Expenses .....                                    | Cost plus 15 % |
| Special equipment charges will be provided upon request. |                |

### Notes

For field and laboratory technicians and special inspectors, overtime rates at 1.5 times the regular rates will be charged for work performed in excess of 8 hours in one day Monday through Friday and all day on Saturday. Rates at twice the regular rates will be charged for all work in excess of 12 hours in one day, all day Sunday and on holidays.

Field technician and special inspection hours are charged at a 4-hour minimum, and 8-hour minimum for hours exceeding 4 hours.

Invoices are payable upon receipt. A service charge of 1.5 percent per month may be charged on accounts not paid within 30 days.

The terms and conditions are included in Ninjo & Moore's Work Authorization and Agreement form.

## Schedule of Fees for Laboratory Testing

### SOILS

|                                                                   |        |
|-------------------------------------------------------------------|--------|
| Atterberg Limits, D 4318, T 89, T90                               | \$ 90  |
| California Bearing Ratio (CBR), D 1883                            | \$ 450 |
| Chloride and Sulfate Content, ARIZ 733, 736                       | \$ 100 |
| Clay Expansion, FHA Swell                                         | \$ 110 |
| Consolidation, D 2435, T 216-94                                   | \$ 250 |
| Crumb Test Dispersion Test, D 4647                                | \$ 60  |
| Direct Shear, D 3080, T236                                        | \$ 350 |
| Expansion Index, D 4829, UBC 18-2                                 | \$ 120 |
| Expansion Potential (Method A), D 4546                            | \$ 110 |
| Hydraulic Conductivity, D 5084                                    | \$ 300 |
| Hydrometer Analysis, D 7928, T 88-93                              | \$ 200 |
| Double Hydrometer Analysis, D 4221, T 88                          | \$ 400 |
| Lime Determination, pH Method, D 62765                            | \$ 210 |
| Standard Proctor Density, D 698                                   | \$ 175 |
| Standard Proctor Density Treated Soils, D 698                     | \$ 195 |
| Modified Proctor Density Treated Soils, D 1557, T 180-93, T 99-94 | \$ 205 |
| Miller Box Resistivity                                            | \$ 60  |
| Moisture, Ash, & Organic Matter of Peat/Organic Soils             | \$ 90  |
| Moisture Only, D 2216, T 265                                      | \$ 25  |
| Moisture and Density, D 2937                                      | \$ 35  |
| Permeability, CH, D 2434, T 215                                   | \$ 220 |
| pH and Resistivity, ARIZ 236 c                                    | \$ 100 |
| Pinhole Dispersion Test, D 4647                                   | \$ 245 |
| R-value, D 2844, T 190                                            | \$ 250 |
| Sand Equivalent, D 2419, T 176                                    | \$ 90  |
| Sieve Analysis, D 6913                                            | \$ 55  |
| Sieve Analysis, C-136 (includes 200 wash), D 6913, D 1140         | \$ 110 |
| Solubility                                                        | \$ 80  |
| Specific Gravity, D 854, T 100-93                                 | \$ 85  |
| Sulfate & Chloride Content                                        | \$ 90  |
| Swell Test, D 4546                                                | \$ 290 |
| Thermal Resistivity (ASTM 5334, IEEE 442)                         | \$ 800 |
| Triaxial Shear, U.U., D 2850 per point                            | \$ 160 |
| Triaxial Shear, C.U., w/pore pressure, D 4767, T 2297 per pt      | \$ 315 |
| Triaxial Shear, C.D, D 4767, T 297 per pt                         | \$ 375 |
| Unconfined Compression, D 2166, T 208                             | \$ 175 |

### MASONRY

|                                                     |        |
|-----------------------------------------------------|--------|
| Brick Absorption, C 67                              | \$ 65  |
| Brick Compression, C 67                             | \$ 30  |
| Brick Moisture, C 67                                | \$ 30  |
| CMU Block Compression Test, 8x8x16, C 140           | \$ 75  |
| CMU Block Moisture Content, C 140                   | \$ 70  |
| Core Compression                                    | \$ 35  |
| Concrete Block Linear Shrinkage, C 426              | \$ 150 |
| Grout Prisms Compressive Strength, C 1019           | \$ 40  |
| Masonry Grout, 4x4x8 prism compression, UBC 21-18   | \$ 22  |
| Masonry Mortar, 2x4 cylinder compression, UBC 21-16 | \$ 22  |
| Masonry Prism, half size, compression, UBC 21-17    | \$ 120 |
| Mortar Cubes Compressive Strength, C 109            | \$ 20  |

### REINFORCING AND STRUCTURAL STEEL

|                                                          |        |
|----------------------------------------------------------|--------|
| Chemical Analysis, A-36, A615                            | \$ 125 |
| Fireproofing Density Test, UBC 7-6                       | \$ 50  |
| Hardness Test, Rockwell, A-370                           | \$ 40  |
| High Strength Bolt, Nut & Washer Conformance, set, A-325 | \$ 150 |
| Mechanically Spliced Reinforcing Tensile Test, ACI       | \$ 80  |
| Pre-Stress Strand (7 wire), A 416                        | \$ 150 |
| Reinforcing Tensile or Bend up to No. 11, A 615 & A 706  | \$ 85  |
| Structural Steel Tensile Test: Up to 200,000 lbs., A 370 | \$ 100 |
| Welded Reinforcing Tensile Test: Up to No. 11 bars, ACI  | \$ 80  |

### CONCRETE

|                                                              |          |
|--------------------------------------------------------------|----------|
| Concrete Core Absorption ASTM C 497 Method A                 | \$ 85    |
| Concrete Core Compressive Strength, C 42, T 24-93            | \$ 90    |
| Concrete Coring Minimum Charge                               | \$ 300   |
| Concrete Laboratory Mix Verification, excluding cylinders    | \$ 300   |
| Concrete Mix Design                                          | \$ 2,000 |
| Compression Tests, 6x12 Cylinder, C 39, T 22-92              | \$ 22    |
| Drying Shrinkage, C 157                                      | \$ 300   |
| Flexural Test, C 78                                          | \$ 80    |
| Gunit/Shotcrete, Panels, 3 cut cores per panel and test, ACI | \$ 190   |
| Lightweight Concrete Fill Compression, C 495                 | \$ 40    |
| Measurement of Concrete Cores, ASTM C 174                    | \$ 20    |
| Rapid Chloride Permeability, C 1202                          | \$ 425   |
| Splitting Tensile Strength, C 496                            | \$ 95    |
| Time of Setting of Cement by Vicat Needle, C 191             | \$ 250   |

### ASPHALT

|                                                                |          |
|----------------------------------------------------------------|----------|
| Asphalt Mix Design Review                                      | \$ 400   |
| Asphalt Mix Design, 5 points, Tex                              | \$ 1,500 |
| Asphalt Content/Gradation (Ignition Oven), T 308, D 6307       | \$ 200   |
| Bulk Density Lab Molded Samples, Tex 207F (per set)            | \$ 50    |
| Bulk Specific Gravity per specimen (non-absorptive), D 2726    | \$ 25    |
| Bulk Specific Gravity per specimen (coated), D 1188            | \$ 45    |
| Compressive Strength of Hot Mix Asphalt, T 167                 | \$ 275   |
| Extraction, % Asphalt, including Gradation, D 2172, T 164-94   |          |
| T 30-93, Tex 210F                                              | \$ 225   |
| Hveem Stability and Unit Weight CTM or ASTM, CT 366            | \$ 200   |
| Hveem Stability, Tex 208F (per set)                            | \$ 90    |
| Marshall Mix Design, Flow and Unit Weight, (set of 3) T 245-94 | \$ 215   |
| Marshall Mix Design                                            | \$ 3,500 |
| Maximum Theoretical Unit Weight, D 2041, CT 309, Tex 227F      | \$ 125   |
| Molding Specimens, Tex 206F (per set)                          | \$ 55    |
| Tensile Strength Ratio D 4867, T283                            | \$ 350   |
| SuperPave Mix Design                                           | \$ 4,000 |

### AGGREGATES

|                                                       |        |
|-------------------------------------------------------|--------|
| Absorption, Coarse, C 127                             | \$ 50  |
| Absorption, Fine, C 128                               | \$ 75  |
| Alkali Reactivity, C 1260                             | \$ 750 |
| Alkali-Silica Reactivity, C 1567                      | \$ 750 |
| Clay Lumps and Friable Particles, C 142               | \$ 95  |
| Fractured Faces, NDOT, T 2303, ARIZ 212e              | \$ 140 |
| Los Angeles Abrasion, C 131 or C 535                  | \$ 180 |
| Moisture, C 566, T 255-92                             | \$ 25  |
| Mortar make properties of fine aggregate, C 87        | \$ 300 |
| Organic Impurities, C 40                              | \$ 50  |
| Sand Equivalent, D 2419, T 176                        | \$ 85  |
| Sieve Analysis, Coarse Aggregate, C 136               | \$ 110 |
| Sieve Analysis, Fine Aggregate (included wash), C 136 | \$ 110 |
| Sodium Sulfate Soundness (per size fraction), C 88    | \$ 240 |
| Specific Gravity, Coarse, C 127                       | \$ 125 |
| Specific Gravity, Fine, C 128                         | \$ 125 |
| Unit Weight C 29, T 19                                | \$ 50  |

Special preparation of standard test specimens will be charged at the technician's hourly rate.  
Ninyo & Moore is accredited to perform the AASHTO equivalent of many ASTM test procedures.

## **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 contract 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 Contract/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**

Work within City's Right-of-Way. All work performed within City's Right-of-Way by Consultant and Consultant's subconsultants must comply with City of Chandler requirements.