

Mr. Clece Aurelus, PE  
Engineering Support Services Manager  
City of Hollywood  
1621 North 14<sup>th</sup> Avenue  
Hollywood, FL 33022

Sent via email: [caurelus@hollywoodfl.org](mailto:caurelus@hollywoodfl.org)

Arcadis U.S., Inc.  
8201 Peters Road  
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[www.arcadis.com](http://www.arcadis.com)

WATER

Subject:  
Task Order Proposal  
Water Treatment Plant High Service Pump Station Upgrades  
Construction Management Services

Date:  
August 28, 2017

Contact:  
Robert Daoust

Dear Mr. Aurelus:

Phone:  
954.414.9016

Per your request Arcadis U.S., Inc. (Arcadis) is submitting this letter proposal to support provision of construction management services (CMS) for upgrades / improvements to the high service pump station at the City of Hollywood's (City) Water Treatment Plant (WTP). Collectively, CMS includes:

Email:  
[robert.daoust@arcadis.com](mailto:robert.daoust@arcadis.com)

- Engineering Services During Construction
- Construction Contract Administration Services
- Part-Time Project Representative Services

Our ref:  
60000361.0000

This Task Order Proposal presents the Scope of Work for this effort, required deliverables, and fees in accordance with the terms and conditions of the Professional Engineering Services Agreement (Agreement) between the City and Arcadis dated January 8, 2003, amended on June 6, 2012, and renewed 2013 and 2015, and assigned to Arcadis in 2016.

**Florida License Numbers**

**Engineering**  
7917

Geology  
GB564

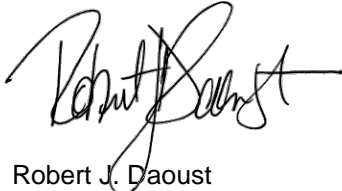
Surveying  
LB7062

The Scope of Services (SOS) is provided as Attachment 1. The not-to-exceed fee estimate associated with these services is \$431,590 (see Attachment 2).

City of Hollywood  
August 28, 2017

We would like to thank you in advance for the opportunity to assist the City in this effort. Arcadis looks forward to any comments from you regarding this proposal. I can be reached via email ([robert.daoust@arcadis.com](mailto:robert.daoust@arcadis.com)) or by telephone (954-547-4616). Please do not hesitate to contact me at your convenience.

Sincerely,  
Arcadis U.S., Inc.



Robert J. Daoust  
Associate Vice President

Copies:  
Arcadis Files (Plantation)

Attachments:

- 1 Scope of Services
- 2 Fee Proposal

*This proposal and its contents shall not be duplicated, used or disclosed — in whole or in part — for any purpose other than to evaluate the proposal. This proposal is not intended to be binding or form the terms of a contract. The scope and price of this proposal will be superseded by the contract. If this proposal is accepted and a contract is awarded to Arcadis as a result of — or in connection with — the submission of this proposal, Arcadis and/or the client shall have the right to make appropriate revisions of its terms, including scope and price, for purposes of the contract. Further, client shall have the right to duplicate, use or disclose the data contained in this proposal only to the extent provided in the resulting contract.*

## **ATTACHMENT 1**

### **CITY OF HOLLYWOOD**

#### **WATER TREATMENT PLANT HIGH SERVICES PUMP STATION UPGRADES CONSTRUCTION MANAGEMENT SERVICES**

#### **SCOPE OF SERVICES**

##### **A: PROJECT DESCRIPTION**

The City provides potable water service to residents within the municipal boundaries of the City, with the exception of Port Everglades, as well as two adjacent areas of unincorporated Broward County. The City's Water Treatment Plant (WTP) is the only source of potable water within its service area and, consequently, the high service pump station at the plant is a crucial element of the City's water system. Currently, the WTP has 10 high service pumps located in two different buildings – four are installed in the Aeration Building and the other six are located in the High Service Pump Station building. The existing high service pumps at the WTP were installed in 1975. While these pumps continue to function, in recognition of the importance of the high service pumps to operation of the water system, the City retained Arcadis U.S., Inc. (Consultant) to evaluate the current pump array, and conduct an analysis of demands and pumping capacity. Based upon these analyses, the City requested that the Consultant also prepare plans and specifications to upgrade the high service pump station – specifically replacing existing pumps and associated systems with state-of-the-art equipment that will provide sufficient pumping capacity and high performance over the next 50 years (hereafter the "Project").

Through review of available demand projections, the Consultant determined that the new pump array must meet a peak hourly flow of no less than 38,000 gallons per minute (gpm). To simplify future operational and maintenance needs, a final design was prepared that included six (6) equally sized horizontal split case pumps each with a capacity of 8,000 gpm. Further, the design includes two empty slots where additional pumps can be installed at a future date should demands require additional capacity. The plans and specifications include:

- Removal of existing pumps and replacement with six new high service pumps
- Construction of two new backwash pumps
- Modifications to existing piping and valves
- Upgrades to the electrical system supporting the high service pump station
- Replacement of instrumentation and controls
- Structural and architectural changes to the pump station and electrical rooms
- Improvements / changes to the HVAC system to address ventilation issues in the pump room, transformer room, a new storage room, and air conditioning of the electrical / VFD room
- Modification of the aeration building

The final plans and specifications were delivered to the City, have undergone review by agencies having jurisdiction (AHJ), and is currently out for bid (Bid # 14-4233 issued on May 18, 2017) through which a qualified general contractor (Contractor) shall be awarded a contract for construction of the project.

Herein, the City is requesting that the Consultant provide the following services for the Project through the Construction Phase and Post-Construction Phase as described in Section 1.6 of the

Agreement. Specifically, the Consultant shall provide assistance with:

1. Pre-Construction Engineering Design Services
2. Engineering Services & Contract Administration Services During Construction
3. Resident Project Representative Services During Construction
4. Start-Up & Post-Construction Professional Services

These services (collectively "Construction Management Services") shall be aligned with those described in Section 2.5 of the Agreement. In addition, the Consultant shall also provide services to support the guarantee to repair period described under Section 2.6 of the Agreement.

## **B: SCOPE OF WORK**

### **TASK 1: PRE-CONSTRUCTION ENGINEERING SERVICES AND CONTRACT ADMINISTRATION**

- 1.1 **Shop Drawings and Submittals.** The Consultant shall review, examine, and approve, or take other necessary action upon, the Contractor's Shop Drawings, product data, samples, and other submittals. Approval by the Consultant of the Contractor's submittal shall constitute the Consultant's representation to the City that such submittal is in conformance with the Contract for Construction. Such action shall be taken with reasonable promptness so as to cause no delay to the Contractor or the Project. As necessary, the City shall also review and approve shop drawings and submittals.
- 1.2 **Responses to Requests for Information (RFIs).** The Consultant shall respond to requests for information (RFIs) submitted by the Contractor to provide interpretations and clarifications on the Construction Contract, the project plans, the project specifications, or other matters necessary for the Contractor to be able to satisfactorily perform the work.
  - 1.2.1 **Interpretations and Clarifications.** At any time during the Construction phase, the Consultant shall notify the City in writing within five (5) working days of any necessary interpretations and clarifications of the Contract Documents by the Contractor or the City. The written notification shall include any impacts to quality, operations, schedule or cost. The Consultant shall prepare and issue any necessary interpretations and clarifications of the Contract Documents. The Consultant must obtain written approval from the City if the interpretation or clarification of the Contract Documents will impact quality, operations, schedule or cost. If appropriate, the Consultant shall prepare work directives and proposed change orders (as described in Task 2.4 below). The Consultant shall issue no work directives or change orders without prior written approval of the City. The Consultant may issue responses to RFIs that do not affect cost, schedule, quality or utility operations.
  - 1.2.2 **Contract Interpretations.** The Consultant shall be the interpreter of the requirements of the drawings and specifications and the initial interpreter of the performance there under by the Contractor. The Consultant shall render written or graphic interpretations necessary for the proper execution or progress of the Work with reasonable promptness on the request of the Contractor or the City.

- 1.3 **Examination of Construction Schedules.** The Consultant shall examine and review all construction schedules, and updates thereof, submitted by any Contractor or supplier in connection with the construction of the Project. The Consultant shall advise the City in writing with respect to the adequacy and accuracy of any such schedules or updates.
- 1.4 **Examination of the Schedule of Values.** Upon receipt, the Consultant shall carefully review and examine the Contractor's Schedule of Values, together with any supporting documentation or data which the City or the Consultant may require from the Contractor. The purpose of such review and examination will be to protect the City from an unbalanced Schedule of Values which allocates greater value to certain elements of the Work than is indicated by such supporting documentation or data, or than is reasonable under the circumstances. Consultant shall verify the Schedule of Values is consistent with the Bid Summary Sheet and Contract. If the Schedule of Values is not found to be appropriate, or if the supporting documentation or data is deemed to be inadequate, and unless the City directs the Consultant to the contrary in writing, the Schedule of Values shall be returned to the Contractor for revision or supporting documentation or data. After making such examination, if the Schedule of Values is found to be appropriate as submitted, or if necessary, as revised, the Consultant shall sign the Schedule of Values thereby indicating its informed belief that the Schedule of Values constitutes a reasonable, balanced basis for payment of the Contract price to the Contractor. The Consultant shall not sign such Schedule of Values in the absence of such belief unless directed to do so, in writing, by the City.
- 1.5 **Coordination with City and Contractor.** Prior to the start of construction, the Consultant shall coordinate assistance required by the Contractor by City staff as necessary to prepare for construction. The Consultant shall also coordinate scheduling of critical construction activities between the Contractor and City staff to minimize impacts to operations of the plant during construction of the project.
- 1.6 **Pre-Construction Meeting.** The Consultant shall schedule and attend a pre- construction meeting which shall include, but shall not be limited to, the Consultant, and their subconsultant, the City, the Contractor (and their major Subcontractors). The pre-construction meeting shall review and discuss any applicable procedures for contract administration as well as any other items deemed appropriate by the Consultant or the City. The meeting agenda and meeting minutes shall be prepared and distributed by the Consultant.
- 1.7 **Administrative Services.** The Consultant shall prepare and maintain notes of general project communications, including email and phone conversation; establish standardized formats for logs of construction activities; develop standardized templates for responding to RFIs, meeting notes and progress reports, as well as create a record-tracking and filing system for project materials, correspondence, and other work product.

## **TASK 2: CONSTRUCTION PHASE SERVICES**

- 2.1 **Coordination with City and Contractor.** The Consultant shall coordinate assistance required by the Contractor by City staff as necessary for the construction of the project.
- 2.2 **Change Management.** The Consultant shall review, and advise the City concerning, proposals and requests for Change Orders or Field Orders from the Contractor. The Consultant shall prepare Change Orders or Field Orders for the City's approval and

execution in accordance with the Construction Contract. The Consultant shall have authority to approve Field Adjustments authorizing minor changes in the work not involving an adjustment in the contract price or quality or an extension of the project schedule after notifying the City.

- 2.3 **Approval of Request for Payment.** The Consultant shall review each Contractor pay requests and shall, with each pay request, recommend amounts due to the Contractor under the Contract for Construction predicated upon: inspections of the Work, partial and final Releases of Liens as reported by the Contractor, evaluation of the Contractor's rate of progress in light of the remaining Contract time and upon evaluation of the Contractor's Request for Payment, and shall issue recommended approvals for Payment to the City in such amounts. The issuance of a recommended Approval for Payment shall constitute a representation by the Consultant to the City that the Consultant has made an inspection of the Work, and that the Work has progressed to the level indicated, that the quality of the Work meets or exceeds the requirements of the Contract for Construction, and that, to the best of the knowledge, information and informed belief of the Consultant, the Contractor is entitled to payment of the amount recommended for approval. The City shall be the final interpreter of the amount of payment;
- 2.4 **Administrative Services.** The Consultant shall prepare and maintain notes of project meetings and general project correspondence; develop and maintain appropriate logs for construction activities; and maintain complete records and files of project related materials.
- 2.5 **Engineer-of-Record and Resident Project Representative.** The Consultant shall provide an Engineer-of-Record (EOR) who is a professional engineer licensed in the State of Florida. The Consultant shall also provide a Resident Project Representative (RPR) who shall provide field inspector services to support to the EOR and the services described here.
- 2.5.1 **Inspection Services.** The Consultant shall provide the services of an EOR during performance of construction by the Contractor. The EOR shall be the Consultant's agent at the Project site. The EOR, with support of the RPR, shall inspect the work and shall keep the City fully informed of the progress and quality of the work. The EOR shall review the Contractor's schedule for performance of the work (and any updates thereof), the schedule of shop drawings and submittals (and any updates thereof), and the schedule of values prepared by the Contractor. The EOR, with support of the RPR, shall serve as the Consultant's liaison with the Contractor but shall not, absent written approval from the Contractor, communicate with the Contractor's subcontractors. The EOR, with support of the RPR, shall record the receipt of all shop drawings, submittals, and samples as well as any action taken in connection with same by the Consultant or the Contractor. The EOR shall provide immediate written notification to the City and the Contractor in the event the Contractor commences any work without necessary shop drawings, submittals or samples having first been submitted to the Consultant. The EOR shall record in writing, and immediately report to the Consultant and the City, any defective, deficient, faulty or unsatisfactory work performed by the Contractor. The EOR, with support of the RPR, shall witness and verify all tests required by the Contract Documents as well as the operation of equipment and systems installed by the Contractor. The EOR, with support of the RPR, shall maintain detailed records relating to any such tests. The RPR shall accompany any visiting inspectors or representatives of the City when requested by the Consultant or the City.

2.5.2 **Responsibilities of the Consultant.** The Consultant shall immediately notify the Consultant and City in writing in the event any clarifications or interpretations of the Contract Documents are required or requested by the Contractor. The Consultant shall maintain at the Project site a complete set of Contract Documents including all addenda, change orders, modifications, supplemental drawings, field orders, and directives. The Consultant shall maintain detailed records of the progress of the work, any problems encountered by the Contractor or subcontractors, weather conditions, daily activities, site visitors, decisions, observations in general, specific observations, manpower on the Project, and such other items as may be relevant to the progress and quality of the construction. The Consultant shall also maintain names, addresses and telephone numbers of all contractors, subcontractors, and major suppliers of material and equipment for the Project. The Consultant shall advise the City in advance of any scheduled test, inspection or start-up of any equipment as well as commencement of any significant phase of the Work. The Consultant shall report immediately in writing to the City upon the occurrence of any accident. In accordance with the requirements of the contract between the City and the Contractor, the Consultant shall review the Contractor's applications for payment. The Consultant shall verify the submission of all certificates, as-builts, operation manuals, and other documents required by the Contract Documents and shall deliver copies of same to the Contractor and the City prior to final payment to the Contractor. The RPR shall assist with any final inspection of the Work and shall inspect the Work to determine that all requirements for final inspection have been completed. Any exceptions noted shall be submitted to the Consultant and the City in writing prior to final payment to the Contractor and Consultant shall provide Record Documents to the City.

2.5.3 **Limitations of Resident Project Representative Authority.** The RPR shall not authorize any deviation from the contract documents or any substitution of materials or equipment unless first authorized in writing by both the Consultant and the City. The RPR shall not exceed the limitations of the Consultant's authority as set forth in the agreement by and between the Consultant and the City or as set forth in the Contract Documents. The RPR shall not undertake any of the responsibilities or duties of the Contractor, subcontractors, equipment suppliers, or others charged with construction of the Project. The RPR shall not advise with respect to, or assume control over, any of the means, methods, techniques, sequences or procedures of construction unless such advice or control is specifically required by the Contract Documents.

2.5.4 **Rejection of Work.** The Consultant shall reject any Work which does not conform to the Contract Documents unless directed by the City, in writing, not to do so. Whenever it is necessary in order to protect the interest of the City, the Consultant shall require special inspection or testing of the Work in accordance with the provisions of the Contract for Construction whether or not such Work is fabricated, installed or completed.

2.6 **Inspection of the Work and Testing.** The Consultant shall inspect the Work of the Contractor whenever or wherever appropriate including any final inspection or testing required by the Contract Documents. The purpose of such inspections shall be to determine the quality, quantity and progress of the Work in comparison with the requirements of the Contract for Construction. In making such inspections, the Consultant shall exercise care to protect the City from defects or deficiencies in the Work, from

unexcused delays in the Schedule and from overpayment to the Contractor. Following each such inspection the Consultant shall submit a written report of such inspection, together with any appropriate comments or recommendations, to the City. Furthermore, the Consultant shall require and review any and all tests required by laws, rules, regulations, ordinances, codes, orders or the Contract Documents and shall report in writing to the City the results thereof;

- 2.7 **Construction Progress Meetings.** The RPR shall schedule and lead bi-weekly progress meetings (every two (2) weeks) with the Contractor to review the progress of the Project or as otherwise necessary to protect the interest of the City. The RPR shall provide the City a schedule for these meetings within ten (10) business days following receipt of notice-to-proceed (NTP). The RPR shall identify key milestone progress meetings in which participation by the City is required. The City shall, however, also participate in bi-weekly meetings, at its discretion. As necessary, the RPR shall also coordinate participation of other interested parties, such as AHJ, in key bi-weekly progress meetings. Staff from the Consultant other than the RPR, such as any of the discipline specific EORs, shall participate by telephone and only at such times as the RPR may deem it necessary.
- 2.8 **Bi-Weekly Progress Reports.** During weeks when no bi-weekly progress meeting is held, The Inspector shall prepare reports the describe the progress of the work completed by the RPR and review the Contractor's compliance with the Contract Documents, compare actual progress versus the establish project schedule, identify schedule variances, provide a general review of the Contractor's performance, and describe any critical issues that have arisen, how these issues may impact project delivery, and any actions being implemented to address such issues. During weeks in which a Progress Meeting has been held, the RPR shall prepare meeting notes that include a list of meeting attendees, the meeting agenda, summary of discussion on agenda items, and any action items identified. Together, the progress report or bi-weekly progress meeting notes shall be considered weekly progress reports. Weekly progress reports will be submitted by the RPR on behalf of Consultant to the City by 9:00 AM on Monday following the meeting.

### **TASK 3: START-UP & POST CONSTRUCTION ENGINEERING SERVICES AND CONTRACT ADMINISTRATION**

- 3.1 **Start-Up.** The Consultant shall observe start-up of new equipment and pumps. Given the sequential nature of the expected installation of said equipment, the Consultant shall observe start-up after installation of each pump and associated equipment is completed. Upon successful installation of the first pump and related controls, The Consultant shall provide training on the usage of new controls to City staff, as described below:
- Assistance in connection with refining or adjusting any equipment or system for the Project;
  - Assistance in training City personnel to operate and maintain the project;
  - Assistance in establishing appropriate systems for the preparation and maintenance of Project records;
- The Consultant shall provide training to staff up to, but not exceed, one time. The City shall make available all staff that require such training and shall be solely responsible for providing future training to new staff or staff not present during the single training session provided by the Consultant under this task.



- 3.2 **Substantial Completion.** The Consultant shall determine and recommend in writing to the City the date of Substantial Completion of the Project. The Consultant shall insure all contractual requirements, as determined by the punch list, for substantial completion have been met prior to issuing the recommendation to the City. When appropriate, the Consultant shall issue a recommendation for approval for final payment. The Consultant shall also receive, review for adequacy, compile in an organized, bound, and neat format, and forward to the City written warranties, guarantees, bonds, certificates of inspection, tests, reports, surveys, required approvals, and other related documents required by the Construction Contract prior to issuing a recommendation for substantial completion;
- 3.3 **Final Completion.** The Consultant, based upon one inspection of the Project, shall determine and recommend in writing to the City the date of Final Completion of the Project. The Consultant shall insure all contractual requirements for final completion are met prior to issuing the recommendation to the City. When appropriate, the Consultant shall issue a recommendation for approval for final payment.
- 3.4 **Record Drawings (As-Built).** The Consultant shall review any Record Drawings furnished by the Contractor and update and/or shall incorporate as-built information on reproducible drawings and certify and submit to the City that said drawings are adequate, accurate and complete as provided by the Contractor. Record drawings will be provided to the City by the Consultant in electronic format (both CADD files and PDF formats) and one (1) signed and sealed hard copy.
- 3.5 **Operation and Maintenance Manuals and Review of Warranties and Guarantees.** The Consultant shall review and approve Operation and Maintenance Manuals. Approved Operation and Maintenance Manuals submitted by the Contractor. Operation and Maintenance Manuals shall be compiled in a written document delivered as required by the Construction Contract. Using the Operation and Maintenance Manuals prepared by the Contractor, the Consultant shall also prepare a single detailed Operation and Maintenance Manual for the entire project, which shall be submitted to the City.
- 3.6 **Project Closeout / Certifications.** The Consultant shall prepare and submit the necessary documentation for the successful completion and acceptance of the project for operation with the City's Building Department and other AHJ, as appropriate.
- 3.7 **Final Reconciliation Change Order.** In the event of any discrepancies between the total contract fee and project schedule in the Construction Contract and the actual total fee paid to the Contractor or the actual project schedule, the Consultant shall prepare a final reconciliation change order. The final reconciliation change order shall address any discrepancies, ensuring that contractual obligations of the City to the Contractor are clearly shown to be satisfied in full.

#### **TASK 4: CONTINGENCY**

The not-to-exceed compensation includes a contingency for as-needed services, which shall not be used by the Consultant without prior written approval by the City.

### **C: EXCLUSIONS TO THE SCOPE OF WORK**

1. Services to make measured drawings of or to investigate existing conditions of facilities, or to verify the accuracy of drawings or other information furnished by the City;
2. Services resulting from significant changes in the general scope, extent or character of the Project or its design, including but not limited to, major changes in the size, complexity, financing, or schedule of the Project. Such services include the revision of any previously prepared studies, reports, design documents or Contract Documents when revisions are required as a result of changes in laws, rules, regulations, ordinances, codes or orders enacted subsequent to the preparation of such studies, reports or documents, or are due to any other causes beyond Consultant's reasonable control;
3. Making revisions in drawings, specifications or other documents when such revisions are inconsistent with written direction by the City previously given, are required by the enactment or revision of codes, laws or regulations subsequent to the preparation of such documents and not reasonably anticipated, or are due to other causes not within the control or responsibility of the Consultant, either in whole or in part.

### **D: ASSUMPTIONS AND BASIS OF CONSULTANT COMPENSATION**

1. It is understood by all that the method of compensation for performance of the services described herein is time and materials with a not-to-exceed fee. The Consultant shall not provide services in excess of the not-to-exceed fee without prior authorization by the City.
2. The total not-to-exceed fee that forms the basis of this compensation amount includes certain key assumptions which are noted on Table D.1 below. Any deviation or change to the assumptions noted below may create circumstances that require an adjustment to the compensation to the Consultant.
3. Many of the tasks comprising the scope are time dependent and are based on an assumed duration of time; which for this project is 545 calendar days from issuance of notice-to-proceed to the Contractor to Final Completion. This period is assumed to be broken down as follows:
  - Pre-Construction Period – 8 weeks between NTP and commencement of construction activities by the Contractor.
  - Construction Period – 68 weeks following commencement of construction to Substantial Completion by the Contractor.
  - Post-Construction Period – 6 weeks between Substantial Completion and Final Completion.

An extension of time beyond the control of the Consultant that exceeds the assumed durations of these various phases of the project may result in additional time and effort expended by the Consultant and, as such, may require a request to increase the not-to-exceed compensation for performance of said additional time and effort.

4. No additional survey work is required.
5. The City will pay for all associated permit fees.
6. City staff shall be available to attend progress meetings or be present on-site as may be required by AHJ or to coordinate with the Contractor.
7. Construction period is in accordance with construction time allocated in the project bid documents and will be incorporated in the Construction Contract.
8. The following are detailed assumptions and basis of compensation for the Consultant on this Project Agreement.

**Table D.1 Basis of Compensation and Related Remarks by Task**

<b>Task</b>	<b>Task Description</b>	<b>Basis of Compensation</b>	<b>Remarks</b>
1.1	Shop Drawings and Submittals	Payment will be based on the Contractor's percentage complete with the submittal item of the Schedule of Values on the current Pay Application	Assumes review and response to shop drawing submittals.
1.2	Responses to Requests for Information (RFIs)	The number of RFIs is difficult to estimate as it will vary depending on the Contractor's experience and easy of understanding the project plans and specifications as prepared by the Contractor.	The Consultant shall respond to all RFIs received from the Contractor. If necessary, the Consultant shall discuss the issue with the Contractor to determine the underlying issues driving the number of RFIs being issued and will see recourse to resolve the matter expeditiously.
1.3	Examination of Construction Schedule	50 percent of task fee for review of no more than two (2) version of the project schedule. Remaining task fee is comprised of 17 equal payments to cover monthly schedule updates throughout the construction phase from ATP through Final Completion.	Consultant shall examine and review no more than 2 versions of the schedule of construction submitted by the contractor. The Consultant shall also review 17 monthly schedule updates throughout the construction phase of the project.
1.4	Examination of the Schedule of values	Review and comments on schedule of values submittal provided by the Contractor.	As noted
1.5	Coordination with City and Contractor	Coordination with City staff and the Contractor as required to prepare for construction and to ensure construction sequencing and scheduling has minimal impacts of WTP operations.	As noted
1.6	Pre-Construction Meeting	Attendance as well as prepare agenda and minutes for one (1) Pre-Construction meeting.	Time dependent
1.7	Administration Services	Administrative support as needed.	Time dependent
2.1	Coordination with City and Contractor	Continued coordination with City staff and the Contractor as required for construction to proceed accordingly to schedule, while also ensuring minimal impacts to WTP operations.	As noted
2.2	Change Management	19 equal payments distributed through the Post-Construction phase.	Assumes development, discussion and finalization of 4 change orders.
2.3	Approval of Request for Payment	Review and approval of 19 Pay Applications during course of the work.	As noted
2.4	Administration Services	Administrative support as needed.	Time dependent

**Table D.1 Basis of Compensation and Related Remarks by Task**

<b>Task</b>	<b>Task Description</b>	<b>Basis of Compensation</b>	<b>Remarks</b>
2.5	Engineer-of-Record and Resident Project Representative	Payments distributed evenly from commencement of construction through Substantial Completion.	Effort is based upon provision of the EOR and RPF on a part-time basis from commencement through Substantial Completion.
2.6	Inspection of the Work & Testing	No discrete budget. Consultant will review test results to be provided by Contractor and will schedule testing to be provided by City Testing Consultant, if applicable. Soil and material testing is not included in the Consultant's scope and is the responsibility of the City or Contractor as assigned in the Construction Contract.	Consultant shall rely on Contract Documents for testing requirements. Consultant shall not be responsible for assisting or scheduling tests that are not required in Contract Documents.
2.7	Construction Progress Meetings	Equal payments distributed evenly from Commencement date through Substantial Completion	Consultant shall hold 36 regular bi-weekly progress meetings and prepare associated agendas and meeting minutes. Assumes 68 months total duration of construction activity and no delays on project.
2.8	Bi-Weekly Progress Reports	Equal payments distributed evenly from Commencement date through Substantial Completion	Consultant shall prepare 36 progress reports providing a summary update as describe in the SOW.
3.1	Start Up	Due at completion of Start Up as each pump comes online in sequential order.	Consultant shall provide training for City personnel to operate and maintain project facilities and assisting the City in obtaining adjustments and refinements of new equipment after the first pump is in operation. All subsequent training shall be the responsibility of the City.
3.2	Substantial Completion	Due upon achievement of Substantial Completion.	Preparing the Punch List, Period review of Punch List resolution items, compilation of warranties and guarantees and other required project documentation.
3.3	Final Completion	Due upon achievement of Final Completion.	Resolution and close out of all Punch List items, recommendation of final payment.
3.4	Record Drawings (As-Builts)	Percent of Drawing Sets Completed.	Consultant updates CADD drawings based upon the Contractor's submitted Survey Record Drawing.

**Table D.1 Basis of Compensation and Related Remarks by Task**

<b>Task</b>	<b>Task Description</b>	<b>Basis of Compensation</b>	<b>Remarks</b>
3.5	Operation & Maintenance Manuals and Review of Warranties and Guarantees	Equal payments distributed from the first month a manual is submitted through the end of the construction phase of the Project.	The Contractor is responsible for submitting all required manual material. The Consultant is to provide review and comment and submit complete set of Manuals to the City.
3.6	Project Closeout / Certification	One payment upon completion of all construction contract closeout requirements and certification of the project.	Consultant shall obtain certification and acceptance of the project by AHJ.
3.7	Final Reconciliation Change Order	One payment upon execution by the City of the final reconciliation change order	As noted.

9. The Consultant shall use its own project document control software. It does not contemplate using any document control software preferred or utilized by the City, nor does it include providing labor and effort to produce, manage or administer any such systems or reporting requirements that may be required by the City. The Consultant shall provide routine project control output, project records, and project files to the City as described in Section B: Scope of Work.
10. The Consultant shall provide assistance as may be necessary to address, resolve and settle potential claims or Requests for Compensation (RFC) by the Contractor, but such assistance shall be specifically limited to routine and straightforward issues that commonly arise during construction and that can be handled by the Consultant's RPR, Project Manager, or Engineer-of-Record. Complicated, contentious matters or disputes that require engagement by the Consultant's senior management or corporate legal counsel to reach resolution of settlement would constitute special services and require additional compensation to be paid to the Consultant for provision of such services. In the event such a situation arises, the Consultant shall immediately notify the City, which shall have the right to determine whether or not to authorize such special services from the Consultant. The City may, at its own discretion, elect not to authorize such special services and would, therefore, be responsible for resolving the dispute, conflict, or such matter.

## **E: DELIVERABLES**

As part of the Scope of Work the Consultant shall provide to the City the Deliverables as listed in Exhibit 2.

## **F. PERIOD OF PERFORMANCE / PROJECT SCHEDULE**

1. **Period of Performance.** The Consultant shall commence work upon receipt of an Authorization to Proceed (ATP) issued by the City. The period for performance of the services described in the Section B: Scope of Work shall be consistent with the project schedule as shown in Exhibit 3 and set forth in the project bid documents of five hundred (500) calendar days following NTP through Substantial Completion and an forty-five (45) calendar days from Substantial Completion to Final Completion.

2. **Contract Time.** Upon receipt of a fully executed ATP from the City, the Consultant shall commence services to the City and shall continuously perform services to the City, without interruption, in accordance with the time frames set forth in the project schedule, attached hereto at Exhibit 3. The project schedule contained herein shall correspond to that established in the Construction Contract executed by and between the City and the Contractor. Should the City approve any changes to the project schedule in the Construction Contract that extends the construction period, the City agrees to also modify the Consultant's schedule in Exhibit 3 accordingly.
3. **Requests for Additional Time and / or Compensation.** In the event that the Contractor fails to substantially complete the project on or before the substantial completion date specified in the Construction Contract or the Contractor is granted an extension of the time by the City to complete performance under the Construction Contract, and the Consultant's contract administration services are materially extended and / or the Consultant is required to provide a resident project representative / field inspector for a period beyond the project schedule as incorporated in Exhibit 3, as a direct result thereof and through no fault of the Consultant, the Consultant shall be entitled to additional compensation and contract time. The amount of additional time and compensation due to the Consultant under this paragraph shall be pursuant to an approved Amendment.

Further, the Consultant shall be entitled to request additional compensation for delays in the progress of the project due extensions to the project schedule caused by an act of the City, poor performance or other acts of the Contractor, as well as other causes beyond the Consultant's control, including, but not limited to: delays in equipment delivery; difficulties in obtaining required permits from AHJ; unforeseen complexities in site conditions; challenges arising from demolition and off-site transport of debris materials; as well as unavoidable casualties.

The Consultant may submit all requests for additional compensation in writing to the City by electronic mail to the City's designated representative or project manager. The City's designated representative or project manager shall determine whether or not the Consultant is entitled to the requested claim for additional compensation.

## **F. COMPENSATION AND PAYMENTS**

1. **Compensation.** The City agrees to pay the Consultant a not-to-exceed fee of \$431,590 as compensation for performance of all services described herein and as related to the project, inclusive of payment for all professional services (labor hours) and other direct expenses incurred by the Consultant. This not-to-exceed fee represents the total currently authorized compensation due to the Consultant by the City to perform all services described herein under Section B: Scope of Services, with explicit exclusion of services listed in Section C: Exclusions to the Scope of Work, and in accordance with the assumptions detailed in Section D: Assumptions Pursuant to the Scope of Work. Should the City request services excluded under Section C or should actual effort to execute the project vary from the assumptions presented in Section D, the Consultant shall be eligible to submit a request for amendment to the agreement from the City.
2. **Payments.** The Consultant shall submit invoices monthly to the City. Payments due by the City to the Consultant for each invoicing period shall be determined by task on time and material basis for labor and other direct costs as incurred during the billing period.

## **G: GOVERNING AGREEMENT**

Issuance of this work order is pursuant to the provisions contained in the Professional Services Agreement for General Engineering Consultant Services (Agreement) executed on the 1<sup>st</sup> of April 2003 by and between the City of Hollywood (City) and Malcolm Pirnie, Inc. as amended on June 6, 2012, as renewed in 2012 and 2015, and assigned to Arcadis U.S., Inc. (Consultant).

## **H: REPRESENTATION OF THE CITY**

The Consultant shall represent the City during the construction phase which shall commence with the award of the Construction Contract. Instructions and other appropriate communication from the City to the Contractor shall be communicated through the Consultant unless the City directs otherwise. The Consultant shall act on behalf of the City only to the extent provided in the Agreement and in the Construction Contract. The Consultant shall have and perform all of the duties, obligations and responsibilities of the Consultant as set forth in the Construction Contract to be executed by and between the City and the Contractor selected through Bid # 14-4233. The Consultant herein acknowledges that it has received, reviewed and studied a true and correct copy of the Project Manual and Project Plans as issued under Bid # 14-4233 and same is herein incorporated as Exhibit 1.

**EXHIBIT 1**  
**CONSTRUCTION CONTRACT**



**EXHIBIT 2**  
**PROJECT DELIVERABLES**

<b>Task</b>	<b>Description</b>
1.0	Pre-Construction Engineering Services & Contract Administration
2.0	Construction Phase Services
3.0	Start-Up and Post-Construction Engineering Services & Contract Administration

**EXHIBIT 3**

**PROJECT SCHEDULE**

<b>Task</b>	<b>Description</b>	<b>Task Completion In Calendar Days Following Authorization</b>
1	Pre-Construction Engineering Services & Contract Administration	28 <sup>1</sup>
2	Construction Phase Services	500 <sup>2</sup>
3	Post-Construction Engineering Services & Contract Administration	605 <sup>3</sup>

Notes:

- <sup>1</sup> Pre-Construction Period includes 8 weeks (28 calendar days) of “pre-construction” for project commencement activities and permitting.
- <sup>2</sup> Construction Period is commensurate with the current project schedule of 500 calendar days to Substantial Completion from the Contractor’s receipt of Authorization to Proceed by the City.
- <sup>3</sup> Post-Construction Period includes 45 calendar days following Substantial Completion through Final Completion for project closeout.

Labor Category			Contract Labor Category	Hours	Billing Rate (\$ / hr)	Cost	Fee / Task	Total Fee
								\$ 431,590.00
Arcadis Labor							\$ 320,400.00	
Subconsultant (McKim & Creed) Costs							\$ 94,970.00	
Other Direct Expenses							\$ 3,500.00	
Contingency							\$ 12,720.00	
1	Pre-Construction Engineering Services & Contract Administration						\$ 44,055.00	
Labor Subtotal							\$ 30,350.00	
	Robert Daoust	Contract Manager	Officer	2	\$ 240.00	\$ 480.00		
	Ron Mattingly, PE	Project Manager	Senior Associate	4	\$ 200.00	\$ 800.00		
	Chris Barlow, PE	Engineer-of-Record (Mechanical)	Senior Associate	30	\$ 200.00	\$ 6,000.00		
	Adarsh Shah, PE	Engineer-of-Record (Structural)	Project Engineer 3	30	\$ 150.00	\$ 4,500.00		
	Jim Callahan, PE	Engineer-of-Record (HVAC)	Senior Associate	1	\$ 200.00	\$ 200.00		
	Steve Zeid, PE	Senior Designer (Structural)	Project Engineer 2	4	\$ 130.00	\$ 520.00		
	Vincent Vitale, PE	Principal Engineer (HVAC)	Senior Associate	4	\$ 200.00	\$ 800.00		
	Sopeark Chhea, PE	Staff Engineer (HVAC)	Project Engineer 2	30	\$ 130.00	\$ 3,900.00		
	Julie Nicholson	Senior CADD Technician	Senior Technician	100	\$ 115.00	\$ 11,500.00		
	Anthony Sumner	Senior CADD Technician	Senior Technician	0	\$ 115.00	\$ -		
	Matt O'Rourke	Staff Field Inspector	Senior Technician	4	\$ 115.00	\$ 460.00		
	Jessica Small	Administrative/Clerical	Administrative 2	15	\$ 70.00	\$ 1,050.00		
	Lisa Ciacco	Administrative/Clerical	Administrative 3	2	\$ 70.00	\$ 140.00		
Subcontractor Labor Subtotal							\$ 12,205.00	
	McKim & Creed	Electrical / I&C				\$ 12,205.00		
2	Construction Phase Services						\$ 337,795.00	
Labor Subtotal							\$ 263,770.00	
	Robert Daoust	Contract Manager	Officer	4	\$ 240.00	\$ 960.00		
	Ron Mattingly, PE	Project Manager	Senior Associate	8	\$ 200.00	\$ 1,600.00		
	Chris Barlow, PE	Engineer-of-Record (Mechanical)	Senior Associate	470	\$ 200.00	\$ 94,000.00		
	Adarsh Shah, PE	Engineer-of-Record (Structural)	Project Engineer 3	235	\$ 150.00	\$ 35,250.00		
	Jim Callahan, PE	Engineer-of-Record (HVAC)	Senior Associate	1	\$ 200.00	\$ 200.00		
	Steve Zeid, PE	Senior Designer (Structural)	Project Engineer 2	17	\$ 130.00	\$ 2,210.00		
	Vincent Vitale, PE	Principal Engineer (HVAC)	Senior Associate	8	\$ 200.00	\$ 1,600.00		
	Sopeark Chhea, PE	Staff Engineer (HVAC)	Project Engineer 2	17	\$ 130.00	\$ 2,210.00		
	Julie Nicholson	Senior CADD Technician	Senior Technician	0	\$ 115.00	\$ -		
	Anthony Sumner	Senior CADD Technician	Senior Technician	0	\$ 115.00	\$ -		
	Matt O'Rourke	Staff Field Inspector	Senior Technician	940	\$ 115.00	\$ 108,100.00		
	Jessica Small	Administrative/Clerical	Administrative 2	17	\$ 70.00	\$ 1,190.00		
	Lisa Ciacco	Administrative/Clerical	Administrative 3	235	\$ 70.00	\$ 16,450.00		
Subcontractor Labor Subtotal							\$ 73,525.00	
	McKim & Creed	Electrical / I&C				\$ 73,525.00		
3	Start-Up & Post-Construction Engineering Services & Contract Administration						\$ 37,020.00	
Labor Subtotal							\$ 26,280.00	
	Robert Daoust	Contract Manager	Officer	2	\$ 240.00	\$ 480.00		
	Ron Mattingly, PE	Project Manager	Senior Associate	4	\$ 200.00	\$ 800.00		
	Chris Barlow, PE	Engineer-of-Record (Mechanical)	Senior Associate	45	\$ 200.00	\$ 9,000.00		
	Adarsh Shah, PE	Engineer-of-Record (Structural)	Project Engineer 3	20	\$ 150.00	\$ 3,000.00		
	Jim Callahan, PE	Engineer-of-Record (HVAC)	Senior Associate	1	\$ 200.00	\$ 200.00		
	Steve Zeid, PE	Senior Designer (Structural)	Project Engineer 2	20	\$ 130.00	\$ 2,600.00		
	Vincent Vitale, PE	Principal Engineer (HVAC)	Senior Associate	8	\$ 200.00	\$ 1,600.00		
	Sopeark Chhea, PE	Staff Engineer (HVAC)	Project Engineer 2	20	\$ 130.00	\$ 2,600.00		
	Julie Nicholson	Senior CADD Technician	Senior Technician	40	\$ 115.00	\$ 4,600.00		
	Anthony Sumner	Senior CADD Technician	Senior Technician	0	\$ 115.00	\$ -		
	Matt O'Rourke	Staff Field Inspector	Senior Technician	0	\$ 115.00	\$ -		
	Jessica Small	Administrative/Clerical	Administrative 2	0	\$ 70.00	\$ -		
	Lisa Ciacco	Administrative/Clerical	Administrative 3	20	\$ 70.00	\$ 1,400.00		
Subcontractor Labor Subtotal							\$ 9,240.00	
	McKim & Creed	Electrical / I&C				\$ 9,240.00		
4	Contingency						\$ 12,720.00	