

Project Name: Tertiary Filter  
Rehabilitation  
Project (MI 2590)

**AGREEMENT FOR PROFESSIONAL SERVICES  
BETWEEN THE CITY OF THOUSAND OAKS  
AND  
HDR ENGINEERING, INC.**

THIS AGREEMENT is made and entered into this 12th day of September, 2023, by and between **CITY OF THOUSAND OAKS**, a municipal corporation ("City"), and **HDR ENGINEERING, INC.** ("Consultant").

City and Consultant agree as follows:

**1. RETENTION AS CONSULTANT**

City hereby retains Consultant, and Consultant hereby accepts such engagement, to perform the services described in Section 2. Consultant warrants it has the qualifications, experience, and facilities to properly and timely perform said services.

**2. DESCRIPTION OF SERVICES**

The services to be performed by Consultant are as follows:

Professional services in conjunction with the HCTP Tertiary Filters Rehabilitation Project (MI 2590). Services and deliverables shall generally include filter media assessment and study, condition assessment of the existing filters, concrete structure and electrical systems associated with the tertiary filter building, and are more particularly set forth in the Scope of Work, attached as Exhibit "A," which is incorporated herein by reference. The standard of care for Consultant's services shall be the care and skill ordinarily used by members of Consultant's profession practicing under the same or similar circumstances at the same time and in the same locality.

City shall perform the services defined in Exhibit "A."

**3. COMPENSATION AND PAYMENT**

(a) **Maximum and Rate.** The total compensation payable to Consultant by City for the services under this Agreement **SHALL NOT EXCEED** the sum of **\$360,790.00** (herein "not-to-exceed amount"), and shall be earned as the work progresses on the following basis:

Hourly at the hourly rates and with reimbursement to Consultant for those expenses set forth in Consultant's Schedule of Fees attached as Exhibit "B," which is incorporated herein. The rates and expenses set forth in that exhibit shall be binding upon Consultant until December 31, 2024, after which any change in the rates and expenses must be approved in writing by City's Project Manager (City is to be given 60 days notice of any rate increase request), provided the not to exceed amount is the total compensation due Consultant for all work described under this Agreement.

(b) **Payment.** Consultant shall provide City with written verification of the actual compensation earned, in a form satisfactory to City's Project Manager. Invoices shall be made no more frequently than on a monthly basis, and describe the work performed (including, if applicable, a list of hours worked by personnel classification). All payments shall be made within 30 days after City's approval of the invoice.

(c) **Extra Services.** Additional work not reasonably encompassed by the Scope of Services described in Section 2 may be agreed upon only by execution of a written Amendment to this Agreement. No liability or right to compensation for extra services shall exist without such Amendment. Unless otherwise stated in the Amendment, applicable rates for extra services shall be at the rates set forth in Exhibit "B."

#### **4. CITY PROJECT MANAGER**

The services to be performed by Consultant shall be accomplished under the general direction of, and coordinate with, City's "Project Manager", as that staff person is designated by City from time to time, and who presently is Nader Heydari.

#### **5. TERM, PROGRESS AND COMPLETION**

The term of this Agreement is from the date first written above unto and until Consultant has completed all obligations herein, including without limitation the obligation to provide Errors and Omissions insurance coverage pursuant to paragraph 9 (d) of this agreement. Services under this agreement shall be completed prior to December 31, 2024, unless this Agreement is amended to provide additional time for completion of services.

City Manager or his or her designee shall have the authority to extend the term of this Agreement in writing no more than 2 separate times, for a period of one year each. Extensions shall be memorialized by written amendment to the contract.

Consultant shall not commence work on the services to be performed under the Agreement until (i) Consultant furnishes proof of insurance as required by paragraph 9 below, and (ii) City's Project Manager gives written authorization to proceed with the work. All services shall be completed within the term of this Agreement.

## **6. OWNERSHIP OF DOCUMENTS**

All drawings, designs, data, photographs, reports and other documentation (other than Consultant's drafts, notes and internal memorandum), including duplication of same prepared by Consultant in the performance of these services, are the property of City. City shall be entitled to immediate possession of the same upon completion of the work under this Agreement, or at any earlier or later time when requested by City. City agrees to hold Consultant harmless from all damages, claims, expenses, and losses arising out of any reuse of the plans, specifications, graphics, brochures, reports, and other documentation for purposes other than those described in this Agreement, unless written authorization of Consultant is first obtained.

## **7. PERSONAL SERVICES/NO ASSIGNMENT/SUBCONTRACTS**

This Agreement is for professional services, which are personal to City. Dan Ellison, PE is deemed to be especially experienced and is a key member of Consultant's firm, and shall be directly involved in performing, supervising or assisting in the performance of this work. This key person shall communicate with, and periodically report to, City on the progress of the work. Should said individual be removed from assisting in this contracted work for any reason, City may terminate this Agreement.

This Agreement is not assignable by Consultant without City's prior written consent.

No part of the work described in this Agreement may be subcontracted out to other parties.

## **8. HOLD HARMLESS AND INDEMNITY**

**(a) Hold Harmless for Consultant's Damages.** Consultant holds City, its elected officials, officers, agents, employees and volunteers, harmless from all of Consultant's claims, demands, lawsuits, judgments, damages, losses, injuries or liability to Consultant, to Consultant's employees, to Consultant's contractors or subcontractors, or to the owners of Consultant's firm, which damages, losses, injuries or liability occur during the work or services required under this Agreement, or performance of any activity or work required under this Agreement, except to the extent caused by the City's negligence or breach of this Agreement.

**(b) Defense and Indemnity of Third Party Claims/Liability.** To the maximum extent allowed by law, Consultant shall indemnify, defend with legal counsel approved by City, and hold harmless City, its officers, officials, employees and volunteers from and against all liability including, but not limited to, loss, damage, expense, cost (including without limitation reasonable legal counsel fees, expert fees and all other costs and fees of litigation) of every nature arising out of or in connection with Consultant's negligence, recklessness or willful misconduct in the performance of work hereunder or its failure to comply with any of its obligations contained in the Agreement, except such loss or damage which is caused by the sole or active negligence or willful misconduct of City. Should conflict of interest principles preclude a single legal counsel from representing both City and Consultant, or should the City have a legitimate concern about Consultant's legal counsel, then Consultant shall reimburse City its costs of defense, including without limitation reasonable legal counsel fees, expert fees and all other costs and fees of litigation. The Consultant shall promptly pay City any final judgment rendered against City (and its officers, officials, employees and volunteers) with respect to claims determined by a trier of fact to have been the result of Consultant's negligent, reckless or wrongful performance. It is expressly understood and agreed that the foregoing provisions are intended to be as broad and inclusive as is permitted by the law of the State of California and will survive termination of this Agreement.

Consultant's obligations under this section apply regardless of whether or not such claim, charge, damage, demand, action, proceeding, loss, stop notice, cost, expense, judgment, civil fine or penalty, or liability was caused in part or contributed to by an Indemnitee. However, without affecting the rights of City under any provision of this Agreement, Consultant shall not be required to indemnify and hold harmless City for liability attributable to the active negligence of City, provided such active negligence is determined by agreement between the parties or by findings of a court of competent jurisdiction. In instances where City is shown to have been actively negligent and where City's active negligence accounts for only a percentage of the liability involved, the obligation of the Consultant will be for that entire portion or percentage of liability not attributable to the active negligence of City.

**(c) Nonwaiver.** City does not waive, nor shall be deemed to have waived, any indemnity, defense or hold harmless rights under this section because of the acceptance by City, or the deposit with City, of any insurance certificates or policies described in Section 9.

## **9. MINIMUM SCOPE AND LIMIT OF INSURANCE**

Without limiting Consultant's indemnification of City, and prior to commencement of Work, Consultant shall obtain, provide, and maintain at its own

expense during the term of this Agreement, and any extension thereof, policies of insurance of the type and amounts described below and in a form that is satisfactory to the City.

Coverage shall be at least as broad as:

**(a) Commercial General Liability (CGL):** Consultant shall, at Consultant's sole cost and expense and throughout the term of this Agreement, and any extensions thereof, carry General Liability insurance coverage at least as broad as Insurance Services form CG 00 01 in an amount not less than \$2,000,000 per occurrence, \$4,000,000 general aggregate for bodily injury, personal and advertising injury and property damage, including without limitation, blanket contractual liability.

**(b) Automobile Liability:** Consultant shall, at Consultant's sole cost and expense and throughout the term of this Agreement, and any extensions thereof, carry Automobile Liability insurance coverage at least as broad as Insurance Services form CA 00 01 or the exact equivalent covering bodily injury and property damage for all activities of Consultant arising out of or in connection with the work to be performed under this Agreement, including coverage of any owned, hired, non-owned, or rented vehicles, in an amount not less than \$1,000,000 combined single limit for each accident.

**(c) Worker's Compensation:** Consultant shall, at Consultant's sole cost and expense and throughout the term of this Agreement, and any extensions thereof, carry workers' compensation statutory benefits as required by law with employer's liability limits no less than \$1,000,000 per accident for bodily injury or disease. Consultant shall submit to City, along with the certificate of insurance, a Waiver of Subrogation endorsement in favor of City, its officers, agents, employees and volunteers for all work performed by Consultant, its employees, agents and subcontractors.

**(d) Professional Errors and Omissions Insurance:** Consultant shall, at Consultant's sole cost and expense throughout the term of this Agreement, and any extensions thereof, carry professional errors and omissions coverage of no less than \$1,000,000 per occurrence or claim, \$2,000,000 aggregate, and shall continually maintain such coverage for an additional tail coverage period of three (3) years following completion of services under this Agreement.

If Consultant maintains higher limits than the minimum shown above, City requires and shall be entitled to coverage for the higher limits maintained by Consultant. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to City.

## **Other Insurance Provisions**

The insurance policies are to contain, or be endorsed to contain, the following provisions:

### Additional Insured Status

City, its officers, officials, employees and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the Consultant including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Consultant's insurance (at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10 10 01 and CG 20 37 10 01 if a later edition is used). The provision shall also apply to any excess liability policies. In addition, Consultant shall ensure that the automobile liability policy contains a provision covering City as an additional insured, and shall obtain an endorsement to that effect if it does not.

### Excess Insurance

The limits of insurance required in this agreement may be satisfied by a combination of primary and umbrella or excess insurance. Umbrella or excess policies shall provide coverage at least as broad as specified for underlying coverages and covering those insured in the underlying policies. Coverage shall be "pay on behalf" with defense costs payable in addition to policy limits. There shall be no cross liability exclusion of claims or suits by one insured against the other. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and no-contributory basis for the benefit of City as required in written contract or agreement before City's own insurance or self-insurance shall be called upon to protect it as a named insured.

### City's Rights of Enforcement

In the event any policy of insurance required under this Agreement does not comply with these specifications or is cancelled and not replaced, City has the right but not the duty to obtain the insurance it deems necessary and any premium paid by City will be promptly reimbursed by Consultant, or City will withhold amounts sufficient to pay premium from Consultant's payments. In the alternative, City may cancel this Agreement.

### City's Right to Revise Specifications

City reserves the right at any time during the term of the Agreement to change the amounts and types of insurance required by giving Consultant ninety (90) days advance written notice of such change. If such change results in additional cost to Consultant, City and Consultant will renegotiate Consultant's compensation, if requested.

#### Primary and Non-Contributory Coverage

For any claims related to this Agreement, Consultant's insurance coverage shall be primary insurance as respects City, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by City, its officers, officials, employees or volunteers shall be excess of Consultant's insurance and shall not contribute with it and shall be at least as broad as CG 20 01 04 13.

#### Notice of Cancellation

Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to City.

#### Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by City. City may require Consultant to provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.

#### Acceptability of Insurers

All insurance policies shall be issued by an insurance company currently authorized by the Insurance Commissioner to transact business of insurance in the State of California, with a current A.M. Best's rating of no less than A:VII, (unless otherwise acceptable to the City).

#### Waiver of Subrogation

All insurance coverage maintained or procured pursuant to this Agreement shall be endorsed to waive subrogation against City, its officers, officials, employees or volunteers or shall specifically allow Consultant or others providing insurance evidence in compliance with these specifications - to waive their right of recovery prior to a loss. Consultant hereby waives his own right of recovery against City, and shall require similar written express waivers and insurance clauses from each of its subcontractors. Copies of these waivers shall be submitted to City prior to commencement of work.

#### Claims Made Policies

If any of the required policies provided coverage on a claims-made basis:

(a). The Retroactive Date must be shown and must be before the date of the Agreement or the beginning of contract work.

(b). Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the work required under this Agreement.

(c). If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the Agreement effective date, Consultant must purchase "extended reporting" coverage for a minimum of five (5) years after completion of Agreement work.

#### Verification of Coverage

Consultant shall provide City with copies of certificates (on City certificate form or an Accord form as modified per City direction) for all policies, with the appropriate named additional insured coverage and an endorsement that they are not subject to cancellation without 30 days prior written notice to City. All certificates and endorsements are to be received and approved by City before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive Consultant's obligation to provide them. City reserves the right to require redacted copies of all required insurance policies, including endorsements required by these specifications, at any time.

#### Subcontractors

Consultant shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Consultant shall ensure that City is an additional insured on insurance required from subcontractors. For CGL coverage, subcontractors shall provide coverage with a form at least as broad as CG 20 38 04 13.

### **10. RELATION OF THE PARTIES**

a. Consultant is and shall at all times remain as to the City a wholly independent contractor. The personnel performing the services under this Agreement on behalf of Contractor shall at all times be under Consultant's exclusive direction and control. Neither City nor any of its officers, employees, agents, or volunteers shall have control over the conduct of Consultant or any of Consultant's officers, employees, or agents except as set forth in this Agreement. Consultant shall not at any time or in any manner represent that it or any of its officers, employees or agents are in any manner officers, employees or agents of the City. Consultant shall not incur or have the power to incur any debt, obligation or liability whatever against City, or bind City in any manner.



b. No employee benefits shall be available to Consultant in connection with the performance of this Agreement. Except for the fees paid to Consultant as provided in the Agreement, City shall not pay salaries, wages, or other compensation to Consultant for performing services hereunder for City. City shall not be liable for compensation or indemnification to Consultant for injury or sickness arising out of performing services hereunder.

## **11. CORRECTIONS**

In addition to the above indemnification obligations, Consultant shall correct, at its expense, all errors in the work that may be disclosed during City's review of Consultant's report or plans, except for those errors which were due to circumstances outside of Consultant's control. Should Consultant fail to make such correction in a reasonably timely manner, such correction shall be made by City, and the cost thereof shall be charged to Consultant or withheld from any funds due to Consultant hereunder.

## **12. TERMINATION BY CITY**

City Manager or his or her designee may, upon 30 calendar days written notice, terminate without cause any portion or all of the services agreed to be performed under this Agreement. City may also terminate for cause, but only after providing Consultant written notice of the breach and a period of 10 calendar days to cure. In the event of termination, Consultant shall have the right and obligation to immediately assemble work in progress for the purpose of closing out the job. All compensation for actual work performed and charges outstanding at the time of termination shall be payable by City to Consultant within 30 days following submission of a final statement by Consultant unless termination is for cause. In such event, Consultant shall be compensated only to the extent required by law.

## **13. ACCEPTANCE OF FINAL PAYMENT CONSTITUTES RELEASE**

The acceptance by Consultant of the final payment made under this Agreement shall operate as and be a release of City from all claims and liabilities for compensation to Consultant for anything done, furnished, or relating to Consultant's work or services. Acceptance of payment shall be any negotiation of City's check or the failure to make a written extra compensation claim within 10 calendar days of the receipt of that check. However, approval or payment by City shall not constitute, nor be deemed, a release of the responsibility and liability of Consultant, its employees, subcontractors, agents and consultants for the accuracy and competency of the information provided and/or work performed; nor shall such approval or payment be deemed to be an assumption of such responsibility or liability by City for any defect or error in the work prepared by Consultant, its employees, subcontractors, agents and consultants.

#### **14. AUDIT OF RECORDS**

Consultant shall maintain, in accordance with generally accepted accounting principles, complete and accurate records of all activities and operations relating to this Agreement. Records, including but not limited to, timecards, employment records, work progress reports, reimbursements, invoices, project records, proprietary data and information, as well as licensed software and any electronic records shall be kept for a period of four years beyond the termination of this Agreement. Consultant agrees that City, or its authorized representative, shall have the right to examine, audit, excerpt, copy or transcribe any of the records pertaining to this Agreement at any time during normal business hours. Consultant shall reimburse City for all reasonable costs of the audit, including travel time and auditor costs, should such audit reveal an overcharge of five (5) percent or more. Any overcharge will be considered a breach of this Agreement and could be cause for termination. The obligations of this section shall be explicitly included in any subcontracts or other agreements entered into by Consultant with respect to this Agreement.

#### **15. WAIVER; REMEDIES CUMULATIVE**

Failure by a party to insist upon the strict performance of any of the provisions of this Agreement by the other party, irrespective of the length of time for which such failure continues, shall not constitute a waiver of such party's right to demand strict compliance by such other party in the future. No waiver by a party of a default or breach of the other party shall be effective or binding upon such party unless made in writing by such party, and no such waiver shall be implied from any omissions by a party to take any action with respect to such default or breach. No express written waiver of a specified default or breach shall affect any other default or breach, or cover any other period of time, other than any default or breach and/or period of time specified. All of the remedies permitted or available to a party under this Agreement, or at law or in equity, shall be cumulative and alternative, and invocation of any such right or remedy shall not constitute a waiver or election of remedies with respect to any other permitted or available right of remedy.

#### **16. CONFLICT OF INTEREST**

Consultant is unaware of any City employee or official that has a financial interest in Consultant's business. During the term of this Agreement and/or as a result of being awarded this Agreement, Consultant shall not offer, encourage or accept any financial interest in Consultant's business by any City employee or official.

**17. CONSTRUCTION OF LANGUAGE OF AGREEMENT**

The provisions of this Agreement shall be construed as a whole according to its common meaning of purpose of providing a public benefit and not strictly for or against any party. It shall be construed consistent with the provisions hereof, in order to achieve the objectives and purposes of the parties. Wherever required by the context, the singular shall include the plural and vice versa, and the masculine gender shall include the feminine or neutral genders or vice versa.

**18. MITIGATION OF DAMAGES**

In all situations arising out of this Agreement, the parties shall attempt to avoid and minimize the damages resulting from the conduct of the other party.

**19. GOVERNING LAW**

This Agreement, and the rights and obligations of the parties, shall be governed and interpreted in accordance with the laws of the State of California. Should litigation occur, venue shall be in Superior Court of Ventura County.

**20. TAXPAYER IDENTIFICATION NUMBER**

Consultant shall provide City with a complete Request for Taxpayer Identification Number and Certification, Form W-9, as most recently issued by the Internal Revenue Service.

**21. NON-APPROPRIATION OF FUNDS**

Payments due and payable to Consultant for current services are within the current budget and within an available, unexhausted and unencumbered appropriation of City funds. In the event City has not appropriated sufficient funds for payment of Consultant services beyond the current fiscal year, this Agreement shall cover only those costs incurred up to the conclusion of the current fiscal year.

**22. MODIFICATION/AMENDMENT OF AGREEMENT**

Any amendment, modification, or variation of the terms or tasks of this Agreement shall be in writing and shall be effective only upon the mutual written approval by the City Manager, or his designee, and Consultant.

**23. USE OF THE TERM "CITY"**

Reference to "City" in this Agreement includes City Manager or any authorized representative acting on behalf of City.

**24. PERMITS AND LICENSES**

Consultant, at its sole expense, shall obtain and maintain during the term of this Agreement, all appropriate permits, licenses, and certificates that may be required in connection with the performance of services under this Agreement.

**25. CAPTIONS**

The captions or headings in this Agreement are for convenience only and in no other way define, limit or describe the scope or intent of any provision or section of the Agreement.

**26. AUTHORIZATION**

Each party has expressly authorized the execution of this Agreement on its behalf and bind said party and its respective administrators, officers, directors, shareholders, divisions, subsidiaries, agents, employees, successors, assigns, principals, partners, joint venturers, insurance carriers and any others who may claim through it to this Agreement.

**27. ENTIRE AGREEMENT BETWEEN PARTIES**

Except for Consultant's proposals and submitted representations for obtaining this Agreement, this Agreement supersedes any other agreements, either oral or in writing, between the parties hereto with respect to the rendering of services, and contains all of the covenants and agreements between the parties with respect to said services.

**28. PARTIAL INVALIDITY**

If any provision in this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions will nevertheless continue in full force without being impaired or invalidated in any way.

**29. NOTICES**

Any notice required to be given hereunder shall be deemed to have been given by depositing said notice in the United States mail, postage prepaid, and addressed as follows:

TO CITY:                      Nader Heydari  
Public Works Department  
City of Thousand Oaks  
2100 Thousand Oaks Boulevard  
Thousand Oaks, CA 91362

TO CONSULTANT: Dan Ellison  
HDR Engineering, Inc.  
200 E. Santa Clara St., Suite 220  
Ventura, CA 93001-2795

### 30. **SIGNATURES**

(a) **Counterparts.** This Agreement may be executed in two or more counterparts, each of which together shall be deemed an original, but all of which together shall constitute one and the same instrument.

(b) **Scanned Signatures.** In the event that any signature is delivered by facsimile transmission or submitted electronically as a scanned image (i.e. files with .pdf, .tiff or .jpeg extensions), such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or scanned signature page were an original thereof.

(c) **Digital/Electronic Signatures.** This Agreement may be executed through the use of digital or electronic signatures provided they meet the requirements of the Electronic Signatures in Global and National Commerce (ESIGN) Act and the California Uniform Electronic Transactions Act (UETA) and are produced using a City-approved method. The presence of an electronic signature on this document shall be construed as the parties' consent to do business electronically.

**In concurrence and witness whereof**, this Agreement has been executed by the parties effective on the date and year first above written.

**HDR ENGINEERING, INC.**

\_\_\_\_\_  
Anna Lantin, P.E., Vice President

\_\_\_\_\_  
Elisa Davies, Corporate Secretary

**CITY OF THOUSAND OAKS**

\_\_\_\_\_  
Kevin McNamee, Mayor

**ATTEST:**

\_\_\_\_\_  
Laura B. Maguire, City Clerk

**APPROVED AS TO ADMINISTRATION:**

\_\_\_\_\_  
Andrew P. Powers, City Manager

**APPROVED BY DEPARTMENT HEAD:**

\_\_\_\_\_  
Clifford G. Finley, Public Works Director

**APPROVED AS TO FORM:**

Office of the City Attorney

\_\_\_\_\_  
Tracy Friedl, Assistant City Attorney

**EXHIBIT A**  
**SCOPE OF SERVICES - MI 2590**

**HCTP TERTIARY FILTER REHABILITATION PROJECT**

CONSULTANT shall provide all necessary resources to prepare a tertiary filter media assessment study as well as a condition assessment of the existing tertiary filters, the building concrete, and electrical systems associated with the HCTP tertiary filter facility.

CONSULTANT shall perform the following Tasks:

**TASK A. Project Management and Quality Control/Assurance.**

CONSULTANT shall organize and facilitate project meetings and workshops, endeavoring to engage the right City and CONSULTANT staff in a collaborative effort, by providing timely meeting agendas and minutes for City review. The meeting minutes will document the list of participants, action items, key decisions, and highlights of discussions. Meetings will be virtual, unless otherwise noted.

**TASK B. Research / Review and Condition Assessment**

1. CONSULTANT shall conduct staff interviews with HCTP leadership, operations, maintenance, and electrical staff to provide a foundational understanding of the filters system.
2. CONSULTANT shall assess four basins—two from each period of construction. The assessment will include a variety of methods as outlined below. The assessments will involve two mobilizations.

**2.1 Structural Assessments**

Surface penetrating radar (SPR) shall be used to scan the concrete walls, roof, and floor, providing information about thickness, gross deterioration, and rebar locations.

Cores extracted from concrete shall be tested to determine the depth of carbonation, chloride penetration, and other degradation.

Electrical potential mapping (also known as half-cell potential testing) of rebar shall be used to assess reinforcing steel connectivity, which identifies areas of possible steel corrosion.

Where feasible, CONSULTANT's assessment team shall remove loose concrete and rust to determine the true extent of metal degradation.

## **2.2 Mechanical Assessments**

The condition of the washwater troughs shall be thoroughly examined by CONSULTANT. Fiberglass troughs shall be examined for delamination, splintering and UV degradation. Concrete troughs shall be examined for exposed aggregate, cracking, and other evidence of deterioration.

The condition of the gravel underdrain shall be assessed while the filter is offline.

The condition of pipes and appurtenances shall be visually examined and assessed for corrosion and metal loss, using spot ultrasonic thickness measurements, pit gauge measurements, and other physical tests.

The isolation ability of valves shall be assessed, including an evaluation of seals, metal deterioration, actuators, and general operability.

## **2.3 Electrical Assessments**

For original wire that is 46 years old, full replacement shall be recommended. For the 20-year-old wire, CONSULTANT shall assess the wire and conduit condition using megger testing of insulation condition and recommend for placement on a case-by-case basis.

CONSULTANT's electrical engineer shall participate in two coordination meetings and site visits to discuss electrical and control improvements and construction sequencing.

CONSULTANT's electrical engineer shall investigate the cause of water intrusion into the lighting panel. If the cause for water intrusion cannot be identified, a new conduit shall be designed for contractor installation.

Electrical condition assessment shall be performed on all major electrical distribution equipment, machines, instrumentation, control panels, and general building electrical systems. Common areas of evaluation and general work performed during the assessment include: reviewing overall maintenance conditions, general estimation of service life, proper installation per NEC, ease of maintenance, assessing general reliability concerns, and communicating with maintenance and operations staff for any unique problems found at HCTP.

## **2.4 Instruments and Control Assessments**

CONSULTANT shall assess the instrumentation and control systems, including determining the feasibility of using a single instrument for turbidity and sludge blanket readings.



### **TASK C. Media Replacement Study**

1. CONSULTANT shall first review the existing media specifications, specifically for media depth, grain size distribution, porosity, hydraulic parameters, and contaminant removal efficiency.
2. CONSULTANT shall review the original design documents for intended parameters and coordinate meetings with City staff to discuss the performance, operation, and maintenance history of the filters.  
In those meetings, CONSULTANT shall also work with City staff to identify several sample locations in the filters, taking full-bed core samples from the highest and lowest performing filters of each time period (1977 and 2003) while the filters are offline for condition assessment and extrapolate the data for all filters in between. Consultant shall extract four core samples during two mobilizations. The mobilizations will be concurrent with the Task B mobilizations.
3. CONSULTANT shall evaluate the cores for physical characterization, measuring grain size profiling via sieving techniques, stratification, determine porosity and void fractionation, assessing uniformity of media, and calculating effective size and specific gravity of media particle. A hydraulic conductivity assessment, filtration performance evaluation, and adsorption capacity testing shall provide guidance to the remaining useful life expectancy of the media.
4. While the filters are offline, CONSULTANT shall perform spot-checks in the filter media for mudballs and gravel underdrain blockages, which affect the performance of the filter.

### **TASK D. Preliminary Design Report (PDR)**

1. CONSULTANT shall provide a Draft and Final comprehensive PDR to document and summarize the discussions with HCTP staff, findings of the condition assessment and media replacement studies, and establish design criteria that provide the basis for Final Design.
2. CONSULTANT shall keep a decision and action log. At the submittal of the Draft PDR, CONSULTANT shall conduct an in-person workshop with City staff to review recommendations, discuss comments, and achieve consensus regarding the recommended project. The Final PDR shall be submitted, including workshop slides, meeting minutes, and responses to HCTP staff comments.

The City will perform the following services as part of the contract:

Historical data on influent and effluent turbidity:

1. Filter run times
2. Water use (backwash)
3. Original specifications on filter media and under drain, if available
4. Date/time media replacement history
5. I/O list

## EXHIBIT B

### Fee Schedule HDR Engineering Inc.

The following rates apply through December 31, 2024.

Title	Hourly Rate
Student Intern	\$80
Project Coordinator / Assistant	\$120
Project Accountant	\$130
BIM Technician	\$140
Assistant Project or Corrosion Engineer (EIT)	\$150
CADD Operator / Technician	\$145
Project Mgmt Assistant	\$155
Asst Corrosion Engineer (PE)	\$160
Project Controller	\$180
NACE-Certified Coatings Inspector - prevailing wage	\$175
Senior Project Engineer (PE) / Corrosion Engineer (PE)	\$180
Senior CADD Designer / CADD Mgr / BIM Mgr	\$200
Startup Commissioning Lead / I&C Engineer / Structural Engr	\$250
WW Treatment Process Engineer	\$260
Senior Corrosion, Pipeline, or Structural Engineer	\$295
Electrical Quality Reviewer / Start-up Commissioning Review	\$295
Senior Civil / Process Quality Reviewer / Tech Expert	\$350
Senior Prof Assoc / Principal Project Manager	\$350
Filter Study Technical Lead	\$400
Inspector per diem travel	\$240 / day

Personnel time is billed in half-hour increments. These rates apply to regular and travel time. Charges for travel time will be limited to eight (8) hours per day. Overtime, if required in the interest of the project, will be charged at the above rates for professional personnel and 1.5 times the above rates for inspector, technician, and non-profession office personnel. Field work for technicians, inspectors, and others are billed at a four (4) hour minimum charge per day.

#### EQUIPMENT AND OTHER DIRECT CHARGES

Personnel charges include the indicating instruments commonly used in corrosion testing. Specialized instrumentation/test equipment and facilities may require an additional charge. Other direct costs (ODC), such as outside consultants or laboratories, rental equipment and, miscellaneous expenses (including vehicle usage, photograph, reproduction, binding, overnight mail or courier services, etc.) will be charged at cost plus ten percent (10%). Mileage will be charged at the IRS rate per mile. Travel expenses (airfare, local travel and accommodations) will be charged at cost. Meal and incidental expenses (M&IE) during travel will be charged at actual cost. For extended travel, the per diem rate will be applied. Permits and fees required for projects will be charged at cost.