

PROFESSIONAL SERVICES CONTRACT

BETWEEN

CITY OF DETROIT, MICHIGAN

AND

APPLIED SCIENCE, INC.

CONTRACT NO.

6006953

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CITY OF DETROIT PROFESSIONAL SERVICES CONTRACT

This Professional Services Contract ("Contract") is entered into by and between the City of Detroit, a Michigan municipal corporation, acting by and through its Housing and Revitalization Department ("City"), and Applied Science, Inc., Michigan for profit corporation, with its principal place of business located at 21455 Melrose Avenue, Bldg R, Ste. 12, Southfield, MI 48075 ("Contractor").

Recitals:

Whereas, the City desires to engage the Contractor to render certain technical or professional services ("Services") as set forth in this Contract; and

Whereas, the Contractor desires to perform the Services as set forth in this Contract; and
Accordingly, the parties agree as follows:

Article 1: Definitions

1.01 The following words and expressions or pronouns used in their stead shall be construed as follows:

"Additional Services" shall mean any services in addition to the services set forth in Exhibit A that are related to fulfilling the objectives of this Contract and are agreed upon by the parties by written Amendment.

"Amendment" shall mean modifications or changes in this Contract that have been mutually agreed upon by the City and the Contractor in writing and approved by the City Council.

"Associates" shall mean the personnel, employees, consultants, subcontractors, agents, and parent company of the Contractor or of any Subcontractor, now existing or subsequently created, and their agents and employees, and any entities associated, affiliated, or subsidiary to the Contractor or to any subcontractor, now existing or subsequently created, and their agents and employees. "City" shall mean the City of Detroit, a municipal corporation, acting through the office or department named in the Contract as contracting for the Services on behalf of the City.

"City Council" shall mean the legislative body of the City of Detroit.

"Contract" shall mean each of the various provisions and parts of this document, including all attached Exhibits and all Amendments, as executed and approved by the appropriate City departments or offices and by the City Council.

"Contractor" shall mean the party that contracts with the City by way of this Contract, whether an individual, sole proprietorship, partnership, corporation, or other form of business organization, and its heirs, successors, personnel, agents, employees, representatives, executors, administrators and assigns.

"Exhibit A" is the Scope of Services for this Contract and sets forth all pertinent data relating to performance of the Services.

"Exhibit B" is the Fee Schedule for this Contract and sets forth the amount of compensation to be paid to the Contractor, including any Reimbursable Expenses, and any applicable hourly rate information.

"Exhibit C" is the Contractor's Statement of Political Contributions and Expenditures.

"Public Servant" means the Mayor, members of City Council, City Clerk, appointive officers, any member of a board, commission or other voting body established by either branch of City government or the City Charter, and any appointee, employee or individual who provides services to the City within or outside of its offices or facilities pursuant to a personal services contract."

"Records" shall mean all books, ledgers, journals, accounts, documents, and other collected data in which information is kept regarding the performance of this Contract.

"Reimbursable Expenses" shall mean only those costs incurred by the Contractor in the performance of the Services, such as travel costs and document reproduction costs that are identified in Exhibit B as reimbursable.

"Services" shall mean all work that is expressly set forth in Exhibit A, the Scope of Services, and all work expressly or impliedly required to be performed by the Contractor in order to achieve the objectives of this Contract.

"Subcontractor" shall mean any person, firm or corporation, other than employees of the Contractor, that contracts with the Contractor, directly or indirectly, to perform in part or assist the Contractor in achieving the objectives of this Contract.

"Technology" shall mean any and all computer-related components and systems, including but not limited to computer software, computer code, computer programs, computer hardware, embedded integrated circuits, computer memory and data storage systems, whether in the form of read-only memory chips, random access memory chips, CD-ROMs, floppy disks, magnetic tape, or some other form, and the data retained or stored in said computer memory and data storage systems.

"Unauthorized Acts" shall mean any acts by a City employee, agent or representative that are not set forth in this Contract and have not been approved by City Council as part of this Contract.

"Work Product" shall mean the originals, or copies when originals are unavailable, of all materials prepared by the Contractor under this Contract or in anticipation of this Contract, including but not limited to Technology, data, studies, briefs, drawings, maps, models, photographs, files, records, computer printouts, estimates, memoranda, computations, papers, supplies, notes, recordings, and videotapes, whether such materials are reduced to writing, magnetically or optically stored, or kept in some other form.

Article 2: Engagement of Contractor

- 2.01 By this Contract, the City engages the Contractor and the Contractor hereby agrees to faithfully and diligently perform the Services set forth in Exhibit A, in accordance with the terms and conditions contained in this Contract.

- 2.02 The Contractor shall perform in a satisfactory manner as shall be determined within the sole and reasonable discretion of the City. In the event that there shall be any dispute between the parties with regard to the extent, character and progress of the Services to be performed or the quality of performance under this Contract, the interpretation and determination of the City shall govern.
- 2.03 The Contractor shall confer as necessary and cooperate with the City in order that the Services may proceed in an efficient and satisfactory manner. The Services are deemed to include all conferences, consultations and public hearings or appearances deemed necessary by the City to ensure that the Contractor will be able to properly and fully perform the objectives as set forth in this Contract.
- 2.04 All Services are subject to review and approval of the City for completeness and fulfillment of the requirements of this Contract. Neither the City's review, approval nor payment for any of the Services shall be construed to operate as a waiver of any rights under this Contract, and the Contractor shall be and will remain liable in accordance with applicable law for all damages to the City caused by the Contractor's negligent performance or nonperformance of any of the Services furnished under this Contract.
- 2.05 The Services shall be performed as set forth in Exhibit A, or at such other locations as are deemed appropriate by the City and the Contractor for the proper performance of the Services.
- 2.06 The City and the Contractor expressly acknowledge their mutual understanding and agreement that there are no third party beneficiaries to this Contract and that this Contract shall not be construed to benefit any persons other than the City and the Contractor.
- 2.07 It is understood that this Contract is not an exclusive services contract, that during the term of this Contract the City may contract with other firms, and that the Contractor is free to render the same or similar services to other clients, provided the rendering of such services does not affect the Contractor's obligations to the City in any way.

Article 3: Contractor's Representations and Warranties

- 3.01 To induce the City to enter into this Contract, the Contractor represents and warrants that the Contractor is authorized to do business under the laws of the State of Michigan and is duly qualified to perform the Services as set forth in this Contract, and that the execution of this Contract is within the Contractor's authorized powers and is not in contravention of federal, state or local law.
- 3.02 The Contractor makes the following representations and warranties as to any Technology it may provide under this Contract:
 - a) That all Technology provided to the City under this Contract shall perform according to the specifications and representations set forth in Exhibit A and according to any other specifications and representations, including any manuals, provided by the Contractor to the City;

- b) That the Contractor shall correct all errors in the Technology provided under this Contract so that such technology will perform according to Contractor's published specifications;
 - c) That the Contractor has the full right and power to grant the City a license to use the Technology provided pursuant to this Contract;
 - d) That any Technology provided by Contractor under this Contract is free of any software, programs or routines, commonly known as "disabling code," that are designed to cause such Technology to be destroyed, damaged, or otherwise made inoperable in the course of the use of the Technology;
 - e) That any Technology containing computer code and provided under this Contract is free of any known or reasonably discoverable computer program, code or set of instructions, commonly known as a "computer virus," that is not designed to be a part of the Work Product and that, when inserted into the computer's memory: (i) duplicates all or part of itself without specific user instructions to do so, or (ii) erases, alters or renders unusable any Technology with or without specific user instructions to do so, or (iii) that provide unauthorized access to the Technology and
- 3.03 That all Technology shall be delivered new and in original manufacturer's packaging and shall be fully warranted for repair or replacement during the term of this Contract as amended or extended.
- 3.04 That any Technology that it is provided to the City shall:
- a) Accurately recognize and process all time and date data including, but not limited to, daylight savings time and leap year data, and
 - b) Use accurate same-century, multi-century, and similar date value formulas in its calculations, and use date data interface values that accurately reflect the correct time, date and century.

Article 4: Contract Effective Date and Time of Performance

- 4.01 This Contract shall be approved by the required City departments, approved by the City Council, and signed by the City's Chief Procurement Officer. The effective date of this Contract shall be the date upon which the Contract has been authorized by resolution of the City Council.
- 4.02 Prior to the approvals set forth in Section 4.01, the Contractor shall have no authority to begin work on this Contract. The Chief Procurement Officer shall not authorize any payments to the Contractor, nor shall the City incur any liability to pay for any services rendered or to reimburse the Contractor for any expenditure, prior to such award and approvals.
- 4.03 The City and the Contractor agree that the commencement and duration of the Contractor's performance under this Contract shall be determined as set forth in Exhibit A.

Article 5: Data To Be Furnished Contractor

- 5.01 Copies of all information, reports, records, and data as are existing, available, and deemed necessary by the City for the performance of the Services shall be furnished to the Contractor upon the Contractor's request. With the prior approval of the City, the Contractor will be permitted access to City offices during regular business hours to obtain any necessary data. In addition, the City will schedule appropriate conferences at convenient times with administrative personnel of the City for the purpose of gathering such data.

Article 6: Contractor Personnel and Contract Administration

- 6.01 The Contractor represents that, at its own expense, it has obtained or will obtain all personnel and equipment required to perform the Services. It warrants that all such personnel are qualified and possess the requisite licenses or other such legal qualifications to perform the services assigned. If requested, the Contractor shall supply a résumé of the managerial staff or consultants it proposes to assign to this Contract, as well as a dossier on the Contractor's professional activities and major undertakings.
- 6.02 The City may interview the Contractor's managerial staff and other employees assigned to this Contract. The Contractor shall not use any managerial staff or other employees to whom the City objects and shall replace in an expedient manner those rejected by the City. The Contractor shall not replace any of the personnel working on this Contract with new personnel without the prior written consent of the City.
- 6.03 When the City deems it reasonable to do so, it may assign qualified City employees or others to work with the Contractor to complete the Services. Nevertheless, it is expressly understood and agreed by the parties that the Contractor shall remain ultimately responsible for the proper completion of the Services.
- 6.04 The relationship of the Contractor to the City is and shall continue to be that of an independent contractor and no liability or benefits, such as workers' compensation, pension rights or liabilities, insurance rights or liabilities, or other rights or liabilities arising out of or related to a contract for hire or employer/employee relationship shall arise or accrue to either party or either party's agent, Subcontractor or employee as a result of the performance of this Contract. No relationship other than that of independent contractor shall be implied between the parties or between either party's agents, employees or Subcontractors. The Contractor agrees to indemnify, defend, and hold the City harmless against any claim based in whole or in part on an allegation that the Contractor or any of its Associates qualify as employees of the City, and any related costs or expenses, including but not limited to legal fees and defense costs.
- 6.05 The Contractor warrants and represents that all persons assigned to the performance of this Contract shall be regular employees or independent contractors of the Contractor, unless otherwise authorized by the City. The Contractor's employees' daily working hours while working in or about a City of Detroit facility shall be the same as those worked by City employees working in the facility, unless otherwise directed by the City.

- 6.06 The Contractor shall comply with and shall require its Associates to comply with all security regulations and procedures in effect on the City's premises.

Article 7: Compensation

- 7.01 Compensation for Services provided shall not exceed the amount of Three Hundred Eighty Thousand and .00/100 Dollars (\$380,000.00), inclusive of expenses, and will be paid in the manner set forth in Exhibit B. Unless this Contract is amended pursuant to Article 18, this amount shall be the entire compensation to which the Contractor is entitled for the performance of Services under this Contract.
- 7.02 Payment for Services provided under this Contract is governed by the terms of Ordinance No. 4298, entitled "Prompt Payment of Vendors," being Sections 17-5-281 through 17-5-288 of the 2019 Detroit City Code.

The City employee responsible for accepting performance under this Contract is:

Barry L. Brown II
Detroit Water and Sewerage Department
6425 Huber St. Detroit, MI 48211
Detroit, Michigan
Email: Barry.Brown@detroitmi.gov

The City employee from whom payment should be requested is:
Gordon Pearson
Department of Housing and Revitalization
2 Woodward Avenue, Suite 908
Detroit, MI 48226
Email: pearsong@detroitmi.gov

Article 8: Maintenance and Audit of Records

- 8.01 The Contractor shall maintain full and complete Records reflecting all of its operations related to this Contract. The Records shall be kept in accordance with generally accepted accounting principles and maintained for a minimum of three (3) years after the Contract completion date.
- 8.02 The City and any government-grantor agency providing funding under this Contract shall have the right at any time without notice to examine and audit all Records and other supporting data of the Contractor as the City or any agency deems necessary.
- a) The Contractor shall make all Records available for examination during normal business hours at its Detroit offices, if any, or alternatively at its facility nearest Detroit. The City and any government-grantor agency providing funds for the Contract shall have this right of inspection. The Contractor shall provide copies of all Records to the City or to any such government-grantor agency upon request.
 - b) If in the course of such inspection the representative of the City or of another government grantor agency should note any deficiencies in the performance of the Contractor's agreed upon performance or record-keeping practices, such deficiencies will be reported to the Contractor in writing. The Contractor agrees to promptly remedy and correct any such reported deficiencies within ten (10) days of notification.

- c) Any costs disallowed as a result of an audit of the Records shall be repaid to the City by the Contractor within thirty (30) days of notification or may be set off by the City against any funds due and owing the Contractor, provided, however, that the Contractor shall remain liable for any disallowed costs exceeding the amount of the setoff.
- d) Each party shall pay its own audit costs. However, if the dollar amount of the total disallowed costs, if any, exceeds three percent (3%) of the dollar amount of this Contract, the Contractor shall pay the City's audit costs.
- e) Nothing contained in this Contract shall be construed or permitted to operate as any restriction upon the powers granted to the Auditor General by the City Charter, including but not limited to the powers to audit all accounts chargeable against the City and to settle disputed claims.

8.03 The Contractor agrees to include the covenants contained in Sections 8.01 and 8.02 in any contract it has with any Subcontractor, consultant or agent whose services will be charged directly or indirectly to the City for Services performed pursuant to this Contract.

Article 9: Indemnity

9.01 The Contractor agrees to indemnify, defend, and hold the City harmless against and from any and all liabilities, obligations, damages, penalties, claims, costs, charges, losses and expenses (including, without limitation, fees and expenses for attorneys, expert witnesses and other consultants) that may be imposed upon, incurred by, or asserted against the City or its departments, officers, employees, or agents by reason of any of the following occurring during the term of this Contract:

- a) Any negligent or tortious act, error, or omission attributable in whole or in part to the Contractor or any of its Associates; and
- b) Any failure by the Contractor or any of its Associates to perform their obligations, either express or implied, under this Contract; and
- c) Any and all injury to the person or property of an employee of the City where such injury arises out of the Contractor's or any of its Associates performance of this Contract.

9.02 The Contractor shall examine all places where it will perform the Services in order to determine whether such places are safe for the performance of the Services. The Contractor undertakes and assumes all risk of dangerous conditions when not performing Services inside City offices. The Contractor also agrees to waive and release any claim or liability against the City for personal injury or property damage sustained by it or its Associates while performing under this Contract on premises that are not owned by the City.

9.03 In the event any action shall be brought against the City by reason of any claim covered under this Article 9, the Contractor, upon notice from the City, shall at its sole cost and expense defend the same.

9.04 The Contractor agrees that it is the Contractor's responsibility and not the responsibility of the

City to safeguard the property that the Contractor or its Associates use while performing this Contract. Further, the Contractor agrees to hold the City harmless for any loss of such property used by any such person pursuant to the Contractor's performance under this Contract.

- 9.05 The indemnification obligation under this Article 9 shall not be limited by any limitation on the amount or type of damages, compensation, or benefits payable under workers' compensation acts or other employee benefit acts.
- 9.06 The Contractor agrees that this Article 9 shall apply to all claims, whether litigated or not, that may occur or arise between the Contractor or its Associates and the City and agrees to indemnify, defend and hold the City harmless against any such claims.

Article 10: Insurance

10.01 During the term of this Contract, the Contractor shall maintain the following insurance, at a minimum and at its expense:

TYPE	AMOUNT NOT LESS THAN
a. Workers' Compensation	Michigan statutory minimum
b. Employers' Liability	\$500,000.00 minimum each disease \$500,000.00 minimum each person \$500,000.00 minimum each accident
c. Commercial General Liability Insurance (Broad Form Comprehensive)	\$1,000,000.00 each occurrence \$2,000,000.00 aggregate
d. Automobile Liability Insurance (covering all owned, hired and non-owned vehicles with personal and property protection insurance, including residual liability insurance under Michigan no fault insurance law)	\$1,000,000.00 combined single limit for bodily injury and property damage

10.02 The commercial general liability insurance policy shall include an endorsement naming the "City of Detroit" as an additional insured. The additional insured endorsement shall provide coverage to the additional insured with respect to liability arising out of the named insured's ongoing work or operations performed for the additional insured under the terms of this Contract. The commercial general liability policy shall state that the Contractor's insurance is primary and not excess over any insurance already carried by the City of Detroit and shall provide blanket contractual liability insurance for all written contracts.

- 10.03 Each such policy shall contain the following cross-liability wording: “In the event of a claim being made hereunder by one insured for which another insured is or may be liable, then this policy shall cover such insured against whom a claim is or may be made in the same manner as if separate policies had been issued to each insured hereunder.”
- 10.04 All insurance required by this Contract shall be written on an occurrence-based policy form, if the same is commercially available.
- 10.05 The Commercial General Liability policy shall be endorsed to have the general aggregate apply to the Services provided under this Contract only.
- 10.06 If during the term of this Contract changed conditions or other pertinent factors should, in the reasonable judgment of the City, render inadequate the insurance limits, the Contractor shall furnish on demand such additional coverage or types of coverage as may reasonably be required under the circumstances. All such insurance shall be effected at the Contractor's expense, under valid and enforceable policies, issued by insurers licensed to conduct business in Michigan and are otherwise acceptable to the City.
- 10.07 All insurance policies shall name the Contractor as the insured. Certificates of insurance evidencing the coverage required by this Article 10 shall, in a form acceptable to the City, be submitted to the City prior to the commencement of the Services and at least fifteen (15) days prior to the expiration dates of expiring policies. In the event the Contractor receives notice of policy cancellation, the Contractor shall immediately notify the City in writing.
- 10.08 If any work is subcontracted in connection with this Contract, the Contractor shall require each Subcontractor to effect and maintain the types and limits of insurance set forth in this Article 10 and shall require documentation of same, copies of which documentation shall be promptly furnished the City.
- 10.09 The Contractor shall be responsible for payment of all deductibles contained in any insurance required under this Contract. The provisions requiring the Contractor to carry the insurance required under this Article 10 shall not be construed in any manner as waiving or restricting the liability of the Contractor under this Contract.

Article 11: Default and Termination

- 11.01 This Contract shall remain in full force and effect until the end of its term unless otherwise terminated for cause or convenience according to the provisions of this Article 11.
- 11.02 The City reserves the right to terminate this Contract for cause. Cause is an event of default.
 - a) An event of default shall occur if there is a material breach of this Contract, and shall include the following:
 - 1) The Contractor fails to begin work in accordance with the terms of this Contract; or

- 2) The Contractor, in the judgment of the City, is unnecessarily, unreasonably, or willfully delaying the performance and completion of the Work Product or Services; or
 - 3) The Contractor ceases to perform under the Contract; or
 - 4) The City is of the opinion that the Services cannot be completed within the time provided and that the delay is attributable to conditions within the Contractor's control; or
 - 5) The Contractor, without just cause, reduces its work force on this Contract to a number that would be insufficient, in the judgment of the City, to complete the Services within a reasonable time, and the Contractor fails to sufficiently increase such work force when directed to do so by the City; or
 - 6) The Contractor assigns, transfers, conveys or otherwise disposes of this Contract in whole or in part without prior approval of the City; or
 - 7) Any City officer or employee acquires an interest in this Contract so as to create a conflict of interest; or
 - 8) The Contractor violates any of the provisions of this Contract, or disregards applicable laws, ordinances, permits, licenses, instructions or orders of the City; or
 - 9) The performance of the Contract, in the sole judgment of the City, is substandard, unprofessional, or faulty and not adequate to the demands of the task to be performed; or
 - 10) The Contractor fails in any of the agreements set forth in this Contract; or
 - 11) The Contractor ceases to conduct business in the normal course; or
 - 12) The Contractor admits its inability to pay its debts generally as they become due.
- b) If the City finds an event of default has occurred, the City may issue a Notice of Termination for Cause setting forth the grounds for terminating the Contract. Upon receiving a Notice of Termination for Cause, the Contractor shall have ten (10) calendar days within which to cure such default. If the default is cured within said ten (10) day period, the right of termination for such default shall cease. If the default is not cured to the satisfaction of the City, this Contract shall terminate on the tenth calendar day after the Contractor's receipt of the Notice of Termination for Cause, unless the City, in writing, gives the Contractor additional time to cure the default. If the default is not cured to the satisfaction of the City within the additional time allowed for cure, this Contract shall terminate for cause at the end of the extended cure period.
- c) If, after issuing a Notice of Termination for Cause, the City determines that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the Notice of Termination had been issued as a Notice of Termination for Convenience. Alternatively, in the City's discretion, the Notice of Termination for Cause may be withdrawn and the Contract, if terminated, may be reinstated.

- d) The Contractor shall be liable to the City for any damages it sustains by virtue of the Contractor's breach or any reasonable costs the City might incur in enforcing or attempting to enforce this Contract. Such costs shall include reasonable fees and expenses for attorneys, expert witnesses and other consultants. However, if the Contractor makes a written offer prior to the initiation of litigation or arbitration, then the City shall not be entitled to such attorney fees unless the City declines the offer and obtains a verdict or judgment for an amount more than ten percent (10%) above the amount of the Contractor's last written offer prior to the initiation of litigation or arbitration. The City may withhold any payment(s) to the Contractor, in an amount not to exceed the amount claimed in good faith by the City to represent its damages, for the purpose of setoff until such time as the exact amount of damages due to the City from the Contractor is determined. It is expressly understood that the Contractor shall remain liable for any damages the City sustains in excess of any setoff.
- e) The City's remedies outlined in this Article 11 shall be in addition to any and all other legal or equitable remedies permissible.

11.03 The City shall have the right to terminate this Contract at any time at its convenience by giving the Contractor five (5) business days written Notice of Termination for Convenience. As of the effective date of the termination, the City will be obligated to pay the Contractor the following: (a) the fees or commissions for Services completed and accepted in accordance with Exhibit A in the amounts provided for in Exhibit B; (b) the fees for Services performed but not completed prior to the date of termination in accordance with Exhibit A in the amounts set forth in the Contractor's rate schedule as provided in Exhibit B; and (c) the Contractor's costs and expenses incurred prior to the date of the termination for items that are identified in Exhibit B. The amount due to the Contractor shall be reduced by payments already paid to the Contractor by the City. In no event shall the City pay the Contractor more than maximum price, if one is stated, of this Contract.

11.04 After receiving a Notice of Termination for Cause or Convenience, and except as otherwise directed by the City, the Contractor shall:

- a) Stop work under the Contract on the date and to the extent specified in the Notice of Termination;
- b) Obligate no additional Contract funds for payroll costs and other costs beyond such date as the City shall specify, and place no further orders on subcontracts for material, services, or facilities, except as may be necessary for completion of such portion of the Services under this Contract as is not terminated;
- c) Terminate all orders and subcontracts to the extent that they relate to the portion of the Services terminated pursuant to the Notice of Termination;
- d) Preserve all Records and submit to the City such Records and reports as the City shall specify, and furnish to the City an inventory of all furnishings, equipment, and other property purchased for the Contract, if any, and carry out such directives as the City may issue concerning the safeguarding or disposition of files and property; and

- e) Submit within thirty (30) days a final report of receipts and expenditures of funds relating to this Contract, and a list of all creditors, Subcontractors, lessors and other parties, if any, to whom the Contractor has become financially obligated pursuant to this Contract.

11.05 After termination of the Contract, each party shall have the duty to assist the other party in the orderly termination of this Contract and the transfer of all rights and duties arising under the Contract, as may be necessary for the orderly, un-disrupted continuation of the business of each party.

Article 12: Assignment

12.01 The Contractor shall not assign, transfer, convey or otherwise dispose of any interest whatsoever in this Contract without the prior written consent of the City; however, claims for money due or to become due to the Contractor may be assigned to a financial institution without such approval. Notice of any assignment to a financial institution or transfer of such claims of money due or to become due shall be furnished promptly to the City. If the Contractor assigns all or any part of any monies due or to become due under this Contract, the instrument of assignment shall contain a clause stating that the right of the assignee to any monies due or to become due shall be subject to prior liens of all persons, firms, and corporations for Services rendered or materials supplied for the performance of the Services called for in this Contract.

Article 13: Subcontracting

13.01 None of the Services covered by this Contract shall be subcontracted without the prior written approval of the City and, if required, any grantor agency. The City reserves the right to withhold approval of subcontracting such portions of the Services where the City determines that such subcontracting is not in the City's best interests.

13.02 Each subcontract entered into shall provide that the provisions of this Contract shall apply to the Subcontractor and its Associates in all respects. The Contractor agrees to bind each Subcontractor and each Subcontractor shall agree to be bound by the terms of the Contract insofar as applicable to the work or services performed by that Subcontractor.

13.03 The Contractor and the Subcontractor jointly and severally agree that no approval by the City of any proposed Subcontractor, nor any subcontract, nor anything in the Contract, shall create or be deemed to create any rights in favor of a Subcontractor and against the City, nor shall it be deemed or construed to impose upon the City any obligation, liability or duty to a Subcontractor, or to create any contractual relation whatsoever between a Subcontractor and the City.

13.04 The provisions contained in this Article 13 shall apply to subcontracting by a Subcontractor of any portion of the work or services included in an approved subcontract.

13.05 The Contractor agrees to indemnify, defend, and hold the City harmless against any claims initiated against the City pursuant to any subcontracts the Contractor enters into in performance of this Contract. The City's approval of any Subcontractor shall not relieve the Contractor of any of its responsibilities, duties and liabilities under this Contract. The Contractor shall be solely responsible to the City for the acts or defaults of its Subcontractors and of each Subcontractor's Associates, each of whom shall for this purpose be deemed to be the agent or employee of the Contractor.

Article 14: Conflict of Interest

- 14.01 The Contractor covenants that it presently has no interest and shall not acquire any interest, direct or indirect, that would conflict in any manner or degree with the performance of the Services under this Contract. The Contractor further covenants that in the performance of this Contract no person having any such interest shall be employed by it.

- 14.02 The Contractor further covenants that no officer, agent, or employee of the City and no other public official who exercises any functions or responsibilities in the review or approval of the undertaking or performance of this Contract has any personal or financial interest, direct or indirect, in this Contract or in its proceeds, whether such interest arises by way of a corporate entity, partnership, or otherwise.

- 14.03 The Contractor warrants (a) that it has not employed and will not employ any person to solicit or secure this Contract upon any agreement or arrangement for payment of a commission, percentage, brokerage fee, or contingent fee, other than bona fide employees working solely for the Contractor either directly or indirectly, and (b) that if this warranty is breached, the City may, at its option, terminate this Contract without penalty, liability or obligation, or may, at its option, deduct from any amounts owed to the Contractor under this Contract any portion of any such commission, percentage, brokerage, or contingent fee.

- 14.04 The Contractor covenants not to employ an employee of the City for a period of one (1) year after the date of termination of this Contract without written City approval.

- 14.05 The Contractor shall promptly identify and inform the City in writing of any potential conflict of interest (as set forth in Sections 14.01 through 14.04 above) or any relationship or actions that might give the appearance that a conflict of interest (as set forth in Sections 14.01 through 14.04 above) exists, or that a situation exists that could reasonably be viewed as affecting the Contractor's objectivity in performing work under this contract, including the performance of administrative or other duties to related organizations.

- 14.06 The Contractor shall provide a statement listing all political contributions and expenditures ("Statement of Political Contributions and Expenditures"), as defined by the Michigan Campaign Finance Act, MCL 169.201, et seq., made by the Contractor, its affiliates, subsidiaries, principals, officers, owners, directors, agents or assigns, to elective City officials within the previous four (4) years. Individuals shall also list any contributions or expenditures from their spouses.

- 14.07 The Contractor's Statement of Political Contributions and Expenditures shall be attached to this Contract as "Exhibit C" and made a part hereof. **This Contract is not valid unless and until the Statement of Political Contributions and Expenditures is provided.**

- 14.08 The Statement of Political Contributions and Expenditures shall be filed by the Contractor on an annual basis for the duration of the Contract, shall be current up to and including the date of its filing, and shall also be filed with all contract renewals and change orders, if any.

Article 15: Confidential Information

- 15.01 In order that the Contractor may effectively fulfill its covenants and obligations under this Contract, it may be necessary or desirable for the City to disclose confidential and proprietary information to the Contractor or its Associates pertaining to the City's past, present and future activities. Since it is difficult to separate confidential and proprietary information from that which is not, the Contractor shall regard, and shall instruct its Associates to regard, all information gained as confidential and such information shall not be disclosed to any organization or individual without the prior consent of the City. The above obligation shall not apply to information already in the public domain or information required to be disclosed by a court order.
- 15.02 The Contractor agrees to take appropriate action with respect to its Associates to ensure that the foregoing obligations of non-use and non-disclosure of confidential information shall be fully satisfied.

Article 16: Compliance with Laws

- 16.01 The Contractor shall comply with and shall require its Associates to comply with all applicable federal, state and local laws.
- 16.02 The Contractor shall hold the City harmless with respect to any damages arising from any violation of law by it or its Associates. The Contractor shall commit no trespass on any public or private property in performing any of the Services encompassed by this Contract. The Contractor shall require as part of any subcontract that the Subcontractor comply with all applicable laws and regulations.

Article 17: Office of Inspector General

- 17.01. In accordance with Section 2-106.6 of the City Charter, this Contract shall be voidable or rescindable at the discretion of the Mayor or Inspector General at any time if a Public Servant who is a party to the Contract has an interest in the Contract and fails to disclose such interest.
- 17.02. This Contract shall also be voidable or rescindable if a lobbyist or employee of the contracting party offers a prohibited gift, gratuity, honoraria or payment to a Public Servant in relation to the Contract.
- 17.03. A fine shall be assessed to the Contractor in the event of a violation of Section 2-106.6 of the City Charter. If applicable, the actions of the Contractor, and its representative lobbyist or employee, shall be referred to the appropriate prosecuting authorities.
- 17.04. Pursuant to Section 7.5-306 of the City Charter, the Inspector General shall investigate any Public Servant, City agency, program or official act, contractor and subcontractor providing goods and services to the City, business entity seeking contracts or certification of eligibility for City contracts and person seeking certification of eligibility for participation in any City program, either in

response to a complaint or on the Inspector General's own initiative in order to detect and prevent waste, abuse, fraud and corruption.

- 17.05. In accordance with Section 7.5-310 of the City Charter, it shall be the duty of every Public Servant, contractor, subcontractor, and licensee of the City, and every applicant for certification of eligibility for a City contract or program, to cooperate with the Inspector General in any investigation pursuant to Article 7.5, Chapter 3 of the City Charter.
- 17.06. Any Public Servant who willfully and without justification or excuse obstructs an investigation of the Inspector General by withholding documents or testimony, is subject to forfeiture of office, discipline, debarment or any other applicable penalty.
- 17.07. As set forth in Section 7.5-308 of the City Charter, the Inspector General has a duty to report illegal acts. If the Inspector General has probable cause to believe that any Public Servant or any person doing or seeking to do business with the City has committed or is committing an illegal act, then the Inspector General shall promptly refer the matter to the appropriate prosecuting authorities.
- 17.08. In accordance with Section 17-5-351(a) of the Detroit City Code, the City shall solicit offers from, award contracts to, consent to subcontracts with, or otherwise to conduct business with, responsible contractors only. To effectuate this policy, the debarment of contractors and subcontractors from current and/or future City work may be undertaken.
- 17.09. Therefore, it will be the responsibility of all Contractors to check the list of debarred contractors in the City's website and confirm that neither the Contractor nor the subcontracting company is listed on the City's debarment list and they will not be using the debarred (sub) contractor(s) to conduct any City business.
- 17.10. In accordance with Section 17-5-352 (c) of the Detroit City Code, the Contractor shall report to the Office of Inspector General any improper, unethical or illegal activity or requests made by elected officers of the City, including those acting on their behalf, or any Public Servant in connection with this Contract.

Article 18: Amendments

- 18.01. The City may consider it in its best interest to change, modify or extend a covenant, term or condition of this Contract or require the Contractor to perform Additional Services that are not contained within the Scope of Services as set forth in Exhibit A. Any such change, addition, deletion, extension or modification of Services may require that the compensation paid to the Contractor by the City be proportionately adjusted, either increased or decreased, to reflect such modification. If the City and the Contractor mutually agree to any changes or modification of this Contract, the modification shall be incorporated into this Contract by written Amendment.
- 18.02. Compensation shall not be modified unless there is a corresponding modification in the Services sufficient to justify such an adjustment. If there is any dispute as to compensation, the Contractor shall continue to perform the Services under this Contract until the dispute is resolved.
- 18.03. No Amendment to this Contract shall be effective and binding upon the parties unless it expressly makes reference to this Contract, is in writing, is signed and acknowledged by duly authorized

representatives of both parties, is approved by the appropriate City departments and the City Council, and is signed by the Chief Procurement Officer.

- 18.04 The City shall not be bound by Unauthorized Acts of its employees, agents, or representatives with regard to any dealings with the Contractor and any of its Associates.

Article 19: Fair Employment Practices

- 19.01 The Contractor shall comply with, and shall require any Subcontractor to comply with, all federal, state and local laws governing fair employment practices and equal employment opportunities.
- 19.02 The Contractor agrees that it shall, at the point in time it solicits any subcontract, notify the potential Subcontractor of their joint obligations relative to non-discrimination under this Contract, and shall include the provisions of this Article 19 in any subcontract, as well as provide the City a copy of any subcontract upon request.
- 19.03 Breach of the terms and conditions of this Article 19 shall constitute a material breach of this Contract and may be governed by the provisions of Article 11, "Default and Termination."

Article 20: Notices

- 20.01 All notices, consents, approvals, requests and other communications ("Notices") required or permitted under this Contract shall be given in writing, mailed by postage prepaid, certified or registered first-class mail, return receipt requested, and addressed as follows:

If to the Housing and Revitalization Department on behalf of the City:

City of Detroit
Department of Housing and Revitalization Detroit, MI 48226
Attention: Ms. Julie Schneider, Director

City of Detroit
Office of Contracting and Procurement
2 Woodward Ave., Suite 1008
Detroit, MI 48226
Attention: Deputy Chief Procurement Officer

If to the Contractor:
Applied Science, Inc.
21455 Melrose Ave., Bldg. R, Ste. 12
Southfield, MI 48075

- 20.02 All Notices shall be deemed given on the day of mailing. Either party to this Contract may change its address for the receipt of Notices at any time by giving notice of the address change to the other party. Any Notice given by a party to this Contract must be signed by an authorized representative of such party.

- 20.03 The Contractor agrees that service of process at the address and in the manner specified in this Article 20 shall be sufficient to put the Contractor on notice of such action and waives any and all claims relative to such notice.

Article 21: Proprietary Rights and Indemnity

- 21.01 The Contractor shall not relinquish any proprietary rights in its intellectual property (copyright, patent, and trademark), trade secrets or confidential information as a result of the Services provided under this Contract. Any Work Product provided to the City under this Contract shall not include the Contractor's proprietary rights, except to the extent licensed to the City.
- 21.02 The City shall not relinquish any of its proprietary rights, including, but not limited to, its data, privileged or confidential information, or methods and procedures, as a result of the Services provided under this Contract.
- 21.03 The parties acknowledge that should the performance of this Contract result in the development of new proprietary and secret concepts, methods, techniques, processes, adaptations, discoveries, improvements and ideas ("Discoveries"), and to the extent said Discoveries do not include modifications, enhancements, configurations, translations, derivative works, and interfaces from the Contractor's intellectual property, trade secrets or confidential information, said Discoveries shall be deemed "Work(s) for Hire" and shall be promptly reported to the City and shall belong solely and exclusively to the City without regard to their origin, and the Contractor shall not, other than in the performance of this Contract, make use of or disclose said Discoveries to anyone. At the City's request, the Contractor shall execute all documents and papers and shall furnish all reasonable assistance requested in order to establish in the City all right, title and interest in said Discoveries or to enable the City to apply for United States patents or copyrights for said Discoveries, if the City elects to do so.
- 21.04 Any Work Product provided by the Contractor to the City under this Contract shall not be disclosed, published, copyrighted or patented, in whole or in part, by the Contractor. The right to the copyright or patent in such Work Product shall rest exclusively in the City. Further, the City shall have unrestricted and exclusive authority to publish, disclose, distribute and otherwise use, in whole or in part, any of the Work Product. If Work Product is prepared for publication, it shall carry the following notation on the front cover or title page: "This document was prepared for, and is the exclusive property of, the City of Detroit, Michigan, a municipal corporation."
- 21.05 The Contractor warrants that the performance of this Contract shall not infringe upon or violate any patent, copyright, trademark, trade secret or proprietary right of any third party. In the event of any legal action related to the above obligations of the Contractor filed by a third party against the City, the Contractor shall, at its sole expense, indemnify, defend and hold the City harmless against any loss, cost, expense or liability arising out of such claim, whether or not such claim is successful.
- 21.06 The making of payments, including partial payments by the City to the Contractor, shall vest in the City title to, and the right to take possession of, all Work Product produced by the Contractor up to the time of such payments, and the City shall have the right to use said Work Product for public purposes without further compensation to the Contractor or to any other person.

- 21.07 Upon the completion or other termination of this Contract, all finished or unfinished Work Product prepared by the Contractor shall, at the option of the City, become the City's sole and exclusive property whether or not in the Contractor's possession. Such Work Product shall be free from any claim or retention of rights on the part of the Contractor and shall promptly be delivered to the City upon the City's request. The City shall return all of the Contractor's property to it. The Contractor acknowledges that any intentional failure or unreasonable delay on its part to deliver the Work Product to the City will cause irreparable harm to the City not adequately compensable in damages and for which the City has no adequate remedy at law. The Contractor accordingly agrees that the City may in such event seek and obtain injunctive relief in a court of competent jurisdiction to compel delivery of the Work Product, to which injunctive relief the Contractor consents, as well as seek and obtain all applicable damages and costs. The City shall have full and unrestricted use of the Work Product for the purpose of completing the Services.

Article 22: Force Majeure

- 22.01 No failure or delay in performance of this Contract, by either party, shall be deemed to be a breach thereof when such failure or delay is caused by an event or circumstance that is beyond the reasonable control of that party, absent such party's fault or negligence, and which by its nature could not have been foreseen by such party, or, if it could have been foreseen, was unavoidable ("Force Majeure Event"). A Force Majeure Event includes, but is not limited to, any Act of God or the public enemy, strikes, lockouts, wars, acts of domestic or international terrorism, riots, epidemics, pandemics, explosions, sabotage, the binding order of any governmental authority, or any other cause, whether the kind herein enumerated or otherwise, which is not within the control of a party. Contractor's economic hardship and changes in the market conditions are not considered a Force Majeure Event. In the event of a dispute between the parties with regard to what constitutes a Force Majeure Event, the City's reasonable determination shall be controlling.
- 22.02 Upon the occurrence of a Force Majeure Event, Contractor shall (i) give prompt written notice to (1) the City and (2) the City's Office of Contracting and Procurement that the Force Majeure Event has occurred, the anticipated effect on Contractor's performance, and its expected duration; (ii) use all diligent efforts to end the failure or delay of its performance, ensure that the effects of any Force Majeure Event are minimized, (iii) keep the City apprised of Contractor's progress in remediating the effects of the Force Majeure Event; and (iii) promptly resume performance under the Contract.
- 22.03 If a Force Majeure Event prevents Contractor from performing under the Contract for a continuous period of at least ten (10) business days, the City may terminate this Contract immediately by giving written notice to Contractor as required under the Contract.

Article 23: Waiver

- 23.01 The City shall not be deemed to have waived any of its rights under this Contract unless such waiver is in writing and signed by the City.
- 23.02 No delay or omission on the part of the City in exercising any right shall operate as a waiver of such right or any other right. A waiver on any one (1) occasion shall not be construed as a waiver of any right on any future occasion.

- 23.03 No failure by the City to insist upon the strict performance of any covenant, agreement, term or condition of this Contract or to exercise any right, term or remedy consequent upon its breach shall constitute a waiver of such covenant, agreement, term, condition, or breach.

Article 24: Miscellaneous

- 24.01 If this contract is grant funded, this contract is governed by the terms and conditions of the grant agreement. See the full terms and conditions of the grant are included with this contract.
- 24.02 If any provision of this Contract or its application to any person or circumstance shall to any extent be invalid or unenforceable, the remainder of this Contract shall not be affected and shall remain valid and enforceable to the fullest extent permitted by law.
- 24.03 This Contract contains the entire agreement between the parties and all prior negotiations and agreements are merged into this Contract. Neither the City nor the City's agents have made any representations except those expressly set forth in this Contract, and no rights or remedies are, or shall be, acquired by the Contractor by implication or otherwise unless expressly set forth in this Contract. The Contractor waives any defense it may have to the validity of the execution of this Contract.
- 24.04 Unless the context otherwise expressly requires, the words "herein," "hereof," and "hereunder," and other words of similar import, refer to this Contract as a whole and not to any particular section or subdivision.
- 24.05 The headings of the sections of this Contract are for convenience only and shall not be used to construe or interpret the scope or intent of this Contract or in any way affect the same.
- 24.06 This Contract and all actions arising under it shall be governed by, subject to, and construed according to the law of the State of Michigan. The Contractor agrees, consents and submits to the exclusive personal jurisdiction of any state or federal court of competent jurisdiction in Wayne County, Michigan, for any action arising out of this Contract. The Contractor also agrees that it shall not commence any action against the City because of any matter whatsoever arising out of or relating to the validity, construction, interpretation and enforcement of this Contract in any state or federal court of competent jurisdiction other than one in Wayne County, Michigan.
- 24.07 If any Associate of the Contractor shall take any action that, if done by a party, would constitute a breach of this Contract, the same shall be deemed a breach by the Contractor.
- 24.08 The rights and remedies set forth in this Contract are not exclusive and are in addition to any of the rights or remedies provided by law or equity.
- 24.09 For purpose of the hold harmless and indemnity provisions contained in this Contract, the term "City" shall be deemed to include the City of Detroit and all other associated, affiliated, allied or subsidiary entities or commissions, now existing or subsequently created, and their officers, agents, representatives, and employees.

- 24.10 The Contractor covenants that it is not, and shall not become, in arrears to the City upon any contract, debt, or other obligation to the City including, without limitation, real property, personal property and income taxes, and water, sewage or other utility bills.
- 24.11 This Contract may be executed in any number of originals, any one of which shall be deemed an accurate representation of this Contract. Promptly after the execution of this Contract, the City shall provide a copy to the Contractor.
- 24.12 As used in this Contract, the singular shall include the plural, the plural shall include the singular, and a reference to either gender shall be applicable to both.
- 24.13 The rights and benefits under this Contract shall inure to the City of Detroit and its agents, successors, and assigns.
- 24.14 The City shall have the right to recover by setoff from any payment owed to the Contractor all delinquent withholding, income, corporate and property taxes owed to the City by the Contractor, any amounts owed to the City by the Contractor under this Contract or other contracts, and any other debt owed to the City by the Contractor.

Article 25: Invoice Submission and Payment

- 25.01 All invoices submitted against the contract must include part or item numbers and part or item description, list price, and applicable discount. Items not properly invoiced will not be paid. It is the Supplier's responsibility to ensure the creation of invoice(s) in Oracle Cloud. Invoices must meet the following conditions for payment: Price on invoice must correspond to the pricing listed on purchase order and/or contract.
- 25.02 Supplier must submit price lists in accordance with bid requirements
- 25.03 All suppliers **must** register in the Supplier Portal and be set up for ACH (wireless payment) in order to receive payment
- 25.04 Supplier registration and invoice submission instructions can be found on the City of Detroit's website at <http://www.detroitmi.gov/Supplier>. Questions should be directed to procurementinthecloud@detroitmi.gov.

Article 26: Board of Ethics

- 26.01 In accordance with Section 2-106.10 of the City Charter, it is the duty of every Public Servant, the Contractor and subcontractors, if any, to cooperate with the Board of Ethics in any investigation.
- 26.02 Any Public Servant who willfully and without justification or excuse obstructs an investigation of the Board of Ethics by withholding documents or testimony is subject to forfeiture of officer, discipline, debarment or any other applicable penalty.

26.03 The Contractor acknowledges that it subject to debarment or any other applicable penalty, if the Contractor willfully and without justification or excuse obstructs an investigation of the Board of Ethics by withholding documents or testimony.

(Signatures appear on next page)

Signature Page

The City and the Contractor, by and through their duly authorized officers and representatives, have executed this Contract as follows:

Applied Science, Inc.

City of Detroit:

By: Julie Schneider
DS
DocuSigned by:
E17656515DAF4C9...
 Name
 Director
 Title

Contractor:
 By: John Michalski
Signed by:
John Michalski
4AB0D042550642A...
 Name
 President
 Title

THIS CONTRACT WAS APPROVED
 BY THE CITY COUNCIL ON:

April 15, 2025

Date

THIS CONTRACT WAS APPROVED
 BY FRC ON:
 (if FRC approval is not required, leave blank)

Date

APPROVED BY LAW DEPARTMENT
 PURSUANT TO § 7.5-206 OF THE CHARTER
 OF THE CITY OF DETROIT

Sandra Yu Stahl
DocuSigned by:
333671204FFE45A...
4/15/2025
 Chief Procurement Officer Date

March 26, 2025
 Corporation Counsel Date

**THIS CONTRACT IS NOT VALID OR AUTHORIZED UNTIL APPROVED BY
 RESOLUTION OF THE CITY COUNCIL AND SIGNED BY THE CHIEF PROCUREMENT**

EXHIBIT A: SCOPE OF SERVICES

I. Notice to Proceed

The term of this Contract shall begin upon approval by the Detroit City Council, and shall continue for a term of two (2) years with two (2) one-year renewal options. The Contractor shall commence performance of this Contract upon receipt of a written “Notice to Proceed” from the City and in the manner specified in the Notice to Proceed.

II. Services to be Performed

Project Management

The Consultant shall provide management of the project to help ensure timely delivery of services in accordance with the Contract. This includes maintaining a project schedule, scheduling and convening project meetings, meeting summaries and timely transmittal of project deliverables. Project management scope and fee shall be distributed across project work tasks based on the anticipated level of effort necessary to ensure timely delivery of the project. DWSD expects that appropriate quality assurance and quality control measures are included as part of project delivery.

Throughout the project Applied Science, Inc (ASI) will conduct meetings including the initial kick off meeting, prepare invoices, track spending, and monitor the schedule and budget for the project. ASI will coordinate all task work for each bi-weekly progress meeting, prepare a progress report and will update the project schedule and budget. A monthly look-ahead schedule and budget will be prepared to ensure the schedule is maintained and budgets are not exceeded. Monthly invoices will be prepared, and spending will be tracked against the project budget.

All services provided and documents produced under this contract will be reviewed following ASI’s quality assurance/quality control (QA/QC) practices. These practices ensure that work products are accurate and have been reviewed by senior members of ASI relative to issues such as completeness, accuracy, and quality.

Kick Off Meeting

ASI will present the project management plan to steer this project from start to finish. The meeting will include the management plan, communication log, QA/QC plan, and the project schedule.

Information Gathering

Prior to detailed study work, the consultant shall amass a digital library of project files to help ensure that work can advance in a linear and efficient manner. ASI has completed numerous projects for DWSD and GLWA over the last 40 years. As a result, ASI has collected a vast amount of utility information on the neighborhoods in the Fischer and Meldrum Districts. The Fischer District has been the focus of several study level projects to address untreated CSO discharges that ASI has completed over the years. Under the GLWA WWMP Project, ASI identified the Fischer District as a potential sewer separation candidate and selected it as a proof of-concept location. Paving plans and as-built drawings for the stormwater and combined sewers provided by DWSD were used to size proposed sanitary and stormwater sewers, identified bulkhead locations and developed a cost estimate for the overall project.

File Collection

At the onset of the project, ASI will review the utility information already at hand for the Fischer and Meldrum Districts. ASI will then develop a list of missing information and prepare requests for DWSD and GLWA. ASI shall request relevant information from DWSD and GLWA for the sewer system within and around (as necessary) the project area. Requested information should generally include sewer section maps, as-built sewer profiles, studies and models (DWSD and GLWA).

ASI shall also request telemetry data (pump run time, wet well depths, flow, etc) for the Fischer pump station as well as CSO discharge data for B003 through B006 and area rain gage data. For the Meldrum drainage area, the consultant shall also request CSO discharge data and area rain gage data.

Base Mapping

ASI shall prepare a document library comprised of all readily available GIS information. This generally should include sewer lines, manholes, pump stations, CSOs, property information and aerial imagery. Additionally, the Consultant shall submit a MISSDIG design ticket to obtain existing utility information within the project areas.

ASI has base map files from previous DWSD and GLWA projects that provide detailed coverage information of the Fischer and Meldrum Districts. In addition, ASI has experience compiling property information, aerial imagery, topography, land use and other pertinent GIS data from various public sources such as City of Detroit, Wayne County, SEMCOG, USGS and NOAA.

This information will be used as a starting point for the study until ASI receives the most up-to-date files from DWSD and GLWA. Having this information on hand will allow ASI to move quickly and methodically at the start of the project. ASI will prepare a document library listing all of the readily available GIS information. ASI will submit MISSDIG design tickets to obtain existing utility information within the project areas. ASI will also reference the historical DWSD quarter sections maps to identify any utilities (Gas, water, electric) shown on these historical documents.

GLWA Coordination

GLWA is currently designing screening improvements near the existing Fischer outfall. The project is funded through an agreement with MDOT related to the I-94 reconstruction projects. Given the project's overlapping drainage areas, ASI shall arrange for coordination meetings at several points (assume four) throughout the project. ASI was a member of the team that developed sewer separation and netting facility concepts for the Fischer Outfall under the WWMP Project. ASI is very knowledgeable of the current GLWA construction projects in the Fisher and Meldrum Districts from our work under the Conveyance System Infrastructure Improvements Project (1803709) and DRI Rehabilitation Project DB-226. ASI will leverage our institutional knowledge of the various GLWA projects to develop innovative and cost-effective concepts under this project. ASI will meet with GLWA and their selected consultant for the screening facilities at various milestones on this project.

H/H Model set-up

As part of the project, ASI will receive a copy of DWSD's "All-Pipes Model" which is a continuously updated city-wide model of the DWSD and GLWA sewer system. The model has been developed within the Autodesk InfoWorks ICM platform. ASI will maintain a version of this model during the project which will be used to establish existing conditions and model proposed solutions. The ASI team will use the understanding of the modeling software InfoWorks ICM, and understanding of the local DWSD collection system to review the DWSD "All-Pipes Model". The model review will be completed to develop an understanding of the assumed model input parameters in the "All-Pipes

Model” and to develop plans for incorporating elements of the GLWA Regional Wastewater Collection System (RWCS) SWMM model into the “All-Pipes Model” for this study.

Deliverable: Technical Memorandum summarizing the data collection effort and identifying gaps for future research and evaluation during the project.

Task Deliverables

Technical Memorandum categorizing obtained data and identifying potential gaps for future research and evaluation during the project.

Preliminary Hydraulic Modeling

Pre-calibration Model Analysis

Under this task, the GLWA Regional SWMM Model and DWSD All Pipes Infracore Models will be evaluated. The evaluation will document the hydraulic conditions in the existing combined sewer collection system for key hydrologic events to establish baseline conditions to which proposed improvements can be compared. The DWSD “All-pipes Model” and GLWA RWCS models will be reviewed to identify portions of the RWCS model that will be incorporated into the “All-pipes Model”. The focus of this effort will be on providing the right amount of detail from RWCS model to provide an accurate representation of the GLWA collection system without significantly impacting the “All-pipes Model” runtime. ASI’s experience with collection system modeling, the GLWA collection system and the local DWSD collection system will allow for the best balance of model integration on this project.

Metering Plan and Implementation

A metering plan will be developed for the Fischer project area for use in calibrating the DWSD All-Pipes model. DWSD will then contract with a metering contractor to deploy meters within the Fischer project area. Metering data will be collected throughout the growing season to capture storm events. A rain gage may also be located within the project area to accurately capture precipitation data. A flow monitoring period of April 1 through August 31, 2025, would be recommended for this study.

Metering in the Meldrum District is straight forward given that it is a traditional CSO collection system. Two (2) meters are planned on the Meldrum Sewer; one at Vernor Hwy near the proposed connection to the Leib SDF and one near Jefferson Ave upstream of the regulator chamber. The two meters will allow the total wet weather and total dry weather flows to be calculated for this portion of the Meldrum District.

The metering plan for the Fischer District has the complication of all the diversion chambers and relief sewers and interconnections to adjacent CSO outfalls. ASI developed a preliminary metering plan for the Fischer District which would install up to 14 flow meters. A total of nine (9) flow meters would be installed along the main trunk sewers tributary to the four regulator chambers in the district to record the total wet weather and total dry weather flow rates. Two (2) flow meters would be installed on the main Fischer Sewer to understand the high-level relief flow contributions in wet weather. One (1) meter would be installed on the Fischer Sewer near the upstream district boundary to understand out of district flow contributions. Two (2) meters are proposed in discrete local drainage subdistricts to calibrate and confirm the “All Pipes Model” hydrology.

The ASI team will utilize the existing network of GLWA rain gauges and the Detroit City Airport rain gauge to collect and monitor rainfall data throughout the monitoring period. Rain gauge data will be used to select and model large uniform storm events for the model calibration task. Meter data, especially good meter data, is vital to proper model calibration and for telling a story on how the collection system works and affects different districts within the City. As such, ASI plans to use ADS Metering Service to install and maintain the flow meters throughout the monitoring period. ASI has overseen hundreds of meter installations performed by ADS over the years.

Hydraulic Model Calibration

For the intents of this analysis, the consultant shall utilize DWSD All-Pipes model. As part of this, the Fischer metering will be used to calibrate the model for the Fischer project area. After calibration, the model will be run for the 10-, 25-year, and 100-year, 24-hour design events and the 10-year, 1-hour design event. The extent of basement and street flooding will be analyzed for each. The flow meter data collected during the monitoring period will be used to calibrate the DWSD “All-Pipes Model”. The meter data collected during the 2025 monitoring period will be processed and reviewed using the Data Analysis Toolbox (DAT) software which is a program developed by ASI. DAT replaces corrupt or missing data with a fill-in technique such as a rating curve or meter correlation. DAT will also be used to develop dry weather flow patterns for the model. The model calibration will focus on the surface parameters for the subcatchments. The surface parameters in Infoworks ICM are land use based and produce surface runoff that directly enters the sewer system through connections such as catch basins, roof drains and downspouts. As such, the surface parameters are the most important hydrologic parameter and has a significant impact on the predicted peak flow rates. The processed meter data will be imported in the Sanitary Sewer Overflow Analysis and Planning Toolbox (SSOAP) created by the EPA. Wet weather runoff volumes would be determined for each significant spatially uniform storm event from the monitoring period. At each meter the runoff volume would be plotted against the rainfall volume for each calibration storm event and a linear trend would be added. The slope of this trend line is the calibrated runoff for the meter district.

The calibrated model hydrology will be validated by evaluating at least two storm events. The model hydrology would be validated by comparing model and meter depths and flow rates. The updated “All-Pipes Model” will establish the baseline conditions which the proposed project alternatives will be evaluated against.

Capacity and Surge Evaluation

Using the calibrated model, both the Fischer and Meldrum project areas will be evaluated to identify issues within the collection system. This will include a review of the conveyance system and identifying sewers that constrain capacity. The evaluation will also review areas of surcharge and whether they affect basements within the project area. Concentrated areas with elevated surcharge will be identified. Estimated basement depths will be established in the project service areas. These depths will be used to evaluate the level of service of the existing collection system for a series of design storm events. Maps of predicted basement flooding and street flooding locations will be prepared to identify potential bottlenecks in the collection system and survey the extent of expected flooding for the various design storm events. The

model results will be compared to the historical basement flooding data for the City of Detroit for recent storms. This information will be used to identify areas sensitive to flooding in the collection system that will be useful in the development of potential system improvements.

Task Deliverables

Technical memorandum summarizing the existing conditions model. The technical memorandum shall include a detailed evaluation of hydraulic grade lines (HGL) within the project area and include critical design locations where the HGL denotes potential harmful surcharge.

Field Data Collection

For the Fischer project area, based on the review of existing data and preliminary modeling work, the consultant shall collect data to enhance the existing model and increase framework confidence in areas that lack sufficient as-built records. An allowance will be included for pipeline inspection, field data collection and metering. The site selection and investigations for the flow metering will be conducted this winter, with the installations planned for early spring and data collection beginning in April.

CCTV Allowance

During the course of the project, it may become necessary to gain CCTV data of sewers within the project area. As part of this task, ASI shall coordinate a CCTV inspection of existing sewer lines within the project area. This survey is intended as a means to identify connectivity, conditions and sizes of existing sewer service within the project area. Prior to starting work, the Consultant shall provide a list of sewers to be televised to DWSD for review and approval. The Consultant shall then coordinate with a qualified local sewer inspection company to complete PACP/MACP inspections of the sewer system. Upon completion of the work, the Consultant shall review all information and develop a database and map of all sewer connections (storm and sanitary) within the project area.

Field Data Collection Allowance

As-needed topographic survey with structure inventories shall be completed for the project area as defined by the project requirements. The survey shall conform to DWSD requirements. The topographic survey shall include existing utilities based on requested records from Public and Franchise utilities within project area. ASI will retain a contractor to perform survey work for this project. Additional survey work may be required to fill in the gaps of missing background data for existing conditions and the evaluation of proposed collection system improvements. ASI has the ability to self-perform basic survey data collection and has equipment and software capabilities to utilize GPS data collection in the x,y,z coordinate planes.

Wet-weather metering

As part of the study, the Consultant shall install flow meters at strategic locations within the existing Fischer. The flow meters will be utilized to calibrate the existing DWSD All-Pipes model. A total of 16 flow meters are proposed to be installed in the Fischer (14) and Meldrum (2) Districts for this study. The flow meter data will be collected and reviewed after large storm events. Recorded rainfall data will also be reviewed to determine the uniformity of the large

storm events that occur during the monitoring period. This post event analysis will help identify potential storm events for the calibration of the “All-Pipes Model”.

Concept Development

For the Fischer project area, the consultant shall develop at least 3 concepts for engineering analysis which identify potential improvements which result in either the elimination of CSOs or reclassification to extreme discharge only. At this time, DWSD envisions that concepts could include but are not limited to:

Development of stormwater districts within the existing Fischer relief system. This would include the introduction of bulkheading the upstream interconnections between the Fischer system at Senneca/Harper and along the Vernor, Sylvester, Gothe, Mofatt, and Palmer arms. As part of this, the study would also review the feasibility of diverting combined areas to the Northeast Interceptor East Arm (NIEA) sewer.

This study should identify all system interconnects between the stormwater relief sewers and combined sewers and evaluate impacts of the isolated stormwater system on the local and regional systems for the various design events. It is envisioned that this alternative would also include repurposing the Fischer sanitary pumping station as a stormwater dewatering station with a direct discharge to the Detroit River. This should also consider as-needed modifications to the regulator at the Fischer (B005) outfall.

Construction of new storm sewers within the Fischer drainage area. This alternative will evaluate areas for stormwater sewers within the Fischer drainage area, however, a new stormwater outfall will be constructed as part of the improvements. It is envisioned that the exiting Fischer relief system would largely remain in place; however, right of way drainage would be intercepted into the new storm system.

Diversion of areas and optimization of in-system storage. This alternative diverting surrounding areas to adjacent sewers and the NIEA. The existing Fischer system would be evaluated to determine what level of additional storage could be gained through optimization through weirs and other in-system controls.

For the Meldrum project area, the consultant shall develop at least 2 concepts for engineering analysis which identify potential improvements which result in either the elimination of CSOs or reclassification to extreme discharge only. Each alternative should include construction of new storm sewers within the Meldrum outfall drainage area. The alternatives should include a layout for a stormwater trunk sewer and demonstrate which portions of existing stormwater elements can be bulkheaded and intercepted.

Preliminary alternatives were previously developed by ASI under the WWMP Project. These alternatives include complete sewer separation of the Fischer District and a netting facility on CSO Outfall B004.

The calibrated hydrologic/hydraulic DWSD “All-Pipes Model” will be used to develop, evaluate, and recommend innovative, cost-effective, and publicly acceptable sewer separation and mitigation alternatives to improve the level of service in the identified project areas.

ASI will evaluate the stormwater management and control measures tributary previously reviewed and develop an updated view to the problem. The assessment will take a holistic look at the sewer districts which could be utilized to mitigate flooding and improve water quality.

ASI will develop sustainable stormwater management plans for each project with an overall strategy to reduce peak stormwater flows which will provide benefits to the City’s combined sewer level of service. The sustainable stormwater management plans will identify opportunities to use green infrastructure to keep water out of the City’s sewer system. Green infrastructure is often less costly to construct, less expensive to operate and maintain, and are more sustainable than constructing more sewers and facilities. Capture and removal of stormwater runoff through source control provides improved systemwide performance for a range of design storm events. The use of green infrastructure to capture stormwater results in positive externalities that include improving air quality, providing cooling, reducing vulnerability to climate change impacts, creating open space, and increasing property values. A hybrid strategy of traditional investments like infiltration basis, storage basins, in-line storage, and storm sewers complemented with a mix of green infrastructure will be evaluated. ASI will ensure that the proposed alternatives work in concert with the existing collection system.

Task Deliverables

Technical memorandum summarizing the alternative concepts. The technical memorandum shall include an evaluation of the proposed conditions for each alternative concept. This will include maps of the proposed sewers and drainage areas as well as supporting data to confirm the alternatives successfully meet project goals (i.e., elimination of CSOs or reclassification to extreme discharge only).

Stakeholder Coordination

Improvements within the east side sewer system will likely require coordination with public agencies. While the preferred solutions are yet to be determined, DWSD anticipates that they will likely impact or involve GLWA, EGLE and potentially the United States Army Corp of Engineers. Additionally, solutions within the project area may include impacts to private property in which the City of Detroit Planning and Development Department (PDD) would be consulted. Consulting with MDOT or Detroit Public Works (DPW) will be required for any road or Right of Way impacts. In the event that public land may become impacted, the General Services Department (GSD) would be involved. Additional coordination with neighborhood-based stakeholders including the Department of Neighborhoods (DON) and non-profit organizations or deemed interest groups may be required.

Task Deliverables

Meeting summaries of interactions with each agency. Summaries should include critical concerns, required coordination and anticipated permits.

Cost Estimating

Under this task, the Consultant will develop opinions of probable cost will be developed for the proposed improvements. Cost opinions will be developed based upon the preliminary concept plans and will be developed through use of unit pricing. Costs estimates will be developed consistent with the Association for the Advancement of Cost Engineering (AACE) Class 4 methodology. These costs will be based upon current MDOT average unit prices and recently bid DWSD project work.

AACE Class 4 cost opinion for each alternative.

Alternative Screening and Preferred Alternative

The consultant will review each alternative for a variety of factors to determine the most cost-effective project(s). This evaluation should consider:

Reduction in risk by evaluating HGLs for various design events at critical points within the system.

The reduction in both frequency and total volume of CSO discharges within and surrounding the project area for outfalls along the Detroit River.

Project costs inclusive of engineering design, land acquisition (if needed), construction and long-term maintenance/operation.

Project delivery duration inclusive of design and construction.

Environmental impacts and compliance with the National Environmental Policy Act (NEPA).

As part of screening, each concept should be evaluated for impacts to environmental resources.

This evaluation should include those described within the NEPA. Generally, this should include Wetlands and Natural Features, Section 106 / State Historic Preservation Office (SHPO) Analysis and Archaeological Resources, Tribal resources and Floodplain. Please note that the City of Detroit Housing and Revitalization Department has performed an initial environmental screening of the project which will be made available to the Consultant.

Neighborhood values and desires (as gauged by 7.10 Public Outreach).

Coordination with DWSD's risk assessment team and modeling.

Implementation and Funding Strategy

The consultant will evaluate the preferred alternative for a feasible project delivery strategy.

The project delivery should consider the use of DWSD rate dollars, possible regional capacity swaps, State and Federal funding sources including but not limited to Clean Water State Revolving Fund (SRF) and FEMA Building Resilient Infrastructure and Communities (BRIC). The strategy should be a time-based approach that depicts delivery of projects within a 5- to 10-year horizon.

Task Deliverables

Technical memorandum summarizing recommendations for project implementation.

Public Outreach

The consultant shall develop a community engagement strategy in close coordination with the DWSD Public Affairs department. The engagement strategy will work to accomplish the following:

Establish strategic partnerships within the project area. This will help facilitate possible siting for water quality infrastructure and to better understand the neighborhood values and desires prior to alternative development. Partnerships will include traditional community organizations.

Establish level of service expectations. This will include determining the social impacts from prior storm events and how those have affected residents and businesses within the area.

Presentation of Alternatives. Prior to report finalization, the alternatives analysis will be presented to the community for feedback and discussion. Comments from this engagement will be used to finalize the preferred alternative. A locally informed preferred alternative will help to foster greater community support for later construction projects.

At the completion of the study, the Consultant will develop a report documenting the engineering analysis will be developed. The report will include the following sections:

- Executive Summary

- Existing Conditions and Model Findings

- Proposed Alternatives

- Preferred Alternative

- Cost Estimating and Benefit Cost Analysis

- Implementation Plan

- Task Deliverables

- Final Report (PDF and up to 10 hard copies)

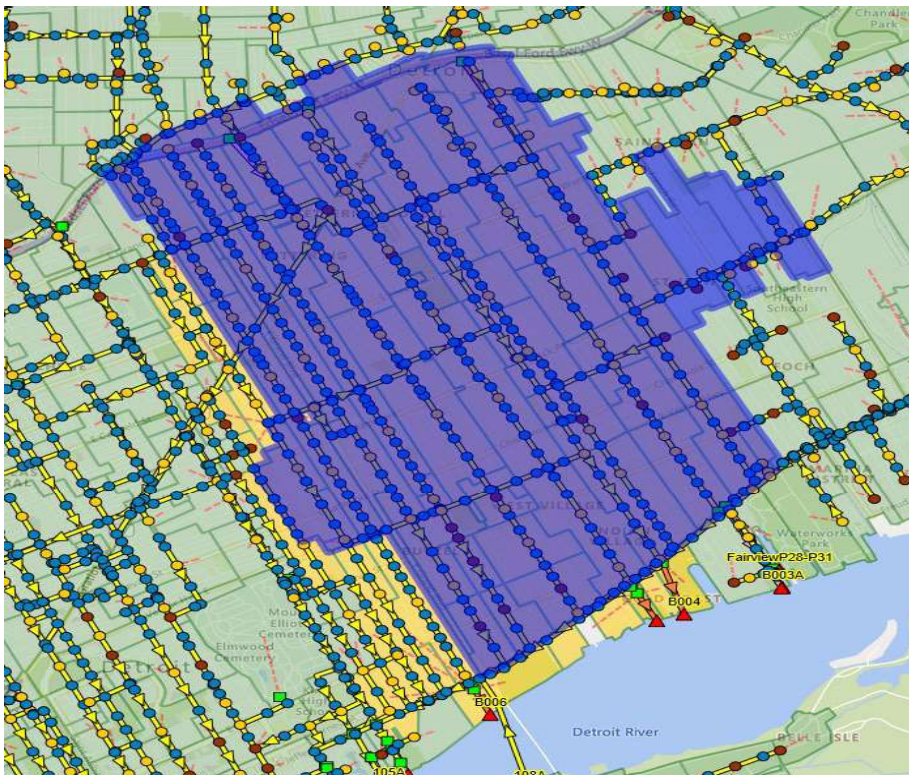
- Digital project data delivery (model files, reports, technical memoranda, GIS data and all other project files in native format)

TECHNICAL INFORMATION

Fischer Relief Drainage Area

The Fischer Relief drainage area, CSO B-003, B-004, B-005 and B-006, has been identified as a Proposed Plan for CSO controls into the Detroit River in the 2020 Great Lake Water Authority (GLWA) Wastewater Master Plan (WWMP) Report to reduce unregulated CSOs and stormwater runoff from entering the combined system. The overflow volume for these CSOs is considered high volume in the GLWA WWMP Report. Under the GLWA NPDES Permit, B-003, B-004, B-005, B-006 are considered as non-core outfalls in the Limited Discharge Authorization for CSOs. The untreated CSOs that are non-core outfalls will be required to be addressed under the adaptive management CSO correction program by 2039. The Fischer sewer drainage area is roughly 2,968 acres and is bounded on the south by the Detroit River, on the north by I-94, on the west by East Grand Boulevard, and on the east by St. Jean. Some of the infrastructure in this area was installed in the late 1870s to the early 1890s.

A large diameter relief sewer system was constructed in the mid-1920s which intercepted stormwater flow and discharged to the Detroit River during extreme events. This system was later modified to include a sanitary pump station near Erma Henderson Park at the intersection of E Jefferson Ave and Fischer Avenue.



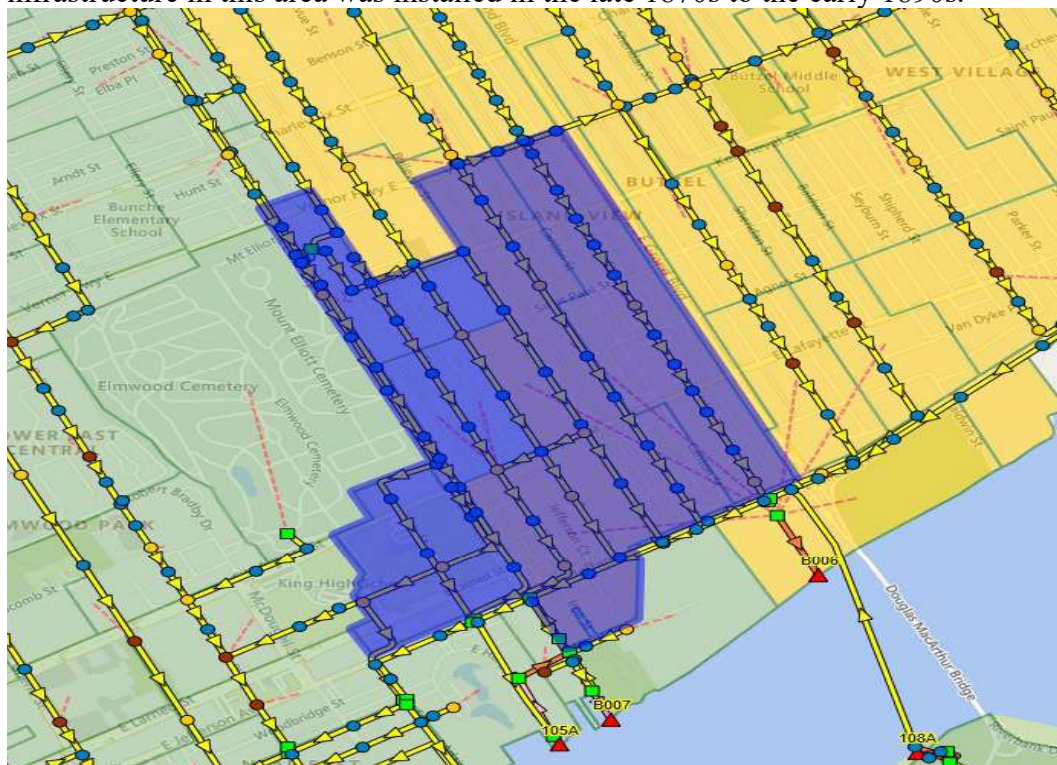
Fischer Relief Sewer Drainage Area

The preliminary engineering analysis will evaluate the impact of converting portions of the Fischer Relief Sewer system to a stormwater sewer within the district to reduce the stormwater from entering the combined system. The majority of the stormwater runoff will be redirected into the new storm sewer pipe network, improving the capacity of the local DWSD and GLWA combined system downstream of the project area. Additionally, the study will evaluate the water

quality improvements to the Detroit River through CSO reductions and in-system surcharge reductions. The surcharge reductions will be checked in a modeling software and translated to basement backup risk reductions.

Meldrum Sewer Drainage Area

The Meldrum Sewer drainage area, CSO B-007, has been identified as a Proposed Plan for CSO controls into the Detroit River in the 2020 Great Lake Water Authority (GLWA) Wastewater Master Plan (WWMP) Report to reduce unregulated CSOs and stormwater runoff from entering the combined system. The overflow volume for these CSOs is considered moderate volume in the GLWA WWMP Report. Under the GLWA NPDES Permit, B-007 is considered as a non-core outfall in the Limited Discharge Authorization for CSOs. The untreated CSOs that are non-core outfalls will be required to be addressed under the adaptive management CSO correction program by 2039. The Meldrum sewer drainage area is roughly 304 acres and is located immediately downstream of the Leib Screening Facility on Mt. Elliott. Some of the infrastructure in this area was installed in the late 1870s to the early 1890s.



Meldrum Sewer Drainage Area (area in blue)

The preliminary engineering analysis will evaluate the impact of creating a stormwater sewer within the district to reduce the stormwater from entering the combined system downstream of the Leib SDF diversion. The majority of the stormwater runoff will be redirected into a storm sewer pipe network, improving the capacity of the local DWSD and GLWA combined system downstream of the project area. Additionally, the study will evaluate the water quality improvements to the Detroit River through CSO reductions and in-system surcharge reductions. The surcharge reductions will be checked in a modeling software and translated to basement backup risk reductions.

Page	Project Overview								Detailed Schedule & Progress																								
	Start	Duration (Days)	End	% Complete	Working Days	Days Complete	Days Remaining		1 / 6 / 25	1 / 20 / 25	2 / 3 / 25	2 / 17 / 25	3 / 3 / 25	3 / 17 / 25	3 / 31 / 25	4 / 14 / 25	4 / 28 / 25	5 / 12 / 25	5 / 26 / 25	6 / 9 / 25	6 / 23 / 25	7 / 7 / 25	7 / 21 / 25	8 / 4 / 25	8 / 18 / 25	9 / 1 / 25	9 / 15 / 25	9 / 29 / 25	10 / 13 / 25	10 / 27 / 25	11 / 10 / 25	11 / 24 / 25	
Phase A	1/06/25	450	4/01/26	0%	323	0	450																										
	1/06/25	450	4/01/26	0%	323	0	450																										
	1/08/25	1	1/08/25	0%	1	0	1																										
	1/15/25	349	12/30/25	100%	250	349	0																										
Phase B	1/08/25	236	9/01/25	32%	169	75	161																										
	1/09/25	59	3/09/25	0%	42	0	59																										
	2/06/25	31	3/09/25	0%	22	0	31																										
	2/19/25	24	3/15/25	0%	18	0	24																										
	3/17/25	1	3/17/25	0%	1	0	1																										
	3/21/25	11	4/01/25	0%	8	0	11																										
	4/01/25	151	8/30/25	0%	109	0	151																										
	3/25/25	131	8/03/25	100%	94	131	0																										
	Phase C	1/08/25	311	11/15/25	0%	223	0	311																									
		1/08/25	32	2/09/25	0%	23	0	32																									
2/09/25		28	3/09/25	0%	20	0	28																										
3/09/25		31	4/09/25	0%	23	0	31																										
8/01/25		90	10/30/25	0%	65	0	90																										
10/15/25		31	11/15/25	0%	23	0	31																										
Phase D		1/09/25	359	1/03/26	22%	257	77	282																									
	2/08/25	96	5/15/25	0%	69	0	96																										
	5/01/25	31	6/01/25	0%	22	0	31																										
	6/02/25	1	6/02/25	0%	1	0	1																										
	6/03/25	210	12/30/25	0%	151	0	210																										
	1/09/26	1	1/09/25	0%	-262	0	1																										
	1/10/26	33	2/12/26	0%	24	0	33																										
	11/01/25	103	2/12/26	100%	74	103	0																										
Phase E	2/06/26	52	3/30/26	0%	37	0	52																										
	2/06/26	28	3/06/26	0%	21	0	28																										
	3/07/26	1	3/07/26	0%	0	0	1																										
	3/08/26	22	3/30/26	0%	16	0	22																										

EXHIBIT B: FEE SCHEDULE

I. General

The Contractor shall be paid for those Services performed pursuant to this Contract a maximum amount of Three Hundred Eighty Thousand and .00/100 Dollars (\$380,000.00), for the term of this Contract as set forth in Exhibit A, Scope of Services.

Payment for the proper performance of the Services shall be contingent upon receipt by the City of invoices for payment. Each invoice shall certify the total cost, itemizing costs when applicable. Each invoice must be received by the City not more than thirty (30) days after the close of the calendar month in which the services were rendered and must be signed by an authorized officer or designee of the Contractor. The Contractor shall be paid by percent complete based on the efforts for the final report developed for each project area and the appropriation of grant funds for each project area.

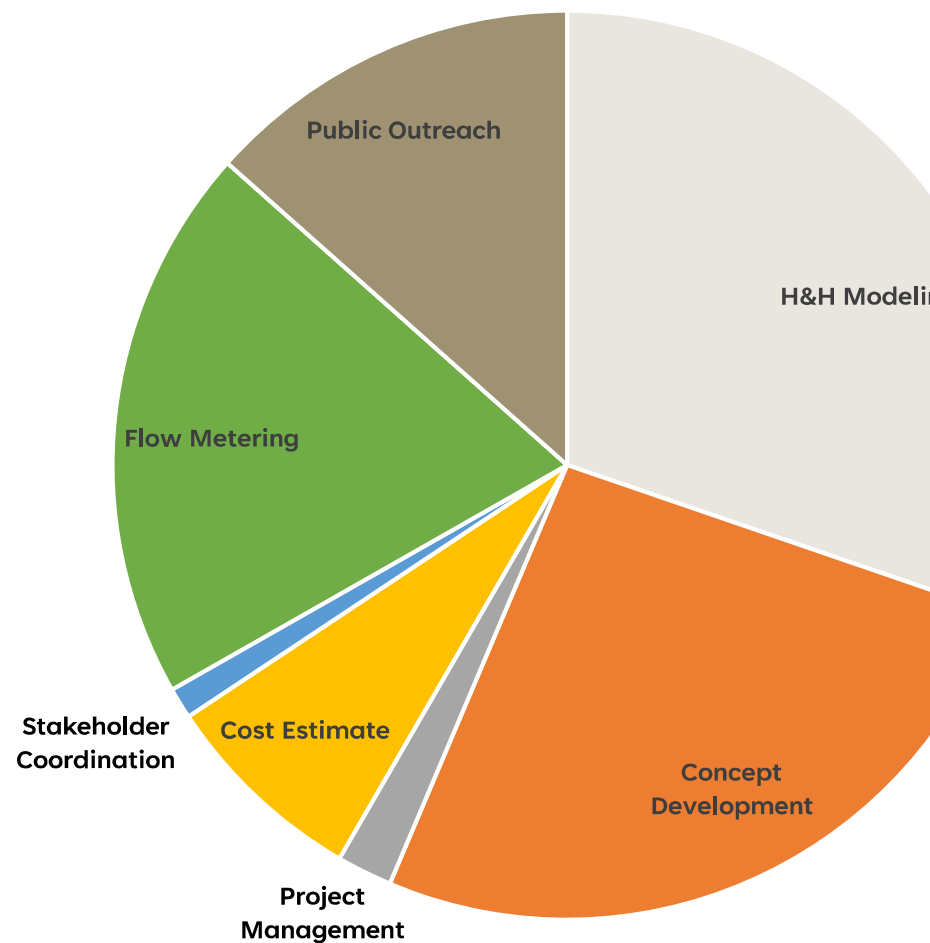
II. Project Fees

Liquidated Damages

The Contractor shall pay to the City, as liquidated damages, one hundred dollars (\$100) for each calendar day that any task deliverable required is late until deemed in compliance subject to a maximum of one thousand dollars (\$1,000.00) established in this agreement between the City and Contractor, in accordance with Exhibit: A Scope of Services and Performance Requirements. Said sum, in view of the difficulty of accurately ascertaining the loss with which City will suffer by reason of delay in the completion of the Work hereunder, is hereby fixed and agreed as the liquidated damages that the City will suffer by reason of such delay. Liquidated damages received hereunder are not intended to be nor shall they be treated as either a partial or full waiver or discharge of the City's right to indemnification, or the contractor's obligation to indemnify the City pursuant to this contract, or to any other remedy provided for in this contract or by law. Liquidated damages may be assessed at the sole discretion of the City. For the purposes of applying and calculating such liquidated damages, a grace period of ten (10) business days shall be observed. The City may deduct and retain out of the monies which may become due hereunder, the amount of any such liquidated damages; and in case the amount which may become due hereunder shall be less than the amount of liquidated damages due to the City per the above formula above, the Contractor shall be liable to pay the difference. Upon fully executed contract, consultant shall provide an official schedule with milestones not to exceed 24 months for full duration where the final report shall be due.

Revised Project Cost Estimate Breakdown

Category	Cost
H&H Modeling	\$ 114,272.00
Concept Development	\$ 98,588.60
Project Management	\$ 7,440.00
Cost Estimate	\$ 27,632.00
Stakeholder Coordination	\$ 4,176.00
Flow Metering	\$ 74,744.00
Public Outreach	\$ 50,723.96
Total	\$ 377,576.56



Revised Project Approach Assumptions

- Project Management - 40 hours for project management over the entire length of the project.
- Flow Metering – 3-month monitoring period with 16 flow meters.
 - Information Gathering
 - Field Data Collection
- Hydrologic/Hydraulic Modeling – Removed climate change from approach. Revised calibration approach.
- Concept Development - Up to 5 concepts would be developed for the two districts.
 - Alternative Development
 - Preferred Alternative
 - Implementation and Funding Strategy
- Cost Estimate – Itemized cost estimate for only the viable concepts.
- Stakeholder Coordination - Assumed 4 meetings (2 workshops) between DWSD, GLWA EGL and MDOT.
- Public Outreach - Assumed 2 public meetings.

EXHIBIT C: STATEMENT OF POLITICAL CONTRIBUTIONS AND EXPENDITURES

“City Charter § 4-122, ¶ 2: For purposes of conflicts of interest, the City shall require in all of its contractual agreements, including, but not limited to, leases, service and equipment agreements and including contract renewals, that the contractor provide a statement listing all political contributions and expenditures (**“Statement of Political Contributions and Expenditures”**), as defined by the Michigan Campaign Finance Act, MCL 169.201, et seq., made by the contractor, its affiliates, subsidiaries, principals, officers, owners, directors, agents or assigns to elective city officials within the previous four (4) years.

Individuals shall also list any contributions or expenditures from their spouses.”

Instructions: In accordance with Section 4-122 of the 2012 Detroit City Charter, you must provide the following information, sign this document, have it notarized, and submit it to the City. If additional space is needed, please enter “see additional sheet(s)” on the last row and attach additional sheets.

In Column A, enter the name of the person or company that made the contribution or expenditure. If there were no political contributions or expenditures made, enter NONE.

In Column B, enter the relationship of the donor to the contractor or vendor, that is, contractor, affiliate, subsidiary, principal, officer, owner, director, agent, assignee, or spouse of any of the foregoing who are individuals.

In Column C, enter the name of the recipient, an elective city official which under Charter § 3-107, includes only the Mayor, the City Clerk, and members of the City Council and the Board of Police Commissioners.

In Column D, enter the amount of the contribution or expenditure, as defined in the Michigan Campaign Finance Act, 1976 PA 388, MCL 169.204 and MCL 169.206.

In Column E, enter the date of the contribution or expenditure. This statement must include all contributions and expenditures within the previous four years.

A	B	C	D	E
Donor	Relationship to Contractor/Vendor	Recipient	Amount of Contribution or Expenditure	Date

**(EXHIBIT C - continued) STATEMENT OF POLITICAL CONTRIBUTIONS AND
EXPENDITURES**

Except as set forth above, I certify that no contributions or expenditures were made to elective city officials within the previous four (4) years by the contractor, its affiliates, subsidiaries, principals, officers, owners, directors, agents, assigns, and, if any of the foregoing are individuals, their spouses.

I understand that the information provided in this disclosure will be relied upon by the City of Detroit in evaluating the proposed bid, solicitation, contract, or lease. I swear [or affirm] that the information provided is accurate. If I am signing on behalf of an entity, I swear [or affirm] that I have the authority to provide this disclosure on behalf of the entity.

Sign name: _____

Print name: _____

Sworn and subscribed to before me on _____, 20____
[by _____, the _____ of the above named
contractor/vendor, an authorized representative or agent of the contractor/vendor]

Sign: _____

Print: _____

Notary Public, _____ County, Michigan,

Acting in _____ County

My Commission Expires: _____

EXHIBIT D: CROSS CUTTING FEDERAL REGULATIONS

Listed below are cross-cutting federal regulations that may apply to your project. Please review the summaries below. Please note that these regulations are not all inclusive, and the City of Detroit may enforce other federal regulations. Questions regarding the cross-cutting federal regulations below may be directed to the City's Housing and Revitalization Department. It is the responsibility of the Contractor to read and understand these regulations and comply in all respects as required.

D.1 M/WBE

Qualified Minority-Owned Enterprises, Women-Owned Enterprises, Disadvantaged Business Enterprises, Veteran Owned Enterprises, and HUD Section 3 Certified Business Concerns are encouraged to submit proposals to City of Detroit for contracts and agreements funded through the Community Development Block Grant program.

Section 281 of the National Affordable Housing Act requires federal grantees to ensure contracting opportunities for minority and woman-owned businesses when federal funds. City of Detroit encourages that any contractor who receives a contract using federal funds to comply with this act. In accordance with Section 281 of the National Affordable Housing Act, applicants must take affirmative steps to use minority and woman-owned businesses for their funded activities. This means the contractor must make a good faith effort to hire minority and/or woman-owned businesses.

An MBE/WBE business meets one of the following:

1. A sole proprietorship, owned and controlled by a minority and/or woman; or
2. A partnership or joint venture controlled by a minority or woman in which 51 percent of the beneficial ownership interest is held by minorities or women; or
3. A Corporation or other entity controlled by minorities or women in which at least 51% of the voting interest and 51 percent of the beneficial ownership interest are held by minorities or women.

D.2 Section 3: Economic Opportunities for Low- and Very Low-Income Persons

Section 3 is a provision of the Housing and Urban Development (HUD) Act of 1968 that helps foster local economic development, neighborhood economic improvement, and individual self-sufficiency. The Section 3 program requires that recipients of certain HUD financial assistance, to the greatest extent feasible, provide job training, employment, and contracting opportunities for low- or very-low income residents in connection with projects and activities in their neighborhoods.

Applicants funded with HUD Community Development Block Grant Funds are required to meet the Section 3 provisions to the greatest extent feasible. Documentation will be required in order to verify compliance from the borrower. Please refer to the City of Detroit Section 3 Program for additional information on the local Section 3 requirements.

<https://detroitmi.gov/departments/housing-and-revitalization-department/hud-programs-and-information/section-3-program>

D.3 Fair Housing Act

The Fair Housing and Equal Opportunity, Office of Program Compliance, investigates complaints pursuant to Title VI of the Civil Rights Act of 1964 (Title VI). Title VI prohibits discrimination on the basis of race, color or national origin in programs and activities receiving Federal financial assistance. Complaints must be filed within 180 days of the alleged act of discrimination.

D.4 Americans with Disabilities Act

Title II of the ADA prohibits discrimination against persons with disabilities in all services, programs, and activities made available by State and local governments. The Department of Justice (DOJ) has coordination authority for the ADA in accordance with Executive Order 11250.

The DOJ regulations cover all State and local governments and extend the prohibition of discrimination in Federally- assisted programs established by Section 504 of the Rehabilitation Act of 1973 to all activities of State and local governments, including those that do not receive Federal financial assistance.

HUD is the designated agency for all programs, services and regulatory activities relating to State and local public housing, and housing assistance and referrals. In addition, HUD has jurisdiction over a State or local government activity when HUD has jurisdiction under Section 504 of the Rehabilitation Act of 1973.

D.5 The Architectural Barrier Act of 1968

The Architectural Barriers Act (ABA) requires buildings and facilities that are constructed by or on behalf of, or leased by the United States, or buildings financed, in whole or in part, by a grant or loan made by the United States to be accessible to persons with mobility impairments. The Architectural and Transportation Barriers Board (ATBCB) has coordination authority for the ABA.

D.6 Section 504 of the Rehabilitation Act of 1973, as amended

Section 504 of the Rehabilitation Act of 1973 prohibits discrimination against persons with disabilities in any program or activity receiving Federal financial assistance.

D.7 Executive order 12898, Environmental Justice

Executive Order 12898 provides that each Federal agency shall conduct its programs, policies, and activities that substantially affect human health or the environment, in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from

participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under, such programs, policies, and activities, because of their race, color, or national origin.

D.8 Non-discrimination

Notice of Non-Discrimination: The City of Detroit does not discriminate on the basis of race, color, creed, national origin, age, handicap, sex or sexual orientation. Complaints may be filed with the City of Detroit, Civil Rights, Inclusion, & Opportunity Department (formerly Human Rights Department), 12TH Floor, Coleman A. Young Municipal Center, Detroit, Michigan 48226.

Executive Order 11063 (Non-Discrimination and Equal Opportunity in Housing) directs HUD and all other executive departments and agencies to take appropriate action to promote the abandonment of discriminatory practices with respect to property or facilities owned or operated by the Federal Government or provided with Federal financial assistance in the sale, leasing, rental, or other disposition of such property or facilities.

D.9 Age Discrimination

The Age of Discrimination Act of 1975, prohibits discrimination on the basis of age in programs or activities receiving Federal financial assistance, directly or through contractual, licensing, or other arrangements use age distinctions or take any other actions which have the effect, on the basis of age of:

Excluding individuals from denying them the benefits subjecting them to discrimination under, a program or activity receiving Federal financial assistance; or

Denying or limiting individuals their opportunity to participate in any program or activity receiving Federal financial assistance.

D.10 Environmental Review

An environmental review is the process of reviewing a project and its potential environmental impacts to determine whether it meets federal, state, and local environmental standards. The environmental review process is required for most federally funded projects to ensure that the proposed project does not negatively impact the surrounding environment and that the property site itself will not have an adverse environmental or health effect on end users. Not every project is subject to a full environmental review (i.e., every project's environmental impact must be examined, but the extent of this examination varies), but every project must be in compliance with the [National Environmental Policy Act \(NEPA\)](#), and other related Federal and state environmental laws. Each project application for Section 108 Loan Guarantee Funds will be required to undergo an environmental review.

Title I of the National Environmental Policy Act (NEPA) contains a Declaration of National Environmental Policy. This policy requires the federal government to use all practicable means to create and maintain conditions under which man and nature can

exist in productive harmony. Section 102 in Title I of the Act requires federal agencies to incorporate environmental considerations in their planning and decision-making through a systematic interdisciplinary approach. Specifically, all federal agencies are to prepare detailed statements assessing the environmental impact of and alternatives to major federal actions significantly affecting the environment. These statements are commonly referred to as Environmental Impact Statements (EIS) and Environmental Assessments (EA).

D.11 National Environmental Policy Act (NEPA) Contract/Award “Rewind Language”

Notwithstanding any provision of this Agreement, the parties hereto agree and acknowledge that this Agreement does not constitute a commitment of funds or site approval, and that such commitment of funds or approval may occur only upon satisfactory completion of environmental review and receipt by the City of Detroit of a release of funds from the U.S. Department of Housing and Urban Development under 24 CFR Part §58. The parties further agree that the provision of any funds to the project is conditioned on the City of Detroit’s determination to proceed with, modify or cancel the project based on the results of a subsequent environmental review.

D.12 Copeland “Anti-Kickback” Act

The "Anti-Kickback" section of the Act precludes a contractor or subcontractor from inducing an employee, in any way, to give up any part of the compensation to which he or she is entitled under his or her contract of employment. The Act and implementing regulations require a contractor and subcontractor to submit a weekly statement of the wages paid to each employee performing on covered work during the preceding payroll period. The regulations also list payroll deductions that are permissible without the approval of the Secretary of Labor and those deductions that require consent of the Secretary of Labor.

D.13 Uniform Relocation Act

The [Uniform Act](#), passed by Congress in 1970, is a federal law that establishes minimum standards for federally funded programs and projects that require the acquisition of real property (real estate) or displace persons from their homes, businesses, or farms. The Uniform Act's protections and assistance apply to the acquisition, rehabilitation, or demolition of real property for federal or federally funded projects. Government wide regulations that implement URA can be found at 49 CFR Part 24.

D.14 Occupational Safety and Health Act of 1970 (OSHA)

Congress passed the Occupational Safety and Health Act to ensure worker and workplace safety. Their goal was to make sure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions.

D.15 National Historic Preservation Act

The National Historic Preservation Act ([NHPA](#)), 54 U.S.C. 306108, directs each Federal agency, and those Tribal, State, and Local governments that assume Federal agency responsibilities, to protect historic properties and to avoid, minimize, or mitigate possible harm that may result from agency actions. The review process, known as Section 106 review, is detailed in 36 CFR Part 800. Early identification and consideration of historic properties in project planning along with full consultation with interested parties are key to effective compliance with Section 106. The State Historic Preservation Officer (SHPO) and/or Tribal Historic Preservation Officer (THPO) are primary consulting parties in the process. A qualified historic preservation consultant may assist with the technical components of the Section 106 review process.

For Detroit's HUD-funded activities or projects, the authority to conduct a Section 106 review is held by the Michigan SHPO. However, the Michigan SHPO has delegated certain aspects of its authority to the City of Detroit through the use of a Programmatic Agreement (PA). The PA is a legal document that allows the City of Detroit to conduct the review of its HUD-funded activities or projects. The PA also includes a description of the review process. This review is facilitated and managed by the Preservation Specialist who is housed within the City of Detroit Housing & Revitalization Department.

D.16 Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion

1. By signing this Contract, the Contractor, also referred to herein as a "prospective lower tier participant", is providing the certification set out below.

2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that this certification was erroneous when submitted or has been erroneous by reason of changed circumstances.

4. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction,

participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspensions Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from covered transactions, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the List of Parties Excluded from Federal Procurement and Non-procurement Programs.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND
VOLUNTARY EXCLUSION - LOWER TIER COVERED TRANSACTIONS.**

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation of this proposal.

CONTRACTOR:	Applied Science, Inc.
BY:	<div>Signed by:  4AB0D042550642A...</div>
Print:	John Michalski
ITS:	President
Date:	3/11/2025

D.17 Certification for Contracts, Grants, Loans, and Cooperative Agreements

The Contractor hereby certifies, to the best of his or her knowledge and belief that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned,

to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement.

- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

CONTRACTOR:

Applied Science, Inc.

BY:

Signed by:

4AB0D042550642A...

Print:

John Michalski

ITS:

President

Date:

3/11/2025

D.18 Conflict of Interest Clause

The Contractor warrants that its participation in this contract will conform to the requirements of all applicable federal regulations including Sections 2 CFR 200.318 and 2 CFR 200.315 and 24 CFR 570.611 of the Code of Federal Regulations, and further warrants that such participation will not result in any Organizational Conflict of Interest (as defined herein).

11. In the event the Contractor has any conflict of interest as defined herein, the Contractor shall disclose such conflict of interest fully in the submission of the proposal and/or during the life of the contract.
12. The Contractor agrees that if after award he or she discovers any conflict of interest with respect to this contract, he or she shall make an immediate and full disclosure in writing to the Director and Executive Manager, which shall include a description of the action which the Contractor has taken or intends to take to eliminate or neutralize the conflict. The Housing and Revitalization Department may, however, terminate the contract if it is in best interest of the City.
13. In the event the Contractor was aware of any conflict of interest before the award of this contract and intentionally did not disclose the conflict, the Housing and Revitalization Department may terminate the contract for default.
14. The provisions of this clause shall be included in all subcontracts and consulting agreements.
15. No federal, state or local elected official nor any member of the City of Detroit Planning Commission or employee of the Housing and Revitalization Department nor any corporation owned or controlled by such person, shall be allowed to participate in any share or part of this contract or to realize any benefit from it.
16. No member, officer, or employee of the City of Detroit Housing and Revitalization Department, no member of the governing body of the City of Detroit or any other local government and no other public official of such locality or localities who exercises any functions or responsibilities with respect to the project, shall, during his or her tenure, or for one year thereafter, have any interest, direct or indirect, in this contract or the proceeds thereof.
17. The Housing and Revitalization Department reserves discretion to determine the proper treatment of any conflict of interest disclosed under this provision.

18. The Contractor covenants that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of the Services under this Agreement. The Contractor further covenants that in the performance of this Agreement, no person having any such interest shall be employed.
19. The Contractor further covenants that no elected or appointed official, or employee of the City and no other public official who exercises any function or responsibilities in the review or approval of the undertaking or performance of this Agreement has any personal or financial interest, direct or indirect in this Agreement or the proceeds thereof.
20. The Contractor also hereby warrants that it shall not and has not employed any person to solicit or secure this Agreement upon any agreement or arrangement for payment of a commission, percentage, brokerage or contingent fee, either directly or indirectly, and that if this warranty is breached, the City may, at its option, terminate this Agreement without penalty, liability or obligation and, in addition, may, at its election, deduct from any amounts owed to the Contractor hereunder, the amounts of any such commission, percentage, brokerage or contingent fee.