CITY OF CINCINNATI
Professional Agreement

Ludlow Run Sustainable Source Control

MSDGC PID 11243320

Contract No. 95x12762

THIS AGREEMENT is made and entered into on the Effective Date (as defined on the signature page hereof) by and between the City of Cincinnati through its Department of Sewers (the "City") as the sole management agency for the operation and maintenance of the sewer system on behalf of the Metropolitan Sewer District of Greater Cincinnati, Hamilton County, Ohio, hereinafter "MSDGC" and Arcadis U.S., Inc., a Delaware corporation, hereinafter "Consultant."

WITNESSETH:

WHEREAS, the City has determined to undertake activities needed to plan and implement the Planning, Design and Construction Phase services for the Ludlow Run Sustainable Source Control Project, hereinafter "Project", in conformance with the Consent Decree entered into in Case No. C-1-02-107, in the Federal District Court for the Southern District of Ohio, Western District ("Consent Decree") and does not have a sufficient staff of permanent employees to do so; and,

WHEREAS, the City issued a Request for Qualifications (RFQ) (RFQ 2019-009) to solicit statements of qualifications (SOQs) from interested vendors willing to provide the services required herein to the City; and,

WHEREAS, the Consultant has submitted a SOQ in response to the aforementioned solicitation and has been determined by the City to be a skilled, competent, and experienced professional firm having the necessary personnel, equipment and other resources to perform the required services; and,

WHEREAS, the Consultant has been selected in accordance with applicable portions of state laws and MSDGC policies to provide these services,

WHEREAS, such services are professional in nature; and,

NOW THEREFORE, for and in consideration of the promises, covenants and agreements herein contained, the parties mutually agree as follows:

ARTICLE 1 – THE AGREEMENT

1.1 The Agreement includes written contract terms of 43 Articles ("First Part of the Agreement"), EXHIBIT A [Scope of Work, including deliverables (the "Work")],
EXHIBIT B (Project Budget), EXHIBIT C (List of Consultant’s Key Personnel, Consultant’s Rate Schedule and Sub-consultants), EXHIBIT D (Schedule of Services and Deliverables), EXHIBIT E (Subconsultant Utilization Plan) and EXHIBIT F (Consultant Travel Reimbursement Requirements).

1.2 Where the terms and provisions of this First Part of the Agreement vary from the terms and provisions of the other documents included in the Agreement, the terms and provisions of this First Part of the Agreement shall prevail over the other documents included in the Agreement and, in like manner, EXHIBIT A shall prevail over EXHIBIT B.

ARTICLE 2 - SCOPE OF WORK

The Consultant shall, in accordance with current professional standards and in a satisfactory and proper manner as reasonably determined by the City Manager of the City of Cincinnati acting through the staff of MSDGC, perform the Work.

ARTICLE 3 - CONTRACT TERM

3.1 This Agreement is effective upon execution by the City (the “Effective Date”) and terminates on December 31, 2024 (the “Termination Date”). This Agreement may be extended by the City for good cause for additional time, not to exceed three Twelve Month (12-month) periods, upon written approval of the City Manager or his/her designee.

3.2 Consultant will be authorized to begin the Work described herein by written Notice-to-Proceed from the City Manager or his/her designee. All of the assignments of the Consultant shall be completed in accordance with the schedule included in this Agreement. All of the Work will be completed prior to the termination date of this Agreement or the termination date of any extension of this Agreement as provided in Article 3.1 (for the purposes of the Agreement “Termination Date” shall mean either the date set forth in the Article 3.1 or in the case of an extension, the extended termination date). Requests to modify the Work are to be in writing and directed to the MSDGC Project Manager (as hereinafter defined), with a copy by the Consultant’s Project Manager to the MSDGC Document Control section (as hereinafter defined).

3.3 Consultant agrees that time is of the essence in the performance of the Consultant’s obligations under this Agreement. The Consultant agrees that no other work in its office will be permitted to interfere with work required under this Agreement in order to achieve timely performance, and that the required level of resources will be provided to meet the schedules set forth herein.

3.4 The Consultant shall employ at all times professional and support personnel with requisite expertise and in adequate numbers for the complete and timely performance of the Consultant’s obligations hereunder. The City recognizes that the Consultant’s performance must be governed by sound professional practices.
All Work will be completed prior to the Termination Date. If Consultant fails, through its own fault, to complete the performance required in this Agreement within the time set forth, as duly adjusted, then the City shall be entitled to the recovery of direct damages resulting from such failure. The City shall also be entitled to reasonable attorney fees and any costs incurred by the City in pursuing the recovery of damages resulting from Consultant’s failure to complete performance of its services within the time set forth in this Agreement.

ARTICLE 4 - CONSULTANT’S GENERAL RESPONSIBILITIES

4.1 For all Work on the Project, the Consultant will be responsible for: alternatives analysis; providing special and optional services as requested; and providing the project management services and quality control necessary to accomplish these services in a well-coordinated, efficient and effective manner as is consistent with the generally accepted standard of professional skill and care.

4.2 The Consultant shall cooperate fully with the City, and all other contractors employed for the Project, to effect proper coordination and progress to complete the Project on schedule and the Work in proper sequence.

4.3 Consultant shall be solely responsible for coordination of all of the Work. Consultant shall cooperate fully with all subcontractors, testing agencies and all others whose services, materials or equipment are required for the completion of the Project by the Termination Date.

ARTICLE 5 - COMPENSATION

5.1 The total compensation payable to the Consultant under agreement shall not exceed Two Million Six Hundred Eighty Seven Thousand Two Hundred Eight dollars ($2,687,208.00) (“Contract Amount”) in accordance with this Agreement, including the terms of this First Part of the Agreement and EXHIBIT B, for the Consultant’s successful completion of the Work. The Consultant agrees that it shall complete the Work for the total Contract Amount specified in this Article unless such amount is modified as provided in this Agreement. The Contract Amount includes all of Consultant’s costs and fees, including profit.

5.2 Upon execution of this Agreement by the City Manager or his/her designee, the City will certify funds in the amount of $526,651.00 for the Planning services of this Agreement.

5.3 Additional funds to pay for the work to be performed for the additional year(s) within the term of this Agreement, shall be certified annually, pending appropriations of funds by the appropriate legislative body, in the amounts deemed appropriate by the City and the Consultant to perform the work to be carried out.

The initial award is for the Planning Phases of the Project, including development of a Business Case Evaluation (BCE). It should be noted that additional Phases for Design and Construction
Phase Services are "SUPPLEMENTAL". It is anticipated that the City will continue to utilize the selected Consultant for these SUPPLEMENTAL phases; however these SUPPLEMENTAL phases will be renegotiated and awarded after successful completion of the Planning Phases in order to more accurately scope the detailed design effort for this project. The City reserves the right in its absolute discretion to not award these SUPPLEMENTAL phases to the Consultant.

ARTICLE 6 -PAYMENT

6.1 Payment for Consultant’s services shall be based upon a time and materials payment. Payment shall be based on actual salaries paid (direct rate) with agreed upon maximum rates, attached as Exhibit C, multiplied by (Insert Multiplier). Payment is tied to the acceptable completion and acceptance by the City of a deliverable (or deliverables) as identified in a schedule of deliverables within EXHIBITS A and D.

Payment will be in accordance with the agreed-upon Consultant’s employees performing the services and not exceeding the approved budget as shown in EXHIBIT B.

6.2 The City shall make payment not more frequently than monthly and upon submission of an approved requisition for payment (the “Invoice”). Invoices shall include a breakdown by Task listed in EXHIBIT B and include: i) a specification that the required services for the deliverables have been performed; ii) current completion date for the Work invoiced; iii) amount of SBE participation; iv) identification of the Project with the applicable identifiers such as title, contract number, certification number, CIP number, and sewer number; and project number; v) amount due and amount previously invoiced; vi) total amount previously authorized; and vii) attachments presenting data such as time sheets satisfactory to the City to document entitlement to payment. The Consultant shall promptly submit satisfactory Invoices as determined by the City. Properly submitted and approved Invoices shall be paid within thirty (30) days after receipt of the Invoices by the City. Inadequate Invoices will delay payment proportional to the additional review time required; however, undisputed invoice portions shall be processed for payment.

6.2.1 Any provision hereof to the contrary notwithstanding, the City shall not be obligated to make payment to the Consultant with respect to one or more of the following conditions for which the Consultant has been given at least fifteen (15) days written notice of the condition and failed to cure the condition:

6.2.1.1 The Consultant is in default of any of its obligations under the Agreement; provided, however, that the City may retain only such amount as is reasonably necessary to cure the default.

6.2.1.2 Part of the payment requested is attributable to services that were not performed in accordance with this Agreement; provided, however, that such payment shall be made as to the part thereof attributable to services that were performed in accordance with this Agreement.
6.2.1.3 The Consultant has failed to make payments promptly to sub-consultants or other third parties used in connection with the services for which the City has made payments to the Consultant, unless the payment is being withheld by the Consultant as the result of a bona fide dispute.

6.2.2 The City shall have the right to request certified payrolls for either or both the Consultant’s employees and the Consultant’s sub-consultant’s employees.

6.2.3 The Consultant acknowledges the importance of submitting complete requisitions for payment for all Work performed during the billing period for which it is requesting payment and will require its sub-consultants to do likewise. The City shall have no obligation to make payment for any of the Work performed on a time and materials basis by a sub-consultant that was performed more than sixty (60) days prior to the earliest date of Work performed by the Consultant for which the Consultant is requesting payment. (For example, if the Consultant submits a request for payment on June 1, 2014 that covers all of the Work performed by the Consultant between May 1 and May 31, 2014, the City is not obligated to pay Consultant for Work performed by a sub-consultant before March 1, 2014.)

6.3 The Consultant shall also be reimbursed without markup for other approved direct costs involved in performing the Work. The City shall not pay routine costs of doing business such as preparation of invoices, proposals, telephone charges, tools of the trade, home office administrative charges not directly related to the project, home office personnel, and charges for the mailing and reproduction of incidentals.

6.4 Expenses for travel expenses for lodging, meals, mileage, and incidental expenses shall be included in EXHIBIT B.

6.5 The City may pay for special education training for Consultant staff support that is requested by and approved in advance by the MSDGC Project Manager and that the MSDGC Project Manager has determined provides the Consultant staff support with essential information necessary to the delivery of the Consultant’s professional services to the City.

6.6 Additional costs for which the City shall not reimburse the Consultant:

6.6.1 Costs associated with the preparation of amendments to this Agreement or the preparation or filing of claims;

6.6.2 Expenses of the Consultant associated with anticipated lost profits, lost revenue, lost income, or lost interest on earnings;

6.6.3 Costs of special consultants or attorneys, whether or not in the direct employ of the Consultant, employed for services specifically related to the resolution of a claim, dispute, or other matter relating to the acceptability of the Work.
6.6.4 Continuing education training expenses for individual consultants working on MSDGC projects.

6.7 The Consultant shall submit its invoices to MSD Accounts Payable, 1600 Gest Street, Cincinnati, Ohio 45204, or, to MSDAccountspayable@cincinnati-oh.gov.

ARTICLE 7 - STANDARD OF CARE

7.1 In providing services under this Agreement, the Consultant will perform in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently performing similar services and practicing under similar circumstances. The Consultant makes no other representations or warranties, whether expressed or implied, with respect to the services rendered hereunder. Upon notice to the Consultant, and by mutual agreement between the parties, the Consultant will without additional compensation, correct those services not meeting such a standard.

7.2 The Scope of Work includes the development of Project-specific objectives and criteria. Consistent with the applicable standard of care, the Consultant's deliverables for the Project shall be consistent with agreed-upon Project-specific objectives and criteria. If the Consultant's deliverables are not consistent with Project-specific objectives and criteria, the Consultant shall notify the City in writing of the differences between the deliverables and Project-specific objectives and criteria in sufficient time and with sufficient detail for the City to respond to the Consultant so that the differences can be resolved to the City's satisfaction.

7.3 Consultant and the City shall comply with applicable Laws and Regulations that the City has provided to Consultant in writing. This Agreement is based on these requirements that are in effect as of the date the parties entered into this Agreement. Changes to these requirements after the date the parties entered into this Agreement may be the basis for modifications to Consultant's scope of services, times of performance, and compensation.

7.4 The deliverables for the Project as developed through the Scope of Work described in EXHIBIT A shall be subject to the approval of the City. Payments to the Consultant for Work performed do not constitute such approval by the City.

ARTICLE 8 - CONSULTANT'S REPRESENTATIVE AND KEY PERSONNEL

8.1 Consultant shall designate and authorize Bradley Olson, who is an employee of Consultant, to act as its agent for all purposes under this Agreement, who shall be available at all times to the City for the purpose of notification and consultation, and who shall be designated as the "Consultant's Project Manager" having overall responsibility for all phases of Consultant's participation in the Project.

8.2 The parties acknowledge the importance of the City's confidence in the personal services of key members of the Consultant's team and the continuity of key members' participation in the services to be provided under this Agreement. This Agreement has
been entered into on the representation that the individuals, firm affiliations, assignments, responsibilities, and office locations will be maintained for this Project.

8.3 No substitution or replacement of individuals or change in status (e.g., firm affiliation, assignment, responsibilities or office location) of the key personnel listed in EXHIBIT C shall be made by the Consultant without the prior approval of the MSDGC Project Manager, except when necessitated by causes beyond the Consultant’s reasonable control. The City shall have the right in any event to approve any substitution or replacement or change in status for Consultant’s personnel assigned to this Project. At the request of the City, the Consultant shall consult with it to resolve any situation in which a member of the Consultant’s team (including, without limitation, any sub-consultant or any principal or employee thereof) is failing to perform to an adequate professional and technical standard. No act or omission of the City made or permitted under this Section shall relieve the Consultant of its sole responsibility for the Work.

ARTICLE 9 - ADDITIONAL WORK

9.1 The Consultant shall not be compensated for any work, except that which is specifically included in EXHIBIT A. Any work in addition to that included in EXHIBIT A shall be requested in writing, authorized by the City, and included in an amendment to this Agreement. Any additional work first requested in writing, and then approved by the City, will be paid at the then-current rates set forth in EXHIBIT C.

9.2 The City may request changes in the Work within the general scope of the Work consisting of additions, deletions, or other revisions. If a change causes a change in the scope of work the parties shall agree upon adjustments to the Contract Amount, the Schedule, or Contract Term, if any, and such adjustments shall be made a written amendment to the Agreement signed by the parties prior to the performance of such change in the Work.

9.3 If the Consultant requests a change in the Work, Consultant shall provide to the City within fourteen (14) days of the event giving rise to the request a written proposal stating: (1) the reasons for the proposed change; (2) the impact of the proposed changes on compensation and schedule, and (3) the detailed nature of any costs to be incurred, including reasonable adjustment to other applicable provisions in this Agreement. If the City accepts any such requested Consultant change, an amendment to the Agreement shall be properly executed by the parties.

9.4 If the Consultant wishes to make a claim for an increase in any sums due the Consultant, it shall give the City written notice within fourteen (14) days of the event giving rise to the claim. The notice shall be given by Consultant before proceeding to execute any additional services relating to the Work which is the basis for such claim and include: (1) the amount of additional compensation claimed; (2) the justification for the belief that it is outside of, or a material change to the Agreement; and, (3) all supportive documentation.
9.5 The Consultant will not be compensated for performing any Work unless the written notice complying with the above Article 9 has been submitted in the time specified and a written amendment has been properly executed by the parties.

ARTICLE 10 - PERFORMANCE EVALUATION RATING

A rating system has been established for this project to evaluate consultant performance. The consultant may request a copy of the rating system from the Project Manager.

ARTICLE 11 - SCHEDULE MANAGEMENT

11.1 Without limiting the Consultant’s general obligations under this Agreement, the Consultant shall adhere to the time schedule set forth in EXHIBIT D.

11.2 Project Schedule – The Consultant shall be required to prepare a Project Cost-loaded Critical Path Method (“CPM”) Schedule for completing all Work including submittal of deliverables by the Termination Date. The schedule format will be reviewed and approved by the City. The Consultant shall include milestone dates, as identified by the City, in the Schedule.

11.3 The Consultant is responsible for coordinating its own schedules, including those of its sub-consultants, as well as activities of others directed by the Consultant.

11.4 The Consultant shall provide copies of all schedules both in hard copy and electronically, for review by the City. The electronic schedule provided to MSDGC shall be in the format designated by the City.

ARTICLE 12 - MSDGC PROJECT MANAGER

12.1 The City will designate a party to act as its Project Manager on its behalf with respect to this Agreement (the “MSDGC Project Manager”). The MSDGC Project Manager may or may not be an employee of the City, in its sole discretion. The MSDGC Project Manager will examine the Consultant’s submissions for quality and completeness and will render decisions pertaining thereto promptly, to avoid unreasonable delay in the progress of the Work to be performed by the Consultant.

12.2 In the course of the Agreement, upon reasonable notice to the Consultant, the City may make such other or additional arrangements for the delegation of its rights and responsibilities under this Agreement as it deems to be in its best interests.

ARTICLE 13 - APPROVALS

The City will not unreasonably withhold any approval to be given by it with respect to submissions required to be made by the Consultant in the performance of this Agreement.
ARTICLE 14 - PROJECT BUDGET

14.1 The Consultant acknowledges the importance of completion of the Work in accordance with the Project Budget. The Consultant shall monitor the Work on a monthly basis, and report on its progress to guard against increases in costs which may be mitigated by the early attention of the parties with responsibility in the matter. Reports shall be made monthly.

14.2 The format of the budget report for the Work (the “Work Budget Report”) shall be approved prior to submittal of the first report. Consultant shall submit the proposed format of the Work Budget Report for approval within two weeks of execution of this Agreement.

ARTICLE 15 - DOCUMENT CONTROL

15.1 It is the intent of the City to use a document control system for facilitating official project communication documentation between the Consultant and it. The Consultant shall coordinate with the MSDGC Project Manager to ensure that delivery of all communications, deliverables, reports, certificates of insurance, and other items as may be requested by the City, are submitted through its Document Control section.

15.2 All deliverables described in EXHIBIT A shall be provided to the City both electronically in an editable format and in hardcopy.

ARTICLE 16 - PROJECT CLOSEOUT

16.1 Prior to payment of the final invoice, Consultant agrees that it shall deliver to the City the following:

16.1.1 All electronic data files, plans, sketches, drawings, conversation reports, photographs, pamphlets, posters, documents, reports, memoranda, and reproducibles related to the Project and other information related to the Project as required by the City. Consultant may retain copies of any or all of the aforementioned materials for its files.

16.1.2 All non-expendable personal property purchased and approved by the City as Other Direct Costs as defined in EXHIBIT B.

16.1.3 A formal written release of all claims seeking further payment and financial requirements arising by virtue of this Agreement, other than such claims, if any, as may be specifically exempted by Consultant from the operation of the release in stated amount to be set forth therein.

ARTICLE 17 - SUB-CONSULTANTS

17.1 The Consultant shall advise the City on a periodic basis of the identities of key personnel engaged by its sub-consultant for this Agreement, of their availability to perform the
work for which they are responsible to the Consultant, and of the sufficiency of their staffing for the Project.

17.2 None of the Work shall be subcontracted to a sub-consultant without the prior written approval of the City, which shall not be unreasonably withheld. Identification of specific sub-consultant in EXHIBIT C shall constitute the required prior written approval of the City. Any services subcontracted shall be by written contract available to the City and such contract shall explicitly state that it is subject to each provision of this Agreement. The Consultant shall provide the same level of documentation for subcontract billing as is required for the Consultant’s own workforce. The Consultant may not mark-up work performed by a sub-consultant unless such mark-up is specifically identified in this Agreement.

17.3 The City maintains a list of Vendors Debarred from Contracting or Subcontracting with the City, which may be accessed at: http://www.cincinnati-oh.gov/purchasing or may be furnished in other form upon request. The City will not contract with any firm or person on the list. It is the Contractor’s (Consultant's) responsibility to verify that each subcontractor (sub-consultant) it proposes to use is an eligible firm or person. The City will not approve a subcontractor whose name appears on the list. The City shall neither accept nor be liable for any increase in costs, or other expenses, delay, loss, or subsequent ineligibility to contract with the City, incurred by a contractor as a result of the City rejecting any proposed person, firm, partner, principal, affiliate, subcontractor or supplier that is debarred or suspended after the submission of a bid, proposal, or other communication leading to a contract, but before the approval or award of the contract.

17.4 Nothing in this Article shall relieve the Consultant of its sole and prime responsibility for the performance of this Agreement, including all performance by sub-consultants.

ARTICLE 18 - ASSIGNMENT

The Consultant shall not assign, transfer, convey, sublet or otherwise dispose of any interest, rights, or obligations under this Agreement, without the prior written consent of the City.

ARTICLE 19 - EQUAL EMPLOYMENT OPPORTUNITY AND SMALL BUSINESS ENTERPRISE

19.1 The Consultant’s employment and contracting practices related to this Agreement shall conform to the MSDGC Small Business Enterprise (SBE) Program.

19.2 The Consultant's shall abide by its Subcontractor Utilization Plan which is included as Exhibit E of this Agreement.

19.3 The Consultant agrees that by the 15th of each month it shall submit information on subconsultant utilization and monthly SBE subcontract payments into the City’s online reporting site, the “Vendor Compliance & Certification System” (VCCS), or any successor site or system the City uses for this purpose, for this Project. The Consultant agrees that its SBE subconsultants will also access the online reporting site monthly to
review and confirm the accuracy of SBE subconsultant payments entered by the Consultant. Upon execution of this Agreement, the Consultant shall contact the MSD SBE Program to obtain instructions, the proper internet link, login information, and password to access the site and set up the necessary reports.

19.4 In connection with the performance of services under this Agreement, the Consultant hereby agrees not to discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin. The aforesaid provisions shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. The Consultant agrees to post hereafter in conspicuous places, available for employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause. To the extent applicable, the Consultant shall comply with Title VI and VII of the Civil Rights Act of 1964, as amended; Title 49, Code of Federal Regulations; Part 21 through Appendix H and Title 23, CFR 710.405(b). To the extent applicable, the Consultant is required to comply with the provisions of Executive Order 11246, entitled "Equal Employment Opportunity", as amended by Executive Order 11375, and as supplemented in Department of Labor Regulations (41 CFR Part 60). To the extent applicable, the Consultant shall comply with the Immigration Reform and Control Act (IRCA) of 1986 and agrees to permit the MSDGC and its agents access to the Consultant's personnel records to verify its compliance with IRCA requirements.

19.5 Details concerning these programs may be obtained from Department of Sewers Procurement, 805 Central Avenue, Suite 234, Cincinnati, Ohio 45202; (513) 352-3278 and the MSDGC Office of Workforce and Business Development – Small Business Enterprise Program, 1600 Gest Street, Cincinnati, Ohio 45204; (513) 244-1304.

ARTICLE 20 - TERMINATION OF THE AGREEMENT, EVENTS OF DEFAULT, AND THE CITY'S RIGHT TO PERFORM CONSULTANT'S OBLIGATIONS

20.1 TERMINATION BY CONSULTANT. If the Consultant, in whole or substantial part, is stopped during the performance of the Work for a period of one hundred twenty (120) days under an order of any court or other public authority having jurisdiction, or as a result of an act of government, such as a declaration of a national emergency making materials unavailable, through no negligent act, negligent omission, intentional misconduct or other fault of Consultant, or if the Consultant is not paid for a period of thirty (30) days due to the City's failure to make proper payment to the Consultant, the Consultant may, upon thirty (30) days' written notice to the City, terminate this Agreement and recover from the City payment through the month during which such termination takes place. Costs associated with the start-up and shut-down of the Work shall be at the Consultant's expense. Upon termination by Consultant, the Consultant shall provide all documents for the Project and other Project-related data theretofore prepared by the Consultant for the Project by whatever method the City deems expedient, and the City may use such documents and other Project-related data prepared by Consultant to complete the Project.
20.2 EVENTS OF DEFAULT. Any of the following events shall constitute "Events of Default" by Consultant under this Agreement:

20.2.1 The City should at any time determine, in its reasonable judgment, and notify Consultant in writing that the City has determined that the performance of the Work is not proceeding in substantial compliance with the requirements of this Agreement and Consultant fails, within ten (10) days after the City notifies Consultant of the same, to furnish to the City evidence reasonably satisfactory to the City that either (i) the performance of the Work is or will be brought into substantial compliance with the requirements of this Agreement, or (ii) provides reasonable justification for the noncompliance with the requirements of this Agreement and satisfies the City that such noncompliance will not adversely affect any milestone dates for the Work.

20.2.2 Consultant materially defaults in the performance of any other obligations of Consultant under this Agreement and fails to commence to cure satisfactorily such default within seven (7) days after the City gives Consultant written notice of the default; provided, however, that the City shall not be required to give additional written notice of, and Consultant shall not be entitled to a cure period with respect to, persistent defaults in the performance of the obligations of Consultant under this Agreement.

20.2.3. Consultant, after receipt of notice of same, persistently disregards any federal, state or local statute or ordinance, rule, regulation, permit or order of any public authority having jurisdiction over the Work or the Project.

20.2.4. The entry of an order for relief pursuant to any Chapter of Title 11 of the U.S. Code, as the same may be amended from time to time, with Consultant as debtor, or the filing by or against Consultant of any other insolvency proceeding or any other proceeding for compromise, adjustment or other relief under the laws of the United States or of any state relating to the relief of debtors.

20.3 Upon the occurrence and during the continuance of an Event of Default, the City may, but shall not be obligated to, take such actions as the City deems reasonable in order to cure the act or omission of Consultant that is the basis for the Event of Default, without thereby waiving the Event of Default, and the Contract Amount shall be reduced by the cost to the City of taking any such actions and Consultant shall only be paid for services rendered prior to the termination.

20.4 Upon the occurrence and during the continuance of an Event of Default, the City may, without prejudice to or limitation upon any other right or remedy which might be available to it at law or in equity, terminate the services of Consultant and, the Consultant shall provide to the City all documents for the Project and other Project-related data prepared by the Consultant for the Project by whatever method the City deems expedient, and the City may use such documents and other Project-related data prepared by Consultant to complete the Project. In such case, Consultant shall not be entitled to receive any further payment with respect to the Consultant's compensation.
until the Work is finished, nor shall it be relieved from its obligations under this Agreement. If the Agreement is terminated by the City as provided herein, the Consultant will be paid for the satisfactory services authorized and performed to the termination date, in a timely manner, and in accordance with applicable payment schedules set forth herein.

20.5 Termination for Convenience - The City may terminate this Agreement at any time by giving at least fourteen (14) days’ notice, in writing, from the City to the Consultant. If the Agreement is terminated by the City as provided herein, the Consultant will be paid for the satisfactory services authorized and performed to the termination date, in a timely manner, and in accordance with applicable payment schedules set forth herein. The City shall take into account identified tasks and hours spent in determining the value of compensated services.

20.6 The City reserves the right to reduce the services required herein of the Consultant and reduce any project budget in a manner which reflects such reduction, by giving notice of such, in writing, stating the date such reduction will become effective.

20.7 Prior to final payment Consultant shall meet the requirements listed in Article 16 - PROJECT CLOSEOUT.

ARTICLE 21 - DISPUTE RESOLUTION

21.1 The City and Consultant agree to negotiate all disputes between them in good faith for a period of thirty (30) days from the date of notice of a dispute by one of the parties, prior to invoking the procedures described in the following paragraphs.

21.2 If the parties fail to resolve a dispute through negotiation under Paragraph 21.1, then the dispute shall be subject to mediation, followed by litigation, as described in the following paragraphs.

21.3 Mediation. Any dispute or other matter in question arising out of or related to this Agreement shall be subject to mediation as a condition precedent to the institution of legal or equitable proceedings by either party, unless the parties mutually agree otherwise. Mediation shall be in accordance with the Construction Industry Mediation Rules of the American Arbitration Association currently in effect or rules of such other forum as the parties have agreed. Request for mediation shall be filed in writing with the other party to this Agreement and with the American Arbitration Association, if this is the forum selected by the parties. The request may be made concurrently with the filing of a legal action but, in such event, mediation shall proceed in advance of any legal or equitable proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order.

21.4 Litigation. Disputes arising under this Agreement and related to the Project that are not resolved successfully through informal discussions between the parties or through
mediation will be the subject of litigation in the Court of Common Pleas for Hamilton County, Ohio.

ARTICLE 22 - COMPLIANCE WITH LAWS AND POLICIES

22.1 In the performance of the Work, the Consultant shall, as is consistent with the generally accepted standards of professional skill and care, comply with applicable statutes, ordinances, regulations, and rules of the Federal Government, the State of Ohio, Hamilton County, and the City of Cincinnati. Whenever notices, approvals, authorizations, waivers, instructions, or determinations by the City are required under this Agreement, they shall be effective only when given either (i) in writing and signed by the City, or (ii) by regulations and policies issued from time to time by the City.

22.2 In particular, as is consistent with the generally accepted standards of professional skill and care, the Consultant agrees to comply with applicable regulations pertaining to approvals for federal and state grants, and with applicable environmental regulations, including timely applications for permits. If a change in regulations would substantially increase or decrease the scope of the Work, the Consultant shall consent to such modifications of this Agreement as may be required by the City and the parties shall agree upon any necessary equitable adjustments in compensation.

22.3 This Agreement is subject to and the Consultant shall comply with the provisions of Chapter 319 of the Cincinnati Municipal Code that provide for a Prompt Payment System.

ARTICLE 23 -HOLD HARMLESS

23.1 The Consultant shall indemnify, defend, save and hold the City of Cincinnati and the Board of County Commissioners of Hamilton County, Ohio and their officers, employees and agents free and harmless against any and all claims, demands, actions, judgments, losses, damages, settlements, costs, charges, professional fees, or other expenses or liabilities to the proportionate extent arising directly or indirectly out of or relating to any and all negligent acts, errors, or omissions by the Consultant (including its employees and agents employees, agents and sub-consultants) in performance of the Work or any ambiguities in the plans and specifications prepared by the Consultant, provided that such ambiguities are originated by or the responsibility of the Consultant and to the extent that such ambiguity is the result of a negligent act, error, or omission of the Consultant in the performance of this Agreement. The Consultant shall be given the opportunity to defend on behalf of the City of Cincinnati and Hamilton County, any action or claim brought against it which, if successfully prosecuted, would give rise to a claim hereunder against the Consultant.

23.2 This indemnification shall not result in the unjust enrichment of the City of Cincinnati or the Board of Commissioners of Hamilton County. In the case of any material ambiguities, the City shall afford the Consultant a reasonable opportunity to mitigate damage and clarify any such ambiguities within a reasonable time after discovery by or notice to the City. The City shall promptly notify the Consultant of any claim, demand,
action, cause of action or other liability for which it may seek indemnification from the Consultant.

23.3 Subsurface Investigations. In soils, foundation, groundwater, and other subsurface investigations, the actual characteristics may vary significantly between successive test points and sample intervals and at locations other than where observations, exploration, and investigations have been made. Because of the inherent uncertainties in subsurface evaluations, changed or unanticipated underground conditions may occur that could affect total cost and/or execution. These conditions and cost/execution effects are not the responsibility of Consultant.

ARTICLE 24 - FORCE MAJEURE

Neither party to the Agreement shall be deemed to be in default in the performance of its obligations hereunder if that party is prevented or delayed from performing by forces beyond its reasonable control including, without limitation, acts of God or of a public enemy; interference or delay by municipal, state, federal, or other governmental agency; any catastrophe resulting from flood, fire, extreme weather conditions, explosion, or other cause beyond the reasonable control of the non-performing party and labor disputes or other work stoppages.

ARTICLE 25 - REPORTS, INFORMATION AND AUDITS

25.1 The Consultant, at such time and in such form as the City may require, shall furnish the City such reports as may be requested pertaining to the Work, the costs and obligations incurred or to be incurred in connection therewith, and any other matters covered by this Agreement. The Consultant shall retain all financial and administrative records for a minimum of three years following completion of this Agreement, and shall permit the City or any of its representatives or auditors access to such records upon advance notice during normal business hours.

25.2 Whenever the Consultant has obtained the Cincinnati Area Geographical Information System (CAGIS) data at no cost for the purpose of performing the Work, the Consultant agrees not to use any such CAGIS data for non-MSDGC projects. Additionally the Consultant shall require its sub-consultants to agree not to use any such CAGIS data for any non-MSDGC project. If the Consultant has purchased CAGIS data for multi-client use, no portion of those costs will be reimbursed by the City.

25.3 Except as authorized by the City, the Consultant and other sub-consultants shall not provide MSDGC infrastructure records or information to persons outside of the Consultant's organization and sub-consultants except as may be required by subpoena or legal proceeding.

ARTICLE 26 - CONFLICT OF INTEREST

No officer, employee, or agent of the City who exercises any functions or responsibilities in connection with the planning and carrying out of the Work, nor any immediate family member,
close business associate, or organization which is about to employ any such person, shall knowingly have any personal financial interest, direct or indirect, in the Consultant or in this Agreement. The Consultant shall take appropriate steps to assure compliance. The Consultant agrees that it will not contract with any sub-consultant in whom the Consultant has any personal financial interest, direct or indirect. The Consultant further covenants that no person who has any financial or conflicting interest in the Work shall be knowingly employed. The Consultant has the responsibility to request disclosure of potential conflicts of interest. The Consultant must report potential conflict of interest to the City for direction and disposition.

ARTICLE 27 - CONSULTANT INSURANCE

27.1 It shall be the responsibility of the Consultant to protect all life and property, and to protect the City, the Consultant, and its employees and sub-consultants from liability claims that may result from performance of the Work.

27.2 The Consultant shall secure and maintain general liability insurance protecting Consultant against claims for bodily injury, death or property damage which may arise as a result of the Consultant's actions during the performance of the Work in an amount of at least One Million Dollars ($1,000,000.00) per occurrence and Two Million Dollars ($2,000,000.00) per project in the aggregate. The City of Cincinnati and the Board of Commissioners of Hamilton County, Ohio shall be named as additional insureds under this policy.

27.3 The Consultant shall secure and maintain professional liability insurance with a combined single limit of One Million Dollars ($1,000,000.00) per claim with a maximum deductible not to exceed Twenty-Five Thousand Dollars ($25,000.00). Such insurance shall extend to the Consultant and to its legal representatives in the event of death, dissolution or bankruptcy, and shall cover the negligent acts, errors and omissions of the Consultant, sub-consultants and employees. Such insurance shall extend to any negligent act, error or omission in the performance of the Work committed by the Consultant, its sub-consultants, or employees, or any other person or entity for whom the Consultant is legally liable. Such coverage shall be in effect from the date services are first provided under this Agreement and shall be maintained in force until the later of (i) the completion of the Work or (ii) official acceptance of the Project by the City; and, provided that such insurance is generally available, shall be maintained for an additional period of three (3) years after the later of (i) the completion of the Work or (ii) official acceptance of the Project by the City.

27.4 The Consultant shall secure and maintain Workers Compensation insurance as required by the laws of the State of Ohio.

27.5 The Consultant shall also carry insurance coverage for valuable papers for the restoration of plans, field notes, drawings, computations, specifications or other documents in the event of loss or destruction of such materials in the custody of the Consultant, in an amount sufficient to cover the cost of restoration.

27.6 The Consultant shall secure and maintain automobile liability insurance with a limit of One Million Dollars ($1,000,000.00) per occurrence. The City of Cincinnati and the Board
of Commissioners of Hamilton County, Ohio shall be named as additional insureds under this policy.

27.7 Prior to executing this Agreement the Consultant shall provide the City with proof of all the insurances required herein. The Consultant shall provide the City thirty days written notice prior to any cancellation (except for non-payment) or non-renewal of any insurance required herein. Consultant shall deliver one copy each of the certificates of insurance and endorsements (and other evidence of insurance requested by the City or any other additional insured) which Consultant and all sub-consultants are required to purchase and maintain.

27.8 All insurance must be provided through companies authorized to do business in the State of Ohio and rated at least A: VII by the A. M. Best Company.

ARTICLE 28 - INDEPENDENT CONTRACTOR

The Consultant shall perform all of the Work as an independent contractor and not as an officer, agent, servant, or employee of the City. The Consultant shall have exclusive control of and the exclusive right to control the details of the Work and all persons performing the same and shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors, and sub-consultants, if any. Nothing herein shall be construed as creating a partnership or joint venture between the City and the Consultant. No person performing any of the Work shall be considered an officer, agent, servant, or employee of the City, nor shall any such person be entitled to any benefits available or granted to employees of the City.

ARTICLE 29 - CONFIDENTIAL OPINIONS OF PROBABLE COST

Notwithstanding publication or legislative proceedings, all opinions of probable cost prepared by the Consultant are to be considered confidential. It is agreed between the parties that the Consultant shall make reasonable attempts to control the confidentiality of any opinion of probable cost that the Consultant became privy to as a result of this Agreement. Any requests by others for opinions of probable cost shall be referred to the City. Consultant shall not be restricted from releasing information in response to a subpoena, court order, or other legal process but shall notify the City of the demand for information before responding to such demand.

ARTICLE 30 - SEVERABILITY

In the event that any provision of this Agreement is declared or determined to be unlawful, invalid, or unconstitutional, such declaration shall not affect, in any manner, the legality of the remaining provisions and each provision of the Agreement will be and is deemed to be separate and severable from every other provision.

ARTICLE 31 - DRUG-FREE WORKPLACE

The Consultant certifies and affirms that the Consultant will comply with all applicable state and federal laws regarding a drug-free workplace. The Consultant will make a good faith effort
to ensure that all employees performing duties or responsibilities under this Agreement while working on state, county, city or private property, will not purchase, transfer, use or possess illegal drugs or alcohol, or abuse prescription drugs in any way.

ARTICLE 32 - OWNERSHIP OF PROPERTY

32.1 The Consultant agrees that at the expiration or in the event of any termination of this Agreement that any memoranda, maps, drawings, working papers, reports, and other similar documents produced as a deliverable in the performance of the Work for the sole benefit of the City shall become the property of the City upon payment therefore, and the Consultant shall promptly deliver such items to the City without any additional compensation to the Consultant. The Consultant may retain copies for its record.

32.2 Unless specified otherwise, the City will rely upon the printed, plotted, electronic or hard copies of material prepared by the Consultant. Any discrepancy between the hard copy and the electronic version identified by the City and pointed out to the Consultant within reasonable time of delivery by the Consultant must be reconciled by diligent efforts of the Consultant at no additional cost to the City; provided, however, because data stored on electronic media can deteriorate undetected or be modified without Consultant’s knowledge, the Consultant makes no warranty as to the compatibility of the data files beyond the specified release or version of the software, or with the City’s hardware and/or software configurations unless specifically set forth in a Task Order, nor shall Consultant be responsible for maintaining copies of the submitted electronic files after acceptance by the City or be held liable for completeness or accuracy of the electronic data after the acceptance thereof.

32.3 Reports and other documents to be submitted to the City will conform to the instructions of the City with respect to the format, numbering, labeling and indexing of documents. Engineering drawings shall be in every instance be stamped and signed by an Ohio licensed professional engineer.

ARTICLE 33 - INTELLECTUAL PROPERTY

Except as otherwise provided herein, all documents, drawings, electronic files, and specifications prepared by the Consultant as a deliverable of the Work shall become the property of the City; however, the Consultant may have the right to their use but not for resale. It is agreed that any original documents, drawings, electronic files, and specification designed for the City and any variations to any original documents and drawings designed for the City MSDGC are the property of the City. The Consultant shall retain its rights in its standard drawing details, designs, specifications, databases, computer software and other proprietary property. Any modification or use by the City of the Consultant’s work product other than for which it was prepared shall be at the City’s discretion and without expression of suitability or applicability by the Consultant with respect to the modification or other use at user’s sole risk without liability or legal exposure to the Consultant. No use of MSDGC infrastructure information is permitted unless authorized by the City in writing.
ARTICLE 34 - RIGHT TO REVIEW

The City shall have the right at any time and at its sole discretion to submit for review any or all parts of the Work performed by the Consultant to consulting engineers or other specialists engaged by the City for that purpose. The Consultant shall cooperate fully in such review at the City's request.

ARTICLE 35 - RIGHTS AND REMEDIES

The City's review, approval, acceptance or payment for any part of the Work shall not operate as a waiver of any rights under this Agreement and the Consultant shall be and remain liable to the City for all damages incurred by the City as the result of the Consultant's failure to perform in conformance with the terms and conditions of this Agreement. The rights and remedies of the City provided for under this Agreement are in addition to any other rights or remedies provided by law. The City may assert a right to recover damages by any appropriate means, including but not limited to set-off, suit, withholding, recoupment, or counter-claim.

ARTICLE 36 - MODIFICATIONS

If the State of Ohio or its agencies require modifications or changes in this Agreement as a condition precedent to the granting of funds for any of the Work, the Consultant agrees to consent to such modifications or changes as may be reasonably required to obtain such funds. An equitable adjustment shall be made to the Consultant's compensation for any such modification or change.

ARTICLE 37 - THIRD PARTY RIGHTS

Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than the City and the Consultant.

ARTICLE 38 - LAW TO GOVERN

This Agreement is entered into in the State of Ohio. The City and the Consultant agree that the law of the State of Ohio shall govern the rights, obligations, duties, and liabilities of the parties to this Agreement and shall govern the interpretation of this Agreement.

ARTICLE 39 - FORUM SELECTION

The Consultant and its successors and assigns acknowledge and agree that all state courts of record sitting in Hamilton County, Ohio, shall be the exclusive forum for the filing, initiation and prosecution of any suit or proceeding arising from or out of, or relating to this Agreement, or any amendment or attachment thereto, including any duty owed by the Consultant to the City in connection therewith.
ARTICLE 40 - ENTIRETY

This Agreement (which includes the Exhibits attached hereto) contains the entire contract between the parties as to the matters contained herein. Any oral representation or modification concerning this Agreement shall be of no force and effect.

ARTICLE 41 - AUTHORIZATION OF SIGNATORY ON BEHALF OF CONSULTANT

The Consultant shall provide the City with adequate proof that the party signing this Agreement has the authority to bind the Consultant. For example, if the Consultant is a corporation, Consultant shall provide the City with a current resolution of its board of directors authorizing the signatory to sign on behalf of the Consultant, and shall include the signatory’s title. If the Consultant is a limited liability company, Consultant shall provide the City with a copy of the operating agreement and, if appropriate, any assignments of authority permitted by the operating agreement.

ARTICLE 42 - NOTICES

This Agreement requires that all notices, including notices of changes to the authorized signatory, Consultant name, primary contact and other contact information provided below, shall be personally served or sent by U.S. mail, postage prepaid, addressed to the parties as follows:

i. To the City of Cincinnati:

   Full Name: Bobbi Hageman
               Chief Procurement Officer
               City of Cincinnati

   Mailing Address: 805 Central Avenue - Suite 234
                     Cincinnati, Ohio 45202

ii. To the Consultant:

<table>
<thead>
<tr>
<th>Full Legal Name of Consultant:</th>
<th>Arcadis U.S., Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Contact Name:</td>
<td>Bradley A. Olson, PE, BCEE, Vice President</td>
</tr>
<tr>
<td>Federal Tax I.D. No.:</td>
<td>57-0373224</td>
</tr>
<tr>
<td>Telephone No.:</td>
<td>513-985-8019</td>
</tr>
<tr>
<td>Fax No.:</td>
<td>513-860-8701</td>
</tr>
<tr>
<td>Mailing Address:</td>
<td>4665 Cornell Road, Suite 200, Cincinnati, OH 45241</td>
</tr>
<tr>
<td>Remittance Address:</td>
<td>(same)</td>
</tr>
<tr>
<td>Primary Contact Email:</td>
<td>Bradley. <a href="mailto:Olson@arcadis.com">Olson@arcadis.com</a></td>
</tr>
<tr>
<td>Website:</td>
<td><a href="http://www.arcadis.com">www.arcadis.com</a></td>
</tr>
</tbody>
</table>
ARTICLE 43 - WAIVER

This Agreement shall be construed in a manner that a waiver of any breach of any provision of this Agreement shall not constitute or operate as a waiver of any other breach of such provision or of any other provisions, nor shall any failure to enforce any provision hereof operate as a waiver of such provision or of any other provision.

(signatures on following page - remainder of this page left intentionally blank)
The City of Cincinnati and the Consultant have executed this Agreement on the dates indicated below.

City of Cincinnati
an Ohio municipal corporation:

Patrick A. Duhane, City Manager, City of Cincinnati
Agent for the Board of County Commissioners of Hamilton County, Ohio in the operation of the Metropolitan Sewer District of Greater Cincinnati, Hamilton County, Ohio

Date: 12/18/19

Approved as to Form:

Joseph Neff, Senior Assistant City Solicitor

City Purchasing Approval:

Bobby Hagenman, Chief Procurement Officer

Recommended by:

Daniel Louis, MSDGC Project Manager

Amanda Gray, MSDGC SBE Program Manager

Certification of Funds:

Date: 12/18/2019

Coding: 7044000000x7681

Amount: $852,167

Karen Aider, Finance Director

Arcadis U.S., Inc.
a Delaware corporation
By:

Signature
Bradley A. Olson
Printed / Typed Name: Vice President
Printed / Typed Title: 12/13/2019
Date: 

[As authorized by corporate resolution dated 9/2, 2019]

MSDGC Approval:

Diana Christy, Interim Director of Sewers

Concurred by:

Michael Oprian, MSDGC Senior Accountant

Billy Mathis
MSDGC Superintendent or Principal Engineer

Ludlow Run Source Control
EXHIBIT A
SCOPE OF WORK

PROJECT BACKGROUND:
The Ludlow Run Sustainable Source Control project includes planning, design and construction phase services for a Wet Weather Improvement Plan (WWIP) project (or projects) to reduce the volume of the combined sewer overflows in the Ludlow Run watershed (CSO's 151, 109, 110, 111, 112, 162 and 024). The project will also address asset management needs within the Ludlow Run watershed.

The Ludlow Run sub-watershed, located in King's Run watershed, includes portions of Cincinnati neighborhoods: Northside, College Hill, Winton Hills, and Winton Place. CSO 024, referred to as the Ludlow Run Regulator is located on the west bank of Mill Creek at the three-way intersection of Spring Grove Avenue, Dooley Bypass, and Dane Avenue. Six CSOs are nested within CSO 024 sub-watershed. Listed from north to south within the sub-watershed, CSOs 151, 109, 110, 111, 112, and 162 overflow into Ludlow Run, which then enters the combined sewer system and contributes to overflows at CSO 024.

SCOPE OF WORK:
The Scope of Work includes the following:

TASK 1.0 – PROJECT ADMINISTRATION – PLANNING
TASK 1.1: Project Management

The Consultant will prepare a Project Management Plan identifying key technical and project management personnel, their roles and responsibilities as assigned by task, for the duration of the contract. Include cost-loaded schedule using Primavera or approved scheduling software. Also include a comprehensive list of deliverables. Submit electronic and hardcopy versions of updated project deliverables and schedules as requested by the MSDGC Project Manager. The Consultant will include contract management plans defining scope and lines of communication for sub-consultants, as applicable. The Consultant will provide MSDGC with electronic versions of draft and final Project Management Plan. During the duration of the planning phase, the Consultant will perform project administration including the preparation of monthly progress reports and monthly schedule updates.

TASK 1.2: Project Meetings

The Consultant will attend project meetings held with MSDGC to discuss status of the project, technical findings, content of deliverables, schedule, and budget. The project meetings during the Planning Phase will include one planning workshop and ten status meetings. The project planning workshop meeting will include the Consultant's key technical and project management personnel and MSDGC. The planning workshop will occur after project data review and shall confirm project goals and objectives, define critical success factors and discuss initial project observations and initial risk assessments. A specified list of deliverables and a completion schedule will be reviewed. The Consultant will provide MSDGC with electronic versions of draft minutes for meetings with stakeholders and formal meetings with MSDGC specified herein within five working days of the meeting date.
EXHIBIT A
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TASK 1.3: Quality Assurance and Quality Control

Quality Assurance/Quality Control (QA/QC) shall be provided by the Consultant utilizing competent staff in accordance with the current version of MSDGC’s Quality Assurance and Quality Control Plan Guidelines (http://msdgc.org/downloads/customer%20care/forms%20and%20documents/qa%20qc%20guidelines.pdf). Monitor and track quality reviews as required throughout the project for milestone interim planning submittals (Alternatives Analysis Report and BCE). QA/QC review level of effort is included in the technical scope items below. The Consultant will provide MSDGC with electronic versions of draft and final Quality Control Document. Provide QA/QC documentation for the Alternatives Analysis Report and the BCE.

TASK 1.4: Risk Management

The Consultant will provide project-level risk management in accordance with MSDGC's Risk Management Guidelines. The Consultant will develop a process to identify and manage risks through the planning stage. Risk Management shall include, at a minimum, the following items:

- Risk Register
- Qualitative Risk Assessment
- Quantitative Risk Assessment
- Recommended Risk Management Plan
- Risk Response Planning
- Risk Monitoring and Control Methodology

An initial risk assessment of the project and a preliminary risk register will be developed and will be regularly updated over the course of the planning effort. The project schedule shall indicate initial risk assessment and risk register, updates, workshops, or other methods the Consultant intends to utilize to manage project risk and to exploit risk management opportunities. The Consultant will provide MSDGC with electronic versions of draft and final Risk Management Plan.

TASK 2.0 – DATA REVIEW AND COLLECTION

TASK 2.1 Data Review

The Consultant will review relevant sections of existing reports and other related documents supplied by MSDGC for the Ludlow watershed, including CAGIS, water quality, operating data, operations and maintenance logs, gravity sewer asset management database (GSAM), CCTV reports, geotechnical soil borings, projects completed in the watershed basin since 2010, nominated asset management projects, Utility coordination projects for the next 5-years, future development plans, geotechnical soil borings and other relevant watershed basin information. Prepare an inventory of material that Consultant has obtained and reviewed. Consultant will identify gaps in the data and indicate any additional information that is required in order to prepare the Alternative Analysis and submit findings in a draft and final Data Review Technical Memorandum.

TASK 2.2 Data Collection and Site Visits

The Consultant will coordinate with MSDGC for the collection of additional data to fill the gaps identified in the Data Review. Data collection may include, but not be limited to: additional geotechnical investigations (to be performed by NEAS, Inc.), and additional CCTV work (to be performed by MSDGC), existing utility location. Either the consultant or MSDGC may obtain additional data, depending on the nature of the needed information. This shall be coordination...
EXHIBIT A
SCOPE OF WORK

with MSDGC and the consultant shall not proceed with gathering additional data without approval from the MSDGC project manager.

The Consultant will conduct an initial site visit with MSDGC to review conditions at each CSO structure and along the alignment of the existing combined sewer line to CSO 024 on the Mill Creek. Consultant may conduct additional site visits as necessary to verify site conditions for project planning to investigate several alternatives. A brief site visit summary will be prepared.

TASK 3.0 – COLLECTION SYSTEM MODEL REVIEW

TASK 3.1: Model Review

All collection system modeling work shall be done in accordance with current MSDGC practices. Currently the calibration requirements are documented in “MSDGC Modeling Guidelines and Standards Volume I System Wide Model.” (MSDGC Project Manager will provide Consultant with a copy.)

All modeling of MSDGC’s collection system is to be done using USEPA SWMM 5. As USEPA frequently updates SWMM 5, Consultant will use the version stipulated in the “MSDGC Modeling Guidelines and Standards Volume I: System Wide Model.” Consultant may use software that is an “enhancement” to USEPA SWMM (i.e., PCSWMM, InfoSWMM, etc.) to perform its work but all model deliverables shall be in the USEPA SWMM format. The MSDGC Project Manager will provide Consultant with the collection system model and the Consultant will utilize EPA-SWMM version 5.1.012 for the modeling deliverables.

The Consultant will evaluate the existing SWMM model for the Ludlow Watershed for (1) compliance with the current MSDGC guidelines as discussed above, and (2) the model’s suitability to be used for the following applications:

- Simulate the existing system to compare the typical year overflows to the Regulatory requirements.
- Develop and analyze conceptual alternatives for CSO reduction to achieve the Regulatory requirements above.
- Assess the impact of asset management projects on the capacity of the system.
- Assess the impact of the conceptual alternatives on the downstream Mill Creek Interceptor.

The Consultant will evaluate currently available flow and rain monitoring data collected to-date in the Ludlow watersheds and interceptor and assess its suitability to be in the model comparison. Consultant shall perform the following to review and prepare the model for the project:

1. Isolate the Ludlow Run Area from the Mill Creek System Wide Model, assess and revise catchment area characteristics as necessary. Run isolated model and compare results to full model results to verify proper model editing and to test proposed boundary conditions.
2. Review the model as supplied by MSDGC to determine if it matches current field conditions using CAGIS data, available drawings, surveys, site inspections, the latest CCTV etc. Confirmation of sewer existence, connections, alignments, and any pipe changes in segment(s) being replaced should be confirmed at a minimum.
3. Review the current level of calibration and validation of the model, using the acceptable flow monitoring and rain data. Determine areas where the model meets and does not
EXHIBIT A
SCOPE OF WORK

meet MSDGC’s current Modeling Guidelines and Standards as well as needs of this project.

Consultant will identify data gaps in the model that should be addressed and make recommendations to address the data gaps including potential locations for installation of flow monitors and need for surveying. The Consultant will provide MSDGC with electronic versions of the draft and final Model Review Technical Memorandum and draft and final Flow Monitoring Plan.

Depending on the results of the Model Review, scheduling for the activities of Flow Monitoring, Model Update and Model Calibration will be recommended based on the project objectives and goals. Task 4.0 Model Update and Calibration has the flexibility to be completed prior to Alternatives Analysis, BCE Development or Detailed Design, based on Model Review results and discussion with MSDGC.

TASK 3.2: Additional Survey Data Collection

Based on the gap analysis documented in the Model Review Technical Memorandum, additional surveying will be performed at key critical structures to update the model network and CAGIS. Potential locations include: diversion structures, outfalls, flow splits, and open channels. Level of effort for this task is 2 days of field crew (TEC Engineering, Inc.). The consultant shall not proceed with gathering additional survey data without approval from the MSDGC project manager.

TASK 4.0 – MODEL UPDATE AND CALIBRATION

TASK 4.1: Flow Monitoring Data Review during Collection Period

Consultant will provide support to MSDGC and the flow monitoring vendor during the installation of the monitors and collection of the data, to confirm on-going quality of the data to be used in model calibration. The level of effort is based on 10 flow monitors for period of 6 months.

The Consultant will perform the flow monitoring and rain data review including: the hydrographs for each flow monitoring site are plotted and general qualitative assessments of the data are made; the available flow monitors are balanced to ensure upstream flow monitors are reporting lower flows than downstream monitors; and finally, a rainfall analysis will be conducted providing the wet weather event statistics. Each flow monitor response is checked to determine if a reasonable runoff volume for the corresponding tributary acreage is being recorded.

TASK 4.2: Model Configuration and Calibration

Consultant shall perform the following to create Calibrated Model:

1. Update the model as supplied by MSDGC to match current field conditions using CAGIS data, available drawings, surveys, site inspections, the latest CCTV etc., including new data collected from the Model Review analysis. Make changes in model parameters where appropriate. The changes should be documented and included the Model Report submitted as part of Task 4.4.

2. Validate and calibrate the model based on available data collected at project-specific monitoring locations including flow monitoring (project area, Mill Creek, Auxiliary Mill...
EXHIBIT A
SCOPE OF WORK

Creek Interceptor), overflow sensors (CSO, SSO, PSO, NEO), and facility operations (pump stations, RTCs, HRTs, etc.). Reports of flooded basements, stream levels, street flooding, manhole overflow, etc. may also be available for assessing model accuracy.

3. Calibration review by MSDGC will include:
   a. Submission by consultant of MSDGC Preliminary Review Checklist items
   b. Review and comment by MSDGC
   c. Submission by consultant of MSDGC Detailed Model Review Checklist and model input files
   d. Review and comment by MSDGC

TASK 4.3: Project Baseline Model

Consultant shall perform the following to create Project Baseline Model:

1. Smaller projects and headwater projects may not require development of Baseline Model differing from Calibration Model (except for simulated boundary conditions replacing observed boundary conditions).

2. Edit the Calibrated Model to include all known projects that will be implemented within the project area. MSDGC Project Manager will provide the list of projects that may exclude projects still in development. Coordinate with Project Manager and Modeling Group on how to implement the projects in the Baseline Model.

3. Coordinate with Project Manager and Modeling Group on known projects outside project area that will impact boundary conditions of Baseline Model. Boundary conditions may change from Calibrated Model including requiring iterations of Baseline Model and System Wide Model to stabilize boundary conditions.

4. Changes to Calibrated Model that result in Baseline Model will be documented in Alternative Analysis reporting. Reporting will include impacts on project area, CSO/SSO/NEO changes, changes at boundary conditions, etc.

TASK 4.4: Modeling Report

Consultant shall prepare Validation and Calibration reports according to the templates provided by MSDGC. Along with the Modeling Report, the consultant shall provide MSDGC with the actual updated and calibrated model(s). The method of delivery (ftp site, etc.) will be determined by MSDGC Project Manager.

TASK 5.0 – PLANNING AND BCE

TASK 5.1 – Condition and Capacity Analysis

The Consultant will perform a condition and capacity analysis. The condition analysis includes MSDGC’s Gravity Sewer Asset Management (GSAM) and additional data collected by MSDGC and/or the Consultant from the gap analysis. The Consultant will use an agreed upon model for current conditions and alternative analysis. The first modeling effort is to perform a capacity analysis by running a typical year simulation and compare to the target WWIP Remaining Overflow Volumes (ROVs), and running a 5-year and 10-year design storm to identify capacity issues. The Consultant will define areas where there are capacity constraints and where WWIP projects are needed. In addition, other Utility Coordination projects will be summarized to see how they overlap with condition and capacity issues. Finding of the condition, capacity and partner projects will be discussed at a status meeting.

TASK 5.2: Alternatives Analysis
EXHIBIT A
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The Consultant will perform alternatives analysis to meet WWIP requirements, asset management needs, and possible partnering with projects led by other utilities or jurisdictions. The Consultant will identify potential solutions to meet the WWIP requirements for the CSOs identified in the capacity analysis task. The Consultant will assess feasibility and screen the potential solutions with MSDGC at a status meeting. Up to three alternatives for each CSO will be selected to be further developed with preliminary layouts and planning level cost estimates. The Consultant will perform the analysis taking into account flexibility, available land, accessibility, maintenance, reliability, operations, and constructability. The Triple Bottom Line factors and scores will be developed in accordance with MSDGC’s BCE requirements. MSDGC shall supply the Triple Bottom Line tool to the Consultant.

The Consultant will identify MSDGC sewer assets based on MSDGC records that need to be repaired, rehabilitated, and/or replaced in the project sewershed. The CCTV will be provided by MSDGC. The consultant will evaluate basis of rehabilitation approaches/technologies based on condition, site specific details impacting constructability, initial capital and life-cycle cost, utility-specific maintenance and rehabilitation philosophies. The Consultant shall estimate rehabilitation cost utilizing internally maintained cost data and Client-supplied bid history as available. The proposed repairs of failing assets within the project area shall be extended to a section that is in good structural condition. This effort should evaluate high risk segments, such as sewers under structures in the proximity of the proposed alignment.

If new storm outfalls are recommended, the Consultant will identify water quality standards and water quality enhancements that are required under EPA’s stormwater management program (SWMP) for municipal storm sewer system (MS4). The Consultant will utilize current Hamilton County, Ohio MS4 permit requirements.

The Consultant shall develop the Draft Alternatives Analysis Report and present the report in front of MSDGC’s Technical Review Committee (TRC). The Consultant shall incorporate comments from the TRC and submit a final Alternative Analysis Report. The response to MSDGC comments will be discussed at an Alternatives Analysis Review Meeting. The Consultant shall prepare and supply the meeting notes to MSDGC Document Control. The Consultant will provide MSDGC with hard copy and electronic versions of the draft and final Alternative Analysis Report.

TASK 5.3: Alternatives Analysis Modeling

Alternative modeling will be performed using the following steps:

1. Alternatives Analysis modeling will be developed from an agreed upon project baseline model.

2. Perform modeling of candidate alternatives identified during Planning phase, inputting proposed control measures and infrastructure to accurately predict impacts to any applicable sewer systems, forecast inflow and SSO/CSO reductions, and verify capacity of proposed infrastructure. Alternative modeling shall be updated and submitted for review and correction for each Detailed Design interim design submission (30%, 60%, 90%) to validate proposed projects (Budget for updates during design included in Design Phase).

3. Make adjustments to proposed control measures and infrastructure as necessary and re-run the model to forecast results against project goals.
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4. The level of service will be estimated based on no changes of the upstream and
downstream hydraulic grade line for the two-, five- and ten-year storms. Storm sewers
are to be designed per SMU standards.
5. Document the changes made to the model.

TASK 5.4: BCE Development

The Consultant shall perform one (1) BCE for the evaluated alternatives in order to accomplish
the project objectives. The document shall utilize MSDGC’s standard BCE format. The BCE
shall summarize the alternatives evaluated which will take into consideration the Triple Bottom
Line factors and scores, as well as risk and costs associated with alternate strategies.
The Consultant shall present the Draft BCE Report in front of MSDGC’s Technical Review
Committee (TRC) at a BCE Review Meeting. The Consultant shall incorporate comments from
the TRC and submit a final BCE Report. The Consultant shall prepare and supply the meeting
notes to MSDGC Document Control. The Consultant will provide MSDGC with hard copy and
electronic versions of the draft and final BCE Report.

TASK 6.0 – DETAILED DESIGN TASKS (SUPPLEMENTAL)

The work within Task 6.0 is considered to be supplemental. It shall only be performed with
written authorization from MSDGC. A finalized scope and fees shall be negotiated prior to the
execution of this work.

1. Project Administration

1.1. Attend one Design Phase kickoff meeting with MSDGC to cover all projects for which
preliminary design has been authorized. Agenda topics include: review lines of
communication, protocol, discuss goals and objectives of each project that has been
authorized for preliminary design, establish critical success indicators, provide
expectations, and review the scope and schedule for the Preliminary Design Phase
including collection system modeling.

1.2. Provide site reconnaissance by walking the proposed sewer corridor for each project.
Provide a memo that discusses factors that will impact alignment selection.

1.3. Participate in three (30%, 60%, and 90%) Interim Design Submittal Review Meetings
to present response to design submittal comments.

1.4. Participate in estimate reconciliation meeting(s) as directed by the project manager,
maximum of three meetings. An estimate reconciliation meeting is required when the
opinion of probable construction cost and MSD’s independent estimate are not within
10% for major pay items or for the total estimate. MSD’s project manager will manage
and document the reconciliation meeting.

1.5. Prepare meeting materials for all project meetings attended by the consultant, including
meeting agenda, sign-in sheet and minutes. Utilize MSDGC meeting document
templates. Distribute draft minutes within five business days of the meeting;
incorporate comments from attendees and distribute final meeting minutes to all
attendees.

1.6. Schedule Management

1.6.1. Prepare an initial project schedule with milestone dates for completing all
services through bid phase. Submit draft initial project schedule at project kickoff meeting. Finalize the initial project schedule within two weeks of receiving MSDGC comments.

1.6.2. Coordinate the project schedule with schedules of MSDGC and sub-consultants as well as with activities of others directed by the Consultant.

1.6.3. Standard schedule allowances:

1.6.3.1. Assume a one-month review period to send/receive comments from utilities and agencies.

1.6.3.2. Assume a three-week MSDGC review period and one additional week for Consultant to prepare responses to comments prior to each interim design review meeting.

1.6.4. Provide the schedule in Gantt and table format. The Gantt chart shall show the original schedule, completed items, current schedule and relationship of items.

1.6.5. Provide an updated schedule for MSDGC review with each design submittal.

1.7. Periodic Status Report – Provide periodic status report with each invoice submittal and as requested by MSDGC. Include the following information:

1.7.1. Project description

1.7.2. General summary of activity during reporting period, reporting period begin and end dates

1.7.3. Activity accomplishments during the reporting period

1.7.4. Planned activity during upcoming reporting period

1.7.5. Earned value report through end of reporting period including percent budget expended, percent schedule expended, earned value as percent of budget

1.7.6. Budget/schedule/Scope issues or changes

1.7.7. Direction or information received or required from MSDGC

1.7.8. Key personnel changes

1.8. Deliverables

1.8.1. Meeting materials

1.8.2. Documentation of site reconnaissance

1.8.3. Project schedule and project schedule updates

1.8.4. Periodic status reports

1.9. QA/QC Plan. Update QA/QC plan from the Planning phase for the detailed design phase. Monitor and track quality reviews as required throughout the project for milestone interim planning submittals (Alternatives Analysis Report and BCE). QA/QC review level of effort is included in the technical scope items below.

1.10. Risk Management Plan. Update Risk Management Plan from the Planning phase for the detailed design phase. Update the risk register at the three milestone design
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submittals and include in the submittal package.

2. 30% Design

2.1. Participate in one Detailed Design Phase Kickoff Meeting with MSDGC to cover all projects authorized for detailed design. Meeting shall be held prior to commencement of 30% Design field investigation activities. Present and discuss Risk Management Plan to cover all projects that require a risk management plan per BCE recommendation. Present and discuss Detailed Design Phase schedule. Coordinate timing of property owner notification letters and field investigation start date. MSDGC will prepare property owner mailing lists. MSDGC will provide all affected property owners with a written notice that complies with O.R.C. Section 6117.01 (F) for the purpose of providing property owners with notice of field investigations.

2.2. Locate above-ground and underground existing utilities for each assigned project for accurate depiction on the construction plans. The design fee and approach shall be based on the following tasks as a minimum:

- Contact the Ohio Utilities Protection Service (OUPS) to have them provide physical field markings of the utilities as well as historical records for all OUPS utility company members. Contact all non-members directly for physical field markings of utilities and obtain historical records.

- Verify that the physical field markings of the utilities are in place prior to scheduling the survey crews.

- Confirm the accuracy of the utility information by walking the job with the completed base map.

- Identify conflicts with the utilities and the proposed work. Resolve conflicts with utility companies to minimize construction costs and inconvenience to the public.

- Coordinate with utility companies to develop utility relocation plans, if needed. Utility relocations shall occur before construction begins or concurrently with the construction as long as the utility relocation will not delay the MSDGC contractors.

- Verify that the utility relocation is scheduled with the utility companies who have their own crews performing the work.

- Underground Utility Investigation
  - Several methods of utility location may be necessary to resolve the utility location, when conflicting utility location information is discovered. This may include geophysical methods, see Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, ASCE 38-02
  - When proposing trenchless installation methods, pothole and then survey the exposed utility at each crossing point. For parallel utilities expose the utility at the beginning and end of each trenchless excavation method run. If the proposed alignment is within the tolerance zone of any parallel
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underground utility expose the utility every one hundred feet.

- Include allowance of $TBD for underground utility investigation using geophysical methods and or potholing, to be performed only upon written authorization by MSDGC.

- Note on the plans the potholing locations and elevations determined. The elevations can be presented in a table if this provides the information in a clearer way.

- When communicating with Duke and Cincinnati Bell overhead electric, the designer shall include a “Pole Impacts Table” with the utility letter. The “Pole Impact Table” shall contain the pole number, station, distance from edge of trench to face of pole, and depth of excavation. Utility letter shall request the following information be provided by the owner of each pole:
  - Measures required to protect each pole, including relocation, relocation with addition of poles, temporary support, minimum separation of construction activities, etc.
  - Responsibility matrix for required protection measures
  - Estimated cost to protect each pole

Example:

<table>
<thead>
<tr>
<th>POLE IMPACTS TABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pole Number</td>
</tr>
</tbody>
</table>

2.3. Provide topographical survey of alignment area, area within work limits and access routes. Budget is based on the survey lengths of _TBD_ and width up to 100 feet. Surveying services will be performed by TEC Engineering, Inc.

- Utilize MSDGC-provided CAGIS information and files to supplement field survey data when preparing construction plans. The vertical datum of the project survey shall be the National Geodetic Vertical Datum of 1929 (NGVD 29).

- Topographic locations shall include, but are not limited to: trees that are six inches and larger in diameter, shrubs, building/structure corners, fences, sidewalks, driveways, recreational facilities (swing/play sets, pools, hot tubs, etc.), outline of existing flower beds and vegetable gardens, and any visible, above ground utilities, as well as OUPS markings as applicable. Field locate all geotechnical exploration bore holes once complete; show bore holes on construction plans for reference.

- Determine basement elevations that are critical to design of the sewer. One attempt will be performed at each residence to gain entry to the basement. If entry is granted, a basement elevation shot will be performed. A distance to
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sewer outlet will be measured, and a photograph will be taken. If no access is available, an elevation will be taken at the door sill.

- All survey control will be tied to the Hamilton County Benchmark system, Horizontal Datum NAD83, Vertical Datum NGVD29
- Property/boundary research of surveys, record plats and current owner deeds, within and adjacent to the project area will be performed and entered into the basemap.
- A thorough field search for all pertinent boundary monumentation will be performed and all monumentation recovered will be located and included in the basemap.
- Property resolution for all affected properties will be performed for subsequent use in the proposed easement plats and the resultant property lines will also be shown on the construction plans.

2.4. Conduct geotechnical investigations and prepare Geotechnical Exploration Report (GER) for each assigned project. Submit proposed schedule of geotechnical investigations and report to MSDGC for approval. Use if applicable: NEAS, Inc. will be the Geotechnical Consultant and will provide geotechnical services as a sub-consultant to Consultant.

Cost estimate for geotechnical investigations is based on number of soil test borings; total length of soil test boring and drilling / sampling of rock core as shown in the table below. Bore holes and bore hole data will conform to MSDGC’s Standard Geotechnical Services Guidelines and geotechnical engineering industry standards where appropriate.

Measure and record the depth at which groundwater is encountered during drilling and at the completion of drilling prior to performing rock coring. If subsurface conditions encounter groundwater, a temporary monitoring well, consisting of solid plastic PVC pipe, with a suitable length of perforated section, will be installed at the appropriate depth and will be left in the borehole until 24-hour groundwater level measurements have been obtained, if necessary. If it is determined that a permanent monitoring well is required to measure future groundwater levels, the Geotechnical Consultant will convert the temporary monitoring well to a permanent monitoring well for future groundwater level measurements as deemed appropriate.

- Coordinate withOUPS for utility clearance and, if applicable, with property owners to gain access to test boring locations. Where work is to be performed on private property, provide a copy of the executed written agreement for access, signed by the property owner, or as directed by MSDGC.
- Coordinate with property owners for Right of Entry (ROE) for the purpose of completing geotechnical investigations. If a required ROE is not provided by any property owner after two attempts, notify MSDGC.
- Obtain and pay for necessary permits from governing jurisdictions to perform geotechnical investigations.
- Provide traffic control measures during the course of geotechnical investigations.
in accordance with Ohio Manual of Uniform Traffic Control Devices.

- Recommend details for boring depths, type of geotechnical sampling, etc. Submit final recommendations to MSDGC for approval prior to performing the test borings.

- Restore disturbed areas in lawns to pre-boring condition based on documented photographs taken before and after borings are collected. For work in lawns, excess cuttings from the boreholes shall be removed from the site.

- When requested by MSDGC, deliver rock cores in appropriate containers for storage at MSDGC.

- The GER shall include the following:
  
  a. Discussion of regional and site geology and topography.
  
b. Description of subsurface conditions encountered in the borings.
  
c. Description of any difficult excavation conditions expected, such as bedrock or groundwater.
  
d. Log of test borings.
  
e. Site plan showing boring locations
  
f. Discussion of geotechnical considerations related to proposed construction including locations, dimensions, bearing elevations and loading conditions, to the extent known at applicable design stage.
  
g. Commentary on general excavation methods that may be required considering the depth of structures, slope stability of soils, and consideration of nearby structures or facilities.
  
h. Recommendations regarding excavation widths anticipated with open cut trench excavations
  
i. Classification, thickness, location, and limits of each stratum encountered in the test borings, including N_{60}-value blow counts from Standard Penetration Tests.
  
j. Engineering interpretations of the drilling, sampling, field testing and laboratory data.
  
k. Engineering properties of the soil and rock mass characteristics.
  
l. Recommendations for site preparation including depth of removal and over-excavation, and improvements of in-situ soils, if applicable.
  
m. Recommended stable grade (H:V) of slopes for permanent excavation cuts or embankment fills.
  
n. Recommended lateral earth pressures for design of substructures. Lateral earth pressures for both active and at-rest, and drained and submerged conditions. Recommended design parameters for retaining structures including friction coefficients and passive pressure (if applicable) for calculating resistance against sliding.
  
o. Recommendations for backfill materials including onsite availability, recommended index properties, particle size analysis, classifications in accordance with ASTM D2487 and moisture and density compaction criteria.
  
p. Compaction and strength characteristics and suitability of onsite soils for use as structural fill for support of structures, backfill for trench
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excavations and similar excavations, embankments, and other pertinent earthwork recommendations.

q. Influence of expansive soils, if encountered, on sewers and structures.

r. Constructability considerations, including temporary excavation slopes, sheeting and shoring, expectations regarding excavation equipment/methods, possibility of heave of excavation bottoms, and applicable dewatering problems and methods. Discussion of constructability shall include potential difficulties which the construction contractor should anticipate. Recommendations shall include lateral pressures for the design of excavation support systems.

s. Groundwater elevations and their effect upon the proposed design and construction, together with a discussion of underdrain requirements and/or recommendations for resistance to uplift pressures, if applicable. A design groundwater level should be recommended for buoyancy and lateral earth pressure considerations based on groundwater level measurements.

t. Loading and design criteria related to subsurface materials (e.g. earth pressures) for retaining walls or earth retaining structures that may be required on the project.

u. Recommended methods for removal of rock, including allowance of blasting, and blasting restrictions.

v. Additional geological or geotechnical recommendations considered pertinent to the project.

2.5. Develop a recommended sewer alignment based on evaluation of all pertinent factors including but not limited to geotechnical findings (e.g., rock, dewatering), impacts to the environment, constructability, access during construction, safety, operation and maintenance considerations, impacts to property and construction costs.

2.6. Develop an Environmental Site Assessment for each assigned project. Consider results of the ESA, such as environmental contamination, when evaluating recommended alignments. Budget for Environmental Site assessments is based upon a total of XXX(TBD) Phase I Environmental Site Assessments.

2.7. Prepare Draft Basis of Design Memorandum (BDM) that summarizes the evaluation that resulted in selection of the recommended sewer alignment. Alternative modeling shall be updated and submitted for review and correction for each Detailed Design interim design submission (30%, 60%, 90%) to validate proposed projects.

2.8. Prepare 30% detailed plan and profile construction plans in accordance with MSDGC standards. Use AutoCAD 2007 or newer with Land Desktop or Civil 3D. Refer to msdgco.org for CAD standards and standard Accession Number Drawings for MSDGC and SMU.


2.10. Indicate preliminary bid items and quantities using MSDGC spreadsheet template.

2.11. Identify anticipated regulatory requirements.
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• If Federal Permits or Federal Funds are used, those Federal processes will dictate efforts to protect threatened and endangered species budget accordingly.

• If Federal Permits or Federal Funds are NOT used, perform a desktop analysis with the 30% design memo to indicate the potential impacts to threatened and endangered species as listed on the USFWS Ohio Field Office site http://www.fws.gov/midwest/Ohio/. Include findings of the desktop analysis in the 30% design memo.

• Consultant shall coordinate with the Ohio Historic Preservation Office (OHPO) with a cultural resource file check for the project area

• As an example, if impacts are identified to the Indiana Bat perform a field assessment prior to final design to identify potential Indiana Bat Roosting trees. Label identified trees as “Bat Trees” with plan notes allowing removal of Bat Trees from October 15 to March 31. The clearing of Bat Trees is restricted in the mating season and identification needs are based on project schedule.


2.13. Distribute 30% construction plans to utilities and agencies for comment.

2.14. Attend the 30% Design Submittal Review Meeting. Discuss with MSDGC comments from other utilities and agencies.

2.15. Incorporate comments agreed to by MSDGC into the design drawings. Consultant shall change the alignment if deemed necessary and directed to do so by MSDGC due to utility conflicts or agency comments. Based on utility and agency reviews, and as approved by MSDGC, necessary alignment changes will be reflected in 60% design submittal.

2.16. Assist MSDGC in arranging a public meeting to review the current design and provide community engagement. Provide graphics and participate in the presentation as required.

2.17. Deliverables:

• One unbound paper copy of Draft BDM including technical specifications outline, anticipated regulatory requirements, preliminary bid items / quantities and OPCC, 21 days in advance of 30% review meeting

• QA/QC documentation letter

• Written recommendation regarding exceptions to MSDGC Rules & Regulations and Collection System Design Standards, if applicable

• 30% construction plans: electronic copies in native format and in PDF format.

• GER: one paper copy and PDF format on a disk. GER shall be on 8.5” X 11” sheets. Pages shall be numbered only near the top of each page. Ledger-size folded sheets will be allowed only when approved by MSDGC.

• EPA-SWMM model input file of full proposed projects including any necessary
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time series such as boundary conditions.

- Meeting materials
- Summary of interim comments and responses for all documents

3. Easement Documents

3.1. Provide field survey and conduct courthouse research to determine: property owner information, obtain deeds, previous survey plats, subdivision & right of way plats and easement information. Conduct field survey to accurately locate all available property monumentation both called for and not called for. Resolve survey to all included and adjoining parcels. Budget is based on acquisition of the number of temporary or permanent easements for up to \{NUMBER OF PARCELS (TBD)\}. Easement documents will be prepared by Consultant’s sub-consultant, TEC Engineering, Inc.

3.2. Prepare preliminary and final easement sheets. Easement sheets shall delineate required permanent and temporary easements for the project. Easement sheets shall be at the same scale as construction plans. Preliminary easement sheets shall be submitted with 60% Design Drawings in pdf format. Submit one copy of preliminary easement sheets for review.

3.3. Easements on City of Cincinnati owned property will require separate easement plats from other owners. Refer to the Springing Easement reference document located in the MSDGC Capital Project Resource Library for various examples and associated jurat wording.

3.4. Provide one paper copy of the final easement sheets with 90% submittal.

3.5. Provide one copy of final easement sheets with PS seal / signature after all revisions are completed and accepted. Provide Mylar copy when requested.

3.6. If requested, provide a proposal for preparation of preliminary and final easement appropriation plats with metes and bounds descriptions for appropriations as directed by MSDGC.

3.7. Deliverables include but are not limited to: final easement plats, appropriation plats and legal descriptions when requested, AutoCAD files of all plats, and MS Word files of all legal descriptions. If requested, the consultant shall also provide a copy of all supporting documents including but not limited to: deeds, plats, and survey information used to resolve the properties. A licensed surveyor, registered in the State of Ohio shall oversee all work, seal and sign all deliverables. Under no circumstances shall CAGIS information be used for final easement/design plats.

4. 60% Design

4.1. Finalize Basis of Design Memorandum (BDM) including incorporation of comments from the 30% review. Alternative modeling shall be updated and submitted for review and correction for each Detailed Design interim design submission (30%, 60%, 90%) to validate proposed projects. Provide a digital version of the BDM with changes from Draft BDM tracked.

4.2. Prepare 60% draft detailed plan and profile drawings; incorporate comments from 30% design review.
4.3. Prepare draft technical specifications using MSDGC’s CSI (Construction Specification Institute) template specifications as modified for this project. Modifications must be submitted to MSDGC in MS Word file with changes and comments shown using MS Word “track changes” feature and “comment” feature. Also, provide an MS Word file with changes accepted and comments deleted.

4.4. Indicate preliminary bid items and quantities using MSDGC spreadsheet template. Alternative modeling shall be updated and submitted for review and correction for each Detailed Design interim design submission (30%, 60%, 90%) to validate proposed projects.

4.5. Develop list of all required permits. Prepare draft of required permit applications. At a minimum, this will include street opening permit application and Ohio EPA Permit to Install application. US Army 404 and Water Quality 401 Certification is not included as it is assumed the work will be performed under a Nationwide Permit No. 12.


4.7. Prepare and submit final resolution of 30% review comments prior to 60% progress meeting.

4.8. Use for projects to be reviewed by Watershed Operations that include source control elements (PM please include Leslie Schehl in scoping efforts): Prepare 60% draft O&M manual incorporating the source control elements, maintenance activities, and cost.

4.9. Attend the 60% Design Submittal Review Meeting.

4.10. Deliverables:

- One digital version of the 60% BDM.
- Draft technical specifications, draft regulatory permit applications, preliminary bid items / quantities and OPCC: one unbound paper copy of all required documentation 21 days in advance of 60% review meeting
- 60% construction plans: electronic copies in native format and in PDF format
- Meeting materials
- QA/QC documentation letter
- Summary of interim comments and responses for all bid documents

5. 90% Design

5.1. Finalize Basis of Design Memorandum (BDM) including incorporation of comments from the 60% review. Alternative modeling shall be updated and submitted for review and correction for each Detailed Design interim design submission (30%, 60%, 90%) to validate proposed projects.

5.2. Provide a digital version of the BDM with changes from Draft BDM tracked.

5.3. Prepare 90% draft detailed plan and profile drawings; incorporate comments from 60% design review.
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5.4. Update technical specifications. Incorporate MSDGC approved revisions from 60% review process. Recommend additional modifications, if appropriate, using MS Word comments feature in right-hand page margin.

5.5. Indicate bid items and quantities using MSDGC Spec 00 41 02 Unit Price Sheet template.

5.6. Prepare final permit applications and provide to MSDGC for submittal to agencies.


5.8. Use for projects to be reviewed by Watershed Operations that include source control elements (PM please include Leslie Schehl in scoping efforts): Prepare 90% draft O&M manual incorporating the source control elements, maintenance activities, and cost; incorporate comments from the 60% design review.

5.9. Attend the 90% Design Submittal Review Meeting.

5.10. Provide summary of comments and final resolution of comments for all bid documents prior to 90% review meeting.

5.11. Assist MSDGC in arranging a public meeting to review the current design and provide community engagement. Provide graphics and participate in the presentation as required.

5.12. Deliverables:
   - One digital version of the Final BDM signed and sealed by a licensed engineer, registered in the State of Ohio
   - Meeting materials
   - QA/QC documentation letter
   - 90% construction plans: electronic copies in native format and in PDF format
   - Revised technical specifications, bid items / quantities and OPCC (one unbound paper copy of all required documentation, 21 days in advance of the review meeting)
   - Required copies of final permit applications and supporting documentation
   - Summary of comments and responses for all bid documents

6. Final Design

6.1. Update contract documents to include special right-of-way conditions and any modifications to alignment made necessary by easement acquisition negotiations.

6.2. Provide final, bid-ready, contract documents including final technical specifications, plan and profile drawings and all items necessary to complete the work based upon comments from the deliverables submitted during the preceding tasks.

6.3. The specifications will include guidance for the construction contractor to develop a Maintenance of Traffic Plan for all phases of the project, as appropriate.

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6.5. Provide QA/QC documentation letter

6.6. Provide explanation of all approved exceptions to MSDGC Rules & Regulations and/or Collection System Design Standards.

6.7. Provide summary of comments and responses for all bid documents.

6.8. *Use for projects to be reviewed by Watershed Operations that include source control elements* (PM please include Leslie Schehl in scoping efforts): Provide final O&M Manual.

6.9. Assist MSDGC in arranging a public meeting to review the current design and provide community engagement. Provide graphics and participate in the presentation as required.

6.10. Deliverables:

* Construction Plans: one paper set, 11 inches by 17 inches; one CD (with AutoCAD and PDF Files) signed and sealed by a licensed engineer, registered in the State of Ohio.

* Specifications: one paper copy and one CD with MS Word and PDF files signed and sealed by a licensed engineer, registered in the State of Ohio.

* Final OPPC: one paper copy and one CD with MS Word and PDF Files)

* QA/QC documentation letter

* Summary of resolution of all comments for all bid documents

* Use for projects to be reviewed by Watershed Operations that include source control elements: Final O&M Manual

* All modeling files including input, output, report, and any external files for the final design.

TASK 7.0 – CONSTRUCTION PHASE SERVICES (SUPPLEMENTAL)
The work within Task 7.0 is considered to be supplemental. It shall only be performed with written authorization from MSDGC. A finalized scope and fees shall be negotiated prior to the execution of this work.

1. **Project Administration** - The Consultant will update the Project Management Plan developed in Detailed Design phase identifying key technical and project management personnel, their roles and responsibilities as assigned by task, for the duration of the contract. The Consultant will provide MSDGC with electronic versions of draft and final updated Project Management Plan. During the duration of the bid and construction phases, the Consultant will perform project administration including the preparation of monthly progress reports.

2. **Bid Phase Services** - Be available to assist MSDGC in responding to contractor questions as requested by MSDGC

3. **Construction Progress Meetings and Site Visits** – Not required for typical sewer replacement projects. Effort will be included for

4. **Review RFI Submittals** - Consultant will assist MSDGC in reviewing Contractor’s Requests
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for Information (RFIs), assumed to be up to three per authorized project. Consultant will review the technical aspects of the RFIs and provide MSDGC interpretations and clarifications relative to the intent of the construction Contract Documents.

5. Review Requests for Contractor’s Proposal (RFCP) – Consultant will assist MSDGC in generating the RFCP and reviewing the Contractor’s response proposals, assumed to be up to one per authorized project. Consultant will review the technical aspects of the RFCP and provide MSDGC interpretations and clarifications relative to the intent of the construction Contract Documents.

6. Review Shop Drawing Submittals – Consultant will review and respond to Contractor’s Shop Drawings, submitted samples, Operations & Maintenance (O&M) Manual, and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents. Consultant assumes up to three submittals per authorized project will be required to meet the project requirements. Such reviews will not extend to means, methods, techniques, sequences or procedures of construction or to safety precautions and safety-related programs incident thereto.

7. Deliverables:
   
   7.1. RFI responses (x estimated) TBD
   
   7.2. Help in generating and reviewing RFCPs (x estimated) TBD
   
   7.3. Shop Drawing review responses (x estimated, which includes one re-submittal each) TBD
# EXHIBIT B
## PROJECT BUDGET

### Prime Consultant Budget Sheet

<table>
<thead>
<tr>
<th>Task No.</th>
<th>Task Description</th>
<th>Project Manager/ Senior Engineer</th>
<th>Technical Expert/ CPM 3</th>
<th>Principal Engineer/ CPM 2</th>
<th>Senior Engineer</th>
<th>Project Engineer</th>
<th>Staff Engineer / Engineer 2</th>
<th>Engineer 1</th>
<th>CADD Drafter</th>
<th>Admin Assistant</th>
<th>Total Labor</th>
<th>Misc. Expenses</th>
<th>Reserve Amount</th>
<th>Sub-Consultant Expense</th>
<th>Total Compensation</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Project Administration - Planning</td>
<td>124</td>
<td>72</td>
<td>16</td>
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**Planning Subtotal** $469,842 $1,650 $0 $55,159 $526,651

| 6        | Detailed Design (Supplemental)    |                                  |                          |                           |                 |                  |                           |           |              |                | $1,383,661 | $1,500        | $0             | $351,505             | $1,736,666      |
| 7        | Construction Phase Services (Supplemental) |                        |                          |                           |                 |                  |                           |           |              |                | $368,652   | $2,000        | $0             | $53,239             | $423,891        |

**Total** $2,222,155 $5,150 $0 $459,903 $2,687,208
EXHIBIT B
PROJECT BUDGET

Assumption for Design and Construction Phase Services

<table>
<thead>
<tr>
<th>CSO Basin</th>
<th>Construction Cost from MSDGC and LMCTR Reconciliation (M7 2011$)</th>
<th>Construction Cost Escalated (M7 2019$)</th>
<th>Design Factor from FAM using current Construction Cost</th>
<th>Estimated Design Fee using FAM</th>
<th>Estimated Construction Fee (2% of Construction)</th>
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<tr>
<td>CSO 151</td>
<td>$3,595,077</td>
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<td><strong>$1,736,666</strong></td>
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1.105417 Escalation factor M7 2011 to M7 2019

Sub-Consultant Budget Sheet

**Coldwater Consulting, LLC**

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<tr>
<th>Task No.</th>
<th>Task Description</th>
<th>Total Labor</th>
<th>Misc. Expenses</th>
<th>Reserve Amount</th>
<th>Sub-Consultant Subtotal</th>
<th>Prime Consultant Markup</th>
<th>Sub-Consultant Expense 4</th>
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<td>$0</td>
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**TEC Engineering, Inc.**

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<th>Sub-Consultant Subtotal</th>
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## EXHIBIT B
### PROJECT BUDGET

**National Engineering and Architectural Services, Inc.**

<table>
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<tr>
<th>Task No.</th>
<th>Task Description</th>
<th>Total Labor¹</th>
<th>Misc. Expenses²</th>
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<th>Sub-Consultant Subtotal</th>
<th>Prime Consultant Markup⁴</th>
<th>Sub-Consultant Expense⁴</th>
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**ETC, Inc.**

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¹ Product of direct hourly rate and professional service agreement multiplier (multipliers for prime and subs are listed in Exhibit C)

² Consultant and sub-consultants shall be reimbursed without markup for approved direct costs involved in performing the Work; refer to PSA Article 6-Payment. Reimbursement for travel, lodging and mileage shall not exceed MSD Consultant Travel Reimbursement Contract Requirements listed in Exhibit F.

³ Reserve Amount is available if a FAR Waiver Multiplier is converted to a multiplier based on a FAR Audited Overhead Rate during the term of the agreement. See Exhibit C, Budget Summary, Note 3 on the manner in which a FAR Waiver Multiplier may be converted to a multiplier based on a FAR Audited Overhead Rate. Utilization of the Reserve Amount is expressly limited to provide the additional compensation resulting from conversion of a firm’s FAR Waiver Multiplier and shall not be utilized to compensate for an increase in consultant’s time expended in excess of the labor hours stated in the approved budget sheet.

⁴ Sub-consultant expenses include prime consultant’s markup amount, if applicable. Markup rate for sub-consultant work (if any) is listed in Exhibit C. Miscellaneous expenses for Sub-consultants are not included in the prime consultant’s markup amount.

Design, Bid, and Construction Phase services are considered supplemental and will be scoped and negotiated following approval of the BCE.
EXHIBIT C
CONSULTANT’S KEY PERSONNEL, RATE SCHEDULE AND BUDGET SUMMARY

Consultant’s Key Personnel

<table>
<thead>
<tr>
<th>Arcadis</th>
<th>Labor Category</th>
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<tbody>
<tr>
<td>Kristen Benick, Project Manager</td>
<td>Senior Water Engineer</td>
</tr>
<tr>
<td>Jason Abbott, Planning and Design Lead</td>
<td>Senior Engineer</td>
</tr>
<tr>
<td>Pete Kube, QA/QC</td>
<td>Principal Water Engineer</td>
</tr>
<tr>
<td>Sue Pressman, Planning Technical Advisor</td>
<td>Certified Project Manager 3</td>
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<tr>
<td>Hazem Gheith, Collection System Technical Advisor</td>
<td>Technical Expert</td>
</tr>
<tr>
<td>Mark Van Auken, Stormwater/Green Infrastructure Technical Advisor</td>
<td>Principal Water Engineer</td>
</tr>
<tr>
<td>Brad Olson, Design and Construction Technical Advisor</td>
<td>Technical Expert</td>
</tr>
<tr>
<td>Coldwater Consulting, LLC</td>
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</tr>
<tr>
<td>Denise Marmer</td>
<td>Senior Scientist</td>
</tr>
<tr>
<td>John Shady</td>
<td>Senior Scientist</td>
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<tr>
<td>TEC Engineering, Inc.</td>
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</tr>
<tr>
<td>Bryan Bender</td>
<td>Project Manager</td>
</tr>
<tr>
<td>Dennis Blevins</td>
<td>Surveyor</td>
</tr>
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<td>National Engineering and Architectural Services, Inc.</td>
<td></td>
</tr>
<tr>
<td>Brendan Andrews</td>
<td>Project Manager</td>
</tr>
<tr>
<td>ETC, Inc.</td>
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<tr>
<td>Bethany Dale</td>
<td>Principal</td>
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Consultant’s Rate Schedule

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<th>Labor Category</th>
<th>Maximum Direct Rate ($/hr.)</th>
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<td>Cadd Drafter 2, Field Technician 3 and 4</td>
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<td>Cadd Drafter 3, Designer 1, Field Technician 5</td>
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<td>Assistant 1-2, Project Assistant 1-2</td>
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<td>Assistant 3-5, Project Assistant 3-4, Accounting Assistant 4-5, Project Administrator 1-4, Project Controller 1-3</td>
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<td>National Technical Manager, Operations Director 2</td>
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<td>Project Controller 4 and 5, Administrator 4, Management Consultant 1, Developer</td>
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**EXHIBIT C**  
CONSULTANT'S KEY PERSONNEL, RATE SCHEDULE AND BUDGET SUMMARY

<table>
<thead>
<tr>
<th>Position</th>
<th>Rate</th>
</tr>
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<tr>
<td>Laboratory Tech</td>
<td>$26.51</td>
</tr>
<tr>
<td>Staff Engineer</td>
<td>$34.97</td>
</tr>
<tr>
<td>Senior Engineer</td>
<td>$44.39</td>
</tr>
<tr>
<td>Project Manager</td>
<td>$63.28</td>
</tr>
<tr>
<td>Principal</td>
<td>$95.53</td>
</tr>
<tr>
<td><strong>ETC, Inc.</strong></td>
<td></td>
</tr>
<tr>
<td>Principal</td>
<td>$101.30</td>
</tr>
<tr>
<td>Project Director</td>
<td>$78.79</td>
</tr>
<tr>
<td>Project Manager/Community Relations Manager</td>
<td>$61.90</td>
</tr>
<tr>
<td>Senior Public Relations/Community Relations/Communications Specialist</td>
<td>$56.28</td>
</tr>
<tr>
<td>Graphic Artist/Designer/Photographer</td>
<td>$78.79</td>
</tr>
<tr>
<td>Technical Job Aid Specialist</td>
<td>$50.65</td>
</tr>
<tr>
<td>IT Communications Support</td>
<td>$50.65</td>
</tr>
<tr>
<td>Public Relations/Community Relations/Media Relations Specialist</td>
<td>$45.02</td>
</tr>
<tr>
<td>Communication Specialist/Associate</td>
<td>$45.02</td>
</tr>
<tr>
<td>Customer Service Representative</td>
<td>$39.39</td>
</tr>
<tr>
<td>Technical Writer/Copy Writer/Editor</td>
<td>$39.39</td>
</tr>
<tr>
<td>Administrative Specialist</td>
<td>$33.77</td>
</tr>
<tr>
<td>Project Admin. Support/Clerk/Date Entry Tech</td>
<td>$28.14</td>
</tr>
</tbody>
</table>
## EXHIBIT C
CONSULTANT’S KEY PERSONNEL, RATE SCHEDULE AND BUDGET SUMMARY

### Budget Summary

<table>
<thead>
<tr>
<th>Firm Name</th>
<th>Project Role</th>
<th>Direct Salaries Multiplier(^1)</th>
<th>Sub-Consultant Markup</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arcadis U.S., Inc.</td>
<td>Prime Consultant</td>
<td>2.94(^2)</td>
<td>5%</td>
<td>$2,248,784</td>
</tr>
<tr>
<td>Coldwater Consulting, LLC</td>
<td>Subconsultant; Regulatory compliance, Stormwater/green infrastructure</td>
<td>2.40(^3)</td>
<td>N/A</td>
<td>$164,210</td>
</tr>
<tr>
<td>TEC Engineering, Inc.</td>
<td>Subconsultant; Topographical survey, property acquisition documentation</td>
<td>2.40(^3)</td>
<td>N/A</td>
<td>$136,572</td>
</tr>
<tr>
<td>National Engineering and Architectural Services, Inc.</td>
<td>Subconsultant; Geotechnical engineering, Materials testing</td>
<td>3.10(^2)</td>
<td>N/A</td>
<td>$81,973</td>
</tr>
<tr>
<td>ETC, Inc.</td>
<td>Subconsultant; Public involvement, Community outreach</td>
<td>2.40(^3)</td>
<td>N/A</td>
<td>$55,669</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$2,687,208</strong></td>
</tr>
</tbody>
</table>


\(^2\) FAR Multiplier has been determined based upon an accepted FAR audited overhead rate.

\(^3\) FAR Waiver Multiplier has been determined by MSD policy, in lieu of a FAR audited overhead rate. If a FAR audited overhead rate is submitted by consultant firm and accepted by MSD after agreement execution, a revised multiplier will be determined based upon the accepted FAR audited overhead rate and a negotiated profit margin. Revised multiplier shall not exceed 3.10 and shall become effective only upon MSD’s written acknowledgment of the revised multiplier. There will be no adjustment of compensation for work performed prior to effective date of the revised multiplier.
EXHIBIT D
SCHEDULE OF SERVICES

Note: The estimated dates are subject to adjustment depending on the actual date of NTP.

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Due Date, Days from Notice to Proceed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Management Plan, QA/QC Plan, Risk Management Plan, Project Schedule (DRAFT)</td>
<td>35 calendar days from NTP</td>
</tr>
<tr>
<td>Data Review Technical Memorandum (DRAFT)</td>
<td>90 calendar days from NTP</td>
</tr>
<tr>
<td>Alternative Analysis Report (DRAFT)</td>
<td>TBD based on Flow Monitoring and Model Calibration Needs</td>
</tr>
<tr>
<td>Business Case Evaluation (DRAFT)</td>
<td>TBD based on Flow Monitoring and Model Calibration Needs</td>
</tr>
</tbody>
</table>

Design, Bid, and Construction Phase services are considered supplemental and will be scoped and negotiated following approval of the BCE.
### MSDGC Qualifications Questionnaire for Ludlow Run Sustainable Source Control #2019-009

**Attachment 6**

**RFP/RFQ Subconsultant Utilization Plan (Statement of Intent to Utilize Firms)**

#### Procurement Description: Request for Qualifications

- **Project Name:** Ludlow Run Sustainable Source Control Project
- **Date Submitted:** 8/7/2019
- **Address:** 4665 Cornell Road, Suite 200, Cincinnati, OH 45241
- **Federal Tax ID:** 37-0373224

#### Contact Person:** Kristen Benick

#### Company Name/Address/Contact Person/Telephone/Email

<table>
<thead>
<tr>
<th>Company Name/Address/Contact Person/Telephone/Email</th>
<th>Federal Tax ID</th>
<th>Describe Exact Type of Work/Supplier</th>
<th>Subcontract Percentage</th>
<th>SBE</th>
<th>MBE</th>
<th>WBE</th>
<th>Non-Snow/MDWDE</th>
<th>First Time Working with SBE Firm (Y/N)</th>
<th>Calculation (For Office Use Only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEC Engineering, Inc. 2798 Central Park Blvd, Mason, OH 45040</td>
<td>31-1679058</td>
<td>Surveying, R/W, and Easements</td>
<td>5%</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>N</td>
</tr>
<tr>
<td>NEAS, Inc. 2800 Corporate Exchange Dr., Suite 240 Columbus, OH 43231</td>
<td>31-1347309</td>
<td>Geotechnical, Material Testing</td>
<td>3%</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>N</td>
</tr>
<tr>
<td>Coldwater Consulting, LLC 46 W. Columbus St., P.O. Box 146 Galena, OH 43021</td>
<td>27-3377013</td>
<td>Green Infrastructure, Regulatory Permitting</td>
<td>6%</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>N</td>
</tr>
<tr>
<td>ETC, Inc. 600 West Loveland Ave., Suite 3A Loveland, OH 45140</td>
<td>31-1405386</td>
<td>Community Outreach / Public Involvement</td>
<td>2%</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>Y</td>
</tr>
</tbody>
</table>

*If the materials or supplies are purchased from an SBE manufacturer, 100% of the cost of the materials or supplies shall count toward SBE goals. If the materials or supplies are purchased from an SBE that is not a manufacturer, 60% of the cost of the materials or supplies shall count toward SBE goals.*

I certify that the above information is true to the best of my knowledge. The company acknowledges and agrees that if awarded the contract, formal agreements will be executed with the companies listed above and the RFP/RFQ Subconsultant Utilization Plan form will be included as part of the contract.

Signature: [Signature]

Print Name: Kristen Benick

Title: Project Manager

Date: 8/7/2019
EXHIBIT F
MSD CONSULTANT TRAVEL REIMBURSEMENT CONTRACT REQUIREMENTS

<table>
<thead>
<tr>
<th>MSD Consultant Travel Reimbursement Contract Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose</strong></td>
</tr>
<tr>
<td><strong>Effective Date</strong></td>
</tr>
</tbody>
</table>

I. TRANSPORTATION

AIR TRANSPORTATION
MSD will reimburse for air fare (including up to first checked bag) for travel authorized by MSD in an amount not to exceed the "YCA" amount as shown on the GSA PDR City Pair Program Search Tool in effect at the time the invoice is submitted.

MSD will not reimburse for:
1. Airline lost ticket application fees
2. Lost, damaged, or stolen checked or carry-on luggage
3. Cost of additional checked bags (in addition to first checked bag) for personal luggage
4. Cancellation fees due to a personal circumstance of the consultant
5. Cost of travel related insurance

Page 1 of 3  MOU Guidelines  5/2018
EXHIBIT F
MSD CONSULTANT TRAVEL REIMBURSEMENT CONTRACT REQUIREMENTS

GROUND TRANSPORTATION

MSD will reimburse for:

1. Cost of consultant-furnished automobile at the rate per mile determined by GSA’s Privately-Owned Vehicle (POV) Mileage Reimbursement Rates for ground transportation, plus associated tolls and parking fees, to and from MSD or an MSD authorized event. For parking and tolls, receipts are required if actual costs exceeds $10.00.
   a) If ground transportation is greater than 300 miles one-way, the reimbursable amount will be based on the lesser of the GSA POV Mileage Reimbursement Rates or the GSA YCA PDR for airfare.

2. If the consultant arrives in Cincinnati by air transportation, MSD will reimburse for actual cost of for-hire ground transportation (i.e., rental car, cab, Uber, Lyft, airport or hotel bus or shuttle and customary tips) plus parking fees and tolls, up to $100/day. Invoice documentation shall include all corresponding expense receipts. If more than one person is traveling from the same consultant location the $100/day maximum rate will apply to the group of travelers.

MSD will not reimburse for:

1. Rental car damage(s)
2. Lost, damaged, or stolen luggage
3. Costs associated with parking tickets, traffic violations, or legal expenses related to traffic violations
4. Cost of travel-related insurance
5. Cancellation fees due to a personal circumstance of the consultant

II. LODGING

MSD will reimburse for:

1. Lodging necessary to complete authorized travel, not exceeding the GSA PDR.
   a. The government or conference rate should always be requested
   b. In the event the government or conference rate exceeds the GSA PDR, the GSA PDR is the maximum allowed reimbursement
   c. The number of nights eligible for reimbursement shall not exceed the number of days required to complete the purpose for which the travel was authorized, plus one additional day if required to accommodate task work schedules

MSD will not reimburse for:

1. Fees associated with a cancellation due to personal circumstances
2. Cost for discretionary hospitality services, e.g., dry-cleaning services, laundry services, long distance telephone, etc.
3. Lost, damaged, or stolen luggage
4. Damages incurred by, from or through lodging
EXHIBIT F
MSD CONSULTANT TRAVEL REIMBURSEMENT CONTRACT REQUIREMENTS

III. MEALS & INCIDENTAL EXPENSES (M&IE)

MSD will reimburse for:
Consultant meals and incidental travel expenses purchased when traveling in an amount based upon receipts, not to exceed the GSA PDR.

IV. NON-REIMBURSABLE TRAVEL-RELATED EXPENSES

MSD will not reimburse for:
1. Travel-related expenses to accommodate early arrival/early departure if not mandatory for and essential to delivery of contract scope
2. Alcohol
3. Personal entertainment
4. Personal recreation
5. Any item(s) not related to the performance of the consultant’s contract scope of services

RECOMMENDED:

Vanessa Smedley, Superintendent, MSD Wastewater Administration

5/9/19

Date

APPROVED AND EFFECTIVE:

Diana R. Christy, Interim MSD Director

5/9/19

Date
CITY OF CINCINNATI
REQUEST FOR CERTIFICATION OF CONTRACT OR AGREEMENT

Department

Metropolitan Sewer District – MSD

Kindly certify that the cost of the work or supplies as shown below is fully covered by unencumbered balance in the fund as shown.

B. Addison x 769

Signature of Department Head or His Designee

Prepared By

MATERIALS, SUPPLIES OR SERVICES

<table>
<thead>
<tr>
<th>Description</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Certification – Arcadis U.S., Inc.</td>
<td>$526,651.00</td>
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Total Certification | $526,651.00

PREVIOUS DOCID

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<th>LN#</th>
<th>AGY</th>
<th>REQ. NO.</th>
<th>LN#</th>
<th>FUND</th>
<th>AGY</th>
<th>ORG</th>
<th>OBJ</th>
<th>JOB PROJ</th>
<th>(ACT)</th>
<th>RPT</th>
<th>CAT</th>
<th>AMOUNT</th>
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<td>7681</td>
<td>10192019</td>
<td>001***</td>
<td>****</td>
<td>$526,651.00</td>
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Liquidations

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<th>Date</th>
<th>Voucher No.</th>
<th>AMOUNT</th>
<th>Total To Date</th>
<th>Date</th>
<th>Voucher No.</th>
<th>AMOUNT</th>
<th>Total To Date</th>
</tr>
</thead>
</table>

For Certification/Stamp

DISTRIBUTION | WHITE - Finance | CANARY - Requisitioner's Copy | PINK - Office Copy