

FIRST READING: 9.13.21
SECOND READING: 9.27.21
THIRD READING: 10.11.21

ORDINANCE NO. 62-21

BY: DAVID W. FURRY

AN EMERGENCY ORDINANCE AUTHORIZING THE MAYOR TO ENTER INTO AN AGREEMENT BETWEEN THE CITY OF ROCKY RIVER AND R2O CONSULTING, LLC. FOR PROFESSIONAL ENGINEERING SERVICES - CALIBRATED SANITARY HYDRAULIC MODELING FOR THE ROCKY RIVER WASTEWATER TREATMENT PLANT (WWTP) IN AN AMOUNT NOT TO EXCEED \$541,181 AS FURTHER DESCRIBED IN EXHIBIT "A"

WHEREAS, The City of Rocky River has determined a need to contract for professional consulting engineering services for the Rocky River WWTP to create a Calibrated Hydraulic Model and Remedial Measures Planning as described herein below; and

WHEREAS, the Mayor, the WWTP Management Committee, and the WWTP Superintendent, have determined that it is in the best interest of the participating Cities to use the unique and specialized services of R2O Consulting, LLC following a Request For Proposal review as described in the agreement attached as Exhibit "A"; and

WHEREAS, included in said agreement is Task 1 – Base Hydraulic Model Development and Data Collection, Task 2 – Flow Data Analysis and Disaggregation, Task 3 – Hydraulic Model Calibration/Validation, Task 4 – Capacity Analysis, Task 5 – Project Management/Meetings/Workshops for an amount not to exceed \$341,181.00, additionally, an as authorized amount not to exceed \$200,000.00 for Project Allowance - Remedial Measures Planning, to yield a Contract Total in the amount not to exceed Five Hundred and Forty One Thousand One Hundred and Eighty One dollars and 00/100 (\$541,181.00) as further explained in Exhibit "A"; and

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF ROCKY RIVER, COUNTY OF CUYAHOGA, STATE OF OHIO:

SECTION 1. That the Mayor of the City of Rocky River is hereby authorized to enter into a contract with R2O Consulting, LLC., 2529 Detroit Avenue, Cleveland, OH 44113, in an amount not to exceed Five Hundred and Forty One Thousand One Hundred and Eighty One dollars and 00/100 (\$541,181.00), as further described in Exhibit "A".

SECTION 2. That the professional consulting engineering services for all authorized tasks in the Calibrated Sanitary Hydraulic Modeling Contract, shall be paid from the Wastewater Treatment Plant Capital Fund.

SECTION 3. That this Ordinance is hereby declared to be an emergency measure necessary for the immediate preservation of public peace, health and safety and for the further reason that services referred to above must be expedited in order to comply with NPDES and funding source requirements, and provided it receives the affirmative vote of two-thirds (2/3) of all members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise, it shall take effect and be in force from and after the earliest period allowed by law.

PASSED: October 11th, 2021

PRESENTED

TO THE MAYOR: October 11th, 2021

TEST:

San G. Pease
SAN G. PEASE
Clerk of Council

James W. Moran
JAMES W. MORAN
President of Council

APPROVED: October 11th, 2021

Pamela E. Bobst
PAMELA E. BOBST
Mayor

San G. Pease
Clerk of Council of the City of Rocky River, Ohio

I, the undersigned clerk of the Council of the City of Rocky River, State of Ohio, do hereby certify that publication of the foregoing ordinance was duly made by posting a true copy thereof in the lobby of the Rocky River City Hall, in accordance with the charter of Rocky River, commencing on the 11th day of October, 20 21.

IN WITNESS WHEREOF I HAVE HEREUNTO SUBSCRIBED MY NAME AND AFFIXED MY OFFICIAL SEAL THIS 11th DAY OF October, 20 21.

U-1 2021 Ordinances

Sharon L. O'Keefe
CLERK OF COUNCIL OF THE CITY OF ROCKY RIVER, OHIO



AGREEMENT FOR CONSULTING SERVICES
BETWEEN Rocky River Wastewater Treatment Plant
AND R2O CONSULTING LLC
FOR Calibrated Sanitary Hydraulic Modeling Services

THIS AGREEMENT is made and entered into on this _____ day of _____, 2021 by and between Rocky River Wastewater Treatment Plant, hereinafter referred to as "Client," and R2O Consulting LLC, an Ohio Limited Liability Company (LLC), hereinafter referred to as "Consultant."

RECITALS:

WHEREAS, Client is authorized to and desires to retain Consultant to provide professional services to develop a calibrated hydraulic model of the sanitary sewer network tributary to the Rocky River wastewater treatment plant;

WHEREAS, Consultant has available and offers to provide personnel and facilities necessary to perform the desired services within the required time; and

WHEREAS, Client desires to retain Consultant to perform the services in the manner, at the time, and for the compensation set forth herein;

NOW, THEREFORE, Client and Consultant agree as follows:

I. DESCRIPTION OF PROJECT

Client and Consultant agree that Project is as described in Exhibit A, entitled "Description of Project," dated June 1, 2021. If, during the course of Project, Client and Consultant agree to changes in Project, such changes shall be incorporated in this Agreement by written amendment.

II. SCOPE OF CONSULTANT SERVICES

Consultant agrees to perform those services described hereafter. Unless modified in writing by both parties, duties of Consultant shall not be construed to exceed those services specifically set forth herein.

A. Basic Services

Consultant agrees to perform those basic services described in Exhibit B entitled "SCOPE OF SERVICES" dated August 18, 2021 (the "Services"). Any tasks not specifically described in Exhibit B are Additional Services.

B. Additional Services

Client shall pay Consultant all fees and costs incurred in performing Additional Services provided the services were either (a) authorized by Client, or (b) required to be performed due to emergency conditions at the project site. Client will be deemed to have authorized the Additional Services if Consultant provides Client with notification that the Additional Services will be performed and Client does not object within fifteen (15) working days after notification. Unless otherwise agreed in writing, Additional Services shall be performed in accordance with Consultant's standard billing rates at the time the Additional Services are performed.

C. Litigation Assistance

Unless specifically stated therein, the Scope of Services does not include assistance to support, prepare, document, bring, defend, or assist in litigation undertaken or defended by Client. All such services required or requested of the Consultant by Client or any third party (except claims between Client and Consultant) will be reimbursed at Consultant's applicable rates for such litigation services.

D. Document Productions

In the event R2O Consulting LLC is requested pursuant to subpoena or other legal process to produce its documents or any other information relating to R2O Consulting LLC's services under this agreement in judicial or administrative proceedings to which R2O Consulting LLC is not a party, Client shall reimburse R2O Consulting LLC at standard billing rates for its time and expenses incurred in responding to such requests.

III. RESPONSIBILITIES OF CLIENT

In addition to payment for the Services performed under this Agreement, Client shall:

1. Assist and cooperate with Consultant in any manner necessary and within its ability to facilitate Consultant's performance under this Agreement.
2. Designate in writing a person to act as Client's representative with respect to this Agreement. Such person shall have complete authority to transmit instructions, receive information, interpret and define Client's policies, make decisions and execute documents on Client's behalf.
3. Furnish Consultant with all technical data in Client's possession including, but not limited to, maps, surveys, drawings, soils or geotechnical reports, and any other information required by, or useful to, Consultant in performance of its Services under this Agreement. Consultant shall be entitled to rely upon the information supplied by Client.
4. Notify Consultant of any known or potential health or safety hazards existing at or near the project site.
5. Provide access to and/or obtain permission for Consultant to enter upon all property, whether or not owned by Client, as required to perform and complete the Services.
6. If Consultant's scope of work includes services during construction, Client will require the construction contractor to indemnify and hold harmless Consultant, its officers, employees, agents, and consultants against claims, suits, demands, liabilities, losses, damages, and costs, including reasonable attorneys' fees and all other costs of defense, arising out of the performance of the work of the contractor, breach of contract, or willful misconduct of the contractor or its subcontractors, employees, and agents.
Client will require the contractor to name Consultant, its directors, officers and employees as additional insureds on the contractor's general liability insurance and/or Owner's and Contractor's Protective policy (OCP), and any builder's risk, or other property insurance purchased by Client or the contractor to protect work in progress or any materials, supplies, or equipment purchased for installation therein.

Client will furnish contractor's certificates of insurance evidencing that Consultant, its officers, employees, agents, and consultants are named as additional insureds on contractor's general liability and property insurance applicable to the Project. Contractor's policies shall be primary and any such insurance carried by the Consultant shall be excess and noncontributory. The certificates shall provide that Consultant be given 30 days' written notice prior to any cancellation thereof.

IV. AMERICANS WITH DISABILITIES ACT

Any other provision of this Agreement to the contrary notwithstanding, unless otherwise specified in the Scope of Services, Client shall have sole responsibility as between Client and Consultant for compliance with the Americans With Disabilities Act ("ADA") 42 U.S.C. 12101 et. Seq. and the related regulations.

V. AUTHORIZATION AND COMPLETION

In signing this Agreement, Client grants Consultant specific authorization to proceed with work specified in Exhibit B. The estimated time for completion is within ____ calendar days of the date Consultant receives authorization to proceed with the work from Client. Consultant shall use its best efforts to perform the work specified in Exhibit B within the estimated time.

VI. COMPENSATION

A. Amount

For the Services described in Exhibit B, Client agrees to pay, and Consultant agrees to accept compensation in accordance with Exhibit C. Where Consultant has provided Client with a breakdown of the total compensation into subtasks, such breakdowns are estimates only. Consultant may reallocate compensation between tasks, provided total compensation is not exceeded without the approval of Client.

B. Payment

As long as Consultant has not defaulted under this Agreement, Client shall pay Consultant within 30 days of the date of Consultant's invoices for services performed and reimbursable expenses incurred under this Agreement. If Client has reason to question or contest any portion of any such invoice, amounts questioned or contested shall be identified and notice given to Consultant, within 15 days of the date of the invoice. Any portion of any invoice not contested shall be deemed to be accepted and approved for payment and shall be paid to Consultant within 30 days of the date of the invoice. Client agrees to cooperate with Consultant in a mutual effort to resolve promptly any contested portions of Consultant's invoices.

VII. RESPONSIBILITY OF CONSULTANT

A. Standard of Care—Professional Services

Subject to the express provisions of the agreed scope of work as to the degree of care, amount of time and expenses to be incurred, and subject to any other limitations contained in this Agreement, Consultant shall perform its Services in accordance with generally accepted standards and practices customarily utilized by competent engineering firms in effect at the time Consultant's Services are rendered. Consultant does not expressly or impliedly warrant or guarantee its Services.

B. Reliance upon Information Provided by Others

If Consultant's performance of services hereunder requires Consultant to rely on information provided by other parties (excepting Consultant's subcontractors), Consultant shall not independently verify the validity, completeness, or accuracy of such information unless otherwise expressly engaged to do so in writing by Client.

C. Consultant's Opinion of Probable Costs (Cost Estimate)

Client acknowledges that construction cost estimates, financial analyses and feasibility projections are subject to many influences including, but not limited to, price of labor and materials, unknown or latent conditions of existing equipment or structures, and time or quality of performance by third parties. Client acknowledges that such influences may not be precisely forecasted and are beyond the control of Consultant and that actual costs incurred may vary substantially from the estimates prepared by Consultant. Consultant does not warrant or guarantee the accuracy of construction or development cost estimates.

VIII.

CONSULTANT'S WORK PRODUCT

A. Scope

Consultant's work product which is prepared solely for the purposes of this Agreement, including, but not limited to, drawings, test results, recommendations and technical specifications, whether in hard copy or electronic form, shall become the property of Client when Consultant has been fully compensated as set forth herein. Consultant may keep copies of all work product for its records.

Consultant and Client recognize that Consultant's work product submitted in performance of this Agreement is intended only for the project described in this Agreement. Client's alteration of Consultant's work product or its use by Client for any other purpose shall be at Client's sole risk.

B. Electronic Copies

If requested, solely as an aid and accommodation to Client, Consultant may provide copies of its work product documents in computer-readable media ("electronic copies," "CADD"). These documents will duplicate the documents provided as work product, but will not bear the signature and professional seals of the registered professionals responsible for the work. Client is cautioned that the accuracy of electronic copies and CADD documents may be compromised by electronic media degradation, errors in format translation, file corruption, printing errors and incompatibilities, operator inexperience and file modification. Consultant will maintain the original copy, which shall serve as the official, archived record of the electronic and CADD documents. Client agrees to hold harmless, indemnify and defend Consultant from any claims arising out of or relating to any unauthorized change or alteration of electronic copies and CADD documents.

IX. INDEMNIFICATION

A. Indemnification of Client

Consultant agrees to indemnify and hold Client harmless from and against any liability to the extent arising out of the negligent errors or negligent omissions of Consultant, its agents, employees, or representatives, in the performance of Consultant's duties under this Agreement.

B. Consequential Damages

Regardless of any other term of this Agreement, in no event shall either party be responsible or liable to the other for any incidental, consequential, or other indirect damages.

X. CONSULTANT'S INSURANCE

Consultant shall procure and maintain the following minimum insurance:



1. Commercial general liability insurance, including personal injury liability, blanket contractual liability and broad-form property damage liability coverage. The combined single limit for bodily injury and property damage shall be not less than \$1,000,000.
2. Automobile bodily injury and property damage liability insurance covering owned, non-owned, rented, and hired cars. The combined single limit for bodily injury and property damage shall be not less than \$1,000,000.
3. Statutory workers' compensation and employer's liability insurance as required by state law.
4. Professional liability insurance. The policy limit shall be not less than \$1,000,000.

Client shall be named as additional insured on policies 1 and 2 above. Upon request, a certificate of insurance will be provided to Client with a 30-day written notice in the event the above policies are cancelled.

XI. CONFIDENTIALITY

Consultant agrees it will maintain the confidentiality of material it receives from Client which Client has clearly identified as "Confidential" and will not disclose, distribute, or publish to any third party such confidential information without the prior permission of Client. Notwithstanding the foregoing, Consultant shall have no confidentiality obligation with respect to information that:

- 1) becomes generally available to the public other than as a result of disclosure by Consultant or its agents or employees;
- 2) was available to Consultant on a non-confidential basis prior to its disclosure by Client;
- 3) becomes available to Consultant from a third party who is not, to the knowledge of Consultant, bound to retain such information in confidence.

In the event Consultant is compelled by subpoena, court order, or administrative order to disclose any confidential information, Consultant shall promptly notify Client and shall cooperate with Client prior to disclosure so that Client may take necessary actions to protect such confidential information from disclosure.

XII. SUBCONTRACTS

Consultant shall be entitled, to the extent determined appropriate by Consultant, to subcontract any portion of the services to be performed under this Agreement subject to client's advance written consent.

XIII. SUSPENSION OF WORK

Work under this Agreement may be suspended as follows:

1. By Client. By written notice to Consultant, Client may suspend all or a portion of the Work under this Agreement if unforeseen circumstances beyond Client's control make normal progress of the Work impracticable. Consultant shall be compensated for its reasonable expenses resulting from such suspension including mobilization and demobilization. If suspension is greater than 30 days, then Consultant shall have the right to terminate this Agreement in accordance with Article XVI, Termination of Work.
2. By Consultant. By written notice to Client, Consultant may suspend the Work if Consultant reasonably determines that working conditions at the Site (outside Consultant's control) are unsafe, or in violation of applicable laws, or in the event Client has not made timely payment in accordance with Article VI, Compensation, or for other circumstances not caused by Consultant that are interfering with the normal progress of the Work. Consultant's suspension of Work hereunder shall be without prejudice to any other remedy of Consultant at law or equity.

XIV.

TERMINATION OF WORK

A. This Agreement may be terminated by Client as follows: (1) for its convenience on 30 days' notice to Consultant, or (2) for cause, if Consultant materially breaches this Agreement through no fault of Client and Consultant neither cures such material breach nor makes reasonable progress toward cure within 15 days after Client has given written notice of the alleged breach to Consultant.

B. This Agreement may be terminated by Consultant as follows: (1) for cause, if Client materially breaches this Agreement through no fault of Consultant and Client neither cures such material breach nor makes reasonable progress toward cure within 15 days after Consultant has given written notice of the alleged breach to Client, or (2) upon five days' notice if work under this Agreement has been suspended by either Client or Consultant for more than 30 days in the aggregate.

C. Payment upon Termination

In the event of termination, Consultant shall perform such additional work as is reasonably necessary for the orderly closing of the Work. Consultant shall be compensated for all work performed prior to the effective date of termination, plus work required for the orderly closing of the Work, including: (1) authorized work performed up to the termination date plus termination expenses, including all labor and expenses, at Consultant's standard billing rates, directly attributable to termination; (2) all efforts necessary to document the work completed or in progress; and (3) any termination reports requested by Client.

Except for termination of Consultant by Client for cause, Consultant shall also receive a termination fee equal to 15 percent of the total compensation yet to be earned under existing authorizations at the time of termination to account for Consultant's rescheduling adjustments, reassignment of personnel, and related costs incurred due to termination.

XV. ASSIGNMENT

This Agreement is binding on the heirs, successors, and assigns of the parties hereto. Except as otherwise set forth under Article VIII, Assignment of Tasks to Affiliates, this Agreement may not be assigned by Client or Consultant without prior, written consent of the other.

XVI. NO BENEFIT FOR THIRD PARTIES

The services to be performed by Consultant are intended solely for the benefit of Client, and no benefit is conferred on, nor contractual relationship established with any person or entity not a party to this Agreement. No such person or entity shall be entitled to rely on Consultant's services, opinions, recommendations, plans, or specifications without the express written consent of Consultant. No right to assert a claim against the Consultant, its officers, employees, agents, or consultants shall accrue to the construction Contractor or to any subcontractor, supplier, manufacturer, lender, insurer, surety, or any other third party as a result of this Agreement or the performance or nonperformance of the Consultant's services hereunder.

XVII. FORCE MAJEURE

Consultant shall not be responsible for delays caused by circumstances beyond its reasonable control, including, but not limited to (1) strikes, lockouts, work slowdowns or stoppages, or accidents, (2) acts of God, (3) failure of Client to furnish timely information or to approve or disapprove Consultant's instruments of service promptly, and (4) faulty performance or nonperformance by Client, Client's independent consultants or contractors, or governmental agencies. Consultant shall not be liable for damages arising out of any such delay, nor shall the Consultant be deemed to be in breach of this Agreement as a result thereof.

XVIII. INTEGRATION

This Agreement represents the entire understanding of Client and Consultant as to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered herein. This Agreement may not be modified or altered except in writing signed by both parties. Any purchase order issued by Client, whether or not signed by Consultant, and any terms and conditions contained in such purchase order which are inconsistent with this Agreement shall be of no force and effect.

XIX. SEVERABILITY

If any part of this Agreement is found unenforceable under applicable laws, such part shall be inoperative, null, and void insofar as it conflicts with said laws, but the remainder of this Agreement shall be in full force and effect.

XX. CHOICE OF LAW/JURISDICTION

This Agreement shall be administered and interpreted under the laws of the State of Ohio. Jurisdiction of litigation arising from the Agreement shall be in that state.

XXI. ATTORNEYS' FEES

In the event either party commences legal proceedings against the other, then the prevailing party shall, in addition to any other recovery, be entitled to recover its reasonable attorneys' fees and all other costs of such proceeding.

XXII. NOTICES

All notices required under this Agreement shall be delivered by facsimile, personal delivery or mail and shall be addressed to the following persons:

Kellie C. Rotunno
Project Manager
R2O Consulting LLC
11215 Edgewater Drive
Cleveland, OH 44102

[Name]
[Title]
[Client's Name]
[Address]
Fax: [number]

Notice shall be effective upon delivery to the above addresses. Either party may notify the other that a new person has been designated by it to receive notices, or that the address or Fax number for the delivery of such notices has been changed, provided that, until such time as the other party receives such notice in the manner provided for herein, any notice addressed to the previously-designated person and/or delivered to the previously-designated address or Fax number shall be effective.

XXIII. AUTHORIZATION

The persons executing this Agreement on behalf of the parties hereto represent and warrant that the parties have all legal authority and authorization necessary to enter into this Agreement, and that such persons have been duly authorized to execute this Agreement on their behalf.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

R2O Consulting LLC

Rocky River Wastewater Treatment Plant

Signature _____

Signature _____

Printed Name _____

Printed Name _____

Title _____

Title _____

Federal Tax ID number: 81-5380057



WWTP PROFESSIONAL ENGINEERING SERVICES -
Calibrated Hydraulic Modeling

Exhibit A – Description of Project



CITY OF ROCKY RIVER WASTEWATER TREATMENT PLANT (RRWWTP)

REQUEST FOR PROPOSAL:

PROFESSIONAL ENGINEERING SERVICES - CALIBRATED HYDRAULIC MODELING

Statements of Proposals are being sought by the City of Rocky River WWTP for the development and calibration of a hydraulic model for the sewershed tributary to the RRWWTP.

BACKGROUND

Following a No Feasible Alternative (NFA) study submitted in 2019 to Ohio EPA, the RRWWTP was asked to perform a flow study in addition to developing a system-wide hydraulic model to assess collection system capacity issues for both dry and wet weather flow conditions. The RRWWTP plant has an average design flow of 22.5 MGD for treatment to four communities: Bay Village, Fairview Park, Rocky River, and Westlake. All the communities have a separate sanitary and storm collection system. Wet weather flows at the plant range from 60 to over 130 MGD depending on the rain event.

The flow study was performed over the course of four months in 2020. Data collection was performed by ADS Environmental Services with oversight by Hazen and Sawyer through a series of 54 flow meters and 5 rain gauges positioned throughout the collections system. The WWTP is now looking for a firm to use this data to develop a calibrated hydraulic model which will drive decision making for both the contributing communities and WWTP. This model will be used in conjunction with WWTP capital improvements to develop an integrated approach between the surrounding communities and the WWTP to reduce/eliminate sanitary flow bypasses.

PROPOSAL DUE DATE & REQUIREMENTS

Any proposal submitted as a result of this Request for Proposal (RFP) shall be binding on the proposer for SIXTY-(60) calendar days following the specified opening date. Any proposal for which the proposer specifies a shorter acceptance period may be rejected.

Proposals are a public document under the Ohio Open Records Law (OORL), except as to information that may be treated as confidential as an exception to disclosure under the OORL. If you cannot agree to this standard, please do not submit your proposal.

All information that is to be treated as confidential and/or proprietary must be **CLEARLY** identified, and each page containing confidential and/or proprietary information, in whole or in part, must be stamped and/or denoted as **CONFIDENTIAL** by the proposer, in bold, in a font of at least 12-point type, in the upper right-hand corner of the page. All information not so denoted and identified shall be subject to disclosure by RRWWTP.

All costs incurred by the proposer associated with proposal preparations and subsequent interviews and/or negotiations, which may or may not lead to 3 of 16 execution of an agreement, shall be borne entirely and exclusively by the proposer.

The successful proposer shall comply with all applicable federal, state and local governmental laws, rules, regulations and orders in the performance of its duties under this Agreement.

The successful proposer shall be duly authorized and licensed to perform the duties herein described in each jurisdiction in which it will act and, in furtherance thereof, it will contract only with such third parties as are also duly authorized and licensed.

If the proposer discovers any ambiguity, conflict, discrepancy, omission or other error in the RFP, it shall immediately notify RRWWTP of such error in writing and request modification or clarification of the document. The proposer is responsible for clarifying any ambiguity, conflict, discrepancy, omission or other error in the RFP or it shall be deemed waived. All questions or requests for clarification must be submitted to Nick Barille at the RRWWTP via email nbarille@rrcity.com . The last date that questions will be accepted is Wednesday, March 31, 2021 at 4:00 PM.

Any revision(s) to this RFP will be issued and distributed as addenda. All addenda will become part of this RFP. Proposers are specifically directed to contact RRWWTP Superintendent, Assistant Superintendent, or Administrative Assistant. Proposer are not to contact member city personnel for meetings, conferences, or technical discussions related to this request unless approved by RRWWTP Superintendent. Failure to adhere to this policy may be grounds for rejection of proposals.

No verbal interpretation made to any respondent concerning this RFP shall be binding on the RRWWTP unless repeated into writing and distributed as addenda by the RRWWTP. It shall be the respondent's responsibility to acknowledge receipt of addenda and ascertain that its proposal includes all addenda.

This Request for Proposal provides basic information regarding the RRWWTP's requirements. Services which are not specifically requested in this Request for Proposal, but which are necessary to provide the functional capabilities proposed by the proposer, shall be included in this proposal.

The RRWWTP reserves the right to waive or modify any requirement under the RFP or to accept or reject any proposal, if the RRWWTP determines such action to be in the best interest of the RRWWTP, the System, or the public. In evaluating the proposals, the RRWWTP shall exercise its best judgment and discretion in determining which proposal is most responsive to the requirements of this RFP, and constitutes the best proposal, even if that proposal may not present the lowest price.

PROPOSAL CONTENT

One original and three (3) copies of the Statement of Proposal (SOP), and one digital copy (PDF with bookmarks) on a USB drive or via digital upload should be submitted. All submissions should be a maximum of 21 printed pages double sided including cover. Proposals are to be submitted no later than April 5, 2021 at 12 PM.

The following information shall be included:

1) **Executive Summary**

The prospective Consultant should provide a summary that clearly addresses their specific understanding of the project requirements, their specific expertise, and their ability to meet the resource and scheduling needs of the project.

2) **Information Specific to the Consultant**

- a) Basic Information: Name of the Firm, Owners, and address of Firm (both corporate office and location of office where work will be completed)
- b) History of the Firm including number of years in business, additional office locations, and number of employees by discipline

- c) Types of services offered
 - d) Firm Qualifications: The selected firm must have completed projects of similar scope and size. The firm shall demonstrate at least 5 years of experience and 5 projects using the dynamic hydraulic software (PC-SWMM1) on a system of similar size or larger than the Ricky River sanitary sewer system using continuous calibration utilizing groundwater infiltration approaches to provide for proper simulation of seasonal and antecedent moisture conditions. The Lead Project Modeler shall have at least 5 years of experience using groundwater infiltration simulation approaches. The Engineer and Lead Project Modeler shall also demonstrate experience in the following:
 - i) Modeling of treatment plant headworks, unique structures, and control gates
 - ii) Use of Groundwater Infiltration approaches to simulate antecedent moisture conditions and long tail infiltration during calibration
 - iii) Analysis of wet weather control alternatives, including I/I removal solutions
 - iv) Conducting long-term continuous calibration and simulations
 - v) Rainfall analysis
 - vi) Development and application of QA/QC procedures for model development, calibration,
 - vii) Familiarity with defining and evaluating SSO levels of controlProvide the following for the 5 projects of similar scope:
 - i) Project Title
 - ii) Proposed team members involved
 - iii) Description of Project
 - iv) Client Name
 - v) Client Location
 - vi) Client Contact information
 - vii) Year Completed
 - viii) Collection System Description
 - ix) Project Estimated Cost and Project Final Cost
 - e) Project Team Qualifications: Submit resume and office location of proposed Project Manager. Submit resumes and office locations of key staff members and or sub consultants proposed to work on the project (Not Included in Page Count)
 - f) Types of projects currently underway and ability to handle this project
- 3) **Technical approach to implementation of this project:**
- a) How will your firm interact with WWTP employees, other consulting engineers, regulators, and schedule to meet project requirements.
 - b) What types of technological approaches would the firm propose for meeting the goals of the project
 - c) How might the firm make the project most efficient in both costs and time

4) **Pricing:**

- a) Include a price proposal page in the submission. Estimate the numbers of hours for each personnel and show the unit rate for each.
- 5) A copy of a Standard Agreement, typical of those used by the prospective Consultant Firm, shall be attached as an exhibit separate from the SOP (Not Included in page count)

SCOPE OF SERVICES

Rocky River WWTp Collection System Model Development and Calibration

The Consultant/Contractor shall provide the following services:

Task 1- Base Hydraulic Model Development and Data Collection

- The existing model, developed by URS in 2011, shall be assessed to determine if the extents, or portions thereof, are representative of existing conditions and can be an additional data source to develop a new model using the most up-to-date version of PC-SWMM.
- The model shall include, at minimum, all gravity sewers 12-inches in diameter and larger as well as all upstream and downstream tributary pump stations within the entire collection system tributary to the Rocky River WWTp. Gravity sewers less than 12-inches in diameter, along with tributary pump stations and force mains shall be included where necessary to evaluate known or suspected capacity restrictions, or as determined by the Owner. The model shall include sufficient detail of the WWTp headworks to accurately represent influent hydraulics that may impact flows and levels within the influent interceptors.
- The hydraulic model shall be developed using available data such as previous models, record/as built drawings, GIS databases, sewer maps, CCTV data, pump curves, water consumption data, and census population data. Any additional necessary data shall be identified by the Consultant/Contractor but will be gathered and obtained by the Cities or a separate consultant.
- Identify large water users where additional information is needed such as hours of operation or other water usage pattern information.
- The Consultant/Contractor shall perform a data gap analysis and profile reconciliation to determine if any field investigations, including but not limited to field survey and pump station drawdown testing, are necessary to resolve missing or suspect model attribute discrepancies and/or connectivity issues found during the model development process.
- Model subcatchments shall include all areas tributary to the collection system, typically range from 5 to 30 acres, and shall be no larger than 30 acres in size unless submitted in writing and agreed upon by the Owner.
- All pump stations shall include actual wet well dimensions, control settings, as well as actual pump curves for all pumps. Hydraulic losses within the pump station through discharge piping and valves up to the connection to the force main shall be represented.
- Force main diameters shall include actual interior diameters based on actual pipe materials and not nominal sizes.
- No model links shall be modeled as dry (i.e., all upstream boundary nodes shall have flows loaded to them).
- The base hydraulic model shall be submitted to the City for review and shall include at a minimum the physical model network and all applicable attributes, proposed model subcatchment delineations and tributary population and land use distribution.

Task 2 - Flow Data Analysis and Disaggregation

- The Consultant/Contractor shall review available flow (54 area/velocity monitors) and rainfall (5 gauges) data for potential data quality concerns that may interfere with accurate model calibration or data analysis. Additional supplemental rainfall data from available Northeast Ohio Regional Sewer Districts available rain gauges may also be used. Potentially inaccurate data shall be flagged and provided to the Owner prior to any additional flow data analysis or calibration.

- The Consultant/Contractor shall analyze and disaggregate the entirety of available and usable observed flow data into its varying components for each meter. This includes dry weather sanitary flow, base seasonal groundwater infiltration (GWI), and rainfall derived infiltration and inflow (RDII). Develop flow-based statistics for each meter and municipality including average sanitary flow, GWI per inch diameter mile of pipe by month, R-values (i.e. percentage rainfall ingress method) for each event larger than 0.25 inches, and wet weather peaking factors. Consultant shall calculate R-values using the area from subcatchments delineated in Task 1. Consultant shall use Steven-Schutzbach method in determining ground water infiltration.
- The Consultant/Contractor shall submit a brief Technical Memorandum summarizing the flow data analysis, flow-based statistics, and shall include thematic maps presenting results.

Task 3- Hydraulic Model Calibration

- The Consultant/Contractor shall calibrate the model to match the entire time series (except for snow and snow melt) during both dry and wet weather conditions and shall include components for fixed runoff response as well as groundwater infiltration to facilitate continuous calibration to various antecedent moisture conditions.
- The Consultant/Contractor shall utilize the calibration/verification goals established by the Water Planning User's Group (WaPUG) Code of Practice for the hydraulic Modeling of Sewer Systems. If certain locations cannot achieve the calibration/verification targets, provide a detailed explanation such as flow and rainfall data quality issues. The Consultant/Contractor shall identify locations of, and provide to the Cities, any necessary additional field investigations necessary to evaluate conditions or inaccuracies that may be interfering with proper model calibration.
- The Consultant/Contractor shall present the model calibration results to the City in a Calibration Workshop.
- The Consultant/Contractor shall submit a brief Model Calibration Technical Memorandum summarizing the model calibration and shall include all steps related to the development, calibration, and verification of the hydraulic model. The Technical Memorandum shall also include all calibration plots and statistics.

Task 4- Capacity Analysis

- The Consultant/Contractor shall perform a capacity analysis by running synthetic storm simulations in the calibrated hydraulic model with 2, 5, and 10-year return intervals and 6-hour and 24-hour durations under wet-antecedent (saturated groundwater) conditions. The rainfall hyetographs and total depth for each synthetic storm shall be provided to the Consultant/Contractor.
- The Consultant/Contractor shall analyze historical rainfall to identify and then simulate a typical year continuous simulation.
- Provide thematic mapping summary of model results including locations of model-simulated capacity issues under each condition such as surcharge, potential basement flooding, and/or SSOs. Compare model results to available historical data.
- The Consultant/Contractor shall present the capacity assessment results to the City in a Capacity Assessment Workshop.
- The Consultant/Contractor shall provide to the City an electronic copy of the calibrated hydraulic model as well as model results from the capacity analysis including GIS-based model output for all pipes and manholes.

Task 5 - Remedial Measures Planning

- Level of Service – Consultant/Contractor shall work with the City to identify the conditions that trigger an improvement as well as the target performance of any remedial measure for each storm return period.

- The Consultant/Contractor shall develop, size, and provide Class IV level costs for remedial measures including inflow/infiltration source reduction, capacity enhancement (replacement or parallel relief sewers) and/or equalization storage in areas where conditions trigger an improvement Develop up to three remedial measure alternatives for each storm return period. Each alternative will comprise a combination source reduction, relief/replacement sewers, and equalization. This will result in a total of 9 alternatives per City. The remedial measures for each storm return period shall meet performance requirements under both 6- and 24-hour.
- The Consultant/Contractor shall present the alternatives to the Owner and respective City for consensus selection of the recommended alternative.
- The Consultant/Contractor shall develop a prioritized implementation plan based on factors such as public health risk, environmental risk, cost/benefit, and other factors.
- The Consultant/Contractor shall prepare a Remedial Measures Technical Memorandum summarizing the Capacity Assessment, Remedial Measures analysis, consensus recommendation, and priority phasing plan along with Class IV planning level costs.

Task 6 - Project Management/Meetings/ QA-QC

The Consultant shall coordinate with the Owner on a regular basis and provide updates as to the progress of the modeling effort on a regular basis.

- Provide brief written, monthly updates on the progress of the current project task(s).
- Conduct monthly progress meetings with the Owner during the 12-month duration.
- Conduct 3 workshops with the Owner to review model and progress.
- Conduct QA/QC of modeling effort throughout the duration of the model development and before issuing all Technical Memorandums.

SELECTION CRITERIA

The City will rank respondents based on the following:

- Project Understanding
- Conformance to the requirements of this solicitation
- Firm and Individual Qualifications
 - Firm's number of years in business
 - Firm's background and experience on similar projects
 - Experience of proposed personnel on similar projects
 - Team Leads
 - Other Project Resource Personnel
- Proximity to Rocky River
- Capacity to Perform Work
 - Ability to meet schedule
 - Resources outside of the proposed team
 - Discussion of technical approach
- Past References
 - Quality of Deliverables

- Technical Innovation
- Meeting Schedules and Deadlines
- Controlling Costs/meeting budgets
- Communication/Coordination
- Past Performance on projects for the Rocky River Wastewater Treatment Plant and/or the owner cities
- Fee Schedule

It is the City's intention to negotiate a contract with the firm highest ranked based on this SOP. Alternately, the City at its sole discretion may request of the three highest scoring firms to provide a presentation and participate in a discussion intended to better clarify their experience, approach, etc. The city will then select a firm based on the combination of both portions of the selection process. If the city is unable to negotiate an acceptable contract with the highest rated firm it will notify the firm of the rejection of the proposal, and cease consideration of award of contract to the firm. The City will then request a price proposal from the next highest rated firm for consideration. This process may be repeated until such time as the City awards the Contract to a firm or rejects all proposals. Because there are timelines established with the Ohio EPA, proposers are asked to be prepared to negotiate a contract in the two week period following the submission timeline.

PRE-PROPOSAL MEETING

An informational meeting for consultants will be held via Zoom:

When: **Tuesday, March 30, 2021 10:00 AM**

Register in advance for this meeting through email mflachbart@rrcity.com & cc: nbarille@rrcity.com:

<https://rrcity.zoom.us/j/93832655865>

After registering, you will receive a confirmation email containing information about joining the meeting.

Deadline for Submission

April 5, 2021 at 12:00 PM

Submissions are to be addressed:

Rocky River Wastewater Treatment Plant
Attn: Nicholas Barille
21012 Hilliard Boulevard
Rocky River, OH 44116

The proposals should be marked:

RFP, WWTP: PROFESSIONAL ENGINEERING SERVICES - Calibrated Hydraulic Modeling

Exhibit B – Scope of Services

Date: August 18, 2021

Task 1 – Base Hydraulic Model Development and Data Collection

Task 1.1 Existing Model(s) Review

R2O will review the existing, available hydraulic models, for each of the four communities, including the following pre-existing models:

- 2011 Hydraulic Model (URS)
- 2021 Bay Village sanitary Model (Hazen & Sawyer)
- Fairview Park Model (BV)
- Rocky River Model (AECOM)

Task 1.2 Existing Data Collection and Review

R2O will review the existing data set to establish its sufficiency for building out the hydraulic model for Fairview Park, Westlake, and Rocky River. R2O has assumed that the recently developed and calibrated model for Bay Village will be sufficient and no additional information will be required for the build-out of the model for this community. Existing data sources to be reviewed by R2O, and provided by others, include:

- Existing GIS data for the wastewater collection system (pipes with diameter greater or equal to 12 inches)
- Record/as-built drawings, sewer maps,
- CCTV data
- Available pump operational records, including SCADA Data, run times, drawdown testing, and pump curves for the following lift stations:
 - Westlake – 1
 - Fairview Park – 1
 - Rocky River – 2 (excluding 3 grinder pump stations)
- Drinking water consumption data
- Census tract population data
- Local road and stormwater flooding records
- Local basement flooding data
- Sewer maintenance problem areas

Task 1.3 Data Gap Analysis

Upon completion of tasks 1.1 and 1.2, R2O assess the sufficiency of the existing data set and identify any critical data gaps that may be required to successfully build-out the complete and reliable sanitary hydraulic model. R2O has assumed that missing critical data pieces can be collected by community engineers, or others, and provided to the team within one month of request/identification of the data gaps. If supplemental data collection efforts by communities extend beyond this one month time frame, RR WWTP recognizes that project schedule impacts will result.

Task 1.4 Model Updates

Data from existing models listed in Task 1.1 will be imported into PCSWMM v. 7.3 SWMM 5.1.015 engine, the most up-to-date version of PCSWMM. Model asset source data will be maintained within the model's asset description. Pump stations will be parameterized to represent actual wet well dimensions, control settings, and pump curves. Hydraulic losses within the pump station through discharge piping and valves up to the connection to the force main shall be represented in the model based upon information provided in as-built drawings. Model sewersheds will be developed to be an average of approximately 15 acres. Subcatchment extents will be delineated as a traditional sewershed using parcel data and the collection system network.

Task 1 Deliverables:

- Data gap analysis/Additional Data Request Memorandum
- Baseline Hydraulic Model in PCSWMM

Task 2 – Flow Data Analysis and Disaggregation

Task 2.1 Flow Monitoring Data Review

To better understand the intricacies of the system as a whole and by community, flow-based statistics will be developed for each watershed and municipality. R2O will review existing flow monitoring data provided by Rocky River WWTP for 45 flow meters. The data will be reviewed within the context of the updated hydraulic model.

Data from 45 meters will be reviewed for signal continuity (velocity and depth), as well as hydraulic response to wet-weather events. Meter data across the flow monitoring period will be presented in a tabular format to identify time periods with the most reliable flow data.

Scattergraphs depicting meter responses during wet-weather will be generated for storm events that fall within the minimum acceptable intensity (0.25 inches/hour) and volume (0.2 inches). From this data, only the most reliable wet-weather events will be identified for use in the Task 3 model calibration efforts.

Task 2.2 Rain Gauge Data Review

R2O will review available rain gage data for both quality and consistency from the flow monitoring period. Storm events that are large enough to be used in wet-weather model calibration will be flagged to identify periods where flow monitoring data must be closely reviewed. In addition, dry-weather periods will be identified for the purpose of determining dry weather flow (DWF) days which will be used in Task 2.3 for flow data disaggregation. For the purpose of this study, R2O will define dry weather days as periods without measurable rainfall in the preceding 48-hour period accompanied by flows at the WWTP not exceeding 14 MGD.

Task 2.3 Flow Data Disaggregation

The R2O team will disaggregate the flow data into its varying components for each meter using HazenQ. This flow disaggregation includes separating total system flows into:

- Dry Weather Flows (DWF): Including subcomponents of sanitary flow and dry weather I/I (DWII) of which base seasonal groundwater infiltration (GW1). Sanitary flows will be estimated using winter retain water usage records where available, and DWII will be calculated as the difference between DWF and sanitary flows.
 - Wet Weather Flows (WWF), including rainfall derived infiltration and inflow (RDII).
- The DWII portion of dry weather flow will be further examined on a monthly and seasonal basis to determine varying diurnal and seasonal patterns in DWII. Based upon our analysis of DWII, R2O will develop the following data for the flow monitoring period:
- Average sanitary flow.
 - DWII expressed as 1) DWII by area, and 2) GW1 per inch diameter mile of pipe by month.
 - Wet weather peaking factors
 - R-values (i.e. percentage rainfall ingress method) for each event larger than 0.25 inches using the area from delineated subcatchments in Task 1.
 - Analysis of the GW1 and Base Infiltration (BI) using HazenQ which takes into account the Steven-Schutzbach method.

Task 2.4 Technical Memorandum

R2O will provide a brief Technical Memorandum summarizing the flow data analysis and flow-based statistics utilizing thematic maps to present the results.

Task 2 Deliverables:

- Flow Monitoring Technical Memorandum

Task 3 – Hydraulic Model Calibration

Task 3.1 Model Calibration/Validation

R2O will use existing flow monitoring data from 45 flow monitors (excluding 9 meters from Bay Village), as provided by RR WWTP for the calibration of the model. The two major components of total flow in a sewer system consists of Dry Weather Flows (DWF) and Wet Weather Flows (WWF). Therefore, model calibration will be performed as a two-step process:

- 1) Calibrate DWF based on identified components for DWF from meter data review.
- 2) Calibrate WWF using the RTK method based on rainfall and RDII flow meter response.

Dry Weather Flow (DWF) Calibration

DWF will be represented in the model using three components: 1) average sanitary flow, 2) baseflow infiltration rate, and 3) diurnal peaking factors. Identified dry weather days during processing of meter data, will be used during DWF calibration. DWF will be represented at the subcatchment loading node or in the very upstream node of a pipe segment to ensure no pipe links are modeled as dry. The daily DWF hydrographs will be overlaid to create a minimum and maximum boundary envelope for weekdays and weekends in accordance with the Water Planning User's Group (WaPUG) Code of Practice, now known as Urban Drainage Group. Monthly patterns will be generated to simulate DWII. Calibration of DWF is an iterative process of adjusting the three components of DWF, listed above, until model-estimated responses fall within the established boundary.

Wet Weather Flow (WWF) Calibration

The RTK Method will be used to calibrate the wet weather response recorded by the flow meters. The RTK method is a standard method for modeling the RDII response for separated sanitary sewer systems. Three triangular unit hydrographs are used to estimate the actual RDII hydrographs derived from observed rainfall and sewer flow data. R2O will use the Thiessen Polygon method to distribute rainfall data from the five rain gauges across the four member communities.

All rainfall events with a peak hourly rainfall intensity greater than or equal to 0.25 inches will be used and held to the WaPUG criteria for wet weather calibration. WaPUG calls for a minimum of three rainfall events for calibration where two out three must meet calibration criteria. Since it is anticipated to have more than three rainfall events, a meter shall be considered calibrated when 66% of the events meet the WaPUG calibration criteria. Events with rainfall depths smaller than 0.2 inches will be used for development of initial abstraction numbers for each of the 3-unit Hydrographs used in the RTK method.

During calibration, the model and meter hydrographs should closely follow one another in both shape and in magnitude, until the flow has substantially returned to dry weather flow rates. The model hydrograph will also be calibrated to match the time of peaks and troughs of the meter data, as well as the peak depth, peak flow, and flow volume in accordance with the WaPUG Calibration Criteria.

Task 3.2 Calibration Technical Memorandum

The R2O Team will submit a brief Model Calibration Technical Memorandum summarizing the model calibration including all steps related to the development, calibration, and verification of the hydraulic model, as well as all calibration plots and statistics. The results of this effort will be presented to the RRWWTP in a workshop included as part of Task 5. Model calibration results for each meter will be summarized in accordance with the WaPUG standards. R2O will develop presentation materials and handouts for workshop participants

Assumptions: R2O assumes that the referenced 2021 Bay Village Hydraulic model recently built by Hazen and Sawyer is sufficiently calibrated for use on this project.

Task 3 Deliverables:

- Calibration Technical Memorandum
- Calibration Workshop Materials

Task 4 – Capacity Analysis

Task 4.1 Two-year Storm (6-hour/24-Hour) Simulations

Upon completion of the model calibration, R2O will utilize the model to perform capacity analysis and determine the level of service (LOS), including BBU and SSOs for the 2-year return interval storm for both 6-hour and 24-hour durations under wet-antecedent (saturated groundwater) conditions. The LOS results will be validated by comparing historical basement flooding reports to peak hydraulic grade line elevations and estimated basement elevations for similar sized return interval storm events

Task 4.2 Five-year Storm (6-hour/24-Hour) Simulations

Upon completion of the model calibration, R2O will utilize the model to perform capacity analysis and determine the level of service (LOS) including BBU and SSOs for the 5-year return interval storm for both 6-hour and 24-hour durations under wet-antecedent (saturated groundwater) conditions. The LOS results will be validated by comparing historical basement flooding reports to peak hydraulic grade line elevations and estimated basement elevations for similar sized return interval storm events. Basement elevations will be assumed between 8-10 feet below the manhole rim.

Task 4.3 Ten-year Storm (6-hour/24-Hour) Simulations

Upon completion of the model calibration, R2O will utilize the model to perform capacity analysis and determine the level of service (LOS) including BBU and SSOs for the 10-year return interval storm for both 6-hour and 24-hour durations under wet-antecedent (saturated groundwater) conditions. The LOS results will be validated by comparing historical basement flooding reports to peak hydraulic grade line elevations and estimated basement elevations for similar sized return interval storm events

Task 4.4 Historical Rainfall Analysis, Typical Year Determination

R2O assumes that the already EPA-approved Typical Year from the Northeast Ohio Regional Sewer District will be acceptable to use in the typical year continuous simulation. R2O will look for other community examples and precedence for where this has been done outside the NEORSD service area. The typical year simulation will be run as a continuous simulation. Typical Year results will be incorporated into capacity analysis discussed above. R2O will develop presentation materials and handouts for workshop participants.

Task 4 Deliverables:

- Thematic LOS maps and accompanying narrative for each of the four communities within the RR WWTP service area.
- Calibrated Model Results including GIS-based model output in .pcz format
- Workshop Materials and Handouts

Task 5 – Project Management/ Meetings/ QA-QC

Project Management Plan (PMP)

R2O will develop a PMP that includes critical processes and management activities to ensure compliance with the project study, schedule, and budget requirements. The PMP will include a discussion of the following project elements:

- Project Communications
- Team Integration
- Budget Management
- Quality Assurance/Quality Control (QA/QC)
- Project Schedule
- Project Deliverables

Task 5.1 Monthly Status Reports and Invoicing

R2O will prepare monthly status report updates to accompany monthly invoices throughout the 12-month project timeline. Monthly status reports will include a list of activities accomplished over the previous 30-day period, along with a look ahead for activities planned over the following month. Monthly invoiced will be provided in a format that is acceptable to RR WWTP with sufficient detail and backup as required.

Task 5.2 Monthly Progress Meetings

R2O will conduct monthly progress meetings with Rocky River WWTP staff during the anticipated 12-month project duration. At these meetings, we will provide a brief, monthly written project update and review progress on current project tasks. The report will be a maximum of one page and include updates on current project tasks performed and anticipated tasks for the next month. As presented in Tasks 3 and 4, two workshops will be presented to the Owner to review model progress, capacity analysis, and selected alternatives.

Task 5.3 Model Calibration Workshop

R2O will conduct one virtual workshop with the Owner to review the model and discuss project progress. The R2O team will present how the calibration rainfall events compare to 2, 5, and 10-year return intervals and 6-hour and 24-hour durations and typical year storms. R2O will prepare meeting agenda, minutes, and has included participation of up to 4 team members in the workshop. Preparation of technical workshop materials and handouts will be provided as a deliverable under Task 3.

Task 5.4 Capacity Workshop

R2O will conduct one virtual workshop with the Owner to present the results of the capacity analysis, including the 2, 5, and 10-year return intervals and 6-hour and 24-hour durations under wet-antecedent (saturated groundwater) conditions. R2O will prepare meeting agenda, minutes, and has included participation of up to 4 team members in the workshop. Preparation of technical workshop materials and handouts will be provided as a deliverable under Task 4.

Allowance - Remedial Measures Planning

Upon completion of tasks 1 through 4, the R2O Team will recommend an approach to further investigate the LOS outcomes, and develop remedial measures alternatives to reduce I/I within "problem areas". The specific type and number of alternatives to be developed will be negotiated with RR WWTP. The goal of this effort is to lead the RR WWTP to a better understanding of factors that are contributing to excessive I/I into the collection system, and ultimately into the WWTP. In anticipation of a need to more closely examine non-sanitary contributions to the I/I problems, and a need to better understand the hydraulic connection between the collection system and the WWTP, the R2O Team recommends including a contract allowance. *The use of this allowance is at the discretion of the RR WWTP Management Committee and respective community of funds from this allowance. No funds will be used without prior authorization and agreement on the specific scope, schedule and fee to be allocated to each member community of such proposed usage.*

Proposed Project Schedule

Our team has laid out the following schedule for completion of the project within the City’s desired 12-month window. We identified that Task 1 and Task 2 can occur simultaneously leading up to the hydraulic model calibration. Our Data Review timeline is estimated to take around one month, at which time Data Gaps will be identified. In order to maintain the desired 12-month schedule, we have assumed data gaps that are classified as “critical” will be filled within 1 month of identification.

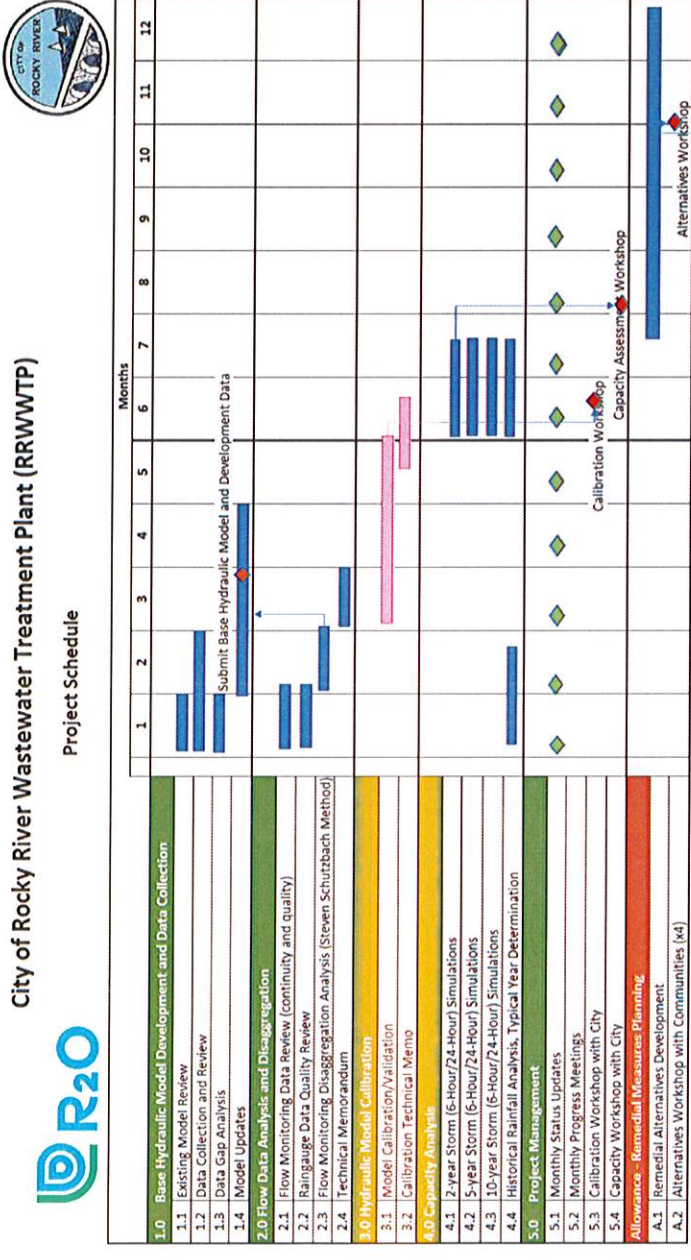


Exhibit C – Compensation

Date: August 18, 2021

City of Rocky River Wastewater Treatment Plan (RRWWTP) - Calibrated Hydraulic Modeling Services						
Date:	8/18/2021					
Client:	Rocky River Wastewater Treatment					
Prime:	R2O Consulting LLC					
1.0	Base Hydraulic Model Development and Data Collection			Fully Burdened Labor Cost	Estimated Hours	Total ODC Costs
	1.1	Existing Model Review		\$ 78,437	750	\$ -
	1.2	Data Collection and Review		\$17,317	150	
	1.3	Data Gap Analysis		\$19,532	204	
	1.4	Data Gap Analysis		\$13,093	112	
	1.4	Model Updates		\$28,495	284	
2.0	Flow Data Analysis and Disaggregation			\$ 75,736	700	\$ -
	2.1	Flow Monitoring Data Review (continuity and quality)		\$32,674	316	
	2.2	Rain Gauge Data Quality Review		\$3,611	98	
	2.3	Flow Monitoring Disaggregation Analysis (Steven Schutzbach) Method		\$21,265	174	
	2.4	Technical Memorandum		\$18,186	172	
3.0	Hydraulic Model Calibration/Validation			\$ 87,759	900	\$ -
	3.1	Model Calibration/Validation		\$57,959	632	
	3.2	Calibration Technical Memo		\$29,800	268	
4.0	Capacity Analysis			\$ 45,960	394	0
	4.1	2-year Storm (6-hour/24-hour) Simulations		\$6,025	50	
	4.2	5-year Storm (6-hour/24-hour) Simulations		\$6,025	50	
	4.3	10-year Storm (6-hour/24-hour) Simulations		\$6,025	50	
	4.4	Historical Rainfall Analysis, Typical Year Determination		\$14,709	124	
	4.5	Technical Deliverables Development		\$13,176	120	
5.0	Project Management/Meetings/Workshops			\$ 53,238	324	\$ 52
	5.1	Monthly Status Updates		\$16,568	84	
	5.2	Monthly Progress Meetings		\$19,803	120	
	5.3	Calibration Workshop with City		\$8,434	60	
	5.4	Capacity Workshop with City		\$8,434	60	
Base Scope Total				\$ 341,130	3,068	\$ 52
Project Allowance - Remedial Measures Planning (Only if authorized)						\$ 200,000
Contract Totals				\$ 341,130		\$ 52
						\$ 541,181



Brown-Caldwell

WWTP: PROFESSIONAL ENGINEERING SERVICES -
Calibrated Hydraulic Modeling