

# **PROJECT: Oakdale Area Sewer Collection System Study**

Project Funded by:

*New York State Environmental Facilities Corporation*



## **Request for Qualifications for Engineering Services**

**June 23, 2025**

## INSTRUCTIONS TO RESPONDERS

### PROJECT BACKGROUND

The Village of Johnson City's sewer collection system has been affected by aging infrastructure and excessive inflow and infiltration. For this particular project, Johnson City seeks a qualified engineering firm to assist with the Oakdale Area Sewer Collection System Study. This project will require firms to identify sources of inflow and infiltration, evaluate alternatives, and recommend improvements to the Village's wastewater collection system. Following the study the consultant shall prepare an Engineering Report that identifies a capital improvement project for implementation. The report should adhere to the current DEC/EFC Engineering Report Outline detailed in Appendix C. Findings of the Oakdale Sewer Collection System Study will be put into a NYSEFC Engineering Report for an Intended Use Plan listing and CWSRF application for eventual loan and grant assistance.

The project referenced in this RFQ is anticipated to be funded with NYS and/or Federal loan and grant funds. All project bidding, construction administration, and inspection/closeout activities associated with the project must be performed in accordance with NYSEFC regulations. In keeping with these requirements, the qualifications-based procurement standards for the Procurement of Architectural, Engineering, and Surveying (A/E) Services shall also apply.

### PROJECT BUDGET

The Village has been awarded an EFC Environmental Planning Grant (EPG) in the amount of \$50,000 with a local in-kind contribution of \$10,000 to complete the project. In-kind services provided by the Village may include assistance with pipeline televising.

### PROJECT TIMELINE

Below outlines the projected schedule. All activities, with the exception of activities related to close out and final audit, must be completed by the estimated project end date of October 2026.

|                                             |                           |
|---------------------------------------------|---------------------------|
| 1. Release of RFQ                           | <b>August 24, 2025</b>    |
| 2. Pre-bid Site Meeting (If requested) *    | <b>August 28, 2025 *</b>  |
| 3. Questions and Clarifications Due         | <b>September 10, 2025</b> |
| 4. Final Interpretations and Addenda Issued | <b>September 15, 2025</b> |
| 5. Response Due Date                        | <b>September 22, 2025</b> |
| 6. Evaluation Completed                     | <b>October 2, 2025</b>    |
| 7. Governing Body Action                    | <b>October 7, 2025</b>    |

### SUBMISSION

Please provide a copy of your qualifications and related materials via ONE electronic and ONE hard copy. Proposals may be transmitted via mail in a sealed envelope no later than 3:00 PM, September 22, 2025, the submittal deadline date. Please mark your response "**REQUEST FOR QUALIFICATIONS – Engineering Services**" and drop off or mail your response to:

**Allison Button**  
**Village of Johnson City**

**60 Lester Avenue  
Johnson City, New York 13790**

## **INQUIRIES**

Any inquiries or requests for explanation regarding this RFQ must be received by 3:00 p.m. local time, Wednesday, September 10th, 2025. No oral interpretation or clarifications will be given. Prospective responders desiring further information or interpretations must make requests by e-mail. All inquiries together with Village of Johnson City's response will be issued to all prospective responders well in advance of the date for proposal submission. Requests for information should be addressed to:

**Allison Button – Community Development Administrator**

[cdevadmin@villageofjc.com](mailto:cdevadmin@villageofjc.com)

## **CONSULTANT SELECTION CRITERIA**

Consultants must demonstrate their level of competence and qualification, and each subcontractor's level of competence and qualification, with respect to the listed evaluation factors for the needed services.

NOTE: These factors are not listed in order of importance.

Evaluation factors include:

1. Serve as Engineer-of-Record for the Village for the Oakdale Area Sewer Collection System project.
2. The ability of the selected firm to provide the technical skills necessary for capital improvement or maintenance projects, or evaluate such projects on a very short notice, and on an as-needed basis as determined by the Village.
3. Size and experience of the consultant's professional and technical staff with respect to the magnitude and complexity of various projects.
4. Experience of the consultant's professional staff with wastewater and water plant design and plant operations and distribution and collection system improvements.
5. The consultant's ability to make practical water and sewer treatment plant process evaluations and develop best practice treatment recommendations.
6. Record of success by the consultant, demonstrated by work previously performed for the Village of Johnson City or similar work performed for others.
7. Individual within the consultant's organization who will have direct charge of the work.
8. Whether the consultant has adequate staff and/or other resources to perform the work within schedule and meet funding program and MWBE requirements.
9. The approach the consultant proposes to use for the work and to keep the project within budget and on schedule.
10. Pertinent new ideas that may be presented by the consultant during the selection process.

11. Whether the consultant has an effective quality control program.
12. The consultant's demonstrated record of keeping construction costs within project budgets and design estimates.
13. Demonstrated ability to identify all necessary permits, regulatory requirements, and processes and obtain involved agency approvals.
14. Understanding of the importance of safety in design and constructability.
15. Demonstrated ability to run a diverse program including managing and coordinating schedules, deliverables, resources, and multiple consultants/subconsultants.
16. Submit a list of communities/clients where you have provided similar water and wastewater design services over the last three years

After initial review of the submittals, a short list of consultants will be developed for further consideration. These firms may be invited for an interview. The best qualified firm or firms will be selected based on its demonstrated competence and qualification for the services required for the project. A more detailed scope of work and fee schedule will be negotiated with the best qualified firm or firms. If negotiations are not successful with any selected firm, the Village will terminate negotiations with that firm and initiate negotiations with the next best qualified firm. When a fair and reasonable fee is established, a contract award recommendation will be made to the Village of Johnson City Village Board for its consideration.

Engineering Firm Insurance Requirements are included in Appendix B.

## **PROPOSAL EVALUATION**

The Village will review and rank the proposals using the factors /rating scale listed below to select the preferred consultant based on qualifications. Based upon the evaluation of the proposals, the Village of Johnson City reserves the right to invite any or all consultants for an interview before making a final selection. Such an invitation does not commit the Village of Johnson City to pay any costs incurred in participating in said interview.

The evaluation factors are:

- Knowledge and familiarity with the Village of Johnson City's water and wastewater systems

**Maximum Points: 25**

- Project Management Approach: Response as outlined regarding the Firm's Project Management Approach and the performance of the identified services as well as the timeliness of project deliverables

**Maximum Points: 25**

- Availability of Staff and Experience of the Project Team: Having the right team helps deliver a project within budget and on schedule. The Village will give considerable weight to the individual qualifications of the project team members who will be assigned to do a majority of

the work identified. Considerations will include the individuals' qualifications, experience, and location of key personnel.

**Maximum Points: 25**

- Experience with NYSEFC Funded Projects: The Firm's familiarity and experience in successfully satisfying funding agency construction document and MWBE requirements will be reviewed and ranked.

**Maximum Points: 25**

After evaluation of selected Submittals, the Village of Johnson City reserves the right to award without delay. The Village of Johnson City will issue a Letter of Intent to Award and a Notice to Proceed when costs are negotiated and accepted by the Village of Johnson City.

## **EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER**

All qualified engineers will receive consideration without regard to race, color, religion, creed, sex, age, or national origin. The Village of Johnson City encourages MWBE and Section 3 firms to submit.

## **RIGHTS**

The Village of Johnson City shall be the sole judge of whether a submittal conforms to the requirements of this RFQ and of the merits and acceptability of the individual submittals. Notwithstanding anything to the contrary contained herein, the Village reserves the right to take any of the following actions in connection with this RFQ: amend, modify or withdraw this RFQ; waive any requirements of this RFQ; require supplemental statements and information from any respondents to this RFQ; award a contract to as many or as few or none of the respondents as the Village may select; to award a contract to entities who have not responded to this RFQ; accept or reject any or all proposals received in response to this RFQ; extend the deadline for submission of proposals; negotiate or hold discussions with one or more of the respondents; permit the correction of deficient proposals that do not completely conform with this RFQ; waive any conditions or modify any provisions of this RFQ with respect to one or more respondents; reject any or all proposals and cancel this RFQ, in whole or in part, for any reason or no reason, in the Village's sole discretion. The Village may exercise any such rights at any time, without notice to any respondent or other parties and without liability to any respondent or other parties for their costs, expenses or other obligations incurred in the preparation.

## **FEES**

The response must clearly present the basis for the responder's compensation or fee structure for all services described in the response. If a particular service is "value added" the response shall so state. The fees shall include all ordinary operating expenses incurred by the firm. Extraordinary expenses incurred at the request of and with the consent of the Village will be reimbursed.

## **RFQ LONGEVITY**

An RFQ may be withdrawn at any time prior to the date specified as the closing date for acceptance; however, no responder may withdraw or cancel their response for a period of forty-five (45) days following the closing date for acceptance, nor shall the successful responder withdraw, cancel or modify the response, after having been notified that the RFQ has been accepted by the Village, except at the request of the Village or with the Village's written consent.

## **EVALUATION OF RFQ**

Responses to the RFQ will be judged upon the responder's ability to provide services, which meet the requirements set forth in the accompanying documents. The Village reserves the right to make such investigations as it deems necessary to determine the ability of the responder to provide services meeting a satisfactory level of performance in accordance with the Village's requirements.

## **INTERVIEWS**

An interview may be arranged at a mutually convenient time and place. A presentation by the responder to the Village may be required prior to the recommendation and consideration of an award.

## **RESPONERS CONDITIONS**

Any conditions or expectations on the part of the responder for performance by the Village must be set forth in responder's submittal. The Village is not obliged to consider the responder's post-submittal terms and conditions. \*\*\* If any service is not included, or is available for an additional cost, the submittal shall clearly so state. \*\*\*

## **RESPONDERS PREPARATION COSTS**

Any costs incurred by the responder in responding to the Request for Proposals is at the responder's own risk and expense as a cost of doing business. All materials submitted with an RFP shall become property of the Village and will not be returned to the responder. The responder is hereby notified that all submitted materials are subject to disclosure pursuant to the New York State Freedom of Information Law (New York Public Officer's Law section 86 et seq.).

## **DELIVIERABLES**

Although the specific deliverables are subject to negotiation the successful responder will be expected to provide the required services as outlined in this proposal.

## **EX PART CONTACT**

Responder shall not contact any other Village officials regarding this RFP other than in accordance with the procedure outlined herein. Any responder that violates the foregoing provision may be disqualified from consideration. Responses shall be based solely on information provided in the RFP and any addenda thereto.

## **MINIMUM QUALIFICATIONS**

The Village acknowledges that this is a Professional Service and not subject to conventional public bidding. However, the Village has directed this RFP to several pre-selected candidates/institutions and has placed a Legal Ad in the Binghamton Press and Sun-Bulletin concerning this RFP. The responder must guarantee

that the professional business entity has not made a contribution within one calendar year immediately preceding the date of the contract or agreement which exceeded the permitted thresholds set forth in article 14 of the Election Law of the State of New York.

## STANDARD CONTRACT CLAUSES

The successful Responder will be required to enter into a written agreement for services that incorporates the terms and conditions of this RFP, including the following minimum terms and conditions. The submission of a response to the RFP indicates the Responder agrees to the following terms and conditions for professional services. The Village reserves the right to include additional terms in the final agreement with the successful Responder and to make changes to the following clauses. In any event, the final contract shall be in a form and contain provisions acceptable to counsel for the Village.

1. Compliance with Law and Standard Practices: The Responder shall perform its obligations hereunder in compliance with any and all applicable federal, state and local laws, rules, and regulations, including applicable licensing requirements and applicable Village Board policies as existing and as amended.
2. Statutory Compliance: The Responder covenants and agrees to comply in all respects with all federal, state and local laws and ordinances regarding services for municipal corporations including but not limited to Workers' Compensation and Employers' Liability Insurance, hours of employment, wages, and human rights.
3. Prevailing Wage Law: The Responder will pay prevailing wages and benefits to the extent required by the laws of the State of New York and certify compliance in writing to the Village.
4. MWBE/EEO: The Responder will not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, and will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal opportunity without discrimination.
5. Assignment or Subletting of Contract: The Responder may not assign, transfer, convey, subcontract or otherwise dispose of this Agreement or its responsibility to perform under this Agreement or its right, title or interest in and/or to the same, nor any monies which are or will become due on and payable to it thereunder, nor the power to execute such Agreement to any other person or corporation without the prior express written consent of the Village.
6. Indemnification: To the fullest extent permitted by law, the Responder and Responder's officers, directors, members, partners, agents, employees, and consultants will indemnify, defend with competent counsel and hold harmless the Village, its officers, agents and employees from and against any and all liabilities, claims, damages, judgments or awards and any and all loss or expense (including reasonable attorney's fees) that may arise by reason of liability for damage, injury or death, or for invasion of personal or property rights, of every name and nature, and whether casual or continuing trespass or nuisance, and any other claim for damages arising at law or equity caused or sustained by or because of any omission of duty, negligence or intentional wrongful act on the part of the Responder, its employees or agents, including subcontractors, in connection with the Agreement.
7. Contract Modifications: This Agreement represents the entire and integrated agreement between the Village and the Responder and supersedes all prior negotiations, representations or agreements, either written or oral. This agreement may be amended only by written instrument signed by both

the Village and the Responder. All verbal clarifications, changes, or modifications of the scope or details in the work are to be followed up with written verification and agreement by both parties. The Village reserves the right of final interpretation of any clarifications or modifications relative to the Agreement.

8. Severability: If any term or provision of this Agreement is held invalid or unenforceable, the remainder of this Agreement shall not be affected thereby, and every term and provision of this Agreement shall be valid and enforced to the fullest extent permitted by law.
9. Conflict of Interest: The Responder hereby covenants and agrees that no member of the Village Board or other Village officer or employee forbidden by law to be interested in this Agreement will directly or indirectly benefit therefore.
10. Independent Contractors: The Village and the Responder are independent contractors and shall have no other relationship. Neither party shall have or hold itself out as having the right or authority to bind or create liability for the other by its intentional or negligent act or omission, or to make any contract or otherwise assume any obligation or responsibility in the name of or on behalf of the other party.
11. Conflict of Laws; Venue: This Agreement shall be governed by and construed in accordance with the laws of the State of New York. Any litigation or other proceeding arising under this Agreement shall be commenced in a court of appropriate subject matter jurisdiction in the State of New York with venue in Broome County.
12. Insurance: The Agreement shall require compliance with all insurance requirements of the Village. A copy of such requirements is attached to this RFP as an exhibit and such requirements are incorporated by reference.
13. Mandatory Provisions: The following additional provisions will be required in any final contract, and may not be modified, changed, or altered:
  - a. The Responder hereby represents to the Village the following: (i) that the Responder is financially solvent, able to pay its debts as they mature and possessed of sufficient working capital to complete the services required hereunder and performs its obligations hereunder; (ii) that Responder is able to furnish any of the plant, tools, materials, supplies, equipment and labor required hereunder and perform all of its obligations hereunder and it has sufficient experience and competence to do so; (iii) that Responder is authorized to do business in New York and is properly licensed by all necessary governmental and public and quasi-public authorities having jurisdiction over it and the services required under this Agreement and the project itself; (iv) that Responder's execution of this Agreement and its performance of it is within its duly authorized powers; and (v) that Responder's duly authorized representative has visited the project and familiarized him/herself with the local conditions under which the services required under this Agreement are to be performed. Responder agrees that the representation in this paragraph shall survive the execution and delivery of this Agreement.
  - b. Whenever reasonably requested by the Village during the term of this Agreement, and as part of the Basic Services fee hereunder, the Responder shall attend meetings of the Village Board to advise its Trustees concerning the progress of the Project.
  - c. The Responder's services, as defined herein, shall be provided in a manner and quality consistent with the standard of skill, care and diligence normally practiced by licensed professional design/engineering and construction management firms in performing services of a similar nature. Responder acknowledges that the Village is a municipality

and, consistent with the standard of care, the Responder shall use reasonable care to ensure its services comply with all applicable laws, regulations, and rules as they pertain to the design, bidding and construction of any project as they apply to the Responder including, but not limited to, the requirements of Article 5-A of the General Municipal Law. The Responder will consult with the Village or the Village's legal counsel with respect to any questions concerning the applicability or interpretation of such laws and regulations. The Responder shall perform its services as expeditiously as is consistent with the standard of care. The Responder shall render decisions in a timely manner pertaining to issues submitted by the Village and/or Contractors in order to avoid unreasonable delay in the orderly and sequential progress of the Responder's services and/or the Project Work.

- d. The Village shall not be responsible to pay, and the Responder shall not be entitled to receive, compensation for any Additional Services if such services were required due to the fault of the Responder or the Responder's failure to perform in accordance with the terms of this Agreement. If an architectural service was a reasonably foreseeable and necessary service required to complete the project scope, where such service would normally be anticipated by and expected to be performed by the Responder, then such service shall be deemed to have been included as a Basic Service and will be provided by the Responder without additional compensation. Professional design/engineering and construction management services not reasonably foreseeable shall entitle the Responder to additional compensation.
- e. The Responder shall make a detailed review of available drawings and other documents depicting existing conditions of the project site to determine site conditions.
- f. Any adjustments to a project schedule shall be void and of no force and effect until such adjustments are agreed to in writing by the Village and the Responder.
- g. In the event the Responder objects to the Village's directive or substitution, Responder shall immediately notify Village in writing, and the parties shall then reach a mutual understanding before work proceeds.
- h. The Responder shall prepare draft documents for separate construction contracts when required by Article 5-A of the General Municipal Law for review by the Village and its counsel.
- i. The Responder shall include in the construction documents that each prime contractor shall be responsible to provide the Village, prior to the Final Application for Payment being submitted, "As-Built" drawings for their trade as part of the Contractor's basic services.
- j. The Responder shall acknowledge the receipt of each Contractor-generated Request for Information (RFI) submitted in accordance with the Contract Documents as soon as reasonably possible, but no later than seven (7) days after receiving it. The Responder shall issue a written answer for each RFI simultaneously to the Contractor and the Village (along with necessary descriptive drawings, specifications, or other documents) with the promptness necessary to avoid unnecessary delay or cost to the Project, but in no case more than ten (10) days after the RFI is received by the Responder.
- k. Responder acknowledges and agrees that Village has, shall retain, and may exercise during the term of this Agreement and thereafter, all rights and remedies available to the Village, whether derived from this Agreement, from statute, or otherwise, as a result of or in connection with the Responder's breach of this Agreement.

- l. The Village and Responder shall commence all claims and causes of action, whether in contract, tort, or otherwise, against the other arising out of or related to this Agreement in accordance with the requirements of the method of binding dispute resolution selected in this Agreement within the period specified by applicable law.
- m. The Responder acknowledges and recognizes that the Village, is utilizing Prime Contractors and subcontractors in performing the work, and that each of the aforementioned parties, including Responder, may be responsible for causing delays in or damage to the work. Accordingly, to ease resolution of any disagreement or claim involving the parties, Responder agrees to participate at its own cost and expense in good faith mediation if one of the foregoing parties has a claim arising out of the acts or omissions of Responder and for which Responder may be obligated to indemnify the Village, but for which Village may otherwise bear responsibility.
- n. The Village is tax-exempt and will not pay for or reimburse for any tax where it is exempt, including but not limited to, sales taxes.

### **IRANIAN ENERGY SECTOR DIVESTMENT**

- a. Contractor/Responder hereby represents that said Contractor/Responder is in compliance with New York State General Municipal Law Section 103-g entitled “Iranian Energy Sector Divestment”, in that said Contractor/Responder has not:
  - i. Provided goods or services of \$20 Million or more in the energy sector of Iran including but not limited to the provision of oil or liquefied natural gas tankers or products used to construct or maintain pipelines used to transport oil or liquefied natural gas for the energy sector of Iran; or b. Acted as a financial institution and extended \$20 Million or more in credit to another person for forty-five days or more, if that person’s intent was to use the credit to provide goods or services in the energy sector in Iran.
- b. Any Contractor/Responder who has undertaken any of the above and is identified on a list created pursuant to Section 165-a (3)(b) of the New York State Finance Law as a person engaging in investment activities in Iran, shall not be deemed a responsible bidder pursuant to Section 103 of the New York State General Municipal Law.
- c. Except as otherwise specifically provided herein, every Contractor/Responder submitting a bid/proposal in response to this Request for Bids/Request for Proposals must certify and affirm the following under penalties of perjury:
  - i. “By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief, that each bidder is not on the list created pursuant to NYS Finance Law Section 165-a (3)(b).” The Village will accept this statement electronically in accordance with the provisions of Section 103 of the General Municipal Law.
- d. Except as otherwise specifically provided herein, any Bid/Proposal that is submitted without having complied with subdivision (a) above, shall not be considered for award. In any case where the Bidder/Responder cannot make the certification as set forth in subdivision (a) above, the Bidder/Responder shall so state and shall furnish with the bid a signed statement setting forth in detail the reasons therefore. The Village reserves its rights, in accordance with General Municipal Law Section 103-g to award the Bid/Proposal to any Bidder/Responder who cannot make the certification, on a case-by-case basis under the following circumstances:

- i. The investment activities in Iran were made before April 12, 2012, the investment activities in Iran have not been expanded or renewed after April 12, 2012, and the Bidder/Responder has adopted, publicized and is implementing a formal plan to cease the investment activities in Iran and to refrain from engaging in any new investments in Iran; or
- ii. The Village of Johnson City has made a determination that the goods or services are necessary for the Village to perform its functions and that, absent such an exemption, the Village would be unable to obtain the goods or services for which the Bid/Proposal is offered. Such determination shall be made by the Village in writing and shall be a public document.

## SUBMITTAL CONTENT

The submittal must include the following attachments and should be kept to roughly 15 pages (See Appendix B for applicable forms.):

- **Schedule.** A proposed time schedule for the completion of the project.
- **Insurance Requirements.**
- **Iran Energy Sector Divestment Certification.** Respondent must attach a signed statement on company letterhead that is affirmed as true under penalty of perjury.
- **Statement of Non-collusion.**
- **Signed Gifts Statement.** A signed statement that discloses all gifts given, if any, by the bidding professional business entity to any officer or employee of the Village.
- **W-9.**
- **Additional Attachments.** Resumes and material helpful to the technical evaluation may also be attached (short project descriptions, brochures).
- Disclose all allegations or claims of substandard work, unethical or illegal practices or debarment or suspension from state- or federally- funded projects, and provide documentation as to the resolution of these matters. Respondent must not be suspended or debarred from participation in state- or federally-funded projects.

**Appendix A:**  
**Project Map**



PROJECT LOCATION

NEWARK AVE

ROBINSON HILL RD

DANIER DR

TYLER ST

ANDREWS ST

GRANT ST

OAKDALE RD

ARTHUR AVE

OAKDALE COMMONS

REYNOLDS RD

PLACER DR

CYNDY ST

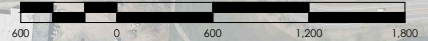
VICTORY ST

MILTON AVE

JERRY ST

HARRY I DR

NY - 17



SCALE: 1" = 600'

## **Appendix B:**

### **Attachments**

- Insurance Requirements
- Iran Energy Sector Divestment Certification
- Statement of Non-collusion
- W-9

## Insurance Requirements:

- Commercial General Liability Insurance with a limit of not less than \$1,000,000 for each occurrence and \$2,000,000 general aggregate. Such liability shall be written on the Insurance Service Office's (ISO) occurrence form CG 00 01, or a substitute form providing equivalent coverages and shall cover liability arising from premises operations, independent contractors, products-completed operations, broad form property damage, personal & advertising injury, owners & contractors protective, cross liability coverage, liability assumed in a contract (including the total liability of another assumed in a contract) and explosion, collapse & underground coverage.
  - 1) If such insurance contains an aggregate limit, it shall apply separately to this location.
  - 2) Umbrella Liability shall be the Maximum Limits available under the policy but no less than \$5,000,000 with the Aggregate limit of at least \$5,000,000. The Umbrella Liability has to provide Primary coverage over all the scheduled underlying policies including the coverage for the Per Project Aggregate and Additional Insureds.
- Where the Project described in the RFP includes the construction of any structure or building, a Builder's Risk Policy or Installation Floater Policy until the Project is completed and accepted in the amount of the total project cost.
- Rigging Floater, Minimum Limit \$500,000 for all Property owned by the Owner and Contractor in the service contractors care, custody & control.
- Workers Compensation, Employers Liability, and Disability Benefits for all Employees including Corporate Officers, Partners and Sole Proprietors. Workers Compensation Policy shall include the U.S. Longshore & Harbor Workers' Compensation Act endorsement.
- Commercial Automobile Liability Insurance with a limit of not less than \$1,000,000 for each accident. Such insurance shall cover liability arising out of any automobile including owned, leased, hired and non-owned automobiles.
- Commercial Property Insurance or Equipment Floater Policy covering at a minimum, the perils insured under the ISO Special Clauses of Loss Form (CP 10 30), or a substitute form providing equivalent coverages, for loss or damage to any owned, borrowed, leased or rented capital equipment, tools, including tools of their agents and employees, staging towers and forms, and property of the Department held in their care, custody and/or control.
- An Owners and Contractors Protective (OCP) will be provided by the Contractor with the Village of Johnson City as the Named Insured. The OCP limit should be \$1,000,000 with an Aggregate Limit of at least \$2,000,000.
- The Village of JC, Architect and Engineer and their Agents, Employees and Representatives or any other party required in the Village of JC contract are to be named as an Additional Insured on a Primary, Non-Contributory basis on all policies or Self-Insurance including Completed Operations with the exception of Workers Compensation or Professional Liability. A certificate of insurance will be provided when the contract is signed. The certificate will provide 10 days of notice of cancellation or non-renewal and copies of endorsements required by this Insurance agreement. The Contractor Waives all rights of Subrogation against the Village of JC and other parties required by any applicable contract documents and will have all policies endorsed setting forth this Waiver of Subrogation.

### **Iranian Energy Sector Divestment Certification:**

Please be advised that, The Iran Divestment Act of 2012 (effective April 12, 2012) is codified at State Finance Law ("SFL") 165-a and General Municipal Law ("GML") Section 103-9. The Iran Divestment Act, with certain exceptions, prohibits the Municipality from entering into contracts with persons engaged in investment activities in the energy sector of Iran. Each bidder is required to certify at the time it submits its bid that it is not on a list of entities engaged in investment activities in Iran created by the Commissioner of the NYS Office of General Services pursuant to the State Finance Law.

Each bidder must hereby represent that said bidder is in compliance with New York State General Municipal Law Section 103-g entitled "Iranian Energy Sector Divestment". The bidder must affirm that, pursuant to Iranian Energy Sector Divestment Law, that bidder has not invested more than \$20 million in the Iranian energy sector.

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies and in the case of a joint bid, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief, that each bidder is not on the list created pursuant to NYS Finance Law Section 165-a(3)(b).

The bidder shall submit a signed, notarized and dated Iranian Energy Sector Divestment Certification with its bid. Said certificate is a requirement of Section 103-g of the General Municipal Law. The Certification starts below.

**A bid shall not be considered for award nor shall any award be made where the bidder fails to submit a signed and verified bidder's certification.**

### **Certification Pursuant to Section 103-g of General Municipal Law** **IRANIAN ENERGY SECTOR DIVESTMENT**

1. Bidder hereby represents that said bidder is in compliance with New York State General Municipal Law Section 103-g entitled "Iranian Energy Sector Divestment", in that said Bidder has not:

a) Provided goods or services of \$20 million or more in the energy sector of Iran including but not limited to the provision of oil or liquefied natural gas tankers or products used to construct or maintain pipelines used to transport oil or liquefied natural gas for the energy sector of Iran; or

b) Acted as a financial institution and extended \$20 million or more in credit to another person for forty-five (45) days or more, if that person's intent was to use the credit to provide goods or services in the energy sector in Iran.

2. Any Bidder who has undertaken any of the above and is identified on a list created pursuant to Section 165-a (3) (b) of the New York State Finance Law as a person engaging in investment activities in Iran, shall not be deemed a responsible bidder pursuant to Section 103 of the New York State General Municipal Law.

3. Except as otherwise specifically provided herein, every contractor submitting a bid in response to this request for bids must certify and affirm the following under penalties of perjury:

a) "By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to paragraph (b) of subdivision 3 of section 165-a of the state finance law"

4. Except as otherwise specifically provided herein, any bid that is submitted without having complied with subdivision (a) above, shall not be considered for award. In any case where the bidder cannot make the certification as set forth in subdivision (a) above, the bidder shall so state and shall furnish with the bid a signed statement setting forth in detail the reasons therefore. The Municipality reserves its rights, in accordance with General Municipal Law Section 103-g to award the bid to any bidder who cannot make the certification, on a case-by-case basis under the following circumstances:

a) The investment activities in Iran were made before April 12, 2012, the investment activities in Iran have not been expanded or renewed after April 12, 2012 and the bidder has adopted, publicized and is implementing a formal plan to cease the investment activities in Iran and to refrain from engaging in any new investments in Iran; or

b) The Municipality has made a determination that the goods or services are necessary for the Municipality to perform its functions and that, absent such an exemption, the Municipality would be unable to obtain the goods or services for which the bid is offered. Such determination shall be made by the Municipality in writing and shall be a public document.

**BIDDER'S CERTIFICATION:**

☐ By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to paragraph (b) of subdivision 3 of section 165-a of the state finance law.

☐ I am unable to certify that my name and the name of the bidder does not appear on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the State Finance Law. I have attached a signed statement setting forth, in detail, why I cannot so certify.

\_\_\_\_\_  
Signature Title

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Date

STATE OF NEW YORK)  
COUNTY OF \_\_\_\_\_) ss:

On the \_\_\_\_\_ day of \_\_\_\_\_ in the year \_\_\_\_\_ before me, the undersigned, personally appeared \_\_\_\_\_, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies) and that by his/her/their signature(s) on the instrument, the individual(s) or the person upon behalf of which the individual(s) acted, executed the instrument.

\_\_\_\_\_  
Notary Public

Dated:

Notary Public

# Request for Taxpayer Identification Number and Certification

Give Form to the  
requester. Do not  
send to the IRS.

► Go to [www.irs.gov/FormW9](http://www.irs.gov/FormW9) for instructions and the latest information.

|                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                   |
|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Print or type.<br>See Specific Instructions on page 3. | 1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                   |
|                                                        | 2 Business name/disregarded entity name, if different from above                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                   |
|                                                        | 3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only <b>one</b> of the following seven boxes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): |
|                                                        | <input type="checkbox"/> Individual/sole proprietor or single-member LLC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Exempt payee code (if any) _____                                                                  |
|                                                        | <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ► _____<br><b>Note:</b> Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is <b>not</b> disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner. | Exemption from FATCA reporting code (if any) _____                                                |
|                                                        | <input type="checkbox"/> Other (see instructions) ►                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | (Applies to accounts maintained outside the U.S.)                                                 |
|                                                        | 5 Address (number, street, and apt. or suite no.) See instructions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Requester's name and address (optional)                                                           |
| 6 City, state, and ZIP code                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                   |
| 7 List account number(s) here (optional)               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                   |

## Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

**Note:** If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

|                                |  |  |  |   |  |  |  |   |  |
|--------------------------------|--|--|--|---|--|--|--|---|--|
| Social security number         |  |  |  |   |  |  |  |   |  |
|                                |  |  |  | - |  |  |  | - |  |
| or                             |  |  |  |   |  |  |  |   |  |
| Employer identification number |  |  |  |   |  |  |  |   |  |
|                                |  |  |  | - |  |  |  |   |  |

## Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

|           |                            |        |
|-----------|----------------------------|--------|
| Sign Here | Signature of U.S. person ► | Date ► |
|-----------|----------------------------|--------|

## General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

**Future developments.** For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to [www.irs.gov/FormW9](http://www.irs.gov/FormW9).

## Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting*, later, for further information.

**Note:** If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

**Definition of a U.S. person.** For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

**Special rules for partnerships.** Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States.

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

**Foreign person.** If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515, *Withholding of Tax on Nonresident Aliens and Foreign Entities*).

**Nonresident alien who becomes a resident alien.** Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

**Example.** Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

## Backup Withholding

**What is backup withholding?** Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

**Payments you receive will be subject to backup withholding if:**

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the instructions for Part II for details),
3. The IRS tells the requester that you furnished an incorrect TIN,
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate Instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships*, earlier.

## What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the Instructions for the Requester of Form W-9 for more information.

## Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

## Penalties

**Failure to furnish TIN.** If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

**Civil penalty for false information with respect to withholding.** If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

**Criminal penalty for falsifying information.** Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

**Misuse of TINs.** If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

## Specific Instructions

### Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

**Note: ITIN applicant:** Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C corporation, or S corporation.** Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

### Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

### Line 3

Check the appropriate box on line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

| IF the entity/person on line 1 is a(n) . . .                                                                                                                                                                                                                                                   | THEN check the box for . . .                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| • Corporation                                                                                                                                                                                                                                                                                  | Corporation                                                                                                                     |
| • Individual<br>• Sole proprietorship, or<br>• Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes.                                                                                                                             | Individual/sole proprietor or single-member LLC                                                                                 |
| • LLC treated as a partnership for U.S. federal tax purposes,<br>• LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or<br>• LLC that is disregarded as an entity separate from its owner but the owner is another LLC that is not disregarded for U.S. federal tax purposes. | Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation) |
| • Partnership                                                                                                                                                                                                                                                                                  | Partnership                                                                                                                     |
| • Trust/estate                                                                                                                                                                                                                                                                                 | Trust/estate                                                                                                                    |

### Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

#### Exempt payee code.

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2—The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5—A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8—A real estate investment trust
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10—A common trust fund operated by a bank under section 584(a)11—A financial institution
- 12—A middleman known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

| IF the payment is for . . .                                                            | THEN the payment is exempt for . . .                                                                                                                                                                          |
|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interest and dividend payments                                                         | All exempt payees except for 7                                                                                                                                                                                |
| Broker transactions                                                                    | Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012. |
| Barter exchange transactions and patronage dividends                                   | Exempt payees 1 through 4                                                                                                                                                                                     |
| Payments over \$600 required to be reported and direct sales over \$5,000 <sup>1</sup> | Generally, exempt payees 1 through 5 <sup>2</sup>                                                                                                                                                             |
| Payments made in settlement of payment card or third party network transactions        | Exempt payees 1 through 4                                                                                                                                                                                     |

<sup>1</sup> See Form 1099-MISC, Miscellaneous Income, and its instructions.

<sup>2</sup> However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

**Exemption from FATCA reporting code.** The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G—A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I—A common trust fund as defined in section 584(a)J—

A bank as defined in section 581

K—A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

**Note:** You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

## Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

## Line 6

Enter your city, state, and ZIP code.

## Part I. Taxpayer Identification Number (TIN)

**Enter your TIN in the appropriate box.** If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

**Note:** See *What Name and Number To Give the Requester*, later, for further clarification of name and TIN combinations.

**How to get a TIN.** If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at [www.SSA.gov](http://www.SSA.gov). You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at [www.irs.gov/Businesses](http://www.irs.gov/Businesses) and clicking on Employer Identification Number (EIN) under Starting a Business. Go to [www.irs.gov/Forms](http://www.irs.gov/Forms) to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to [www.irs.gov/OrderForms](http://www.irs.gov/OrderForms) to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

**Note:** Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

**Caution:** A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

## Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

**Signature requirements.** Complete the certification as indicated in items 1 through 5 below.

**1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.**

You must give your correct TIN, but you do not have to sign the certification.

**2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.** You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

**3. Real estate transactions.** You must sign the certification. You may cross out item 2 of the certification.

**4. Other payments.** You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

**5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions.** You must give your correct TIN, but you do not have to sign the certification.

**What Name and Number To Give the Requester**

| For this type of account:                                                                                      | Give name and SSN of:                                                                                   |
|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| 1. Individual                                                                                                  | The individual                                                                                          |
| 2. Two or more individuals (joint account) other than an account maintained by an FFI                          | The actual owner of the account or, if combined funds, the first individual on the account <sup>1</sup> |
| 3. Two or more U.S. persons (joint account maintained by an FFI)                                               | Each holder of the account                                                                              |
| 4. Custodial account of a minor (Uniform Gift to Minors Act)                                                   | The minor <sup>2</sup>                                                                                  |
| 5. a. The usual revocable savings trust (grantor is also trustee)                                              | The grantor-trustee <sup>1</sup>                                                                        |
| b. So-called trust account that is not a legal or valid trust under state law                                  | The actual owner <sup>1</sup>                                                                           |
| 6. Sole proprietorship or disregarded entity owned by an individual                                            | The owner <sup>3</sup>                                                                                  |
| 7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A)) | The grantor <sup>4</sup>                                                                                |
| For this type of account:                                                                                      | Give name and EIN of:                                                                                   |
| 8. Disregarded entity not owned by an individual                                                               | The owner                                                                                               |
| 9. A valid trust, estate, or pension trust                                                                     | Legal entity <sup>4</sup>                                                                               |
| 10. Corporation or LLC electing corporate status on Form 8832 or Form 2553                                     | The corporation                                                                                         |
| 11. Association, club, religious, charitable, educational, or other tax-exempt organization                    | The organization                                                                                        |
| 12. Partnership or multi-member LLC                                                                            | The partnership                                                                                         |
| 13. A broker or registered nominee                                                                             | The broker or nominee                                                                                   |

| For this type of account:                                                                                                                                                                   | Give name and EIN of: |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments | The public entity     |
| 15. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))                                          | The trust             |

<sup>1</sup> List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

<sup>2</sup> Circle the minor's name and furnish the minor's SSN.

<sup>3</sup> You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

<sup>4</sup> List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships*, earlier.

**\*Note:** The grantor also must provide a Form W-9 to trustee of trust.

**Note:** If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

**Secure Your Tax Records From Identity Theft**

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

**Protect yourself from suspicious emails or phishing schemes.**

Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to [phishing@irs.gov](mailto:phishing@irs.gov). You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at [spam@uce.gov](mailto:spam@uce.gov) or report them at [www.ftc.gov/complaint](http://www.ftc.gov/complaint). You can contact the FTC at [www.ftc.gov/idtheft](http://www.ftc.gov/idtheft) or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see [www.IdentityTheft.gov](http://www.IdentityTheft.gov) and Pub. 5027.

Visit [www.irs.gov/IdentityTheft](http://www.irs.gov/IdentityTheft) to learn more about identity theft and how to reduce your risk.

## Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

**Appendix C:**  
**Engineering Report Outline**



**Environmental  
Facilities Corporation**

**Department of  
Environmental Conservation**

# Engineering Report Outline for New York State Wastewater Infrastructure Projects

October 1, 2024

For Projects to be Approved by the NYS Department of Environmental Conservation (DEC)  
and/or the NYS Environmental Facilities Corporation (EFC)

## I. Statement of Purpose

This document provides guidance on the requirements of an acceptable engineering report for wastewater infrastructure projects in New York State. This outline was created to promote the development of comprehensive engineering evaluations that can be used to make informed decisions about wastewater infrastructure. An engineering report is a final and comprehensive description of the water quality problem and the proposed solution including applicable design criteria and data supporting the solution. A report should evaluate potential solutions to the defined problem and clearly demonstrate that acceptable engineering principles were used in the evaluation, that the data supports the conclusions, and that the proposed solution has reasonable expectations of solving the water quality problem. A report must also present an estimate of the costs of the recommended alternative and a schedule for its implementation. Early project planning is critical to successful projects. The goal of the report is to provide the intended audiences—regulatory and permitting agencies, funding agencies, and governing bodies that must authorize the project—sufficient information to make an informed decision. This also allows the municipalities to prepare overall project plans that include the selection of contract type which impacts schedules, project costs and permitting.

Use of this outline will help to ensure that a submitted report satisfies Clean Water State Revolving Fund (CWSRF) and DEC programmatic and technical requirements. While it is intended that all the items in the outline must be considered for every project, the engineer's evaluation may determine that some elements of the outline do not apply to a project. Conversely, an engineering report may need additional information before it is deemed acceptable or approvable. DEC may also use this outline for Industrial and Private/Commercial/Institutional (PCI) projects. Allocate sufficient time for review, comment, comment resolution and approval.

## II. Engineering Report Preparation Standards

An engineering report shall be prepared, stamped, and signed by a qualified professional licensed to practice in New York State and developed in accordance with the latest editions of the following standards whenever practicable and as appropriate:

1. Recommended Standards for Wastewater Facilities - Policies for the Design, Review, and Approval of Plans and Specifications for Wastewater Collection and Treatment Facilities (commonly known as the Ten States Standards)<sup>1</sup>
2. Recommended Standards for Water Works
3. TR-16 Guides for the Design of Wastewater Treatment Works - New England Interstate Water Pollution Control Commission
4. New York State Stormwater Management Design Manual
5. New York State Design Standards for Intermediate Sized Wastewater Treatment Systems Statewide and Lake George Design Standards
6. [New York State Flood Risk Management Guidance for Implementation of the Community Risk and Resiliency Act \(CRRA\)](#)

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<sup>1</sup> 6NYCRR Part 750-2.10

7. American Water Works Association Manual M6, Water Meters – Selection, Installation, Testing, and Maintenance, Fifth Edition

In instances where the design engineer proposes a deviation from the standards listed above, the report must clearly explain and justify the deviation. In all cases, facilities must be designed to treat permitted flows and loads.

There may be components described in the applicable standards that are pertinent to a project and are not addressed in this outline. The engineer preparing the report must ensure that all applicable standards are addressed during the development of the report. See [Appendix D: Additional Considerations for Specific Technologies and Project Types](#) for further design guidance.

If the engineering report will be used to seek assistance from the following federal agencies, the engineering report may also need to comply with the latest edition of the Engineering Report Interagency Memo ([Bulletin 1780-2](#)): Department of Agriculture – Rural Development, Environmental Protection Agency, Department of Homeland Security, or Housing and Urban Development.

### III. Minimum Requirements for Environmental Facilities Corporation Funding

The primary functions of an engineering report are to identify an infrastructure or water quality problem, discuss various solutions and propose a capital improvement project to address the problem. The report also justifies the expenditure and, if being used to apply for funding, should satisfy requirements of the financing entity. To that end, any engineering report funded through the Engineering Planning Grant program, or used for funding projects through the EFC **must**:

- ☐ be current, meaning at the time of submission the report was prepared or updated no more than five years prior to the end of the current IUP period;
- ☐ be the final version, not a draft;
- ☐ be stamped and signed on the outside cover by a qualified professional licensed to practice in New York State;
- ☐ identify the problem and state a capital improvement project as the recommended solution;
- ☐ provide an alternatives analysis;
- ☐ provide an estimate of the total project cost;
- ☐ include or attach project location maps; and
- ☐ attach the completed engineering report certification.

**Please Note:** Reports that do not include all eight of these items by the listing deadline may not be listed on the Annual List in the CWSRF IUP. A project may receive CWSRF financial assistance in the IUP Period only if it is on the Annual List.

## IV. Engineering Report Outline - Table of Contents and Sections

Each engineering report should contain a Table of Contents, including page numbers. The Table of Contents below sets forth the basic outline of information necessary for the development of an engineering report. Please refer to the appropriate page number for details and guidance on each of the sections.

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## Cover

The cover of the engineering report should contain:

- A descriptive project title
- Name of the Owner/Municipality
- Applicable State Pollution Discharge Elimination System (SPDES) or Publicly Owned Sewer System (POSS) number
- Name of the engineering firm preparing the report
- Date of the report, including any revision dates
- Professional Engineer stamp and signature from a qualified P.E. licensed to practice in New York State and
- If funded by an Engineering Planning Grant, the EPG number and CWSRF project number, once listed

## Executive Summary

Provide a brief description of the purpose of the report, need for the project, evaluations conducted, recommended alternative, and proposed course of action.

## Project Background and History

### 1. Site Information

Describe the area(s) under consideration and include the following:

- Location
- Geologic conditions (soil type, depth to bedrock and groundwater, slope if significant)
- Environmental resources (potentially impacted waterbodies, aquifers, endangered species, wetlands, archeologically sensitive areas, agricultural districts, etc.) including any preliminary coordination with involved agencies
- Floodplain considerations<sup>2</sup> including identification of Base Flood Elevation for the site
- Project impacts to Potential Environmental Justice Area(s) (PEJA) and/or Disadvantaged Communities (DAC). The [DECinfo Locator](#) is a resource to identify these areas.

### 2. Ownership and Service Area

Describe the ownership of the facilities and area(s) being served or to be served. Include details of the following:

- Outside users
  - Discuss any existing/required inter-municipal/private/industrial agreements
- Industrial discharges or hauled waste (e.g., source, volume, composition)
- Population<sup>3</sup> trends and growth:
  - U.S. Census or other data (include sources) for the service area for at least the past twenty years or the Period of Probable Usefulness (PPU), if available. Reference the IUP to determine what year data should be used.

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<sup>2</sup> Floodplain considerations would also include consideration of CRRA guidance referenced throughout this document. The full guidance document can be found [here](#).

<sup>3</sup> EFC uses population to determine the project category in the IUP when a project is listed.

- Discuss any planned or anticipated development.
- Establishment of Sewer Debt Responsibility:
  - Provide the population that is responsible for any debt service associated with the recommended project. This may include users in multiple municipalities.
  - If the population responsible for the debt service and operation/maintenance differ, identify the difference.
  - The debt service population can be provided as actual population responsible for the debt service or estimated from Equivalent Dwelling Units (EDUs).
  - If using EDUs, provide a table detailing EDU quantities by classification (residential, apartments, commercial, institutional, industrial, etc.). When converting the EDUs to population deduct vacant lots, industrial, and commercial properties.
  - Use an estimate of 2.5 residents per EDU
  - Provide backup documentation supporting the population served as appendices to the report (e.g., Intermunicipal Agreements (IMAs); excerpts from Sewer Use Law; tax bills; Map, Plan, and Report; etc.)

### 3. Existing Facilities and Present Condition

Provide overview of major system components and include the following:

- General description and history of major system components with process flow diagram
- Current or future projects on the same site
- State Pollutant Discharge Elimination System (SPDES) Permit conditions and effluent discharge limits. Include when the permit was last issued
- Current SPDES permit as an appendix to the report. Use the [DECinfo Locator](#), if needed
- Publicly Owned Sewer System (POSS) Identification Number, if applicable<sup>4</sup>
- Documented compliance issues (e.g., SPDES or other permit requirements, consent order, notice of violation, judicial order, EPA order) as an appendix to the report
- Design flows and waste loads (average and peak)
- Existing flows and waste loads from the last three years (average and peak)
- Analyses of production rates for processing and/or manufacturing operations (applicable to industry)
- Existing energy consumption (include energy audit results if available)
- Photographs
- History of damage due to storm or flood impacts (include elevation of floodwaters)

Describe each unit process being evaluated and its present condition. Include the following:

- Existing capacity, age, conveyance, treatment, storage, and/or disposal capabilities
- Past projects, significant operations and maintenance history, and preventative maintenance history
- Failure history and component limitations
- Ability to meet current design standards for treatment

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<sup>4</sup> POSS numbers can be found at <https://www.dec.ny.gov/fs/projects/sprtk/regismuni.xlsx>. For municipalities that operate and own both their collection system and treatment plant, the POSS Identification Number is the same as the SPDES Permit Number.

- Planned, current, or future improvements outside of the project scope
- Hydraulic capacity analysis of existing sewers where expansion or increased flow is proposed
- Security and/or Cybersecurity, if applicable to the system
- Inventory of existing assets, if available

#### 4. Definition of the Problem

Describe the need for the project. Include any reports, maps, photographs, or schematics as they relate to:

- Health, sanitation, security, and/or cybersecurity
- Short-lived asset need as supported by a Capital Improvement Plan
- Identify and summarize existing Asset Management Plans<sup>5</sup>. Highlight any project components that directly support plan priorities and specify their corresponding priority levels. Include the relevant plan as supporting documentation.
- Aging infrastructure
- Need for Redundancy
- Infiltration and inflow; CSO; SSO
  - Discuss Long Term Control Plan (LTCP) or Sewer System Evaluation Survey (SSES) requirements, as appropriate
- Reasonable growth and its impact on design flow rates (average, peak day, peak hour)
- County-wide or regional planning efforts
- Water, energy and/or waste considerations (include audits, if available)
- Suitability for continued use
- Physical risk due to climate change (sea level rise, storm surge, potential for flooding impacts, or other extreme weather event)
- Compliance with current standards (federal, state, and local laws)

#### 5. Financial Status<sup>6</sup>

Briefly provide information regarding sources of income, current rate schedules, other capital improvement programs, and status of existing debts and required reserve accounts. When developing the cost estimate for the project, identify the impact on current sewer rates (total increase/decrease to residential rates) or evaluate the cost per EDU and provide appropriate supporting documentation.

Identify whether the project area is contiguous or wholly within a census designated place (CDP). Include a map overlaying the project area and CDP boundary.

EFC utilizes the American Community Survey's five-year estimates published by the U.S. Census Bureau to determine an applicant's Median household Income (MHI). If the census data is not reflective of the area served by the project or the population responsible for the debt incurred for the project, an applicant may perform an Income Survey in accordance with EFC's [Hardship Policy](#).

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<sup>5</sup> Asset Management Plans must be developed in accordance with [DEC's Asset Management Guide](#)

<sup>6</sup> A more detailed financial profile of the municipality will be required by EFC as part of the Application for financial assistance. If this engineering report is to be utilized for other funding programs, more detailed financial information may be required by those programs.

## Alternatives Analysis

The report must include a comprehensive analysis of the following alternatives:

- No-action
- Repair or replacement versus new construction (as described in Appendix D)
- Green infrastructure for treatment of stormwater (including stormwater inflow into sewer systems)
- Regional consolidation opportunities
- Centralized versus decentralized (required for new systems), or a combination thereof (small cluster or individual systems)

Any alternatives considered technically infeasible should be identified as such and the rationale briefly discussed.

### 1. Description

Describe how each alternative will resolve the defined problem. Present the following information for each technically feasible alternative, as appropriate:

- Proposed preliminary design, design standards, sizing, and supporting calculations. Include runoff reduction volume calculations and site conditions for green infrastructure practices
- Impact on existing facility (design average and peak flows and loads)
- Outfall configuration concerns
- Land requirements
- Environmental impacts and mitigation measures
  - Potential State Environmental Quality Review (SEQR) concerns such as water quality and supply, noise levels, air quality, population growth, wetlands, floodplains, and other sensitive areas
  - Potential Impacts (negative or positive) on a PEJA or DAC
- Seasonal limits, challenges, and requirements
- Meet discharge permit requirements required by DEC whether they be existing requirements or new/proposed requirements. Note: It's important to engage the Regional Permit Administrator (RPA) early in the review of the project to ensure a timely coordinated review is done. Please contact NYSDEC to discuss the status of your SPDES permit and the potential need for permit review. If the project scope involves any of the following, a revised/modified SPDES permit and other necessary permits and/or approvals may be required by DEC before approval of design documents or construction can begin. Please include submittal of a full permit application (NY-2A) and time for permit review/issuance in your project schedule giving due consideration to the number and complexity of the permits and approvals needed:
  - Increase in flow or expansion of treatment facility
  - Change to the treatment process
  - Change in outfall location or design
  - Increase or alter the content of the wastes discharged (physical, chemical, or biological)

- Nitrogen reduction treatment strategies, in accordance with New York State Environmental Conservation Law § 17-0809(3), for facilities/outfalls located within
  - the Long Island [Special Groundwater Protection Areas \(SGPA\)](#), OR
  - ten-year time of travel to surface freshwater or marine waters on Long Island.
- Identify the water and energy efficiency measures used
  - Efficient water use, reuse, recapture, and conservation, and energy-efficient design, and/or renewable generation of energy
  - Energy efficiency in accordance with [Appendix A](#) – Energy Efficiency Best Practices, Table 1: NYSERDA Summary of Baseline Standard Practices and Energy Efficient Designs - Wastewater Sector
- Demonstrate consideration for future physical climate risks (sea-level rise, storm surge, potential for flooding impacts, or other extreme weather event)<sup>7</sup> and discuss any measures being undertaken to increase the resiliency of the facility.
- Security and/or cybersecurity
- Constructability and schedule (account for seasonal limitations)

## 2. Cost Estimate

- Total project cost with construction costs, non-construction costs and contingency separately stated
  - The cost estimate must comprehensively cover all elements and phases of the recommended project.
  - Include a detailed breakdown of construction and equipment costs and provide quantities where applicable (e.g., linear feet, diameter, square feet).
  - Non-construction may include land/easement acquisition, legal, engineering, construction management, financial advisor, grant/loan administrator, etc.
  - EFC suggests Total Project Contingencies of 35% for projects without completed design; 25% if design is complete; and 15% after bids are received, inclusive of inflation.
- Annual operation and maintenance (O&M) cost considering personnel, administration, water purchase or waste treatment costs, insurance, energy cost (fuel or electric), process chemical, monitoring and testing, short-lived asset maintenance and replacement (see [Appendix B](#): Examples of Short-Lived Assets), professional services, and residuals disposal. Include any income from energy generation or outside revenue.
- Indicate the change in annual O&M from current budget.
- Calculate the average annual cost per user/EDU after deducting awarded grant funding.

## 3. Non-Monetary Factors

Include discussion of all relevant non-monetary factors such as increased recreational opportunities, increased local employment, aesthetics, improved habitat, reduced carbon footprint, climate resiliency, standardization, personnel impacts, permit issues, community objections, or wetland relocation.

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<sup>7</sup> Storm and flood resiliency would also include consideration of CRRA guidance referenced throughout this document. The full guidance document can be found [here](#).

## Summary and Comparison of Alternatives

Provide a summary table of all technically feasible alternatives identifying any major differences, pros and cons, non-monetary factors, and costs.

- Provide a summary life-cycle cost analysis for all technically feasible alternatives. A comprehensive life-cycle cost analysis may be warranted for projects involving new infrastructure technologies. This analysis should convert capital, O&M, short-lived assets, and salvage costs to present worth values. State the time period and the interest rate used in the evaluation.
- Provide a comparison of current cost per user/EDU and each alternative's impact to sewer rates
- If the project objective is primarily energy efficiency, the payback period should be calculated and compared for each alternative ([Appendix A](#): Energy Efficiency Best Practices, Table 2: Example Payback Period Calculation).
- For projects involving stormwater, including stormwater inflow to sanitary or combined sewer systems, a justification and cost analysis must be provided if a green infrastructure component is not part of the recommended alternative.

## Recommended Alternative

Identify the recommended alternative and include:

- 1) Basis of Selection
  - a) Prioritization of recommendations (e.g., which sewersheds are critical to be repaired first). Consider vulnerability, risk analysis, and cost-effectiveness.
  - b) Justification of why certain alternatives were not selected.
- 2) Cost Estimate and proposed annual cost per user/EDU
- 3) Project Schedule
  - a) Include time for review/issuance of any necessary SPDES permit modifications and any other necessary permits and/or approvals before approval of design
- 4) Next Steps
  - a) Include descriptions of planned community engagement
  - b) Discuss expected SEQR Review
  - c) Engage the RPA early in the review of the project to be sure a coordinated review is done, if needed, and review/issuance of any other necessary permits and/or approvals
  - d) Discuss anticipated procurement methods and plan of contracts (e.g., design/bid/build, energy performance contract, Project Labor Agreement, Wicks, design/build, etc.)
  - e) Attach signed Engineering Report Certification, if seeking funds through EFC ([Appendix C](#))

## Maps & Figures

Provide a series of maps, drawings, and/or figures that details information regarding the site, the project, and its impacts. For each figure, overlay with applicable information such as municipal boundaries, floodplain and/or resiliency guideline elevations, topography, and PEJA and DAC areas. Include necessary map elements including, but not limited to, a north arrow, legend, and scale.

1. Overall service area
  - a. Service area boundaries

- b. Outfalls
  - c. Pump stations
  - d. Treatment plant(s)
- 2. Existing project site
  - a. Site layout/overall schematic drawing
  - b. Hydraulic profile
  - c. Process flow diagram
- 3. Proposed improvements for each alternative
  - a. Sewer lines (Identify type of improvement: new, repair, replace, line, etc.)
  - b. Manholes
  - c. Pump stations
  - d. Treatment plant site(s)
  - e. Outfall modifications
  - f. Hydraulic profile
  - g. Process flow diagram

## Appendix A: Energy Efficiency Best Practices

New York State Energy Research and Development Authority (NYSERDA) has studied the energy usage for the wastewater treatment sector and identified certain practices and technologies that achieve performance and treatment requirements while also reducing the consumption of energy. These practices and technologies are identified in the NYSERDA Water and Wastewater Energy Management – Best Practices Handbook – March 2019 and are summarized on the following page.

DEC and EFC endorse the reduction of energy usage. The cost savings from employing these technologies generally outweigh the initial cost. As such, it is expected that engineering reports address the feasibility of employing energy reduction technologies identified by NYSERDA. If the selected option within an engineering report does not employ the preferred technology (or a technology that provides greater energy efficiency) identified by NYSERDA, the report should provide justification for not selecting the more energy efficient alternative.

**Table 1: NYSERDA Summary of Baseline Standard Practices and Energy Efficient Designs  
Wastewater Sector**

| Operation Process                | Standard Practice                                                                | Typical Energy Efficiency Measures*                                                                                                  |
|----------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Influent Pumping                 | On/Off Level Control and Standard or High Efficiency Motors                      | VFD with Control Loop; Premium or Super Premium Efficiency Motors; Multiple Pumps to Match Actual Flow Conditions                    |
| Primary Treatment                | Standard or High Efficiency Motors; Timers on Sludge Draw-off                    | Premium or Super Premium Efficiency Motors; VFDs on Sludge Draw-off; Chemically Enhanced Primary Settling                            |
| Secondary Treatment              | Standard or High Efficiency Motors                                               | Premium or Super Premium Efficiency Motors; Automatic Controls                                                                       |
| Fixed Film                       | Standard or High Efficiency Motors                                               | Premium or Super Premium Efficiency Motors; Flow Control/VFDs on Recycle                                                             |
| Mechanical Aeration              | Standard or High Efficiency Motors                                               | Premium or Super Premium Efficiency Motors; Level Control on Effluent Weir; Blowers with Diffuser System; Multi-Speed Motors or VFDs |
| Diffuser System                  | Coarse or Medium Bubble Aeration                                                 | Fine or Ultra Fine Bubble Diffusers; Fine or Ultra Fine Bubble Diffusers with Mixers (Used Under Mixing Limited Conditions)          |
| Aeration Blowers                 | Multi-Stage Centrifugal Blowers with Standard or High Efficiency Motors          | Premium or Super Premium Efficiency Motors; Inlet Flow Control; Single-Stage Centrifugal Blowers with VFD or Turbo Blowers           |
| Aeration Blowers                 | Positive Displacement Blowers with Standard or High Efficiency Motors            | Premium or Super Premium Efficiency Motors; VFDs; Single-Stage Centrifugal Blowers with VFD or Turbo Blowers                         |
| DO Control                       | Manual handheld DO Monitoring with Manual Adjustment                             | VFDs with DO or Pressure Control Loop; Start/ Stop Blowers; Control Airflow and Output                                               |
| WAS/RAS Pumps                    | Timed Operation and Standard or High Efficiency Motors                           | VFD with Control Loop; Premium or Super Premium Efficiency Motors                                                                    |
| Tertiary Treatment               | Flow Control Valves and Standard or High Efficiency Motors                       | VFD with Control Loop; Premium or Super Premium Efficiency Motors                                                                    |
| UV Disinfection                  | Medium Pressure UV Lamps                                                         | Low Pressure High Output Lamp Technology or Hybrid (Fewer Lamps, Low Power) Technology with Dimming Capability; Dose Pacing          |
| Effluent Pumping                 | On/Off Level Control; Flow Control Valves and Standard or High Efficiency Motors | VFD with Control Loop; Premium or Super Premium Efficiency Motors; Multiple Pumps to Match Actual Flow Conditions                    |
| Sludge Processing                | Standard or High Efficiency Motors                                               | Premium or Super Premium Efficiency Motors and VFDs, Where Appropriate                                                               |
| Anaerobic Digesters Mixers       | Gas Mixing, Hydraulic Sludge Mixing, Mechanical Mixing Technologies              | Large Bubble Compressed Biogas, Pumps with VFDs, Vertical Linear Mixers                                                              |
| Plant Water System               | Constant Speed Pumps; System-wide Pressure                                       | VFD with Pressure Control; Booster Pumps at Specific Processes                                                                       |
| Building Systems                 | Building Energy Code Compliant                                                   | Lighting, HVAC, etc. More Efficient than Building Energy Code                                                                        |
| Distributed Renewable Generation | None                                                                             | Incorporation of Renewable Distributed Generation Assets                                                                             |

\*Typical Energy Efficiency Measures were developed for standard conditions and run times. Actual recommendations are evaluated on a case-by-case basis.

The payback period should be calculated for energy efficient practices included in the recommended alternative and compared to the expected useful life of the equipment. If the project objective is primarily for energy efficiency, the payback period should be calculated for each alternative.

Table 2: Example Payback Period Calculation

| Operation/Process: Aeration Blowers           | Baseline/Existing Standard Practice | Energy Efficiency Practice |
|-----------------------------------------------|-------------------------------------|----------------------------|
| Annual Electric Use (kWh/yr.)                 | 2,000,000                           | 750,000                    |
| Annual Energy Cost (\$)                       | \$200,000                           | \$75,000                   |
| Estimated Construction Cost                   | \$1,000,000                         | \$1,200,000                |
| Annual Electric Savings (kWh/yr.)             | 1,250,000                           |                            |
| Annual Energy Savings (\$/yr.)                | \$125,000                           |                            |
| Energy Savings (%)                            | 62.5%                               |                            |
| Incremental Cost Increase (\$)                | \$200,000                           |                            |
| Simple Payback (SPB) of Incremental Cost (yr) | 1.6                                 |                            |
| Expected Useful Life of Component (yr)        | 15                                  |                            |

Payback Period

$$= \frac{(\text{incremental cost of EE measure}[\$] + \text{incremental O\&M cost of EE measure}[\$])}{\text{Energy Savings } [\$/\text{yr}]}$$

## Appendix B: Examples of Short-Lived Assets

The United States Department of Agriculture (USDA) defines short-lived assets as equipment/assets which are not daily/weekly/monthly O&M type items. The time frame for these items has been established in three periods: 0-5 years, 5-10 years, 10-15 years. Some typical short-lived asset items and their time periods are provided in Table 3 and additional short-lived asset examples are provided in Table 4.

Table 3: USDA Short-Lived Asset Time Periods

| Short-Lived Assets                   |       |    |    |
|--------------------------------------|-------|----|----|
| Asset                                | Years |    |    |
|                                      | 5     | 10 | 15 |
| Pumps (years depends on type)        | X     | X  | X  |
| Meters                               |       |    |    |
| Individual                           | X     | X  |    |
| Master                               |       | X  |    |
| Tank Painting                        |       |    | X  |
| Control Valves                       | X     | X  |    |
| Disinfection Equipment               | X     | X  |    |
| Computer Equipment/Software          | X     |    |    |
| Control Equipment                    | X     |    |    |
| Gauges                               |       | X  |    |
| Transmitters                         |       | X  |    |
| Sensors                              |       | X  |    |
| Power &/or Specialty Equipment       |       |    | X  |
| Vehicles                             |       | X  |    |
| Lab Equipment                        | X     |    |    |
| Tools                                | X     |    |    |
| Emergency Generator                  |       |    | X  |
| Tank Cathodic Protection Replacement |       | X  |    |
| Filter Media Replacement             |       |    | X  |

Table 4: Treatment Related vs. Collection System Related

| Treatment Related                                                                                                                                                                                                                                                                                                                     | Collection System Related                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pump Motors<br>Membrane Filter Fibers<br>Field & Process Instrumentation Equipment<br>UV Lamps<br>Centrifuges<br>Aeration Blowers<br>Aeration Diffusers & Nozzles<br>Trickling Filters, RBC's, etc.<br>Belt Presses & Driers<br>Sludge Collecting & Dewatering Equipment<br>Pressure Transducers<br>Chemical Leak Detection Equipment | Pump Motors<br>Trash Racks/Bar Screens<br>Sewer Line Rodding Equipment<br>Air Compressors<br>Vaults, Lids & Access Hatches<br>Security Devices & Fencing<br>Alarms & Telemetry<br>Chemical Leak Detection Equipment |

## Appendix C: Engineering Report Certification

*(Required for EFC financial assistance)*

## **Engineering Report Certification**

To Be Provided by the Professional Engineer Preparing the Report

During the preparation of this Engineering Report, I have studied and evaluated the cost and effectiveness of the processes, materials, techniques, and technologies for carrying out the proposed project or activity for which assistance is being sought from the New York State Clean Water State Revolving Fund. In my professional opinion, I have recommended for selection, to the maximum extent practicable, a project or activity that maximizes the potential for efficient water use, reuse, recapture, and conservation, and energy conservation, taking into account the cost of constructing the project or activity, the cost of operating and maintaining the project or activity over the life of the project or activity, and the cost of replacing the project and activity.

**Title of Engineering Report:**

**Date of Report:**

**Professional Engineer's Name:**

**Signature:**

**Date:**

## Appendix D: Additional Considerations for Specific Technologies and Project Types

If a report is evaluating any of the following project types, please include the appropriate considerations within the report. This is not a comprehensive list, nor will all considerations apply in every case. These are common considerations to assist in the preparation and review of engineering reports. See the [Engineering Report Preparation Standards](#) section for additional guidance.

### Collection/Conveyance

#### 1. New Collection System

- Consider local sewer use laws and ordinances. Determine if they need to be modified or amended.
- Describe the methodology used to estimate flow rates and capacity of the new system based on the proposed service area.
- Discuss relevant environmental and site considerations, such as wetlands, shallow bedrock, and environmentally sensitive areas.
- Discuss ownership (e.g., sewage works corporations) of the proposed system and whether easements or land acquisition will be required.
- Evaluate decentralized alternatives.
- Provide assurance from the affected community that the existing population will connect to the system within a reasonable time following project completion.
- Include documentation that the receiving community has appropriate capacity.
- Review and discuss relevant IMAs. Verify they are valid and binding.
- Evaluate technically feasible collection system alternatives, including, but not limited to, gravity sewer, low-pressure sewer, and septic tank effluent systems, as applicable.

#### 2. Sanitary Sewer System Evaluations and Infiltration and Inflow Reports

- Compare dry and wet weather flows.
- Consider local sewer use laws and ordinances. Determine if they need to be modified or amended.
- Consider peak infiltration, peaking factors, peak inflow rates, total yearly infiltration, and total yearly inflow.
- Discuss
  - Asset Management Program implementation and risk assessment of critical infrastructure.
  - Average low groundwater infiltration.
  - Determination of rainfall/inflow volume relationship.
  - Identified storm/sanitary sewer cross connections from building inspections and/or surveys as sources of inflow.
  - Monitoring of groundwater and precipitation.
- Evaluate repair versus replacement and different construction techniques as applicable (e.g. pipe lining, pipe bursting, open cut replacement, directional boring, etc.).
- If there are documented CSOs or SSOs in the system, demonstrate how the project will eliminate or reduce frequency and volume of overflow events.
- Include recommendations for further studies of infiltration and inflow sources.
- Include sewer capacity analysis and modeling that demonstrates adequate capacity of the project design.

- Provide a summary of results for any flow monitoring, manhole inspection, TV inspection, and smoke or dye testing in the collection system.
- Provide an inventory of existing system relevant to project scope.
- Review and discuss relevant IMAs. Verify they are valid and binding.

## Treatment Works

### 1. New Treatment Plants

- A thorough evaluation of potential sites should be conducted to identify the most suitable location. The report must recommend a final site location.
- Discuss potential permit limits with DEC and provide a summary in the report. These limits are specific to the chosen site and should not be based on estimates from neighboring facilities or regional averages.
- The plant design must be aligned with the DEC-issued permit limits to ensure compliance and minimize environmental impact.

### 2. Disinfection

All disinfection technologies shall consider the process influent bacteria count, the target organisms, treatment dosage, permit conditions, process influent TSS concentrations, and redundancy requirements.

- Chlorination/Dechlorination
  - Discuss the choice of chlorination method considering wastewater flow rates, receiving waterbody characteristics, application and demand rates, pH of wastewater, cost of equipment, chemical availability, required maintenance, and safety concerns.
  - Discuss the design of the system including sizing of feed equipment, chemical storage, type of feed system, mixing point and residual time.
  - If dechlorination is required, discuss where the chemicals will be applied and the required contact period.
- Ultraviolet (UV) Disinfection
  - Ensure that UV systems can provide the minimum UV dose at the point of disinfection at design average and peak flows necessary to comply with a facility's permit.
  - In determining the design dose, particle size distribution, hardness, and transmittance (UVT) should be considered. Include test results as an appendix to the report.
  - Perform a transmittance study covering weekdays, weekends, and summer months if possible.
    - Use 254 nm wavelength for testing if designing a low-pressure UV disinfection system.
    - Measure transmittance for multiple wavelengths between 200-400 nm if medium-pressure UV lamps are under consideration.
- When there is a choice between disinfection methods, provide life-cycle cost analyses of each option.

### 3. Innovative Systems

- Cite references from peer-reviewed literature to support the effectiveness of the technology and the validity of the design calculations.
- Explain any new staff training that may be required with the system.
- Provide a thorough description of the system's operation and maintenance requirements. Consider any weaknesses/sensitivities of the innovative technology and explain how they would be accommodated.

- Provide case studies or operating data from existing installations demonstrating the effectiveness of the technology for similar waste streams in a similar climate.
- Provide design calculations for all constituents the innovative system is expected to treat.
- Provide the manufacturer's sizing and design information for review.

#### 4. Nutrient Removal

- Analyze and compare multiple alternatives for nutrient removal.
- Nitrogen Removal
  - Compare methods of nitrification and/or denitrification. Thoroughly describe the method chosen, process flow rates, and recycling flow rates.
- Phosphorus Removal
  - Compare biological methods and physical/chemical methods.
  - Conduct pilot tests and provide the results.
  - Describe effect on sludge handling, disposal, and cost.
  - Describe effects on disinfection rate.
  - Provide a comparison of filter technologies.
  - Provide a comparison of water treatment chemicals (WTC) and potential for toxicity.

#### 5. Secondary Treatment

- Define the treatment objectives and outline how the chosen technology most efficiently and effectively meets those goals.
- If a standard treatment process is not being proposed, justify why (e.g., no flow equalization provided).
- If the preliminary and primary treatment are pre-designed into a package plant, demonstrate that adequate volume and dimensioning for grit removal, solids separation and solids storage are provided.
- Provide flow equalization for all treatment modes except for septic tanks, single-pass sand filters, and lagoons.
- Analyze and compare multiple alternatives for secondary treatment as applicable.

#### 6. Sludge Handling and Disposal

- Discuss alternative technologies of treating the sludge onsite as well as hauling sludge elsewhere.
- Discuss how potential odor or other environmental problems have been considered.
- Discuss the magnitude of additional loadings from nutrient removal and treatment.
- Present the results of any testing done to determine sludge volume and characteristics.
- Provide adequate sludge treatment for the method of final disposal selected
- Sludge digestion:
  - Provide volume requirements, mixing requirements, gas collection, air requirements, and supernatant collection.
  - Analyze and compare aerobic versus anaerobic digestion processes as applicable.
- Thickeners: Present comparison of technologies. Include design parameters such as tank size and polymer additions.
- For applicable projects, provide an overall life-cycle analysis of different feasible sludge handling and disposal alternatives that includes sludge holding, thickening, digestion, dewatering, and disposal. Include regionalization of services where appropriate and feasible.

## Processes and Technologies for Non-Publicly Owned Treatment Works Elements

### 1. Decentralized Wastewater Systems

- Evaluate the following systems: septic tanks and drain fields, small-diameter sewers, cluster systems, pressure or vacuum sewers, privately owned individual systems (e.g., PCI facilities).

### 2. Reuse/Land Application Treatment

- Consider frozen and/or saturated soil impacts. Identify storage needs.
- Consider distances to and impacts on local drinking water wells and surface waters.
- Consider quantity and location of any monitoring wells (upgradient and downgradient).
- Describe the level of (pre-) treatment prior to land application.
- Evaluate sampling plan(s).
- Evaluate the potential land treatment site: land use area, USDA NRCS Soil Classification, presence of fill or disturbed soil, acceptable geology, identification of vegetation, description of topography, description of surface and ground water hydrology, consideration of application methods and rates (volume and loading).
- Provide results of any boring logs, percolation tests, infiltration tests, or other subsurface investigations.
- Recognize that applying wastewater to the land is not considered reuse unless it is for irrigation.

### 3. Stormwater

- Compare gray versus green alternatives for stormwater management.
- Depict the stormwater flow path and areas of stormwater permit coverage (if available/appropriate).
- Discuss reduction in stormwater volume and possible impacts on CSOs or SSOs achieved by infiltration, groundwater recharge, harvest and reuse, recycle, and evaporation/evapotranspiration through the use of green infrastructure techniques as a standard practice.
- Evaluate the need for stormwater permit coverage.
- For green infrastructure methods, include the following:
  - Current land use
  - Depth to bedrock (for infiltrating practices)
  - Depth to water table (for infiltrating practices)
  - Discussion of any other site considerations (e.g., wetlands, flood-plain elevations, brownfield remediation)
  - Results of any boring logs, infiltration tests, or other subsurface investigations (for infiltrating practices)
  - USGS Soil Classification (for infiltrating practices).

## Flood Risk Evaluation

1. Determine Base Flood Elevation (BFE)
  - Federal Emergency Management Agency (FEMA) issues flood insurance rate maps (FIRMs) that identify the 1-percent annual chance flood, also known as the base flood elevation (BFE)
  - If observed flood levels from past events surpass the BFE, historical flood levels should be used as the BFE.
2. Freeboard Adjustment
  - Non-critical equipment should be designed at least 2 feet above the BFE and corresponding horizontal floodplain.
  - Critical equipment<sup>8</sup> should be designed at least 3 feet above BFE, or the 500-year flood plain whichever is more restrictive.
3. Sea-level Rise Adjustment
  - Use a relevant sea-level rise mapper to determine if a project site is within six feet of sea level rise by 2100. If the project is within six feet of sea level rise, use Table 5 to quantify the adjustment.
  - Determine the rate of rise by adding the project's PPU to the estimated construction completion year.
  - Non-critical equipment should be designed to the medium sea-level rise projection.
  - Critical equipment should be designed to the high sea-level rise projection.

**Table 5: NYCRR Part 490 Projected Sea Level Rise**  
(INCHES OF RISE RELATIVE TO 2000 2004 BASELINE)  
ADOPTED FEBRUARY 22, 2017, AMENDED SEPTEMBER 2024

| Rate of Rise (in) | Low                                            | Low medium | Medium | High medium | High |
|-------------------|------------------------------------------------|------------|--------|-------------|------|
| <b>Region</b>     | <b>Mid-Hudson<sup>9</sup></b>                  |            |        |             |      |
| 2030s             | 5                                              | 7          | 8      | 10          | 12   |
| 2050s             | 11                                             | 12         | 14     | 17          | 21   |
| 2080s             | 18                                             | 21         | 26     | 35          | 41   |
| 2100              | 21                                             | 25         | 32     | 46          | 60   |
| 2150              | 32                                             | 41         | 52     | 82          | 171  |
| <b>Region</b>     | <b>New York City/Lower Hudson<sup>10</sup></b> |            |        |             |      |
| 2030s             | 6                                              | 7          | 9      | 11          | 13   |
| 2050s             | 12                                             | 14         | 16     | 19          | 23   |
| 2080s             | 21                                             | 25         | 30     | 39          | 45   |
| 2100              | 25                                             | 30         | 36     | 50          | 65   |
| 2150              | 38                                             | 47         | 59     | 89          | 177  |
| <b>Region</b>     | <b>Long Island<sup>11</sup></b>                |            |        |             |      |
| 2030s             | 7                                              | 8          | 10     | 12          | 14   |
| 2050s             | 13                                             | 15         | 18     | 21          | 25   |
| 2080s             | 23                                             | 26         | 32     | 41          | 48   |
| 2100              | 27                                             | 32         | 39     | 54          | 69   |
| 2150              | 42                                             | 50         | 63     | 94          | 185  |

<sup>8</sup> Critical equipment is defined in TR-16 Section 1.2.1h

<sup>9</sup> The main stem of the Hudson River, from the federal dam at Troy to the mouth of Rondout Creek at Kingston, NY.

<sup>10</sup> The main stem of the Hudson River, south from the mouth of Rondout Creek at Kingston and the marine coast of the five boroughs of New York City and the Long Island Sound in Westchester County.

<sup>11</sup> The marine coast of Nassau and Suffolk counties.

4. Guideline Elevations: The guideline elevation is the summation of the BFE and applicable freeboard and sea-level rise adjustments, as shown in Figure 1.

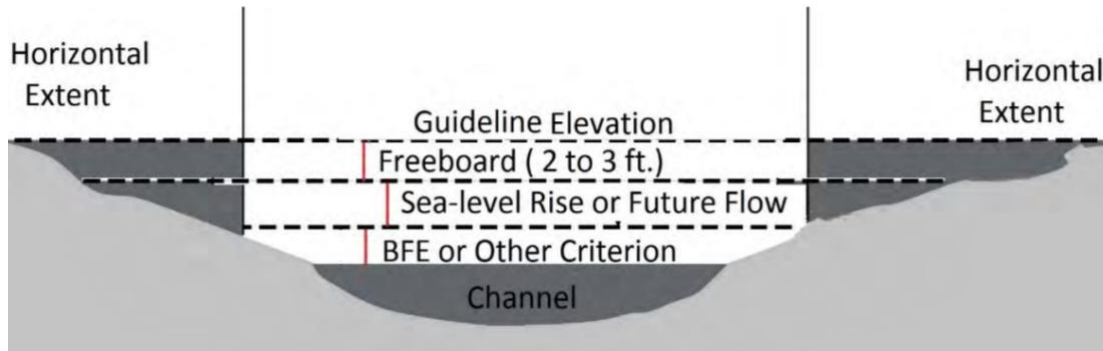


Figure 1: Illustration of CRRA Guideline Elevation

5. Complete the SPDES Permit Application Supplemental Information Form in Appendix E.
6. For further details regarding guidance on flood risk considerations and sea level rise, refer to the New York State Flood Risk Management Guidance for Implementation of the Community Risk and Resiliency Act

## Appendix E: SPDES Permit Application Supplemental Information Form

## SPDES Permit Application Supplemental Information Form

§ 70-0117 Demonstration: Consideration of Future Physical Climate Risk

Following the 2019 Climate Leadership and Community Protection Act (Climate Act), which amended the 2014 Community Risk and Resiliency Act (CRRRA), individual SPDES permit applicants for “major” projects<sup>1</sup> are required to demonstrate consideration of future physical climate risks, including those due to sea level rise, storm surges, and flooding. This form has been developed so the applicant can assess relevant information to comply with the requirements to consider future physical climate risks to wastewater infrastructure (i.e., facility, pump/lift stations). This information can be used by applicants to support future planning efforts.

Applicants should review the [Flood Risk Management Guidance](#) and the [Asset Management Guide for Publicly Owned Treatment Works](#) to identify current and future flood elevations, and to review examples of risk mitigation strategies. For assistance reading flood maps, please contact the community Floodplain Administrator by emailing [floodplain@dec.ny.gov](mailto:floodplain@dec.ny.gov).

For all fields provided below, applicants may attach additional sheets as necessary.

### Facility

|                                                                                                                                                                                                                                                                      |  |                                                                                                                              |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------|--|
| 1. a. Facility name                                                                                                                                                                                                                                                  |  | b. SPDES No.                                                                                                                 |  |
| 2. a. Does the facility discharge to a tidal waterbody? (Y/N)                                                                                                                                                                                                        |  | b. If yes, what is the high projection for sea level rise (SLR) in <a href="#">6 NYCRR 490</a> for the regional area? (feet) |  |
| 3. Please describe the type and extent of any past flooding events at the facility.                                                                                                                                                                                  |  |                                                                                                                              |  |
| 4. What are the applicable <a href="#">Flood Insurance Rate Map</a> (FIRM) Nos. and expiration dates?                                                                                                                                                                |  |                                                                                                                              |  |
| 5. a. Is any portion of the facility located in a FEMA designated flood zone? If yes, what is the zone type? If no, are there adjacent flood zones that could be considered or skip to question 6.                                                                   |  |                                                                                                                              |  |
| b. What is the <a href="#">lowest ground elevation</a> at the facility? (ft)                                                                                                                                                                                         |  |                                                                                                                              |  |
| c. What is the <a href="#">Base Flood Elevation</a> (BFE) at the facility? (ft)                                                                                                                                                                                      |  |                                                                                                                              |  |
| d. What is the <b>Future BFE</b> for the facility based on the <a href="#">NYS Flood Risk Management Guidance</a> ?<br><i>Tidal Areas: BFE + SLR (Method 4)</i><br><i>Non-Tidal Areas: Q100 (Method 3 or use available flood profiles from Flood Insurance maps)</i> |  |                                                                                                                              |  |
| e. What is the target elevation for <u>critical equipment</u> ?<br><b>Future BFE + 3 feet</b>                                                                                                                                                                        |  |                                                                                                                              |  |
| f. Compare questions <b>5.b.</b> and <b>5.e.</b> Is the target elevation greater than the lowest ground elevation?                                                                                                                                                   |  |                                                                                                                              |  |
| 6. What climate risk mitigation measures are in place at the facility? Are any future projects anticipated that provide further opportunity to address climate risk?                                                                                                 |  |                                                                                                                              |  |

### Pump/Lift Station(s)

|                                                                                                          |  |
|----------------------------------------------------------------------------------------------------------|--|
| 7. Are there pump/lift station(s) owned by the permittee? If yes, how many? If no, skip to Certification |  |
| 8. Please describe the type and extent of any past flooding events at the pump/lift station(s).          |  |

<sup>1</sup> “Major” projects are those identified in Uniform Procedures Act regulations at 6 NYCRR 621.4.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--|
| 9. What are the applicable <a href="#">Flood Insurance Rate Map</a> (FIRM) Nos. and expiration dates?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       |  |
| 10. a. Are any pump/lift stations located in a FEMA designated flood zone?<br>If yes, which stations and what zone type?<br>If no, skip to question 11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       |  |
| b. What is the <a href="#">lowest ground elevation</a> at each pump/lift station? (ft)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       |  |
| c. What are the <a href="#">BFEs</a> , future BFEs, and target elevations for critical equipment (future BFE + 3 ft) for each pump/lift station?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                       |  |
| d. Compare questions <b>10.b.</b> and <b>10.c.</b> How many pump/lift stations are below the target elevation?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |
| 11. What climate risk mitigation strategies are in place at the pump/lift stations? Are any future projects anticipated that provide further opportunity to address climate risk?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |  |
| <b>Certification Statement</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |
| I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |  |
| I have demonstrated consideration of current and future physical climate risk.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |
| <b>Name</b> (print or type first and last name)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Official Title</b> |  |
| <b>Signature</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Date Signed</b>    |  |
| <b>List of Attachments</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                       |  |
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| <b>Additional Resources/Information</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                       |  |
| <ul style="list-style-type: none"> <li>Flood Risk Management Guidance - <a href="https://www.dec.ny.gov/energy/102559.html">https://www.dec.ny.gov/energy/102559.html</a></li> <li>Estimating Guideline Elevations - <a href="https://www.dec.ny.gov/docs/administration_pdf/crraestelevguidelines.pdf">https://www.dec.ny.gov/docs/administration_pdf/crraestelevguidelines.pdf</a></li> <li>Asset Management Guide - <a href="https://www.dec.ny.gov/chemical/101412.html">https://www.dec.ny.gov/chemical/101412.html</a></li> <li>Sea Level Rise Projections - <a href="https://www.dec.ny.gov/regulations/103877.html">https://www.dec.ny.gov/regulations/103877.html</a></li> <li>Ground Elevations - <a href="https://ngmdb.usgs.gov/topoview/viewer/#13/43.2885/-74.4839">https://ngmdb.usgs.gov/topoview/viewer/#13/43.2885/-74.4839</a></li> <li>Flood Insurance Rate Maps - <a href="https://msc.fema.gov/portal/home">https://msc.fema.gov/portal/home</a></li> <li>Ten State Standards – <a href="https://www.health.state.mn.us/communities/environment/water/docs/tenstates/tenstatestan2014.pdf">https://www.health.state.mn.us/communities/environment/water/docs/tenstates/tenstatestan2014.pdf</a></li> <li>TR-16 – <a href="https://neiwpcc.org/learning-center/tr-16-guides-design-wastewater-treatment-works/">https://neiwpcc.org/learning-center/tr-16-guides-design-wastewater-treatment-works/</a></li> <li>DEC's Office of Climate Change - <a href="https://www.dec.ny.gov/energy/44992.html">https://www.dec.ny.gov/energy/44992.html</a></li> <li>DEC's Water Quality Improvements Projects Funding – <a href="https://www.dec.ny.gov/pubs/4774.html">https://www.dec.ny.gov/pubs/4774.html</a></li> <li>EFC's Clean Water Financing – <a href="https://efc.ny.gov/">https://efc.ny.gov/</a></li> </ul> |                       |  |