



**TOWN OF LEWISBORO
TOWN BOARD MEETING 7:30 P.M.
AGENDA
(FORMER) LEWISBORO ELEMENTARY SCHOOL (LES) GYMNASIUM
79 BOUTON ROAD, SOUTH SALEM
MONDAY, JULY 26, 2021**

- I. PUBLIC COMMENT PERIOD I**
- II. COMMUNICATIONS**
- III. NEW BUSINESS**
 - a. Comprehensive Plan Steering Committee Quarterly Update – Katie McGinn
 - b. Cityscape Update – Susan Rabold
 - c. Library Fair Presentation
 - d. Resolution to Approve Cabaret License for Waccabuc County Club
 - e. Resolution to Rescind the June 28, 2021, Board Resolutions Authorizing the Sale of Two Town Parcels
 - f. Presentation Regarding NYSERDA Grant – Councilman Dan Welsh
 - g. Discussion Regarding Westchester Power Renewal Memorandum of Understanding
 - h. Resolution to Authorize Proceeding with Emergency Repairs to Town Park Retaining Wall Adjacent to Baseball Field
 - i. Discussion and Setting of a Public Hearing Regarding Gas Station Law
 - j. Discussion of Oakridge Water District PFAS Treatment Project
 - i. Accept the Map and Plan 202(b) Report
 - ii. Resolution Determining the Project to be a Type II Action Under SEQR
 - iii. Order Calling for a Public Hearing on August 9, 2021
 - k. Resolution Approving Installation of Altice/Cablevision Fiber Optic Cabinet on Mead Street
- IV. PUBLIC COMMENT PERIOD II**
- V. APPROVAL OF CLAIMS**
- VI. POLLING OF THE BOARD**

VII. ANNOUNCEMENTS

Town Board Meeting Monday, August 9, 2021, at 7:30 p.m., Lewisboro Elementary School (LES) Gymnasium, 79 Bouton Road, South Salem.

MOTION TO GO INTO EXECUTIVE SESSION

Town Board Meetings Accessibility: The Town of Lewisboro is committed to providing equal access to all its facilities, services, and activities to the fullest extent possible. The Town House, Cyrus Russell Community House, Onatru Farmhouse, and the Bouton Road Town Offices are accessible to persons with physical handicaps. If anyone who wishes to attend any meeting of the Town Board has special needs, please contact the Supervisor's Office (763-3151) at least one week before any scheduled in-person meeting, and we will try to accommodate whenever possible.

Live Stream of the meeting is available on Lewisboro TV YouTube

or

Zoom Meeting

<https://zoom.us/j/93862962307?pwd=dmxkSWd3SUd4WGYvbEZDQkJSsgVuUT09>

Meeting ID: 938 6296 2307

Passcode: 195369

Dial by your location

+1 929 205 6099 US (New York)

Meeting ID: 938 6296 2307

Passcode: 195369

CABARET LICENSE APPLICATION

TOWN OF LEWISBORO
TOWN HOUSE
11 MAIN STREET
SOUTH SALEM, NY 10590

1. Name of applicant Waccabuc Country Club
2. Location of cabaret 90 Mead Street + Perch Bay Road
3. Business address P.O. Box 400, Waccabuc, New York 10597
4. Business telephone numbers 914-763-3144, ext # 212
5. Home and emergency telephone numbers 914-~~763-3144~~
6. Name of owner Waccabuc Country Club
7. Names and addresses of officers of business, etc.
 - a) Ashley Murphy, President ~~Waccabuc Country Club~~ Cross River, NY - 10518
 - b) Kimberly Canfield, Vice President ~~Waccabuc Country Club~~ Waccabuc, NY - 10597
 - c) Peter Hall, Secretary ~~Waccabuc Country Club~~ South Salem, N.Y. - 10590
8. Operator of premises John D. Assumma, GENERAL Manager - Waccabuc Country Club
9. Type of musical entertainment live Band/s and Solo
10. Number of square feet in the room or rooms to be used for cabaret purposes _____
11. License fee \$ 150.00
12. Date July 7, 2021

13. Signature of applicant

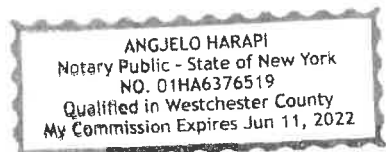
John D. Assumma
GENERAL Manager - Waccabuc Country Club
Title

Corporate Seal

Sworn to before me this 7th day of July, 2021

[Signature]
Notary Public

LICENSE IS NOT TRANSFERABLE



MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding is entered into by and between:

Sustainable Westchester, Inc., a New York non-profit corporation (“Sustainable Westchester”), and the City/Town/Village of _____ (the “Municipality”), a local government member of Sustainable Westchester (each a “Party” and collectively, the “Parties”).

1. Background:

- a. In February 2015, the New York Public Service Commission issued an Order for Case 14-M-0564 as follows: “The Petition of Sustainable Westchester is granted to the extent that its municipal members are authorized to undertake a Community Choice Aggregation demonstration project consistent with the discussion in the body of this Order...”
- b. The PSC subsequently issued an Order for Case 14-M-0224 on April 21, 2016, which authorized Community Choice Aggregation (“CCA”) throughout New York State (the “CCA Order”) and on November 15, 2018 issued the “Order Approving Renewal of the Sustainable Westchester Community Choice Aggregation Program” reauthorizing the Sustainable Westchester CCA program under a Master Implementation Plan.
- c. Sustainable Westchester’s CCA Program enrolled Participating Customers from an initial group of 20 participating municipalities in April 2016. Since then, eight additional municipalities have joined and several other municipalities are actively working towards participation.
- d. For participating municipalities in the New York State Electric and Gas (“NYSEG”) utility territory, the current Electric Service Agreement for the Sustainable Westchester CCA Program will terminate on November 30, 2021.
- e. In compliance with the PSC CCA Orders, the **Municipality** has adopted local legislation to enable Community Choice Aggregation.
- f. As a member of Sustainable Westchester in good standing and participant in the Sustainable Westchester CCA Program, the **Municipality** wishes to continue to engage the services of Sustainable Westchester as the Program Manager for Community Choice Aggregation for the Operation and Maintenance of the Program.

2. Definitions:

- a. **Eligible Customers** – Customers of electricity and/or natural gas eligible to participate in the CCA Program, either on an Opt-out or Opt-in basis, as delineated in the CCA Framework Order. For the avoidance of doubt, all Eligible Consumers must reside or be otherwise located at one or more locations within the geographic boundaries of the Municipality and served by the Distribution Utility, as such boundaries exist on the Effective Date of this ESA.
- b. **Default Product** – The product selected by the Municipality for supply to its Eligible Customers upon enrollment, unless they take action to select a different product or opt out.
- c. **Community Choice Aggregation Program or CCA Program or Program**– A municipal energy procurement program, which replaces the incumbent utility as the default supplier for all Eligible Customers within the Participating Municipality, as defined in the PSC CCA Orders.

- d. **Competitive Supplier:** An entity duly authorized to conduct business in the State of New York as an energy service company (“ESCO”) that procures electric power for Eligible Customers in connection with this CCA Program.
- e. **Compliant Bid:** Electric power supply bid from a Competitive Supplier that meets the requirements specified in this MOU and the 2021 ESA. A Compliant Bid price must be inclusive of fees owed to Program Manager and be less than:
 - i. Residential accounts: 8.70 cents/kwh;
 - ii. Small commercial accounts: 8.70 cents/kwh
- f. **Distribution Utility:** Owner or controller of the means of distribution of the natural gas or electricity that is regulated by the Public Service Commission in the Participating Municipality.
- g. **Electric Service Agreement (“ESA”):** An agreement that implements a CCA Program and contains all the terms and conditions of the Program.
- h. **2020 ESA:** The ESA which implemented the Sustainable Westchester CCA Program during the period from December 1, 2020 to November 30, 2021.
- i. **2021 ESA:** The ESA which will implement Sustainable Westchester CCA Program commencing December 1, 2021 for the NYSEG service territory. The 2021 ESA shall have substantially the same terms outlined in the attached 2021 ESA Template (Attached as Exhibit 1). The 2021 ESA Template tracks as closely as possible to the 2020 ESA in its content, with only minor clarifying changes to better align the 2021 ESA Template with the CCA Orders and the Program’s existing practices.
- j. **CCA Orders:** Collectively, the February 26, 2015 “Order Granting Petition in Part” issued by the PSC in Case 14-M-0564; the April 21, 2016 “Order Authorizing Framework for Community Choice Aggregation Opt-out Program” issued by the PSC in Case 14-M-0224 (the “CCA Framework Order”), which sets forth the requirements, terms, and conditions under which CCA programs can proceed through implementation; and the November 15, 2018 “Order Approving Renewal of the Sustainable Westchester Community Choice Aggregation Program” issued by the PSC in Case 14-M-0564, which reauthorizes the Sustainable Westchester CCA program under a Master Implementation Plan.
- k. **Qualifications Review:** A verification of the status of the Competitive Supplier as an electricity supplier in the Distribution Utility’s service territory. A precondition for attaining such status is that Competitive Supplier has met the credit requirements established by the New York Independent Systems Operator .
- l. **Participating Municipality:** A dues-paying municipal member of Sustainable Westchester, which has adopted the applicable local legislation for the Community Choice Aggregation Program.
- m. **Participating Customers:** Eligible Customers enrolled in the Program, including Opt-out Eligible Customers who have been enrolled subsequent to the opt-out process and other customers who have opted in.
- n. **Opt-out Eligible Customers:** Eligible Customers that are eligible for Opt-out treatment as delineated in the CCA Framework Order. For the avoidance of doubt, Opt-out Eligible Customers shall not include customers that have previously opted-out of the Program.
- o. **Program Manager:** Sustainable Westchester, a non-profit corporation of which the Municipality is a member.

- p. **Public Service Commission (“PSC”)**: The New York State Public Service Commission or the New York State Department of Public Service acting as staff on behalf of the Public Service Commission.
- 3. **Purpose**: The purpose of the Memorandum of Understanding is as follows:
 - a. To establish participation by **the Municipality (hereafter, the “Participating Municipality”)** in a Community Choice Aggregation Program (hereafter, the “Program”) that will be managed on its behalf by **Sustainable Westchester, (hereafter, the “Program Manager”)** under the 2021 ESA.
 - b. To affirm that the Participating Municipality and Program Manager agree to adhere to the terms and conditions of the 2021 ESA in the event they execute it.
 - c. To affirm that the Participating Municipality and Program Manager agree to execute the 2021 ESA, subject to the conditions of review and approval outlined in 4(c) and 5(a), below.
- 4. **Roles and responsibilities of the Program Manager**: As Program Manager, Sustainable Westchester agrees to perform all duties outlined in the 2021 ESA and, prior to execution of that agreement, Program Manager agrees to:
 - a. Provide the involved agencies and parties to the PSC CCA Orders, including, but not limited to, the Public Service Commission and Distribution Utility, requested information about and documentation of the actions undertaken by the Participating Municipality in furtherance of enabling participation in the Program;
 - b. Manage the energy procurement bidding process including:
 - i. the identification and notification of potential firms seeking to be the Competitive Supplier,
 - ii. the management of the Request for Proposals (“RFP”) process from preparation of the content to the publication of the RFP and management of firms responding to the RFP,
 - iii. the preparation of the 2021 ESA that will be included in the RFP,
 - iv. the acceptance, secure opening, and review of the responses to the RFP, and the organization of the Qualifications Review and bid evaluation, all in a manner that is transparent to the Participating Municipality and firms seeking to be the Competitive Supplier;
 - c. Sign the 2021 ESA in a timely fashion subject to the conditions that:
 - i. the Competitive Supplier is deemed qualified for the duration of the 2021 ESA by the Qualifications Review, and
 - ii. such Competitive Supplier’s response to the RFP is deemed by the Program Manager to be a Compliant Bid as defined in Section 2 above.
 - d. Fulfill any other responsibilities as may reasonably adhere to facilitating the implementation of the Program, subject to the Program Manager’s inherent and original role as an organization driven by the deliberated priorities of its constituent member municipalities.
- 5. **Roles and responsibilities of the Participating Municipality**: the Participating Municipality agrees to:
 - a. Sign the 2021 ESA in a timely fashion subject to the conditions that:
 - i. the Competitive Supplier is deemed qualified for the duration of the 2021 ESA by the Qualifications Review, and

- ii. such Competitive Supplier's response to the RFP is deemed by the Program Manager to be a Compliant Bid as defined in Section 2 above.

6. Term and Termination: This Memorandum of Understanding shall expire on the earlier of November 30, 2021 or the date on which the 2021 ESA is signed by the Participating Municipality, the Program Manager, and the selected Competitive Supplier. .
Participating Municipality shall have the right to terminate this Memorandum of Understanding for any of the reasons set forth in the Termination section of the ESA attached hereto as Exhibit 1.

IN WITNESSETH WHEREOF, the Parties have signed this MEMORANDUM OF UNDERSTANDING on the day and year appearing below their respective signatures.

City/Town/Village of _____

Authorized Official Name and Title: _____

Signature: _____

Address: _____

Telephone(s): _____

E-Mail Address: _____

Address for Notices: _____

Sustainable Westchester, Inc.

Authorized Official Name and Title: Nina Orville, Executive Director

Signature: _____

Address: 40 Green Street, Mount Kisco, NY 10549

Telephone(s): (914) 242-4725

E-Mail Address: nina@sustainablewestchester.org

Address for Notices: 40 Green Street, Mount Kisco, NY 10549

Attachments: Exhibit 1, 2021 ESA Template (2021-07-12_ESA_NYSEG.docx)

Electric Service Agreement

Exhibit 1 to accompany the Memorandum of Understanding
on Community Choice Aggregation
between local government members of Sustainable Westchester, [Supplier],
and Sustainable Westchester

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Contents

RECITALS	3
ELECTRIC SERVICE AGREEMENT	5
ARTICLE 1 DEFINITIONS	5
ARTICLE 2 RIGHTS GRANTED	9
ARTICLE 3 CONSUMER CHOICE, NOTIFICATION OF RIGHTS, ENROLLMENT	12
ARTICLE 4 TERM OF CONTRACT AND TERMINATION	14
ARTICLE 5 CONTINUING COVENANTS	15
ARTICLE 6 ROLE OF THE MUNICIPALITY	19
ARTICLE 7 ROLE OF PROGRAM MANAGER	20
ARTICLE 8 PRICES AND SERVICES; BILLING	21
ARTICLE 9 COMPLIANCE WITH THE PSC ORDERS	23
ARTICLE 10 SERVICE PROTECTIONS FOR RESIDENTIAL CONSUMERS	23
ARTICLE 11 NON-DISCRIMINATION IN HIRING AND EMPLOYMENT	24
ARTICLE 12 POWER SUPPLY INFORMATION AND ACCESS TO INFORMATION	24
ARTICLE 13 RESOLUTION OF DISPUTES; CHOICE OF LAW AND FORUM	25
ARTICLE 14 INDEMNIFICATION	26
ARTICLE 15 REPRESENTATIONS AND WARRANTIES	27
ARTICLE 16 INSURANCE	28
ARTICLE 17 REGULATORY EVENT/NEW TAXES	29
ARTICLE 18 MISCELLANEOUS	29
ARTICLE 19 REMEDIES	33
EXHIBIT A – PART 1 PRICES AND TERMS – STANDARD PRODUCT	36
EXHIBIT A- PART 2 PRICES AND TERMS- 100% RENEWABLE CLEAN POWER PRODUCT	38
EXHIBIT B - TEMPLATE KWH SALES AND CONSUMER ACCOUNTS DATA SUMMARY	40
EXHIBIT C - PAYMENT	42
EXHIBIT D - DATA REQUIREMENTS	43
EXHIBIT E - OPTION TO SUPPLY POWER	45

RECITALS

WHEREAS, Sustainable Westchester, Inc. sought approval of a demonstration community choice energy aggregation (“Community Choice”) program in Westchester County in 2014, which would allow local governments to participate in a Sustainable Westchester program to procure energy supply from an Energy Services Company for the residents of the municipalities;

WHEREAS, on February 26, 2015, the Public Service Commission of the State of New York approved implementation of the first Community Choice pilot program in New York State;

WHEREAS, the PSC subsequently issued the order “Authorizing Framework for Community Choice Aggregation Opt-out Program” on April 21, 2016 (the “CCA Framework Order”) enabling Community Choice throughout New York State;

WHEREAS, the Westchester Community Choice Aggregation program (also known as Westchester Power) is intended to include residential and small non-residential customers, and to permit the aggregation of electric purchases by the communities which elect to participate;

WHEREAS, the City/Town/Village of _____ (“Municipality”) has adopted a Local Law to participate in the Sustainable Westchester Community Choice Program (“Program”) to aggregate customers located within the Municipality and to negotiate competitive rates for the supply of electricity for such customers;

WHEREAS, the program allows Municipality to solicit competitive bids for the supply of electricity individually or as part of a buying group with other municipal aggregators;

WHEREAS, Sustainable Westchester, Inc. has been authorized by the Municipality to act as Program Manager for a Community Choice Program, pursuant to Local Law and Memorandum of Understanding 2021, issue a request for proposals (“RFP”) to suppliers to provide energy to Participating Customers, and to award supply contracts;

WHEREAS, the Program executed the first electric service contracts in 2016 (the “2016 ESA”) with four municipalities in the Westchester New York State Electric and Gas (“NYSEG”) utility territory, and added one more municipality in 2018, and the most recent contracts expire on November 30, 2021;

WHEREAS, _____, an entity duly authorized to conduct business in the State of New York as an energy service company (“ESCO”) (the “Competitive Supplier”), desires to provide Full-Requirements Power Supply to customers located within the Municipality, pursuant to the terms and conditions of the Municipality's Program and this Electric Service Agreement (“ESA”);

WHEREAS, the Municipality desires that the Competitive Supplier provide Firm Full-Requirements Power Supply and Consolidated Billing as an alternative to Default Service for customers within the Municipality;

WHEREAS, Competitive Supplier is willing to provide two distinct electric supply products and two corresponding pricing levels, (1) a Standard Product and price, and (2) a 100% Renewable Clean Power Product comprised of the Standard Product plus New York Voluntary Clean Power RECs and price as set out in Exhibit A herein;

WHEREAS, Municipality has chosen the Standard Product / 100% Renewable Clean Power Product [select one and initial] as the Default Product for Participating Customers;

WHEREAS, Competitive Supplier agrees to pay a fee to Program Manager;

WHEREAS, Municipality prefers for Competitive Supplier to collect and remit the fees due the Program Manager;

WHEREAS, the local governments that participate in the Sustainable Westchester Community Choice Program, including this Municipality, intend that this Agreement be uniform in form and substance in each instance throughout the Program; and

NOW THEREFORE, IT IS AGREED THAT, Municipality, Program Manager, and the Competitive Supplier hereby enter into this ESA subject to the terms and conditions below.

ELECTRIC SERVICE AGREEMENT

ARTICLE 1 DEFINITIONS

Capitalized terms that are used but not defined in the body of this ESA, including the Exhibits hereto, shall be defined as set forth in this Article 1. Words defined in this Article 1 that are capitalized shall be given their common and ordinary meanings when they appear without capitalization in the text. Words not defined herein shall be given their common and ordinary meanings.

1.0 Associated Entities – Any and all of the employees, officers, agents, representatives, and independent contractors and subcontractors of the Competitive Supplier or of any of its corporate parents or subsidiaries, which provide goods or services to, or in any way assist, the Competitive Supplier in meeting its obligations under the ESA, but specifically excluding the Distribution Utility.

1.1 Bankruptcy - With respect to a Party, (i) such Party ceases doing business as a going concern, generally does not pay its debts as they become due or admits in writing its inability to pay its debts as they become due, files a voluntary petition in bankruptcy or is adjudicated bankrupt or insolvent, or files any petition or answer seeking any reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under the present or any future federal bankruptcy code or any other present or future applicable federal, state or other Governmental Rule, or seeks or consents to or acquiesces in the appointment of any trustee, receiver, custodian or liquidator of said Party or of all or any substantial part of its properties, or makes an assignment for the benefit of creditors, or said Party takes any corporate action to authorize or that is in contemplation of the actions set forth in this clause (i); or (ii) a proceeding is initiated against the Party seeking any reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under the present or any future federal bankruptcy code or any other Governmental Rule and such proceeding is not dismissed within ninety (90) days after the commencement, or any trustee, receiver, custodian or liquidator of said Party or of all or any substantial part of its properties is appointed without the consent or acquiescence of said Party, and such appointment is not vacated or stayed on appeal or otherwise within ninety (90) days after the appointment, or, within ninety (90) days after the expiration of any such stay, has not been vacated, provided that, notwithstanding the foregoing, the exercise of rights to take over operation of a Party's assets, or to foreclose on any of a Party's assets, by a secured creditor of such Party (including the appointment of a receiver or other representative in connection with the exercise of such rights) shall not constitute a Bankruptcy.

1.2 CCA Orders – Collectively, the February 26, 2015 “Order Granting Petition in Part” issued by the PSC in Case 14-M-0564; the April 21, 2016 “Order Authorizing Framework for Community Choice Aggregation Opt-out Program” issued by the PSC in Case 14-M-0224 (the “CCA Framework Order”), which sets forth the requirements, terms, and conditions under which CCA programs can proceed through implementation; and the November 15, 2018 “Order Approving Renewal of the Sustainable Westchester Community Choice Aggregation Program” issued by the PSC in Case 14-M-0564, which reauthorizes the Sustainable Westchester CCA program under a Master Implementation Plan.

1.3 100% Renewable Clean Power Product - Firm Full-Requirements Power Supply matched with New York Voluntary Clean Power RECs (hydropower, solar energy or wind energy) as defined in, and subject to the Attribute delivery rules set forth in, the New York Generation Tracking System (“NYGATS”) Operating Rules, supporting the Public Service Commission’s Environmental Disclosure Program, as further described and defined in Pricing Exhibit A-2

1.4 Commercially Reasonable - Any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known, or which in the exercise of due diligence should have been known, at the time the decision was made, would have been expected in the industry to accomplish the desired result consistent with reliability, safety, expedition, project economics and applicable law and regulations, as defined in the Uniform Business Practices or without limitation in additional applicable law and regulations, provided that in no event shall increased costs or economic hardship be an excuse for not performing a Party’s obligations under this ESA.

1.5 Community Choice – Municipal electricity procurement program, purchasing supply for the aggregated demand for all Participating Customers within the Municipality.

1.6 Competitive Supplier or Energy Services Company (“ESCO”)– An entity duly authorized to conduct business in the State of New York as an ESCO.

1.7 Consolidated Billing - A billing option that provides Participating Customers with a single bill issued by the Distribution Utility combining delivery and supply charges from the Distribution Utility and Competitive Supplier respectively.

1.8 Default Product – The product selected by the Municipality for supply to its Participating Customers, unless they take action to select a different product or opt out..

1.9 Default Service – Supply service provided by the Distribution Utility to customers who are not currently receiving service from a Competitive Supplier. Residential and small commercial customers within the Municipality that receive Default Service, and have not opted out, will be enrolled in the Program as of the Effective Date.

1.10 Delivery Term - The period for which prices for Firm Full-Requirements Power Supply have been established, as set forth in Exhibit A.

1.11 Distribution Utility - Owner or controller of the means of distribution of the natural gas or electricity that is regulated by the Public Service Commission in the Municipality.

1.12 Electronic Data Interchange (“EDI”) - The exchange of business data in a standardized format between business computer systems.

1.13 Effective Date - The day immediately following the initial 30-day period specified in the PSC Orders, which occurs after notifications to Eligible Customers, which occurs after this ESA

has been executed by the Parties (to be determined by the later date, if the Parties execute on different dates).

1.14 Eligible Customers – Customers of electricity and/or natural gas eligible to participate in the CCA Program, either on an Opt-out or Opt-in basis, as delineated in the CCA Framework Order. For the avoidance of doubt, all Eligible Customers must reside or be otherwise located at one or more locations within the geographic boundaries of the Municipality and served by the Distribution Utility, as such boundaries exist on the Effective Date of this ESA.

1.15 ESA - This Electric Service Agreement.

1.16 Environmental Disclosure Label – The fuel mix purchased by an ESCO and the related emissions of those fuels compared to a statewide average, which is required to be reported under the DPS's Environmental Disclosure Program.

1.17 Federal Energy Regulatory Commission ("FERC") - The United States federal agency with jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, and oil pipeline rates.

1.18 Firm Full-Requirements Power Supply - The service under which the Competitive Supplier provides all of the electrical energy, capacity, reserves, and ancillary services, transmission services, transmission and distribution losses, congestion management, and other such services or products necessary to provide firm power supply at a fixed contract price including all those components regardless of changes in kWh usage or customer grouping during the contract term to Participating Customers at the Point of Sale.

1.19 Force Majeure - Any cause not within the reasonable control of the affected Party which precludes that party from carrying out, in whole or in part, its obligations under this ESA, including, but not limited to, Acts of God; winds; hurricanes; tornadoes; fires; epidemics; landslides; earthquakes; floods; other natural catastrophes; strikes, lock-outs or other industrial disturbances; acts of public enemies; acts, failures to act or orders of any kind of any governmental authorities acting in their regulatory or judicial capacity, provided, however, that any such discretionary acts, failures to act or orders of any kind by the Municipality may not be asserted as an event of Force Majeure by the Municipality; insurrections; military action; war, whether or not it is declared; sabotage; riots; civil or industrial disturbances or explosions. Nothing in this provision is intended to excuse any Party from performing due to any governmental act, failure to act, or order, where it was reasonably within such Party's power to prevent such act, failure to act, or order. Economic hardship of any Party shall not constitute an event of Force Majeure.

1.20 General Communications - The type of communications described and defined in Article 5.7 herein.

1.21 Governmental Authority - Any national, state or local government, independent system operator, regional transmission owner or operator, any political subdivision thereof or any other

governmental, judicial, regulatory, public or statutory instrumentality, authority, body, agency, department, bureau, or entity, excluding the Municipality.

1.22 Governmental Rule - Any law, rule, regulation, ordinance, order, code, permit, interpretation, judgment, decree, or similar form of decision of any Governmental Authority having the effect and force of law.

1.23 kWh, kW - Kilowatt-hour and kilowatt, respectively.

1.24 Local Law – A local law or ordinance, adopted by Municipality according to General Municipal Law, which authorizes Municipality to join the Sustainable Westchester Community Choice Program.

1.25 Memorandum of Understanding 2021 – Binding agreement between Municipality and Program Manager authorizing Sustainable Westchester to administer the Program.

1.26 Newly Opt-Out Eligible Customers – Residential and small commercial customers of electricity that become Opt-out Eligible Customers after the Effective Date, including those that move into Municipality and those who complete or terminate other 3rd party supply contracts and have returned to Default Service, provided these customers have not previously opted out of the Program.

1.27 New Taxes - Any taxes not in effect as of the Effective Date enacted by a Governmental Authority or the Municipality, to be effective after the Effective Date with respect to Firm Full-Requirements Power Supply, or any Governmental Rule enacted and effective after the Effective Date resulting in application of any existing tax for the first time to Participating Customers.

1.28 NYISO - The New York Independent System Operator, or such successor or other entity which oversees the integrated dispatch of power plants in New York and the bulk transmission of electricity throughout the New York power grid.

1.29 Opt-out Eligible Customers - Eligible Customers that are eligible for Opt-out treatment as delineated in the CCA Framework Order. For the avoidance of doubt, Opt-out Eligible Customers shall not include customers that have previously opted-out of the Program.

1.30 Participating Customers - Eligible Customers enrolled in the Program, including Opt-out Eligible Customers who have been enrolled subsequent to the opt-out process and other customers who have been enrolled after opting in.

1.31 Parties - The Municipality, the Program Manager, and the Competitive Supplier, as the context requires. In the singular, "Party" shall refer to any one of the preceding.

1.32 Point of Delivery - The boundary of the Distribution Utility's electricity franchise, or the point at which the Competitive Supplier delivers the power to the Distribution Utility.

1.33 Point of Sale - The electric meter for each Participating Customer's account, as designated by the Distribution Utility, such that all line loss costs are included in Competitive Supplier price to bring power to the meter.

1.34 Program - Sustainable Westchester Community Choice Aggregation Program.

1.35 Program Manager – Sustainable Westchester, Inc., a non-profit organization comprised of multiple municipalities in Westchester County of which the Municipality is a member, authorized by PSC to put out for bid the total amount of electricity being purchased by Participating Customers. Program Manager is responsible for Program organization, administration, procurement, and communications, unless otherwise specified.

1.36 PSC or DPS - The New York State Public Service Commission or the New York State Department of Public Service acting as Staff on behalf of the PSC, or any successor state agency.

1.37 Qualifying Regulatory Event-- Implementation of a new, or changes to an existing, Governmental Rule by a Governmental Authority at any time after Competitive Supplier submits its bid response to the RFP associated with this ESA, including without limitation the Distribution Utility's tariffs, market rules, operating protocols and definitions, which have a material effect on the services and transactions contemplated by this ESA. A "change" as used herein includes without limitation any amendment, modification, nullification, suspension, repeal, finding of unconstitutionality or unlawfulness, or any change in construction or interpretation. To meet the threshold of being a Qualifying Regulatory Event, the impact of the event must impact the majority of customers in the same rate class, but not including a Regulatory Event that applies uniquely to Competitive Supplier. Notwithstanding anything to the contrary in this ESA or the RFP, any changes to the Purchase of Receivables (POR) approved by the PSC shall be deemed a Qualifying Regulatory Event hereunder.

1.38 Regulatory Event-- Implementation of a new, or changes to an existing, Governmental Rule by a Governmental Authority, including without limitation the Distribution Utility's tariffs, market rules, operating protocols and definitions, which have a material effect on the services and transactions contemplated by this ESA. A "change" as used herein includes without limitation any amendment, modification, nullification, suspension, repeal, finding of unconstitutionality or unlawfulness, or any change in construction or interpretation.

1.39 Retail Price - As set forth in Exhibit A.

1.40 Service Commencement Date - The date of the Participating Customers' first meter read date after the Effective Date, or as soon as necessary arrangements can be made with the Distribution Utility thereafter.

1.41 Standard Product – Traditional generation mix, meeting the minimum Renewable Portfolio Standards for electric power established by New York State.

1.42 Term - As defined in Article 4.1.

1.43 Uniform Business Practices – Regulations governing the business practices of utilities and Energy Services Companies with regards to service, billing, marketing, data, and customer rights, issued by the New York State Public Service Commission (Case 98-M-1343).

ARTICLE 2 RIGHTS GRANTED

2.1 GENERAL DESCRIPTION AND LIMITATIONS

Competitive Supplier is hereby granted the exclusive right to be the default provider of Firm Full-Requirements Power Supply to Participating Customers pursuant to the terms of this ESA. For the avoidance of doubt, Competitive Supplier shall be authorized to supply Firm Full-Requirements Power Supply only to Participating Customers enrolled in the plan or plans managed by the Program Manager, and the Distribution Utility will continue to have the right and obligation to supply electricity to Eligible Customers who opt-out of the Program and remain on, or return to, Default Service, until changes in law, regulation or policy may allow otherwise.

In accordance with Article 3 below, all Opt-out Eligible Customers shall be automatically enrolled in the Program unless they choose to opt-out or have previously opted out of the Program. In the event the geographic boundaries of the Municipality change during the term of this ESA, Competitive Supplier shall only be obligated to supply Firm Full-Requirements Service to those Participating Customers located within the Municipality as such boundaries existed on the Effective Date of this ESA. As between the Parties, the Competitive Supplier has the sole obligation of making appropriate arrangements with the Distribution Utility, and any arrangements which may be necessary with the NYISO so that Participating Customers receive the electricity supplies to be delivered pursuant to this ESA.

The Municipality shall specifically authorize the Distribution Utility to provide, and Competitive Supplier the right to obtain and utilize as required, all billing and energy consumption information for Participating Customers as is reasonably available from the Distribution Utility. The Distribution Utility Fees for the provision of this data shall be paid for by the Supplier. Competitive Supplier shall request consumption data for individual Participating Customers from the Distribution Utility via EDI. If further action is required by the Distribution Utility to authorize Competitive Supplier to receive such consumption and billing data, the Program Manager, on behalf of the Municipality agrees to use Commercially Reasonable efforts, at Competitive Supplier's cost, to assist Competitive Supplier, if so requested by it, in obtaining such information for Participating Customers, including, without limitation, assisting Competitive Supplier in obtaining permission from such Participating Customers and/or the PSC, where necessary as a prerequisite to the provision of such information. Competitive Supplier shall not be responsible for any errors that Competitive Supplier or any of its Associated Entities makes in the provision of Firm Full-Requirements Power Supply only to the extent both that: 1) such errors are caused by errors or omissions in the information provided to it by the Distribution Utility; and 2) it was reasonable for the Competitive Supplier to rely upon that provided information. The Municipality shall not be responsible for any such errors by the Competitive Supplier in any event.

2.2 NO THIRD PARTY BENEFICIARIES

Except as specifically provided in Section 18.11, this ESA does not and is not intended to confer any rights or remedies upon any person other than the Parties. This ESA facilitates rights under the CCA Orders and Local Law for Eligible Customers to purchase electricity from the Competitive Supplier in accordance with this ESA. The Municipality, or Program Manager in support of the Municipality, has the right, but not the obligation, to advocate on behalf of the Eligible Customers interested in contracting for electric supply and on behalf of all Participating Customers, unless otherwise prevented by law.

2.3 COMPLIANCE WITH LAWS

The Municipality represents that the Local Law has been duly adopted.

Competitive Supplier specifically represents that it has exercised due diligence to review and has fully complied with all relevant regulations, requirements, and orders of the FERC, NYISO, and PSC.

2.4 CONDITIONS PRECEDENT

The Municipality's obligations under this ESA shall be conditioned upon the Competitive Supplier fulfilling the following requirements:

- a) maintain Competitive Supplier's license from PSC (as such term is defined in the Local Distribution Utility's Terms and Conditions for Competitive Suppliers);
- b) execute any appropriate NYISO applications and agreements;
- c) obtain authorization from the FERC to sell power at market-based rates;
- d) complete EDI testing with Distribution Utility;
- e) provide all other documentation required by the Distribution Utility; and
- f) satisfying all insurance requirements set forth in Article 16 or elsewhere in this ESA.

If Competitive Supplier has not fulfilled all such requirements by the Effective Date, then the Municipality may terminate this ESA without any liability from Municipality to the Competitive Supplier.

2.5 OWNERSHIP AND USE OF ELIGIBLE CUSTOMER DATA

Competitive Supplier acknowledges that: 1) all Eligible Customer data (including addresses, telephone numbers or other identifying information) made available to Competitive Supplier as an agent of Municipality for such data must be protected by the Competitive Supplier and its Associated Entities to the fullest extent possible under the law; 2) the Competitive Supplier does not hold any permanent right, title or interest in this data; and 3) this data is to be obtained, retained and used by the Competitive Supplier and its Associated Entities solely to provide Firm Full-Requirements Power Supply to Participating Customers and to render other services expressly required or permitted under this ESA. Any other use of Eligible Customer data without the prior written consent of the Municipality is strictly prohibited. Competitive Supplier may

share such Eligible Customer data with third-party vendors as reasonably necessary to accommodate Competitive Supplier's provision of Firm Full-Requirements Power Supply or other performance pursuant to this ESA (including, without limitation, collection of receivables or enhancement of data exchange between the Parties), provided that Competitive Supplier will take reasonable measures to secure the confidential nature of such data and the restrictions set forth in this Article 2.5 and elsewhere in this ESA, and that any vendor or subcontractor is also bound by the terms and conditions of this ESA, especially those regarding data confidentiality and prohibition on non-permitted uses of data through a signed non-disclosure agreement, a copy of which will be provided to the Municipality. Except as expressly provided in this ESA, and as otherwise permitted by law, Competitive Supplier and its Associated Entities shall not disclose any Eligible Customer data to any third-party and Competitive Supplier and its Associated Entities shall take all Commercially Reasonable measures to protect Eligible Customer data from access by, or beneficial use for, any third-party. To the extent that the provision of Firm Full-Requirements Power Supply or other services under this ESA requires that Competitive Supplier and its Associated Entities have access to or make use of any Eligible Customer data, Competitive Supplier and its Associated Entities shall treat such Eligible Customer data as confidential information. Competitive Supplier may use Eligible Customer data to engage in direct marketing only during the term of this ESA and subject to the terms set forth in Article 18.2. A violation of this Article 2.5 shall be grounds for termination under Article 4.2(a). Competitive Supplier agrees violation of this Article 2.5 shall constitute irreparable harm.

ARTICLE 3 CUSTOMER CHOICE, NOTIFICATION OF RIGHTS, ENROLLMENT

3.1 CUSTOMER CHOICE

The Parties acknowledge and agree that all Participating Customers have the right, pursuant to CCA Orders, Local Law, and the Program, to change their source of electricity supply, as set forth in Article 2.1. The Parties represent and warrant to each other that they shall not interfere with the right of Participating Customers to opt-out of the Program, and shall comply with any rules, regulations or policies of PSC, the Distribution Utility and/or other lawful Governmental Authority regarding the procedures for opting out or of switching from one source of electric supply to another. Not inconsistent with the above, however, the Parties may take Commercially Reasonable measures to encourage Participating Customers to affirmatively agree to remain in the Program, consistent with any Governmental Rules.

3.2 NOTIFICATION TO NEWLY OPT-OUT ELIGIBLE CUSTOMERS OF OPT-OUT RIGHTS

Consistent with the requirements of any applicable Governmental Rules, and within a reasonable time after the Distribution Utility notifies Competitive Supplier of the existence of a Newly Opt-out Eligible Customer and has provided to Competitive Supplier such Newly Opt-out Eligible Customer's account number, service and billing address, and other pertinent contact information, Competitive Supplier shall notify such Newly Opt-out Eligible Customer (i) of the date on which such Newly Opt-out Eligible Customer will be automatically enrolled in the Program, and (ii) that the Competitive Supplier will be providing Firm Full-Requirements Power Supply to such Newly Opt-out Eligible Customer as of the same date, subject to the opt-out provisions of the

PSC Orders, Local Law, and the Program ("Opt-Out Notice"). The Opt-Out Notice shall be mailed to each such Newly Opt-out Eligible Customer prior to the date of automatic enrollment and shall: (i) prominently state all charges to be assessed by the Competitive Supplier; (ii) at a minimum, provide a summary of the prices and terms included in Exhibit A; (iii) state how such Newly Opt-out Eligible Customer may opt-out of the Program prior to enrollment and remain on Default Service from the Distribution Utility; and (iv) state how all Participating Customers, subsequent to enrollment, will also have the right to opt-out at any time and return to Default Service or choose a new Competitive Supplier without paying a fee or penalty to Competitive Supplier. All such notices must be approved in advance by the Municipality.

In providing the notifications set forth in this Article 3.2, and in otherwise conducting the activities in Article 3.4 below, the Competitive Supplier must rely upon information provided to it by the Distribution Utility for the purpose of performing its obligations. Competitive Supplier will not be responsible for any errors in connection with notification of Eligible Customers only to the extent both that: 1) such errors are caused by errors or omissions in the information provided to it by the Distribution Utility; and 2) it was reasonable for the Competitive Supplier to rely upon that provided information. The Municipality shall not be responsible for any such errors by the Competitive Supplier in any event.

3.3 CUSTOMER AWARENESS

Upon mutual agreement concerning the content and method, either the Competitive Supplier, Municipality, or Program Manager may conduct customer awareness efforts at its sole expense.

3.4 ENROLLMENT

3.4.1 Participating Customers –All Opt-out Eligible Customers as of the Effective Date will be enrolled in the Program, thus becoming Participating Customers, under the terms of this ESA unless they opt-out during the 30-day period specified in the PSC Orders. Participating Customers may disenroll from the Program at any time thereafter with no fee or penalty. The Municipality shall authorize the Distribution Utility to provide to Competitive Supplier or to an alternative designee of the Program Manager who has agreed in writing to a non-disclosure agreement, a copy of which will be provided to the Municipality, a list of Participating Customers as of the Effective Date, as well as such Participating Customer's service and billing addresses, and any other information necessary for Competitive Supplier to commence Firm Full-Requirements Power Supply to such Participating Customers as of the Service Commencement Date.

3.4.2 Newly Opt-out Eligible Customers - If Newly Opt-out Eligible Customers elect not to opt-out of the Program as provided in Article 3.2, such Newly Opt-out Eligible Customers will be automatically enrolled by Competitive Supplier in the Program. These Newly Opt-out Eligible Customers electing not to opt out of the Program as provided in Article 3.2 shall be enrolled in the Program at a price as defined in Exhibit A. For the avoidance of doubt, Participating Customers that have opted into the Program shall also be enrolled in the Program at a price as defined in Exhibit A. Competitive Supplier shall enroll such Newly Opt-out Eligible Customers in accordance with applicable PSC and Distribution Utility rules.

3.4.3 Eligible Customers Who Have Previously Opted Out - At any time during this ESA, Eligible Customers who have previously opted out of the Program may request that they be enrolled or re-enrolled in the Program. Competitive Supplier shall provide Firm Full-Requirements Power Supply to such Eligible Customers at a price as set forth in Exhibit A. Following mutually agreed upon procedures, the Competitive Supplier is responsible for accurately and promptly transmitting information regarding Eligible Customers, to the Distribution Utility. The Competitive Supplier shall be responsible for enrolling all Eligible Customers through EDI transactions submitted to the Distribution Utility for initial enrollment in the aggregation and all enrollments thereafter.

3.4.4 Customers Served by Third-Parties - Customers being served under other competitive supply programs offered by third-parties will not be automatically enrolled as Participating Customers under this ESA until such program terminates or is otherwise completed. Competitive Supplier agrees that customers under such third-party competitive supply programs may affirmatively opt-in at any time and receive Firm Full-Requirements Power Supply, thereby becoming Participating Customers. Competitive Supplier further agrees that customers being served under other competitive supply programs that terminate or are otherwise completed become Newly Opt-out Eligible Customers and may be automatically enrolled as Participating Customers under the CCA Orders. Newly Eligible Customers who opt-in as provided in this Article 3.4.4 or who enroll following the termination or completion of another competitive supply program offered by a third party shall be enrolled in the Program at the rates reflected in Exhibit A.

3.4.5 Termination Fees. There shall be no termination fees for any residential, small commercial, or municipal Participating Customers to disenroll from the Program.

ARTICLE 4 TERM OF CONTRACT AND TERMINATION

4.1 TERM

This ESA shall commence on the Effective Date, provided, however, that Competitive Supplier's obligation to provide Firm Full-Requirements Power Supply shall commence on the Service Commencement Date, and shall cease as delineated in Exhibit A, unless this ESA is terminated earlier under Article 4.2 below ("Term"). Term shall not exceed 36 months.

4.2 TERMINATION

This ESA may be terminated at any time upon written notice:

a) by the Municipality, or the Competitive Supplier, if the other Party fails to remedy or cure any breach of any material provision or condition of this ESA (including, but not limited to, Article 2.5 and Article 9), but excluding the failure to provide or arrange for Firm Full-Requirements Power Supply, which is addressed in Article 4.2(d)), within sixty (60) days following written notice to do so by the non-breaching party; or

- b) by the Municipality, or the Competitive Supplier, if any material provision or condition of this ESA be finally adjudged invalid by any court of competent jurisdiction, or if PSC exercises any lawful jurisdiction so as to invalidate or disapprove this ESA in whole or in significant part; or
- c) by the Municipality, if a Regulatory Event that is not a Qualifying Regulatory Event affects the Competitive Supplier and Competitive Supplier incurs costs and chooses to allocate and collect excess costs from Participating Customers; or
- d) by the Municipality, if a court, PSC or other lawful authority adjudicates contrary to Article 6; or
- e) by the Municipality, i) if an order is entered against the Competitive Supplier approving a petition for an arrangement, liquidation, dissolution or similar relief relating to Bankruptcy or insolvency and such order remains unvacated for thirty (30) days; or (ii) immediately if the Competitive Supplier shall file a voluntary petition in Bankruptcy or any petition or answer seeking any arrangement, liquidation or dissolution relating to Bankruptcy, insolvency or other relief for debtors or shall seek, consent to, or acquiesce in appointment of any trustee, receiver, or liquidation of any of Competitive Supplier's property; or
- f) notwithstanding the foregoing, the failure of Competitive Supplier to provide or arrange for Firm Full-Requirements Power Supply to Participating Customers, in the absence of Force Majeure or the Municipality's failure to perform, shall constitute an act of default, and the Municipality may terminate this ESA upon giving written notice and without a cure period. In the event the Competitive Supplier has performed its obligations hereunder and its failure to arrange for or provide Firm Full-Requirements Power Supply is a direct result of actions or non-actions by any transmission service provider, the Distribution Utility, or the NYISO, the Competitive Supplier's failure shall not be deemed to be an act of immediate default and would be subject to remedy or cure as provided in Article 4.2(a).

4.3 OBLIGATIONS UPON TERMINATION

Following termination of this ESA, the Parties shall each discharge by performance all obligations due to any other Party that arose up to the date of termination of the ESA and Competitive Supplier shall continue to have the right to collect all monies due for services rendered to that date.

Upon termination, Competitive Supplier shall have all Participating Customers switched back to obtaining supply from the Distribution Utility by submitting all customer drops via EDI to the Distribution Utility in a form acceptable to the Distribution Utility.

4.4 EXTENSION

The ESA may be extended beyond the termination date established in Article 4.1 by mutual, written agreement of the Parties. Any new pricing terms shall be added to and replace Exhibit A as Exhibit A Extension. Upon any such extension, this ESA shall continue to be in effect, and all provisions of the ESA shall retain the same force and effect as before the extension, unless it is terminated by any Party pursuant to the provisions of Article 4.2 or until the date stated in such extension.

ARTICLE 5 CONTINUING COVENANTS

The Competitive Supplier agrees and covenants to perform each of the following obligations during the term of this ESA.

5.1 STANDARDS OF MANAGEMENT AND OPERATIONS

In performing its obligations hereunder, during the term of this ESA, the Competitive Supplier shall exercise reasonable care to assure that its facilities are prudently and efficiently managed; that it employs an adequate number of competently trained and experienced personnel to carry out its responsibilities; that it delivers or arranges to deliver an uninterrupted supply of such amounts of electricity to the Point of Delivery as are required under this ESA; that it complies with all relevant industry standards and practices for the supply of electricity to Participating Customers; and that, at all times with respect to Participating Customers, it exercises good practice for a Competitive Supplier and employs all Commercially Reasonable skills, systems and methods available.

5.2 CUSTOMER SERVICE ACCESS

The Competitive Supplier agrees to provide, or cause to be provided, certain customer services to Participating Customers. Such services shall be reasonably accessible to all Participating Customers, shall be available during normal working hours, shall allow Participating Customers to transact business they may have with the Competitive Supplier, and shall serve as a communications liaison among the Competitive Supplier, the Municipality, and the Distribution Utility. A toll-free telephone number will be established by Competitive Supplier and be available for Participating Customers to contact Competitive Supplier during normal business hours (9:00 A.M.- 5:00 P.M. Eastern Time, Monday through Friday) to resolve concerns, answer questions and transact business with respect to the service received from Competitive Supplier. To the extent practicable, the Municipality will post program-related information on the Municipality's website which will be available to Participating Customers for general information, comparative pricing, product, and service information, and other purposes.

5.3 RESPONDING TO REQUESTS FOR INFORMATION

To the extent authorized by the Participating Customer(s) and to the extent such individual permission is required by law, the Competitive Supplier shall, during normal business hours (as set forth above), respond promptly and without charge therefore to reasonable requests of the Municipality for information or explanation regarding the matters covered by this ESA and the supply of electricity to Participating Customers. Competitive Supplier agrees to designate a service representative or representatives (the "Service Contacts") who shall be available for these purposes, and shall identify the office address and telephone number of such representative(s). Whenever necessary to comply with this Article 5.3, the Service Contacts shall call upon other employees or agents of the Competitive Supplier to obtain such information or explanation as may be reasonably requested. Nothing in this Article 5.3 shall be interpreted as limiting the obligation of the Competitive Supplier to respond to complaints or inquiries from Participating Customers, or to comply with any regulation of PSC regarding customer service.

5.4 ARRANGING FOR FIRM FULL-REQUIREMENTS POWER SUPPLY

Competitive Supplier shall participate in or make appropriate arrangements with NYISO, any relevant regional transmission organization, wholesale suppliers or any other entity to ensure an uninterrupted flow of Firm Full-Requirements Power Supply to the Distribution Utility for delivery to Participating Customers, and exercise all Commercially Reasonable efforts to cooperate with NYISO or any other entity to ensure a source of back-up power in the event that Competitive Supplier is unable to deliver Firm Full-Requirements Power Supply to the Point of Delivery. In the event the Competitive Supplier is unable to deliver sufficient electricity to the grid to serve Participating Customers, the Competitive Supplier shall utilize such arrangements and exercise all Commercially Reasonable efforts as may be necessary to continue to serve Participating Customers under the terms of this ESA, and shall bear any costs it may incur in carrying out these efforts and obligations. Competitive Supplier shall not be responsible to the Municipality or any Participating Customers in the event that, through no fault of the Competitive Supplier or its Associated Entities, the Distribution Utility disconnects, curtails or reduces service to Participating Customers (notwithstanding whether such disconnection is directed by NYISO).

5.5 NON-DISCRIMINATORY PROVISION OF SERVICE

Competitive Supplier shall supply electric energy to the Point of Delivery to all Participating Customers on a non-discriminatory basis; provided, however, that those prices and other terms may vary in accordance with reasonably established rate classifications (e.g., residential and small commercial) or by such other categories as appear in Exhibit A. To the extent applicable, Competitive Supplier's prices, terms and conditions shall be in accordance with the New York General Laws, the regulations of PSC, and other applicable provision of law. To the extent required by law and/or the conditions of any PSC approval of this ESA, the Competitive Supplier may not deny service to an Eligible or Participating Customer for failure to pay the bills of any other electric company (whether engaged in the distribution, transmission, or generation of electricity) or of any other aggregator, marketer or broker of electricity, but may reasonably deny or condition new service, or terminate existing service, based upon any Participating Customer's failure to pay bills from the Competitive Supplier, subject to any provisions of law or applicable PSC orders or regulations. Provision of electric energy supply shall be subject to Competitive Supplier's Standard Credit Policy, to the extent permitted by law, as described in Exhibit A.

In any event, should either Program Manager or Municipality actively achieve and document (e.g. to the satisfaction of the New York State Public Service Commission and the Utility) reduction in capacity tag buying obligations, Competitive Supplier will pay or distribute benefits from these tag reductions to Participating Customers at the NYISO strip clearing price for the appropriate zone (i.e., H, upper Westchester or I, lower Westchester), in which the capacity tag reduction is certified by appropriate party. Program Manager agrees it does not intend to pursue any actions that would increase the capacity tag obligation to Competitive Supplier.

5.6 APPROVAL OF GENERAL COMMUNICATIONS

Competitive Supplier shall cooperate with the Municipality in the drafting and sending of messages and information to Eligible or Participating Customers concerning the Program or any matter arising under or related to this ESA. Competitive Supplier shall, prior to sending, whether directly or through its Associated Entities, any direct mail, advertising, solicitation, bill insert, electronic mail, or other similar written or electronic communication (collectively, "General Communications") to Eligible or Participating Customers (but excluding individually drafted or tailored communications responding to the specific complaint or circumstance of an individual customer), provide a copy of such General Communication to the Municipality and to Program Manager for its review to determine whether it is consistent with the purposes and goals of the Municipality and Program Manager. The Municipality or Program Manager shall have the right to disapprove such General Communications and suggest revisions if it finds the communication inconsistent with the purposes and goals of the Municipality, factually inaccurate or likely to mislead; provided, however: (i) that the communication shall be deemed approved if the Municipality and Program Manager fails to respond within seven (7) calendar days (not including weekends and holidays); and (ii) that no approval shall be necessary for any communication (a) regarding any emergency situation involving any risk to the public health, safety or welfare; or (b) in the nature of routine monthly or periodic bills, or collection notices, except that any bill insert or message included at the bottom of such bill not within the scope of (a) above shall require approval. If the Municipality objects to any General Communication on the grounds it is inconsistent with the purposes and goals of the Municipality, the Competitive Supplier, after consultation as provided in this Article 5.6, may nevertheless elect to send such General Communication provided that it: (i) clearly indicates on such communication that it has not been endorsed by the Municipality, and (ii) has previously provided all Participating Customers a meaningful chance to opt not to receive such General Communications. The Municipality may reject or exclude any proposed General Communication that, in its reasonable judgment, is contrary to the interests and objectives of the Program or the Municipality, provided, however, any such right of rejection or exclusion shall not apply to Competitive Supplier's notice to exercise or enforce its rights under the ESA or Customer Agreement, including but not limited to any notice of Force Majeure or Change in Law.

5.7 COMMUNICATION OF INSERTS AND MESSAGES

Competitive Supplier shall, at its expense, print and mail one letter or postcard per year to all active Participating Customers, the design of which shall be determined by the Municipality or Program Manager.

In addition, Competitive Supplier agrees that if it communicates with Participating Customers directly, and unless prevented for regulatory or other such reasons from doing so, it shall allow the Municipality or Program Manager to include no less than three (3) inserts per year into such communications, provided that the Program Manager or Municipality, where appropriate pays the cost of printing and reproducing such insert and any incremental postage or handling costs the Competitive Supplier may incur as a result of including such insert. Competitive Supplier shall have the right to disapprove such General Communications (that is communications other than those pertaining to the Municipality's demand-side management, energy efficiency programs and technology, and renewable energy programs, if applicable) and suggest revisions if it finds the communication inconsistent with its business interests, factually inaccurate or likely

to mislead; provided, however: (i) that the communication shall be deemed approved if the Competitive Supplier fails to respond within seven (7) calendar days after receipt (not including weekends and holidays); and (ii) that no approval shall be necessary for any communication which has been ordered by PSC or any other Governmental Authority to be so communicated. Competitive Supplier shall notify Program Manager at least two (2) weeks before a direct communication to Participating Customers is to be mailed. Program Manager shall provide Program General Communications insert file within seven (7) calendar days of receiving such notice.

Competitive Supplier agrees to allow and facilitate the Program Manager to utilize the supplier messages area of the bill for Program communications.

5.8 PARTICIPATING CUSTOMER LISTS

To the extent not prohibited by any Governmental Rule or expressly by any Participating Customer(s), the Competitive Supplier shall, upon request of the Municipality or of Program Manager, provide aggregate consumption information as the Municipality or Program Manager may request to the extent such information is available to Competitive Supplier. Competitive Supplier shall provide Participating Customer lists in an electronic format, secure transfer mode, frequency and format as set out in Exhibit D, subject to non-disclosure agreement for customers who have not requested that their personal information be denied to Program Manager or to Municipality.

5.9 COMPLIANCE WITH LAWS

The Parties shall promptly and fully comply with all existing and future Governmental Rules of all Governmental Authorities having jurisdiction over the activities covered by this ESA.

5.10 CONSENT

Whenever performance of an obligation of any Party hereto requires the consent or approval of any Governmental Authority, such Party shall make Commercially Reasonable efforts to obtain such consent or approval. In the event the Competitive Supplier requests the Municipality's assistance in obtaining such consent or approval and the Municipality anticipates that it will incur costs in fulfilling the Competitive Supplier's request, it shall give the Competitive Supplier an estimate of such costs. Upon receiving the estimate, Competitive Supplier shall determine whether it will continue to request the Municipality's assistance, and if so, the Competitive Supplier shall reimburse the Municipality for all costs, up to the estimated dollar amount, reasonably incurred by the Municipality in connection with such efforts.

ARTICLE 6 ROLE OF THE MUNICIPALITY

Under this ESA, the Municipality shall not actually receive, take title to, or be liable for the supply or delivery of Firm Full-Requirements Power Supply in any manner whatsoever. The Parties specifically agree that the role of the Municipality is established under the PSC Orders and Local Law and may include negotiating the terms and conditions under which Firm Full-

Requirements Power Supply will be provided by the Competitive Supplier under this ESA. It is the sole obligation of the Competitive Supplier to arrange for delivery of Firm Full-Requirements Power Supply to Participating Customers. The Parties agree that, with regards to electricity, Municipality is not a “public utility company” or providing any “public utility service” within the meaning of GML 360 and Article 4 of Public Service Law as a result of this ESA. Should a court, PSC, or other lawful authority adjudicate to the contrary, the provisions of 4.2 a) shall apply. However, the Municipality may be considered to be operating a municipal load aggregation plan pursuant to the PSC Orders and Local Law. The Competitive Supplier hereby agrees that it will take no action, whether directly or through its Associated Entities, that would make the Municipality liable to any Participating Customer due to any act or failure to act on the part of the Competitive Supplier or its Associated Entities relating to the delivery or supply of Firm Full-Requirements Power Supply.

Municipality may conduct outreach to the community in addition to the initial program notification letter, which will be delivered at the Competitive Supplier’s expense, with a Business Reply Mail insert to allow Eligible Customer to opt out without postage expense. Municipality will report on their endeavors to Program Manager to inform residents on the Program and “non-demand charge” commercial businesses. In case of any doubt, Municipality shall retain final control of content related to all communications.

ARTICLE 7 ROLE OF PROGRAM MANAGER

7.1 PROGRAM MANAGER DUTIES

Sustainable Westchester Inc, as Program Manager, agrees to:

- a. Provide the involved agencies and parties, such as but not limited to the PSC or Distribution Utility, requested information about and documentation of the actions undertaken by the Municipality in furtherance of enabling participation in the Program;
- b. Prepare, or cause to be prepared, and provide the Municipality with requested and non-confidential information that the involved agencies and parties, such as but not limited to the PSC or Distribution Utility, provide to the Program Manager in furtherance of establishing the Program;
- c. Upon execution hereof, initiate all the necessary steps to secure the needed information to fulfill the customer notification requirements of the PSC Orders, including but not limited to the following:

Agreeing to protect that information consistent with the discussion in the body of this Order, and shall submit their agreement to Department of Public Service Staff at the time the letter certifying authorization discussed in the body of this Order is submitted.

In addition, Program Manager will file any Requests for Proposals, or Requests for Information, and similar documents, as well as any contracts entered into for energy supply, at the time they are issued.

- d. Sign the ESA in a timely fashion including the conditions that the Competitive Supplier is verified to be a qualified electricity supplier by the NYISO in the Distribution Utility’s

- service territory and the Competitive Supplier's response to the Energy Procurement Request for Proposals is deemed compliant with the terms and conditions set forth in the ESA;
- e. Provide the Municipality with timely communications content to implement customer notification requirements for approval, not to be unreasonably withheld, given the projected schedule of Program's implementation;
 - f. Fulfill any other responsibilities as may reasonably adhere to facilitating the implementation of the Program, subject to the Program Manager's inherent and original role as an organization driven by the deliberated priorities of its constituent member municipalities; and
 - g. Fulfill any other responsibilities as set forth in this agreement herein.

7.2 PROGRAM MANAGER FEE

Competitive Supplier shall pay Program Manager \$0.001 for each kWh delivered, invoiced and paid for by Participating Customers during the Term ("Program Manager Fee" or "Fee"). The Parties agree that Competitive Supplier will remit the Program Manager Fee to the Program Manager, pursuant to the terms of this ESA. Competitive Supplier shall pass through such payments to Sustainable Westchester, Inc. for the duration of this ESA. This provision shall be binding upon the Parties and all permitted assigns and other successors-in-interest of the Parties.

7.3 PAYMENT OF FEE

Payment to Program Manager will be made monthly by Automated Clearing House ("ACH") (an electronic network for financial transactions) to the account set forth in Exhibit C hereto, provided that Competitive Supplier has received payment with respect to the electricity used by the Participating Customers. The Program Manager Fee shall be paid by the last business day of the month based on revenue collected by Competitive Supplier with respect to each Participating Customer during the calendar month two months prior. For example, full payments received in January will be paid by the end of March. If Competitive Supplier has paid a past Fee in error (or the payment was based on information subsequently determined invalid), it may deduct from or add to future payments due under this ESA and provide explanation of the error in sufficient detail.

Program Manager shall provide the Municipality with a reasonably detailed accounting not less than annually of the program impact, financial and other, including revenues received and expenses incurred on communication, administration and legal expenses.

7.4 INDEPENDENT CONTRACTOR

The Parties agree that Program Manager is not an agent or employee of Competitive Supplier for any purpose. All expenses which are incurred by Program Manager in connection with this ESA shall be borne wholly and completely by Program Manager. Program Manager shall be responsible for all state, federal, and local taxes, including estimated taxes and social security and employment reporting for Program Manager or any employees or agents of Program Manager.

7.5 AUCTION SERVICE FEE

Competitive Supplier shall pay the auction service company, Transparent Energy (“Auction Service Company”), \$0.0001 for each kWh delivered, invoiced and paid for by Participating Customers during the Term (“Auction Service Fee”). The Parties agree that Competitive Supplier will remit the Auction Service Fee to the Program Manager for the duration of this ESA. This provision shall be binding upon the Parties and all permitted assigns and other successors-in-interest of the Parties.

Payment to the Auction Service Company shall be made monthly by ACH to the account indicated by the Auction Service Company, provided that Competitive Supplier has received payment with respect to the electricity used by the Participating Customers.

The Auction Service Fee shall be paid by the last business day of the month based on revenue collected by Competitive Supplier with respect to each Participating Customers during the calendar month two months prior. For example, for full payments received from Participating Customers in January the Auction Service Fee associated with those payments will be paid by the end of March. If Competitive Supplier has paid a past Auction Service Fee in error (or the payment was based on information subsequently determined invalid), it may deduct from or add to future payments due to the Auction Service Company and provide a sufficiently detailed explanation of the error.

ARTICLE 8 PRICES AND SERVICES; BILLING

8.1 SCHEDULE OF PRICES AND TERMS

Competitive Supplier agrees to provide Firm Full-Requirements Power Supply and other related services as expressly set forth herein in accordance with the prices and terms included in Exhibit A to this ESA, which Exhibit is hereby incorporated by reference into this ESA.

8.2 OBLIGATION TO SERVE

As between the Parties, Competitive Supplier has the sole obligation to obtain sources of supply, whether from generating facilities owned or controlled by its affiliates, through bilateral transactions, or the market, as may be necessary to provide Firm Full-Requirements Power Supply for all of the Participating Customers under the Program. Competitive Supplier, except as explicitly limited by the terms included in Exhibit A, shall be obligated to accept all Participating Customers, regardless of their location or energy needs provided such Participating Customers are eligible under the applicable regulations and tariffs of the Distribution Utility.

8.3 METERING

The Distribution Utility will be responsible for any metering which may be required to bill Participating Customers in accordance with the Distribution Utility's Terms and Conditions for Competitive Suppliers.

8.4 TERMS AND CONDITIONS PERTAINING TO INDIVIDUAL ACCOUNT SERVICE

8.4.1 Title

Title to Firm Full-Requirements Power Supply will transfer from Competitive Supplier to Participating Customers at the Point of Sale. In accordance with the Distribution Utility's Terms and Conditions for Competitive Suppliers, the Competitive Supplier will be responsible for any and all losses incurred on the local network transmission systems and distribution systems, as determined by the Distribution Utility.

8.4.2 Billing and Payment

Unless otherwise specified in an Exhibit to this ESA, all billing under this ESA shall be based on the meter readings of each Participating Customer's meter(s) performed by the Distribution Utility. Competitive Supplier shall cause the Distribution Utility to prepare and mail bills to Participating Customers monthly. The Competitive Supplier shall adopt the billing and payment terms offered by the Distribution Utility to its Eligible Customers on Default Service. If actual meter date is unavailable, the Competitive Supplier may cause the Distribution Utility to bill based on its good faith estimates of usage. Any overcharge or under-charge will be accounted for in the next billing period for which actual meter data is available.

8.4.3 Regional and Local Transmission

The prices quoted in Exhibit A do not include current and future charges for distribution service costs collected by the Distribution Utility under its distribution service tariff or local transmission costs as may be imposed by NYISO or individual electric utilities that have FERC transmission tariffs. The Competitive Supplier understands that these costs will be collected by the Distribution Utility. If, in the future, Competitive Supplier becomes responsible for such distribution or transmission costs, Competitive Supplier shall be entitled to collect such costs from Participating Customers to the extent permitted by any Governmental Rules. These costs are "pass through" costs as determined by the appropriate regulatory agencies.

8.4.4 Taxes

All sales, gross receipts, excise or similar taxes imposed with respect to the sale or consumption of Firm Full-Requirements Power Supply required to be collected by the Competitive Supplier shall be included on the Participating Customer's bill and shall be remitted to the appropriate taxing authority by Competitive Supplier. For avoidance of doubt, it is understood that the Competitive Supplier shall include gross receipts tax in its preparation of Participating Customers' bills. Participating Customers shall be responsible for all taxes that are customarily imposed upon a purchaser of electricity and are associated with electricity consumption under the ESA. Participating Customers shall be responsible for identifying and requesting any exemption from the collection of any tax by providing appropriate documentation to Competitive Supplier. For avoidance of doubt, Competitive Supplier shall be responsible for all taxes imposed upon it as a supplier of electricity, including taxes on Competitive Supplier's income.

ARTICLE 9 COMPLIANCE WITH THE PSC ORDERS

Competitive Supplier agrees that it, and its Associated Entities directly or indirectly involved in providing services or meeting the Competitive Supplier's obligations under the ESA, will comply with the applicable provisions of the PSC Orders and any regulations, orders or policies adopted pursuant thereto.

ARTICLE 10 SERVICE PROTECTIONS FOR RESIDENTIAL CUSTOMERS

10.1 UNIFORM BUSINESS PRACTICES COMPLIANCE

Competitive Supplier agrees that it and its Associated Entities directly or indirectly involved in providing services or meeting the Competitive Supplier's obligations under the ESA shall comply with the provisions of the Uniform Business Practices, as applicable to Competitive Suppliers, and any amendments thereto, notwithstanding any relief from the Uniform Business Practices offered by the PSC to the Program. In addition, the Competitive Supplier and its Associated Entities agrees to comply with any code of conduct or policies the PSC may adopt in accordance with the PSC Orders and to all related Orders of Case 14-M-0564 and 14-M-0224 to which the Program Manager is required to adhere, notwithstanding any relief from the Uniform Business Practices offered by the PSC to the Program.

10.2 DESCRIPTION OF SUPPLIER'S PROCEDURES AND SERVICES

The Competitive Supplier shall, on or before the Effective Date, provide a written, detailed description of its billing and termination procedures, customer services, confidentiality and related practices and procedures for approval by the Municipality (which approval shall not be unreasonably withheld). Such written description shall also include the Competitive Supplier's plans for protecting the rights and protections of Participating Customers under the Home Energy Fair Practices Act which requires that all utility customers be treated fairly with regard to application for service, customer billing, and complaint procedures. If the Participating Customer(s) so permit(s) or to the extent such permission is required by law or the terms of any PSC order with respect to this ESA, the Competitive Supplier agrees to provide notice to the Municipality of any customer complaints received from a Participating Customer, and the Municipality shall have the right, but not the obligation, to participate in resolution of the dispute, to the extent that such complaints relate directly to the Program, and to the extent permitted by PSC regulations and other applicable law. The failure to timely submit such written description, or the submission of practices and procedures which materially fail to comply with PSC regulations and policies, shall be deemed grounds for termination of this ESA, at the discretion of the Municipality after providing written notice of such failure to the Competitive Supplier and allowing the Competitive Supplier sixty (60) days to cure such failure.

10.3 DISPUTE RESOLUTION

In accordance with the Uniform Business Practices, in the event of a dispute regarding an invoice or Competitive Supplier's service, whether directly or through its Associated Entities, under this ESA, a Participating Customer may initiate a formal dispute resolution process by providing written notice to the PSC. The PSC will assist the Parties in reaching a mutually acceptable

resolution. If no such resolution is reached within 40 calendar days of receipt of the formal written notice, any Party may request an initial decision from PSC. Parties may appeal this decision.

ARTICLE 11 NON-DISCRIMINATION IN HIRING AND EMPLOYMENT

Competitive Supplier agrees that it shall conduct its operations and activities under this ESA in accordance with all applicable state and federal laws regarding non-discrimination in hiring and employment of employees, and will require all Associated Entities to do the same.

ARTICLE 12 POWER SUPPLY INFORMATION AND ACCESS TO INFORMATION

12.1 POWER SUPPLY INFORMATION

12.1.1 Monthly Report of Sales

Competitive Supplier shall provide the Municipality or its agent with the following monthly reports as shown on Exhibit B attached hereto within 30 days of the end of the month:

1. kWh and counts disaggregated by municipality, utility zone, customer type, rate class, product
2. Add-Drop report with count of transactions for drop categories Moved, Changed Supplier, Opt-out, Other, and add categories of Opt-in and Newly Eligible.

All reports provided under this 12.1 shall be provided in electronic format.

12.1.2 Customer-Related Data

On and after the Service Commencement Date, Competitive Supplier will maintain customer-related data in electronic form including utility account number, billing name, billing address, service address historical usage, demand, and ICAP (Installed Capacity) data. A violation of this Article 12.1.2 shall be grounds for termination under Article 4.2(a) unless such violation is due to a system or reasonable administrative error and the Competitive Supplier demonstrates to the Municipality's satisfaction that such system or administrative error exists and that the Competitive Supplier is acting in good faith to resolve such issue.

12.1.3 Standard of Care

Competitive Supplier and its Associated Entities shall use all Commercially Reasonable efforts in preparing and providing any information or data required under the ESA. To the extent that Competitive Supplier determines that any information or data provided hereunder is in error, it shall provide corrections to such information or data to the Municipality or its agent within a Commercially Reasonable time.

12.2 POWER SUPPLY REPORT

Competitive Supplier agrees to comply with any current and/or future rules and regulations related to Environmental Disclosure Labels in the State of New York, including, once finalized by the PSC and/or the New York State Energy Research and Development Authority and available to Competitive Supplier, the creation of separate labels to reflect renewable CCA products within the Competitive Supplier's portfolio, as well as individual municipal renewable purchases within the CCA program.

Unless the Environmental Disclosure Label requirement is waived by PSC, within fifteen (15) days of the end of the quarter, Competitive Supplier shall present a copy of the current Environmental Disclosure Label required by the PSC of all Competitive Suppliers to be disclosed to their Participating Customers, which includes information pertaining to Competitive Supplier's power supply and a reasonably detailed description of the sources of Competitive Supplier's power supply used to serve Participating Customers pursuant to this ESA, except to the extent such disclosure would violate any confidentiality obligations of Competitive Supplier.

12.3 BOOKS AND RECORDS

Competitive Supplier shall keep their books and records in accordance with any applicable regulations or guidelines of PSC, FERC, and any other Governmental Authority. The Municipality will have electronic access to any reports mandated by the Securities and Exchange Commission which are available on the Internet "EDGAR" system. Upon reasonable request by the Municipality and at the Municipality's reasonable expense, Competitive Supplier or its Associated Entities shall provide reasonable back up for any charge under this ESA questioned by the Municipality.

12.4 COPIES OF REGULATORY REPORTS AND FILINGS

Upon reasonable request, Competitive Supplier shall provide to the Municipality a copy of each public periodic or incident-related report or record relating to this ESA which it files with any New York or federal agency regulating rates, service, compliance with environmental laws, or compliance with affirmative action and equal opportunity requirements, unless the Competitive Supplier is required by law or regulation to keep such reports confidential. Competitive Supplier shall be reimbursed its reasonable costs of providing such copies, if only available in hard copy.

ARTICLE 13 RESOLUTION OF DISPUTES; CHOICE OF LAW AND FORUM

13.1 CHOICE OF LAW AND FORUM

This ESA and the rights of the Parties shall be interpreted and determined in accordance with the laws of the State of New York without respect to conflicts-of-laws principles. Any litigation arising hereunder shall be brought solely in the appropriate federal court in New York or appropriate state court sitting in the New York county in which the Municipality is located, to whose jurisdiction the Parties hereby assent, waiving all objections to venue or forum.

13.2 DISPUTE RESOLUTION

Unless otherwise provided for in this ESA, the dispute resolution procedures of this Article 13.2 shall be the exclusive mechanism to resolve disputes arising under this ESA. The Parties agree to use their respective best efforts to resolve any dispute(s) that may arise regarding this ESA. Any dispute that arises under or with respect to this ESA that cannot be resolved shall in the first instance be the subject of informal negotiations between the Parties involved in the dispute. The dispute shall be considered to have arisen when one Party sends the other Party(ies) involved in the dispute a written notice of dispute. The period for informal negotiations shall be fourteen (14) days from receipt of the written notice of dispute unless such time is modified by written agreement of the Parties involved in the dispute. In the event that the parties involved in the dispute cannot resolve a dispute by informal negotiations, the Parties may seek judicial enforcement subject to the provisions of this ESA. Notwithstanding the foregoing, injunctive relief may be immediately sought without resorting to alternative dispute resolution to prevent irreparable harm that would be caused by a breach of this ESA.

ARTICLE 14 INDEMNIFICATION

14.1 INDEMNIFICATION BY THE COMPETITIVE SUPPLIER

In addition to any other remedies available to the Municipality at law or equity, and notwithstanding any other provision contained herein, the Competitive Supplier shall indemnify, defend and hold harmless the Municipality and the Program Manager ("Indemnified Parties") and the Indemnified Parties' officials, officers, employees, agents, representatives and independent contractors, from and against any and all costs, claims, liabilities, damages, expenses (including reasonable attorneys' fees), causes of action, suits or judgments, incurred by, on behalf of or involving any one of the foregoing parties to the extent arising directly from or in connection with (i) any material breach by Competitive Supplier or its Associated Entities of its obligations, covenants, representations or warranties contained in this ESA and not resulting from the actions (or omissions where there is a duty to act) of the NYISO, Distribution Utility, the Municipality or its employees or agents, or (ii) any action or omission taken or made by the Competitive Supplier or its Associated Entities in connection with Competitive Supplier's performance of this ESA.

14.2 NOTICE OF INDEMNIFICATION CLAIMS

If the Municipality or Program Manager seeks indemnification pursuant to this Article 14, it shall notify Competitive Supplier of the existence of a claim, or potential claim as soon as practicable after learning of such claim, or potential claim, describing with reasonable particularity the circumstances giving rise to such claim.

14.3 SURVIVAL

Notwithstanding any provision contained herein, the provisions of this Article 14 shall survive the termination of this ESA for a period of two (2) years with respect to (i) any claims which occurred or arose prior to such termination and (ii) any losses occurring as a result of the termination.

14.4 DUTY TO MITIGATE

Each Party agrees that they have a duty to mitigate damages and covenant that they will use Commercially Reasonable efforts to minimize any damages they may incur as a result of the other Party's performance or non-performance of this ESA.

ARTICLE 15 REPRESENTATIONS AND WARRANTIES

15.1 BY THE COMPETITIVE SUPPLIER

As a material inducement to entering into this ESA, the Competitive Supplier hereby represents and warrants to the Municipality as of the Effective Date of this ESA as follows:

- a) it is duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation and is qualified to conduct its business in those jurisdictions necessary for it to perform its obligations under this ESA;
- b) it has all authorizations from any Governmental Authority necessary for it to legally perform its obligations under this ESA or will obtain such authorizations in a timely manner prior to when any performance by it requiring such authorization becomes due;
- c) the execution, delivery and performance of this ESA are within its powers, have been duly authorized by all necessary action and do not violate any of the terms or conditions in its governing documents or any contract to which it is a party or any Governmental Rule applicable to it;
- d) subject to the conditions set forth in Article 2.4, this ESA constitutes a legal, valid and binding obligation of the Competitive Supplier enforceable against it in accordance with its terms, and the Competitive Supplier has all rights such that it can and will perform its obligations to the Municipality in conformance with the terms and conditions of this ESA, subject to Bankruptcy, insolvency, reorganization and other laws affecting creditor's rights generally and general principles of equity;
- e) no Bankruptcy is pending against it or to its knowledge threatened against it;
- f) none of the documents or other written information furnished by or on behalf of Competitive Supplier to or for the benefit of the Municipality pursuant to this ESA, contains any untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements contained herein or therein, in the light of the circumstances in which they were made, not misleading; and
- g) all information furnished by Competitive Supplier in response to the Request for Proposals for competitive electric supply services is true and accurate.

15.2 BY THE MUNICIPALITY

As a material inducement to entering into this ESA, the Municipality hereby represents and warrants to Competitive Supplier as of the Effective Date of this ESA as follows:

- a) this ESA constitutes the legal, valid and binding contract of the Municipality enforceable in accordance with its terms, subject to applicable law;

- b) the execution, delivery and performance of this ESA are within the Municipality's powers, have been or will be duly authorized by all necessary action;
- c) Municipality has all authorizations from local Governmental Authority necessary for it to legally perform its obligations under this ESA or will obtain such authorizations in a timely manner prior to when any performance by it requiring such authorization becomes due; and
- d) no Bankruptcy is pending or threatened against the Municipality;

15.3 BY THE PROGRAM MANAGER

As a material inducement to entering into this ESA, the Program Manager hereby represents and warrants to Competitive Supplier and Municipality as of the Effective Date of this ESA as follows:

- a) this ESA constitutes the legal, valid and binding contract of Program Manager enforceable in accordance with its terms, subject to applicable law
- b) the execution, delivery and performance of this ESA are within Program Manager's powers, have been or will be duly authorized by all necessary action;
- c) Program Manager has all authorizations from any local or state Governmental Authority necessary for it to legally perform its obligations under this ESA or will obtain such authorizations in a timely manner prior to when any performance by it requiring such authorization becomes due; and
- d) no Bankruptcy is pending or threatened against Program Manager.

ARTICLE 16 INSURANCE

16.1 In order to help support the indemnifications provided in Article 14, and its other promises and covenants stated herein, Competitive Supplier shall secure and maintain, at its own expense, before the Effective Date and throughout the term of this ESA, unless otherwise specified, commercial general liability insurance of at least \$1,000,000 combined single limit and excess liability coverage of at least \$5,000,000 with insurers licensed to do business in the State of New York. Each of the required insurance policies shall be with insurers qualified to do business in the State of New York, with an A- or better rating for financial condition and financial performance by Best's Key Rating Guide, Property/Casualty Edition. In the event the Competitive Supplier's insurance carrier is downgraded to a rating of lower than Best's A-, Competitive Supplier shall have ninety (90) days to obtain coverage from a carrier with a rating of at least Best's A-. A certificate that each such insurance coverage is in force and effect, and listing the Municipality as an additional insured on all policies, shall be submitted on or before the Effective Date and thereafter whenever renewed or requested by the Municipality. All insurers must be notified that the insurance policies must provide that a copy of any notice of cancellation or non-renewal will be sent to the Municipality.

16.2 With respect to any of the insurance policies provided by the Competitive Supplier pursuant to these requirements which are "claims made" policies, in the event at any time such policies are canceled or not renewed, the Competitive Supplier shall provide a substitute insurance policy with terms and conditions and in amounts which comply with these requirements and which provides for retroactive coverage to the date of the cancellation or non-

renewal of the prior “claims-made” policy. With respect to all “claims made” policies which have been renewed, the Competitive Supplier shall provide coverage retroactive to the Effective Date under this ESA. All said substitute or renewed “claims made” policies shall be maintained in full force and effect for three (3) years from the date of the termination of the ESA.

16.3 Competitive Supplier, to the extent required by law, must provide worker’s compensation insurance meeting all applicable state and federal requirements.

ARTICLE 17 REGULATORY EVENT/NEW TAXES

17.1 REGULATORY EVENT

If a Regulatory Event occurs, the Parties shall use their best efforts to reform this ESA to give effect to the original intent of the Parties. If despite such best efforts, a Regulatory Event affects Competitive Supplier and Program Manager and Municipality agree that Competitive Supplier is incurring excess costs as a result thereof and agrees that Competitive Supplier may recover such costs, such amount shall be allocated to and collected from Participating Customers on a per kWh basis through applicable monthly invoice(s).

17.2 QUALIFYING REGULATORY EVENT

If a Qualifying Regulatory Event occurs, the Parties shall use their best efforts to reform this ESA to give effect to the original intent of the Parties. If a Qualifying Regulatory Event affects Competitive Supplier and Competitive Supplier incurs excess costs as a result thereof, such amount shall be allocated to and collected from Participating Customers on a per kWh basis through applicable monthly invoice(s).

17.3 NEW TAXES

If any New Taxes are imposed for which Competitive Supplier is responsible, the amount of such New Taxes shall be allocated to and collected from Participating Customers through applicable monthly invoice(s).

ARTICLE 18 MISCELLANEOUS

18.1 NO ASSIGNMENT WITHOUT PERMISSION

Except in the event of the sale of all or substantially all of its retail electricity business to an entity with credit and service ability to deliver on all facets of this ESA reasonably acceptable to Municipality, Competitive Supplier or Program Manager shall not directly or indirectly assign this ESA or any of its rights, obligations and privileges under this ESA without the prior written approval of the Municipality. Such approval may be denied at the reasonable discretion of the Municipality, including if the proposed assignee does not have the experience and financial ability to fulfill all obligations of the Competitive Supplier or Program Manager in the ESA. Notwithstanding the above, any assignment of this ESA by the Competitive Supplier, whether as the result of the sale of all or substantially all of the Competitive Supplier’s business related to

this ESA or otherwise, shall be subject to the following requirements: (i) Competitive Supplier shall provide the Municipality with notice of the proposed assignment at least ninety (90) days prior to such assignment; (ii) Competitive Supplier's assignee shall agree in writing to be bound by the terms and conditions of this ESA; and (iii) Competitive Supplier and such assignee shall, at least ninety (90) days in advance of any assignment, reasonably demonstrate to Municipality that assignee has the experience and financial ability to fulfill all obligations of the Competitive Supplier in the ESA. The Municipality or Program Manager may assign this ESA without the prior consent of Competitive Supplier provided that the proposed assignee has at least the same financial ability as the Municipality or Program Manager and such assignment would not materially impair the rights and interests of Competitive Supplier under this ESA. The rights and obligations created by this ESA shall inure to the benefit of, and be binding upon, the successors and permitted assigns of, the respective Parties hereto.

18.2 DIRECT MARKETING

Prior to the introduction of any new product or service which Competitive Supplier may wish to make available to Participating Customers or other Eligible Customers located within the Municipality, Competitive Supplier agrees to (i) give the Municipality written notice of such new product or service and (ii) subject to the entry into reasonable confidentiality terms to the extent permitted by law and mutually acceptable to the Parties, discuss with the Municipality the possible inclusion of such new product or service in this or another aggregation program undertaken by the Municipality.

Competitive Supplier also agrees not to engage, whether directly or through any of its Associated Entities, in any direct marketing to any Participating Customer that relies upon Competitive Supplier's unique knowledge of, or access to, Participating Customers gained as a result of this ESA. For the purposes of this provision, "direct marketing" shall include any telephone call, mailing, electronic mail, or other contact between the Competitive Supplier and the Participating Customer. Programs of the Competitive Supplier that do not rely on unique knowledge or access gained through this ESA will not constitute such "direct marketing."

18.3 NOTICES

All notices, demands, requests, consents or other communications required or permitted to be given or made under this ESA shall be in writing and addressed to:

If to Competitive Supplier:

If to Municipality:

and if to Program Manager:

Executive Director
Sustainable Westchester Inc
55 Maple Ave.
Mount Kisco, NY 10549

Notices hereunder shall be deemed properly served (i) by hand delivery, on the day and at the time on which delivered to the intended recipient at the address set forth in this ESA; (ii) if sent by mail, on the third business day after the day on which deposited in the United States certified or registered mail, postage prepaid, return receipt requested, addressed to the intended recipient at its address set forth in this ESA; or (iii) if by Federal Express or other reputable express mail service, on the next business day after delivery to such express mail service, addressed to the intended recipient at its address set forth in this ESA. Any party may change its address and contact person for the purposes of this Article 18.3 by giving notice thereof in the manner required herein.

18.4 CHANGES IN EMERGENCY AND SERVICE CONTACT PERSONS

In the event that the name or telephone number of any emergency or service contact for the Competitive Supplier changes, Competitive Supplier shall give prompt notice to the Municipality and the Program Manager in the manner set forth in Article 18.3. In the event that the name or telephone number of any such contact person for the Municipality changes, prompt notice shall be given to the Competitive Supplier and the Program Manager in the manner set forth in Article 18.3. In the event that the name or telephone number of any such contact person for the Program Manager changes, prompt notice shall be given to the Competitive Supplier and the Municipality in the manner set forth in Article 18.3.

18.5 ENTIRE ESA; AMENDMENTS

This ESA constitutes the entire agreement between the Parties hereto with respect to the subject matter hereof and supersedes all prior oral or written agreements and understandings between the Parties relating to the subject matter hereof. This ESA may only be amended or modified by a written instrument signed by all Parties hereto, duly authorized to sign such instrument.

18.6 FORCE MAJEURE

If by reason of Force Majeure any Party is unable to carry out, either in whole or in part, its obligations herein contained, such Party shall not be deemed to be in default during the continuation of such inability, provided that: (i) the non-performing Party, within two (2) weeks after the occurrence of the Force Majeure, gives the other Party hereto written notice describing the particulars of the occurrence; (ii) the suspension of performance be of no greater scope and of no longer duration than is required by the Force Majeure; (iii) no obligations of the Party which were to be performed prior to the occurrence causing the suspension of performance shall be excused as a result of the occurrence; and (iv) the non-performing Party shall use Commercially Reasonable efforts to remedy with all reasonable dispatch the cause or causes preventing it from carrying out its obligations. If (i) an event of Force Majeure caused by any strikes, lockouts or other industrial disturbances involving Competitive Supplier or its Associated Entities continues for a period of thirty (30) days or longer, or (ii) an event of Force Majeure arising from any other cause continues for a period of one hundred eighty (180) days or longer, any Party may terminate this ESA by sending the other Party a written notice as set forth in Article 4.2; provided, however, that the same shall not constitute a default under this ESA and shall not give rise to any damages. Additionally, Competitive Supplier shall submit all customer drops via EDI to the Distribution Utility in accordance with the rules and regulations set forth by the PSC in Case 98-M-0667.

18.7 EXPENSES

Each Party hereto shall pay all expenses incurred by it in connection with its entering into this ESA, including without limitation, all of its attorney's fees and expenses.

18.8 NO JOINT VENTURE

Each Party will perform all obligations under this ESA as an independent contractor. Nothing herein contained shall be deemed to constitute any Party a partner, agent or legal representative of the other Party or to create a joint venture, partnership, agency or any relationship between the Parties. The obligations of the Municipality and the Competitive Supplier hereunder are individual and neither collective nor joint in nature.

18.9 JOINT WORK PRODUCT

This ESA shall be considered the work product of all Parties hereto, and, therefore, no rule of strict construction shall be applied against any Party.

18.10 COUNTERPARTS

This ESA may be executed in counterparts, each of which shall be deemed an original and all of which shall constitute a single agreement.

18.11 WAIVER

No waiver by any Party hereto of any one or more defaults by any other Party in the performance of any provision of this ESA shall operate or be construed as a waiver of any future default, whether of like or different character. No failure on the part of any Party hereto to complain of any action or non-action on the part of any other Party, no matter how long the same may continue, shall be deemed to be a waiver of any right hereunder by the Party(ies) so failing. A waiver of any of the provisions of this ESA shall only be effective with respect to an obligation to the waiving Party and shall only be effective if made in writing and signed by the Party who is making such waiver.

18.12 ADVERTISING LIMITATIONS

Competitive Supplier agrees not to use, whether directly or through any of its Associated Entities, the name of the Municipality, or make any reference to the Municipality in any advertising or other information to be distributed publicly for marketing or educational purposes, unless the Municipality expressly agrees to such usage. Any proposed use of the name of the Municipality must be submitted in writing for agreement and prior written approval which may be withdrawn through a notice in writing at any time. The Municipality acknowledges that the Competitive Supplier's corporate affiliates own the exclusive right to the trademarked logo and trade name used by Competitive Supplier. No right, license or interest in this trademark and/or trade name is granted to the Municipality hereunder, and the Municipality agrees that it shall not assert any right, license or interest with respect to such trademark and/or trade name.

18.13 PRESS RELEASES

The Parties agree to cooperate in good faith prior to the issuance of any formal press release with respect to this ESA, such cooperation to include agreement as to the form, substance and timing of such formal press release.

18.14 HEADINGS AND CAPTIONS

The headings and captions appearing in this ESA are intended for reference only, and are not to be considered in construing this ESA.

18.15 SURVIVAL OF OBLIGATION

Termination of this ESA for any reason shall not relieve the Parties of any obligation accrued or accruing prior to such termination.

ARTICLE 19 REMEDIES

19.1 GENERAL

Subject to the limitations set forth in Article 19.2 below and Article 4, the Parties reserve and shall have all rights and remedies available to each of them at law or in equity with respect to the performance or non-performance of the other Party hereto under this ESA.

19.2 LIMITATIONS

NO PARTY HERETO SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT.

Notwithstanding the foregoing, each Party acknowledges that the preceding sentence shall not limit the other Party's rights to seek direct damages or, under Article 14.1, to seek indemnification from Competitive Supplier for consequential, punitive, or incidental damages described in the preceding sentence or other such losses claimed by third- parties.

19.3 DISCLAIMER

COMPETITIVE SUPPLIER MAKES NO WARRANTIES HEREUNDER, WHETHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

//Signatures Follow//

IN WITNESS WHEREOF, the Parties have caused this ESA to be executed by their duly authorized representatives, as required by the applicable laws of the city, town or municipality and the laws, rules and regulations of the State of New York, as of the respective dates set forth below

COMPETITIVE SUPPLIER

By: _____

Name: _____

Title: _____

Address: _____

Dated: _____

MUNICIPALITY

By: _____

Name: _____

Title: _____

Address: _____

Dated: _____

PROGRAM MANAGER

By: _____

Name: Nina Orville

Title: Executive Director

Address: 40 Green Street, Mount Kisco, NY 10549

Dated: _____

EXHIBIT A – PART 1 PRICES AND TERMS – STANDARD PRODUCT

Firm Full-Requirements Price by Rate Classification for all Participating Customers located in **New York State Electric & Gas** territory commencing service on the first customer meter-read date after November 30, 2021.

Table 1:

Rate Class	Fixed Price per kWh	
Residential	\$0.0###	
Small Commercial	\$0.0###	

Terms for System Supply Service

The Price and Terms stated on this Exhibit A will commence on the first customer meter read date after November 30, 2021 and continue until the first customer meter read date after _____ for each Participating Customer, unless this ESA is sooner terminated in accordance with Article 4.2 of this ESA.

The period of delivery of Firm Full-Requirements Power Supply shall be consistent with the provisions of Article 4 and Exhibit A of this ESA.

Start-Up Service Date: Firm Full-Requirements Power Supply will commence at the prices stated above as of Participating Customer's first meter read dates after November 30, 2021.

Renewable Energy in System Supply: The Competitive Supplier shall include Renewable Energy and Renewable Energy Certificates in the Firm Full-Requirements Power Supply mix in an amount equal to New York State's Renewable Portfolio Standards in a manner designated by New York State.

Eligible Customer Opt-Out: Participating Customers are free to opt-out of the Program utilizing established EDI drop protocols. Participating Customers are to provide five (5) days notice to the Competitive Supplier of such termination and Competitive Supplier will notify Distribution Utility to resume service as soon as possible after such notification. There are no fees or charges for Participating Customers to opt-out or terminate service.

Competitive Supplier's Standard Credit Policy: The Competitive Supplier will not require a credit review for any customer participating in the Program, nor will Competitive Supplier require any customer to post any security deposit as a condition for participation in the Program. The Competitive Supplier may terminate service to a Participating Customer and return such customer to Default Service in the event that the customer fails to pay to Competitive Supplier amounts past due greater than sixty (60) days.

Supplier shall serve Newly Opt-out Eligible Customers, as well as Eligible Customers who opt-in to the Program, who enroll or are enrolled into the Program after the first customer meter-read date referred to above at the fixed price in Table 1 above.

EXHIBIT A- PART 2 PRICES AND TERMS- 100% RENEWABLE CLEAN POWER PRODUCT

Firm Full-Requirements Price for 100% Renewable Clean Power Product by Rate Classification for all Participating Customers located in New York State Electric & Gas territory commencing service on the first customer meter-read date after November 30, 2021.

Table 2:

Rate Class	Fixed price per kWh
Residential	\$0.0####
Small Commercial	\$0.0####

Terms for System Supply Service

The Price and Terms stated on this Exhibit A will commence on the first customer meter read date after November 30, 2021 and continue until the first customer meter read date after _____ for each Participating Customer, unless this ESA is sooner terminated in accordance with Article 4.2 of this ESA.

The period of delivery of 100% Renewable Clean Power Product shall be consistent with the provisions of Article 4 and Exhibit A – Part 2 of this ESA.

Start-Up Service Date: 100% Renewable Clean Power Firm Full-Requirements Power Supply will commence at the prices stated above as of Participating Customer's first meter read dates after November 30, 2021.

Renewable Portfolio Standards ("RPS Requirements"): The standard electricity generation mix offered to Participating Customers under the Standard Electricity Product shall meet the minimum RPS Requirements for electric power designated by New York State.

100% New York Voluntary Tier II Clean Power RECs -- This Exhibit A-Part 2 includes a voluntary purchase of Renewable Energy Certificates ("RECs") sourced from NY Tier II Voluntary Renewable Resources in an amount equal to 100% of the Participating Customers' electricity usage, less any then-current Tier I REC purchase associated with the RPS Requirements applicable to alternative retail electric suppliers in New York. For clarifications purposes, this amount includes any then-current New York renewable energy standard requirements applicable to alternative retail electric suppliers in New York as of the Effective Date of this Agreement plus additional NY Tier II Voluntary RECs in an amount equal to 100% of the customer's usage. Each REC represents environmental attributes associated with one MWh of electricity generated by a renewable fuel type defined by the New York Generation Tracking System ("NYGATS") Operating Rules, dated May 18, 2018, but does not include any tax credits, depreciation allowances or third party subsidies of any kind. Competitive Supplier does not represent or warrant that the RECs purchased hereunder can be used as offsets or

otherwise for compliance with any emission reduction or similar program. For purposes of this Agreement:

i. “NY Tier 2 Renewable Resource” means any electric power generator meeting the definition of a “renewable energy system,” as that term is defined in the New York Climate Leadership and Community Protection Act, and meeting the requirements of a Tier II Renewable Energy Certificate as defined by the PSC or DPS Staff. Competitive Supplier does not represent or warrant that the RECs purchased hereunder can be used as offsets or otherwise for compliance with any emission reduction or similar program. RECs will be retired for all participants collectively at the Program level.

Eligible Customer Opt-Out: Participating Customers are free to opt-out of the Program utilizing established EDI drop protocols. Participating Customers are to provide five (5) days notice to the Competitive Supplier of such termination and Competitive Supplier will notify Distribution Utility to resume service as soon as possible after such notification. There are no fees or charges for Participating Customers to opt-out or terminate service.

Competitive Supplier's Standard Credit Policy: The Competitive Supplier will not require a credit review for any customer participating in the Program, nor will Competitive Supplier require any customer to post any security deposit as a condition for participation in the Program. The Competitive Supplier may terminate service to a Participating Customer and return such customer to Default Service in the event that the customer fails to pay to Competitive Supplier amounts past due greater than sixty (60) days.

Supplier shall serve Newly Opt-out Eligible Customers, as well as Eligible Customers who opt-in to the Program, who enroll and are enrolled into the Program after the first customer meter-read date referred to above at the price in Table 2, above.

In the event that New York State institutes a subsidy for CCA purchase of RECs after the signing of this ESA that is applicable to all or any portion of the Competitive Suppliers obligations under this ESA, Competitive Supplier shall pass through the full subsidy to Participating Customers in the form of a rate reduction.

EXHIBIT B - TEMPLATE KWH SALES AND CUSTOMER ACCOUNTS DATA SUMMARY

KWH Sales Template

UsageEndYrMo	Municipality	Zone	CustType	RateClass	Product	Count	Consump_kWh
202101	[MUNI NAME]	I	Residential	SC1	100% renewable	##,###	###,###
202101	[MUNI NAME]	I	Residential	SC1	Standard	##,###	###,###
202101	[MUNI NAME]	I	Small Coml	SC2	100% renewable	##,###	###,###
202101	[MUNI NAME]	I	Small Coml	SC2	Standard	##,###	###,###
202101	[MUNI NAME]	H	Residential	SC1	100% renewable	##,###	###,###
202101	[MUNI NAME]	H	Residential	SC1	Standard	##,###	###,###
202101	[MUNI NAME]	H	Small Coml	SC2	100% renewable	##,###	###,###
202101	[MUNI NAME]	H	Small Coml	SC2	Standard	##,###	###,###
etc..							

Add-Drop Report

UsageEndYearMonth	Municipality	CustomerType	RateClass	Product	AddOrDrop	AddDropType	Count
202101	[MUNI NAME]	Residential	SC1	renewable	Drop	Moved	##
etc.					Drop	Changed Supplier	
					Drop	Opt-out	
					Drop	Other	
					Add	Opt-in	
					Add	Newly Eligible	

EXHIBIT C - PAYMENT

PROGRAM MANAGER BANK INFORMATION FOR PAYMENTS BY ACH

Bank Name:

Bank Routing Number:

Bank Account Number:

Federal ID:

EXHIBIT D - DATA REQUIREMENTS

In order for program administrators and participants to have visibility into their participation with the program, certain data will need to be exchanged, in a regular format, with regular transmission methods and times.

There are three file formats currently in use for this purpose which must be provided by Competitive Supplier to Program Manager:

1. Newly_Opt-out Eligible_Customer file - Competitive Supplier will obtain this data quarterly from the Utility and the notification mailing is made from the list following procedures described elsewhere in this ESA. The Program Manager requires a matching dataset as defined below in order to perform its duties for customer service during the opt out period.
2. Post-enrollment file - After the Competitive Supplier sends enrollments to the Utility, either at the beginning of this contract or after a Newly Opt-out Eligible Customer opt out period, the Competitive Supplier will send this file to the Program Manager to update its records.
3. Commission file - Standard practice for aggregation suppliers.

The abovementioned files should, at minimum, contain the following information:

<u>Newly Opt-out Eligible Customer file</u>	<u>Post-enrollment file</u>	<u>Commission file</u>
Pre-Enrollment ID Customer Name Service Address Service City State Zip Mailing Address Mail City State Zip Customer Classification Rate Category	Pre-Enrollment ID Utility Account Number Meter Read Cycle Account Start Account End Enrollment Issue/Reason Code Municipality Name Contract Start Contract End Rate Class Annual kWh Capacity Tag Capacity Start Date Capacity End Date Billing Name Billing Address Billing State Billing City Billing Zip Enrollment Date (Contract Start Date) Load Zone	Customer Name Service Account Number Invoice Number Contract ID Municipality Customer Class Invoice Date Start Date End Date Earned Date Scheduled Payment Month Usage UDC Code Commission Rate/Amount Commission Payment Lag (Days)

File transfer between the Supplier and Program Manager, or a party designated by Program Manager, shall be by SFTP or other secure mode.

EXHIBIT E - OPTION TO SUPPLY POWER

Competitive Supplier shall provide power to Participating Customers, including through the purchase of REC's, throughout the term of this ESA and from sources selected in Competitive Supplier's own discretion. However, Program Manager desires to build or contract with a third party to supply renewable sources of energy (the "Renewable Power Source") after the Effective Date of the Program for the benefit of the Participating Customers. Upon completion of any such Renewable Power Source the Program Manager may offer to sell output from the Renewable Power Source to Competitive Supplier, either directly or through an Associated Entity, under a separate Power Purchase Agreement ("PPA"). Upon mutual agreement of such arrangement and execution of the PPA, Competitive Supplier (or its Associated Entity) shall take the output of the Renewable Power Source for use for the Program. The Competitive Supplier and Program Manager agree that any such PPA shall include a provision requiring the the Competitive Supplier or the Program Manager to agree to a rate adjustment to Participating Customers in the following circumstances:

(i) In the event that executing the PPA makes it necessary for Competitive Supplier (or an Associated Entity) to sell power previously purchased to meet Competitive Supplier's obligations under this ESA at a lower price than Competitive Supplier paid for such power, the Program Manager shall agree to a rate adjustment to Participating Customers to compensate Competitive Supplier (or its Associated Entity) for any losses suffered by the Competitive Supplier as a result of the difference in price.

(ii) In the event that executing the PPA makes it necessary for Competitive Supplier (or an Associated Entity) to sell power previously purchased to meet Competitive Supplier's obligations under this ESA at a higher price than Competitive Supplier paid for such power, the Competitive Supplier (or an Associated Entity) shall agree to a rate adjustment to Participating Customers to compensate Participating Customers for any gains inured to the benefit of Competitive Supplier as a result of the difference in price.

July 19, 2021

Town Board
Town of Lewisboro
11 Main Street
South Salem, New York 10590

Attn: Supervisor Peter Parsons &
Members of the Town Board

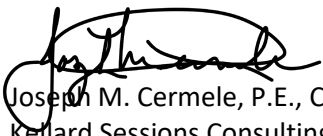
RE: Town Park Retaining Wall Repairs/Replacement

Dear Supervisor Parsons:

On June 17, 2021, I visited the Town Park, at the request of Councilman Tony Goncalves, to inspect the condition of the existing railroad-tie retaining walls in the vicinity of the baseball field backstop, concession stand, bleacher seating and pedestrian access walkway. Much of the retaining wall system was in poor condition or has failed and is in need of repair. Portions of the wall and protective railing along the walkway have recently collapsed and several of the stair treads have rotted, presenting a trip hazard. The areas have since been temporarily barricaded to limit pedestrian access. However, given the intense use of the property by the public and the condition of the areas described above, the potential for an accident or other unforeseen occurrence or condition, which could affect public property or threaten public safety is a concern. We would recommend that the Town Board consider immediate action to resolve the current condition and initiate corrective measures as soon as practicable.

If you should have any questions or require additional information, please do not hesitate to contact me.

Very truly yours,



Joseph M. Cermele, P.E., CFM
Kellard Sessions Consulting
Consulting Town Engineers

JMC/dc

cc: Dana Mayclim, Superintendent of Parks & Recreation

https://kellardsessionsconsulti.sharepoint.com/sites/Kellard/Municipal/Lewisboro/Correspondence/2021-07-19_LWTB_Parsons_Town Park Retaining Wall_Ltr.docx

PROPOSED LOCAL LAW #9 OF THE YEAR 2021

A LOCAL LAW TO AMENDING CHAPTER 220 ENTITLED “ZONING”

SECTION 1: AUTHORITY

This chapter is adopted pursuant to the authority of Article 2, §10 of the New York State Municipal Home Rule Law.

SECTION 2: LEGISLATIVE PURPOSE AND INTENT

Leaking underground petroleum storage tanks are the largest threat to groundwater quality in the United States where the U.S. Environmental Protection Agency has estimated that the cost of cleanup of oil spills could be upwards of \$32 billion. The totality of the Town of Lewisboro drains into reservoirs serving New York City, Norwalk and Stamford. The overwhelming majority of Lewisboro homes are served by a multitude of private wells while others use small local public water systems. These facts make Lewisboro exceptionally vulnerable to any petroleum tank leakages and oil spills. Historical Methyl tert-butyl ether (MTBE) leaks within the Towns of Lewisboro and Pound Ridge in the Cross River and Scotts Corners areas have adversely impacted groundwater quality as well. Furthermore, long lines and extended delays are not typically experienced at existing gas stations within the Town of Lewisboro and it is anticipated that there will be a steady but considerable decline in demand as the trend to electric vehicles accelerates and others buy more fuel efficient hybrid cars. Gasoline powered vehicles are accelerating climate change and New York State is making a determined effort to reduce their number. Finally we are seeing a steady increase in pedestrian and bicycle traffic.

SECTION 3 : AMENDMENT OF CHAPTER 220 OF LEWISBORO TOWN CODE ENTITLED “ZONING”

Chapter 220 of the current Code of the Town of Lewisboro entitled “Zoning”, specifically §220-43.7 entitled “Gasoline Service Stations” is hereby amended to read as follows:

§220-43.7 Gasoline Service Station.

Gasoline Service Stations, as defined in this chapter, shall be prohibited unless legally permitted and in existence as of July 15, 2021. However, any expansion or other enlargement of any legal gasoline service station use as set forth herein shall be subject to the following:

- A. Location. The special use listed in this section may be permitted in the RB (Retail Business) and GB (General Business) Districts only in locations fronting on or having direct access to major roads as determined by the Planning Board.
- B. Minimum lot area. The minimum lot area required for the establishment of a gasoline service station shall be one acre.
- C. Setbacks. The minimum setbacks for a gasoline service station use shall be as set forth in the district within which the use is located.
- D. Buffer area. A landscaped buffer area, meeting at least the minimum requirements of § 220-15 of this chapter, shall be required along all lot lines adjoining other properties, except where determined by the approving agency that a lesser width or

no buffer will meet the purpose of this requirement.

- E. Distance from other similar use. A gasoline service station use shall not be permitted within a distance of 200 feet of another existing gasoline service station use. The distance shall be measured in a straight line between the property lines of the subject properties.
- F. Distance from other uses. A gasoline service station use shall not be permitted within a distance of 200 feet of a school, public recreation area or church use. The distance shall be measured in a straight line between the property lines of the subject properties.
- G. Access points. Access points shall be located a minimum of 100 feet from the intersection of the designated street lines. All accesses shall be defined by the use of granite or concrete curbing and shall be designed to provide safe and convenient travel without the potential for backing vehicles into the public street.
- H. Pumps and canopies. Pumps, pump islands and canopies are structures and shall not be located in any required yard setbacks. Unless screened from the street, pumps shall be oriented perpendicular to the street. Canopies shall be in mass, scale, roofline configuration and architectural appearance to match site and area buildings without marketing graphics and other signage. Canopy lighting shall be minimized, limited to under canopy lights of pump islands only and fully recessed into the ceiling of the canopy structure. No outdoor display of products not associated with the gasoline service station use shall be permitted.
- I. Discontinuance of use. In the event that a gasoline service station use is abandoned, as determined by the Building Inspector, the owner, lessee and/or motor fuel supplier of said gasoline service station shall immediately remove the tanks, gasoline pumps, all identification signs and lighting poles. In lieu of removing the tanks, the flammable liquids shall be removed therefrom and all tanks filled with water for a three-month period only and thereafter with a solid material, subject to approval of the New York State Department of Environmental Conservation, and any other such approval agencies having jurisdiction. The owner and/or lessee shall also provide adequate protection against unlawful entry into the buildings and onto the property, and shall close all vehicular entrances to the property to prevent the storage of abandoned vehicles thereon.
- J. Other requirements. Such use shall comply with any other requirements of this chapter and any special requirements deemed appropriate by the approving agency in accordance with the requirements of § 220-32 herein.

SECTION 4 – HOME RULE

Nothing in this Local Law is intended, or shall be construed to limit the home rule authority of the Town under State Law or to limit the Town's discretion in setting fees and charges in connection with any applications requiring Town approval.

SECTION 5 – SEVERABILITY

If any part or provision of this Local Law or the application thereof to any person or circumstance be adjudged invalid by any court of competent jurisdiction, such judgment shall be confined in its operation to the part or provision or application directly involved in

the controversy in which judgment shall have been rendered and shall not affect or impair the validity of the remainder of this Local Law or the application thereof to other persons or circumstances, and the Town Board of the Town of Lewisboro hereby declares that it would have passed this Local Law or the remainder thereof had such invalid application or invalid provision been apparent.

SECTION 6– EFFECTIVE DATE

This Local Law shall take effect immediately upon filing in the office of the Secretary of State in accordance with Section 27 of the Municipal Home Rule Law.

TOWN OF LEWISBORO
Westchester County, New York



Planning Board
79 Bouton Road
South Salem, New York 10590

Tel: (914) 763-5592
Fax: (914) 875-9148
Email: planning@lewisborogov.com

July 22, 2021

VIA EMAIL AND HAND DELIVERY

Honorable Peter Parsons, Supervisor and
Members of the Town Board
Town of Lewisboro
11 Main Street
South Salem, New York 10590

Re: Proposed Local Law #9 of 2021 –
Amendment to Town Code, Chapter 220, Zoning
Town Code §220-43.7(E)

Dear Supervisor Parsons and Members of the Town Board:

I write, at the direction of the Planning Board, concerning the proposed amendment of Lewisboro Town Code §220-43.7(E). In accordance with §220-80 of the Code, the Town Board referred this zoning amendment to the Planning Board for review and a report. The Planning Board evaluated the proposed local law at its July 20, 2021 meeting, and recommends that the Town Board reject the zoning amendment contained therein.

The Planning Board is concerned with the legitimacy of this proposed amendment. As noted in a leading land use treatise, “[g]asoline stations are recognized as essential and zoning ordinances usually make some provision for them. Since this use is a lawful business, and not a nuisance if it is located properly in relation to other uses, zoning regulations that exclude gasoline stations from the whole territory of the municipality are of doubtful validity.” 2 N.Y. Zoning Law & Prac. §16.02 (2021). The amendment under consideration will exclude “gasoline service stations” within the Town of Lewisboro, with the exception of those “legally permitted and in existence as of July 15, 2021.” Yet, gasoline stations – particularly those constructed under current federal, state and local regulations – can be placed within the Town in a manner that avoids nuisance conditions and/or adverse environmental impacts. Consequently, the prohibition imposed under the amendment is questionable from a legal perspective.

This prohibition is also without support in the Lewisboro Town Master Plan. The Plan promotes the development of “neighborhood centers” with corresponding business

district zoning standards (these include the hamlets of Goldens Bridge, Cross River, Vista and South Salem). The Plan acknowledges that gasoline stations can be part of the commercial development within these centers, noting that “more detailed controls should be developed for some uses (e.g. gasoline stations and fast-food restaurants) . . .” Town Master Plan, p.84. Significantly, the Plan does *not* promote a ban of such uses in these neighborhood centers, rather it supports particularized regulation of their placement and operation. The proposed local law, however, simply excludes new stations and is thus contrary to the Master Plan.

The local law recites, as the rationale for the proposed ban, groundwater protection concerns and a projected decline in the need for this type of use. The Planning Board finds that this stated rationale does not support the exclusion of new gasoline stations. Again, appropriate regulation of these uses – as opposed to an outright ban – can achieve the objective of environmental protection. For this reason, the Planning Board considers the proposed amendment arbitrary in nature. Indeed, this type of use should be addressed through regulatory controls consistent with the intent of the Master Plan, rather than through the imposition of an ad hoc prohibition.

For these reasons, the Planning Board recommends that the Town Board reject the proposed amendment. On behalf of the Planning Board, I thank the Town Board for its consideration of this recommendation.

Respectfully submitted,

A handwritten signature in cursive script that reads "Janet Andersen".

Janet Andersen, Chair

MAP and PLAN 202(b)

ENGINEERING REPORT

OAKRIDGE WATER DISTRICT IMPROVEMENTS
PFAS TREATMENT

Public Water System ID# NY 5918395

TOWN OF LEWISBORO
Westchester County, New York

Prepared for:

TOWN OF LEWISBORO
11 Main Street
South Salem, New York 10590

Prepared by:

DELAWARE ENGINEERING, D.P.C.
28 Madison Ave. Extension
Albany, New York 12304



May 2021

Table of Contents

1.0	EXECUTIVE SUMMARY	1
2.0	PROJECT BACKGROUND & HISTORY	2
2.1	SITE INFORMATION.....	2
2.2	Geologic conditions.....	2
2.3	Environmental resources	2
2.4	Floodplain considerations.....	2
2.5	Cultural Resources	2
3.0	OWNERSHIP & SERVICE AREA.....	3
3.1	Existing Facilities.....	3
3.2	Need for Project	3
3.3	Capacity Development.....	4
4.0	ALTERNATIVE ANALYSIS	5
4.1	Description	5
4.2	No Action Alternative.....	5
4.3	Add GAC Filtration Alternative.....	5
4.4	Ion Exchange Alternative	6
4.5	RO Alternative.....	7
4.6	Additional Upgrades	7
4.7	Cost Estimate	8
4.8	Non-Monetary Factors.....	9
5.0	RECOMMENDED AND SELECTED ALTERNATIVES	10
5.1	Project Cost	10
5.2	Project Schedule.....	11

Figure 1- Site Location Map

Figure 2 – Site Plan

Figure 3 – Alternative 1 – GAC Treatment

Figure 4 – Alternative 2 – Ion Exchange Treatment

Figure 5 – Propose WTP Building Addition

Appendix A – WCDOH Notice of Violation

Appendix B – PFAS Sampling Data

Appendix C – GAC Filter Data Sheets

Appendix D – Ion Exchange Data Sheets

Appendix E – Capital Cost Estimates

Appendix F - Capacity Development Evaluation Form

1.0 Executive Summary

The purpose of this Engineering Report is to document planned improvements to the Oakridge Water District water treatment plant located at 400 Oakridge Drive, South Salem.

The project is required to treat and remove a group of carcinogenic bioaccumulating chemicals generally known as PFAS. In February of 2021, concentrations of PFAS were found in all five of the water supply wells and Well #6 was above maximum contaminant levels (MCLs) and the District was issued a Notice of Violation by the Westchester County Department of Health (WCDOH) on March 1, 2021. The WCDOH has required the District to develop a plan to address the water quality violations by May 31, 2021. Appendix A includes a copy of the Notice of Violation. Additionally, in May the second quarterly samples were collected and the test results showed that Wells #2, #6, and #7 had levels above the MCL.

The project proposes the design and construction of an expansion to the water treatment plant to further treat the water from all of the existing wells with the use of carbon filtration (GAC). The 40-foot by 38-foot expansion of the water plant will further require improvements to the booster pumps, treatment chemicals, valves, meters, and other appertences.

2.0 Project Background & History

2.1 Site Information

The Oakridge Water District serves approximately 900 people in the Oakridge development and surrounding area located on Route 123 in the Town of Lewisboro, Westchester County, New York.

At the location of the water treatment plant, the topography gently slopes upward to the northwest. The water treatment facilities are located on the southwest side of the Oakridge Drive development. To the east of the treatment plant is a recreational facility, apartment complexes and a man-made pond central to the development. To the west is a forested low rocky outcrop.

2.2 Geologic conditions

Major soil types in the vicinity include the Charlton-Chatfield Complex, 0 to 15 percent slopes, very rocky and Urban land-Charlton complex, 3 to 8 percent slopes. The Charlton-Chatfield complex consists of gravelly fine sandy loam, well drained, with a depth to restrictive layer of more than 80 inches. To the west of the project is the Chatfield-Hollis-Rock outcrop, 0 to 15 percent slopes, very rocky.

2.3 Environmental resources

The man-made pond within the Oakridge development flows to an unnamed stream (Class A) tributary to the Siscowit Reservoir to the southwest, part of the Connecticut water supply system.

There are state wetlands to the north, south and southeast of the water treatment facilities. The facility is within the NYS DEC buffer area of the palustrine forested, seasonally flooded wetland complex to the south.

There are no critical habitats or endangered species in the vicinity as mapped by the NYS DEC Enviromapper.

2.4 Floodplain considerations

The project area is in Zone X, minimal flood risk area, as on FIRM Panel 36119C0185F, effective 9/28/2007.

2.5 Cultural Resources

The New York State Office of Parks, Recreation and Historic Preservation concluded that this project will have no impact on archaeological and/or historic resources listed in or eligible for the New York State and National Registers of Historic Places (letter 8/10/2018).

3.0 Ownership & Service Area

The Town of Lewisboro owns the water system and water plant known as the Oakridge Water District (District). Included in the distribution area are 278 condominiums, 22 single-family residences, a commercial area plus a new section of approximately 40 townhomes. Source water is drawn from a system of five ground water wells. All supply lines from the wells are connected to a common header and flow into the treatment facility through a 4-inch PVC main.

3.1 Existing Facilities

The existing water treatment plant consists of five raw water supply wells, mix media filters, and green sand filtration to remove high levels of iron and manganese.

The water is disinfected with sodium hypochlorite and pumped to the 95,000-gallon water storage tank.

The system flows for typical average over 50,000 gpd.

	2018	2019	2020
Total Annual Flow	<i>18,314,000 Gallons</i>	<i>18,187,000 Gallons</i>	<i>19,853,000 Gallons</i>
Average Gallons per Month	<i>1,526,167 Gallons</i>	<i>1,515,583 Gallons</i>	<i>1,654,417 Gallons</i>
Average Gallons per Day	<i>50,872 GPD</i>	<i>50,519 GPD</i>	<i>55,147 GPD</i>

3.2 Need for Project

The project is required to treat and remove a group of carcinogenic bioaccumulating chemicals generally known as PFAS. In February and May 2021, concentrations of PFAS were found in all five of the water supply wells and Well #2, Well #6, and Well #7 were above maximum contaminant levels (MCLs). After the February test results, the District was issued a Notice of Violation by the Westchester County Department of Health (WCDOH) on March 1, 2021. The WCDOH has required the District to develop a plan to address the water quality violations by May 31, 2021. Appendix A includes a copy of the Notice of Violation.

PFOA levels ranged from 6.13 up to 11.4 ppt

PFOS levels ranged from 3.87 up to 15.5 ppt

Appendix B includes the water quality data from the wells.

3.3 Capacity Development

The facility has sufficient water supply for the District. The water treatment plant and the water system are operated by VRI and is staffed with certified water treatment plant operators.

The Town's DPW oversees VRI's operation of the plant and ensures that there are sufficient funds to operate the facility.

The Capacity Development Program Evaluation Form is attached in Appendix G.

4.0 Alternative Analysis

4.1 Description

As required by New York State water quality standards, the District sampled all of its water supply wells in February and May of 2021. It was discovered that all five the wells had PFAS and Well #2, Well #6, and Well #7 had PFOS and/or PFOA above the maximum contaminate level of 10 ppt.

The plant has a capacity of 75,000 gpd.

Each of the mixed media filters and the green sand filters have a capacity of 140 gpm, per treatment train.

Well capacities are as follows:

- Well #2- 21.5 GPM
- Well #4- 33 GPM
- Well #5- 35 GPM
- Well #6- 24 GPM
- Well #7- 33 GPM

The wells are typically operated in two groups. wells 2, 4 & 7 or 2, 6 & 7 are run together, for a combined average GPM of 80-90. Well #5 is not normally used because it has a much higher iron levels than the rest of the wells.

Each treatment train has a flow reducer to limit the flow to a maximum of 140 gpm. This allows all the wells to be on, if needed, and not exceed the rated capacity of each treatment train.

4.2 No Action Alternative

The water district took the highest contaminated well out of service and sampled the PFAS levels in the combined remaining wells. By taking Well #6 out of service, the PFAS levels are below the MCL of 10 ppt.

However, keeping Well #6 off line permanently is not a solution because it would leave the district short of the required water supply.

Additionally, sampling collected on May 5, 2021 showed PFAS above the MCL for Well #2, Well #6, and Well #7.

Therefore, the no action alternative is not feasible.

4.3 Add GAC Filtration Alternative

GAC filtration is an established method for the removal of PFAS to non-detection levels (below 2 ppt). It is a well establish best technology available for this type of treatment. For the flows at

Oakridge 75,000 gpd and operating range of 80 to 140 gpm, a Calgon Model 8 two vessel system with 20,000# of F400 GAC in each vessel is recommended.

Redundancy will be achieved by having two vessels each one with the full capacity of the wells (140 gpm). The vessels will be able to run in parallel or in series. Normal operation will be in series and parallel operation will be used when one vessel is down because of the need to change media or other maintenance.

Additionally, the WTP has TOC in the 1.5 to 3 mg/l range. Total organic carbon (TOC) is presumed to be the precursor of THMs formed after chlorination during water treatment, and TOC is readily removed by granular activated carbon (GAC).

By using GAC filters for PFAS removal, the reduction of total organic carbon (TOC) prior to disinfection is also expected to nearly eliminated the precursors of THM and address this water quality problem for the District.

Appendix C includes product information for the GAC treatment system. Figure 3 shows the needed GAC equipment.

4.4 Ion Exchange Alternative

Ion exchange treatment requires a resin specifically manufactured for removal of PFAS. Purolite is an ion exchange resin that is a single use PFAS-selective resin (PFA694E).

Based on a flow rate range of 35 gpm minimum to 140 gpm maximum, an AdEdge treatment skid Model APU-4896-2-LL-MVH, 2 x 48" dia x 96" high filter to operate in lead/lag is recommended.

The water entering the ion exchange treatment must go through pre-treatment to remove oxidants (chlorine and permanganate), iron and manganese, TOC, and suspended solids.

A 5-micron filter is needed to address the suspended solids and there is existing iron and manganese treatment at the WTP. However, the treatment system will still need to address the TOC (1.5 to 3 mg/l) and the potential for oxidants to be present in the influent to the ion exchange system.

Because of the constraints on the water quality entering the ion exchange system and the water quality at the plant, it is likely that the ion exchange treatment would experience premature failure and breakthrough of the PFAS. This condition would lead to more frequent media exchanges than predicted under ideal conditions.

Appendix D includes product information for this proposed equipment. Figure 4 shows the required Ion Exchange treatment units.

4.5 RO Alternative

RO treatment has been shown to filter out PFAS. However, there are many obstacles to using and RO system to treat PFAS at a small municipal WTP. RO is sensitive to the presence of iron and manganese, and oxidants. RO has recovery of 90 to 95% which means 5 to 10% of the pumped well water would be returned to the wastewater plant with elevated levels of PFAS that would flow through the WWTP and be discharged to the stream.

Additionally, we reached out to several manufactures and suppliers of RO treatment systems and they all responded that RO is not a viable alternative for Oakridge WTP due to the low flows and water quality.

Thus, RO is not a viable alternative.

4.6 Additional Upgrades

The WTP will need to address some additional upgrades to expand its treatment process. They include:

- Replacing the booster pumps in-kind
- Replacing the jockey pump in-kind
- Replacing the high flow pump and add a 2nd pump in-kind
- Replacing influent flow meter in-kind
- New effluent master meter
- Replacing static mixers
- Replacing injection quills
- Replace piping and lower to a workable level (4 to 5 feet above FF) to allow safe access to valves.
- Additional instrumentation and controls
- Chemical storage area

4.7 Cost Estimate

Appendix E includes a detailed breakdown of the expected capital costs to implement the improvements at the water treatment plant.

Alternative 1, GAC Treatment, capital costs are summarized as follows:

- \$158,000 -Site Work
- \$405,000 – Building Work
- \$254,000 - Piping
- \$512,500 – GAC Filters
- \$162,000 – Pumps and Misc Equipment
- \$224,000 – 15% Contingency
- \$224,000 – 15% Engineering
- \$1,939,500 - Total

Alternative 2, Ion Exchange Treatment, capital cost are summarized as follows:

- \$158,000 -Site Work
- \$405,000 – Building Work
- \$254,000 - Piping
- \$380,000 – GAC Filters
- \$162,000 – Pumps and Misc Equipment
- \$204,000 – 15% Contingency
- \$204,000 – 15% Engineering
- \$1,767,000 - Total

Both the GAC media and the Ion Exchange media cost approximately \$30,000. Because of the water quality at the Oakridge Plant (TOC, oxidants, iron, hardness) the expected life of the ion exchange media is expected to be six months vs 18 months for GAC.

The present worth analysis of the two alternatives is as follows:

GAC Treatment Alternative	Ion Exchange Alternative
Capital Cost - \$1,939,500	Capital Cost -\$1,767,000
Annual Media Cost - \$20,000	Annual Media Cost - \$60,000
	Annual Cartridge Cost - \$10,000
20-year cost =\$2,339,500	20-year Cost =\$3,167,000

4.8 Non-Monetary Factors

RO is a non-feasible alternative.

Ion Exchange can remove PFAS but because of the water quality at the Oakridge Water Plant (TOC, Ion and Manganese, Chlorine, Permanganate, suspended solids), this alternative could be unreliable.

GAC filters are a proven technology that removes TOC and is forgiving for water quality issues that exist at Oakridge. Thus, it is expected to be the more reliable treatment method.

5.0 Recommended and Selected Alternatives

Treating PFAS with GAC filtration is the recommended alternative. It provides the most reliable treatment alternative at the lowest present worth cost.

A system of two GAC filters each one with 100% capacity will be provided. The filters will be piped to allow for operation in series or parallel. The normal operation will be series to provide the greatest level of treatment to ensure PFAS is removed to non-detection levels.

The water plant will be able to operate as usual with three wells on at a time and have the ability to run all five wells at the same time.

The existing treatment plant will be expanded to accommodate the proposed equipment as shown in Figure 2 and Figure 5.

5.1 Project Cost

The total project cost is \$1,939,500. The Town has applied and will continue to apply for grants and DWSRF financing for the project.

If no grants are obtained, the total capital costs will be paid by a municipal bonds. The debt service would be paid by the 340 water users of Oakridge Water District. At 20 years, using an annual interest rate of 4%, the annual payment is approximately \$142,711.80.

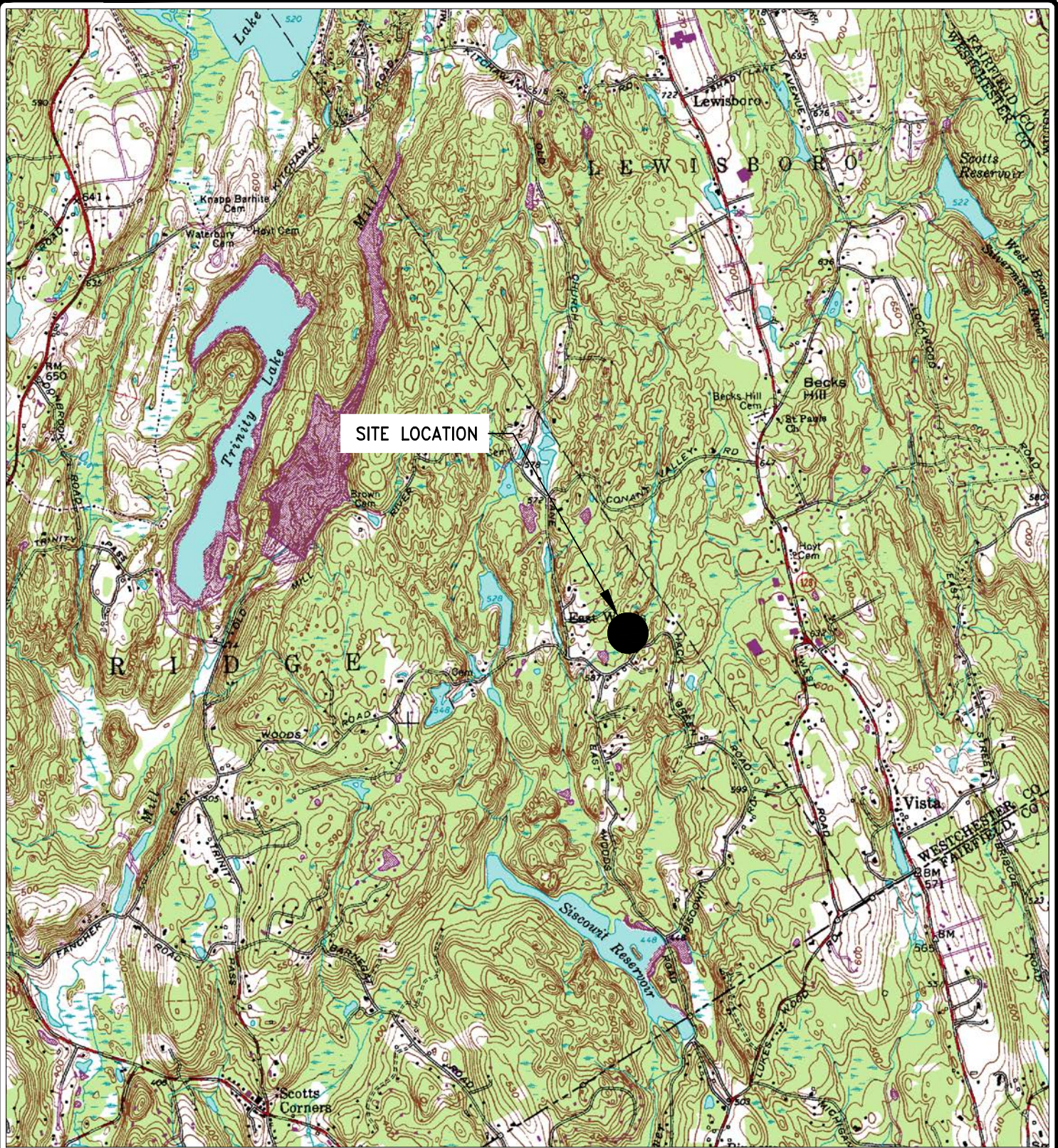
The current water rates that are assessed quarterly for a typical water user are \$55 base; \$7 per 1,000 gallons for first 7,000 gallons; \$8 per 1,000 gallons for over 7,000 gallons to 27,000 gallons; \$9 per 1,000 gallons above 27,000 gallons.

For a typical residential condominium that uses 80,000 gallons per year, the proposed project would increase their yearly water cost from approximately \$664.00 to \$1,084.

5.2 Project Schedule

The proposed project schedule is as follows:

- Submit Engineering Report to WCDOH by 5/31/2021
- Receive WCDOH approval of Report by 12/31/2021
- Authorize Design by 12/31/2021
- Submit Design to WCDOH by 5/1/2022
- Receive WCDOH approval of design plans by 12/31/2022
- Authorize Bids by 12/31/2022
- Receive Bids by 3/1/2023
- Issue notice to Proceed by 4/1/2023
- Start construction by 5/1/2023
- Complete construction by 12/31/2023



SITE LOCATION MAP

REVISIONS		
NO.	DATE	DESCRIPTION

DATE:	5/27/2021
DRAWN BY:	
SCALE:	1:2400
REVIEWED BY:	
PROJECT NO.:	
FILE:	



**DELAWARE
ENGINEERING, D.P.C.**
CIVIL AND ENVIRONMENTAL ENGINEERING

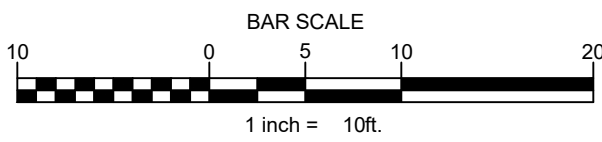
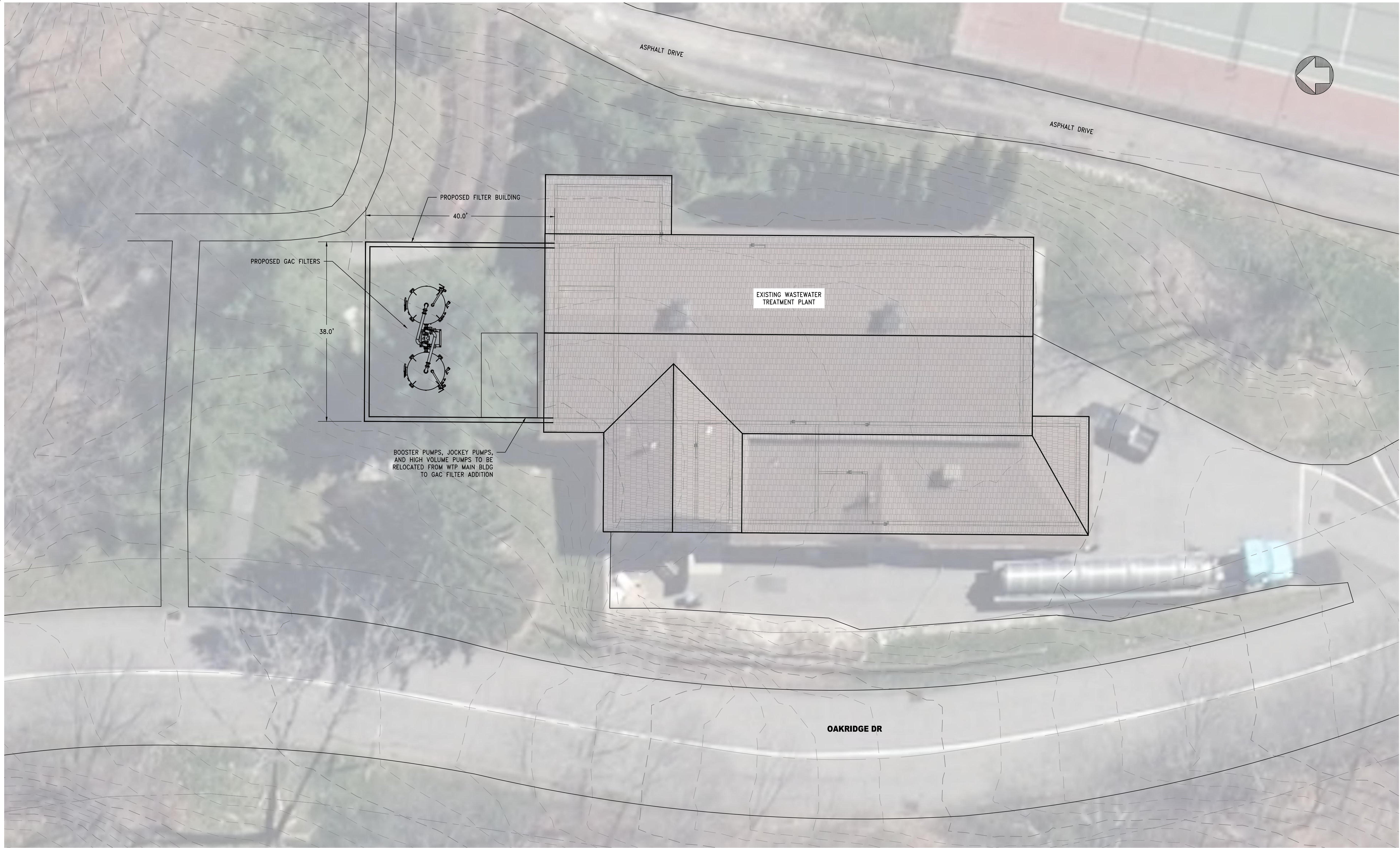
28 MADISON AVENUE EXTENSION, ALBANY, NY 12203 - 518.452.1290
 55 SOUTH MAIN ST, ONEONTA, NY 13820 - 607.432.8073
 31 NORTH MAIN STREET, LIBERTY, NY 12754 - 845.747.9952
 6 TOWNSEND STREET, WALTON, NY 13856 - 607.865.9235
 16 EAST MARKET ST., RED HOOK, NY 12571 - 518.452.1290
 548 BROADWAY, MONTICELLO, NY 12701 - 845.791.7777

SHEET NO:

FIGURE 1

TOWN OF LEWISBORO, NY
 OAKRIDGE WATER DISTRICT
 WTP UPGRADE PROJECT

H:\Drawings\Lewisboro-Oakridge\WTP Upgrades\GAC\Figure #2.dwg



DATE: 5/27/2021
DRAWN BY: IB
SCALE:
REVIEWED BY:
PROJECT NO.: XXXXXX
FILE:

**DELAWARE
ENGINEERING, D.P.C.**
CIVIL AND ENVIRONMENTAL ENGINEERING

28 MADISON AVENUE EXTENSION, ALBANY, NY 12203 - 518.452.1290
55 SOUTH MAIN ST. ONEONTA, NY 13820 - 607.432.8073
31 NORTH MAIN STREET, LIBERTY, NY 12754 - 845.747.0862
1600 W. STATE STREET, ALBANY, NY 12206 - 518.452.1290
16 EAST MARKET ST. RED HOOK, NY 12571 - 518.452.1290
548 BROADWAY, MONTICELLO, NY 12001 - 845.791.7777

REVISIONS			
NO.	DATE	DESCRIPTION	

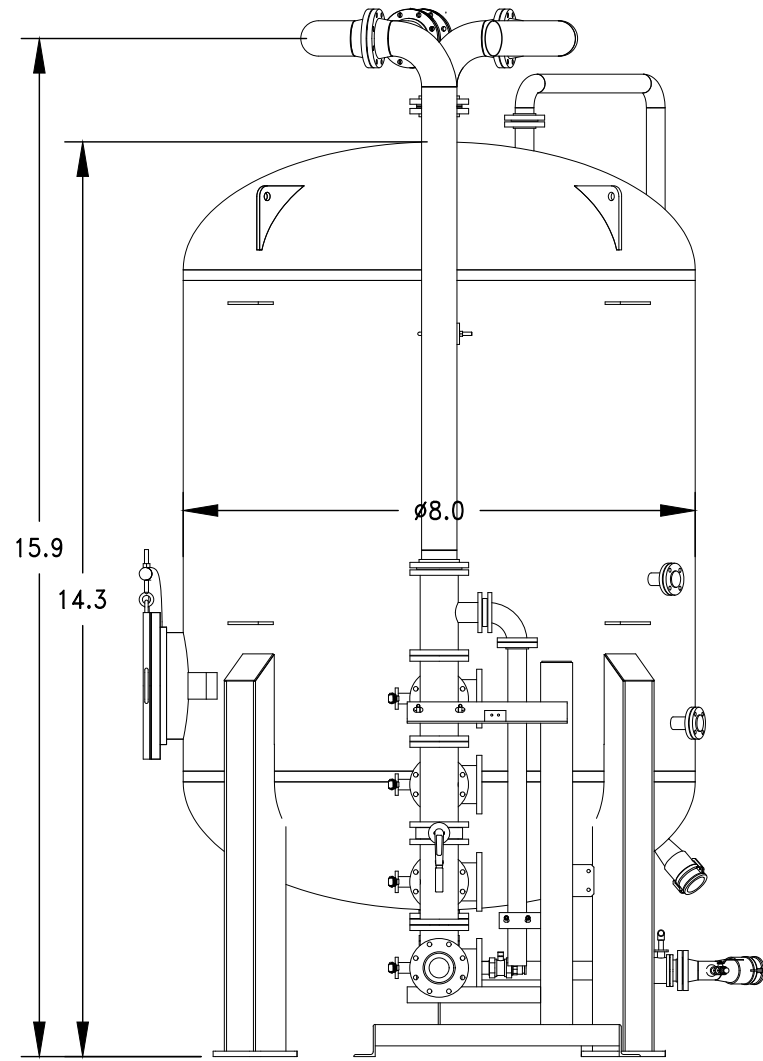
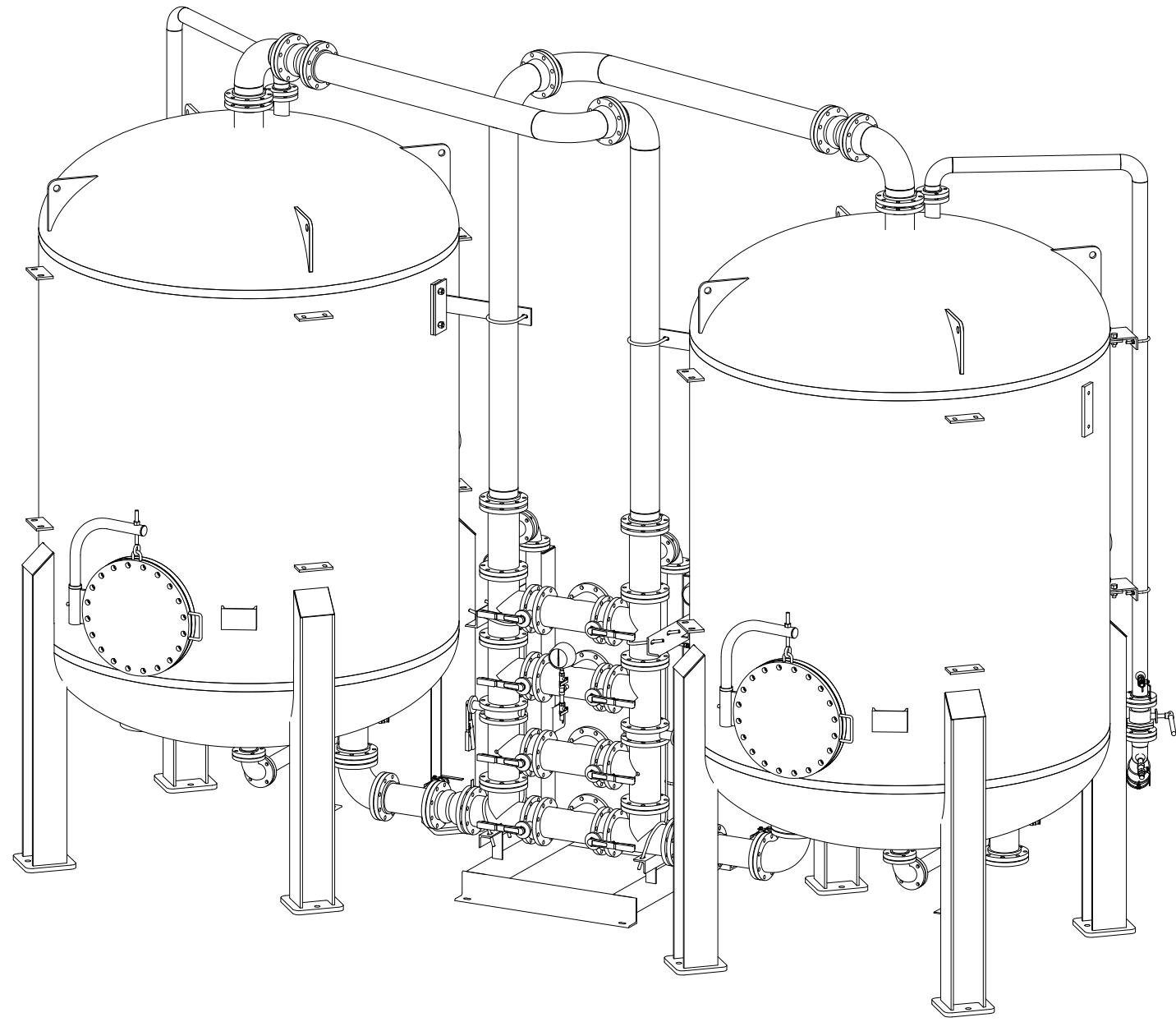
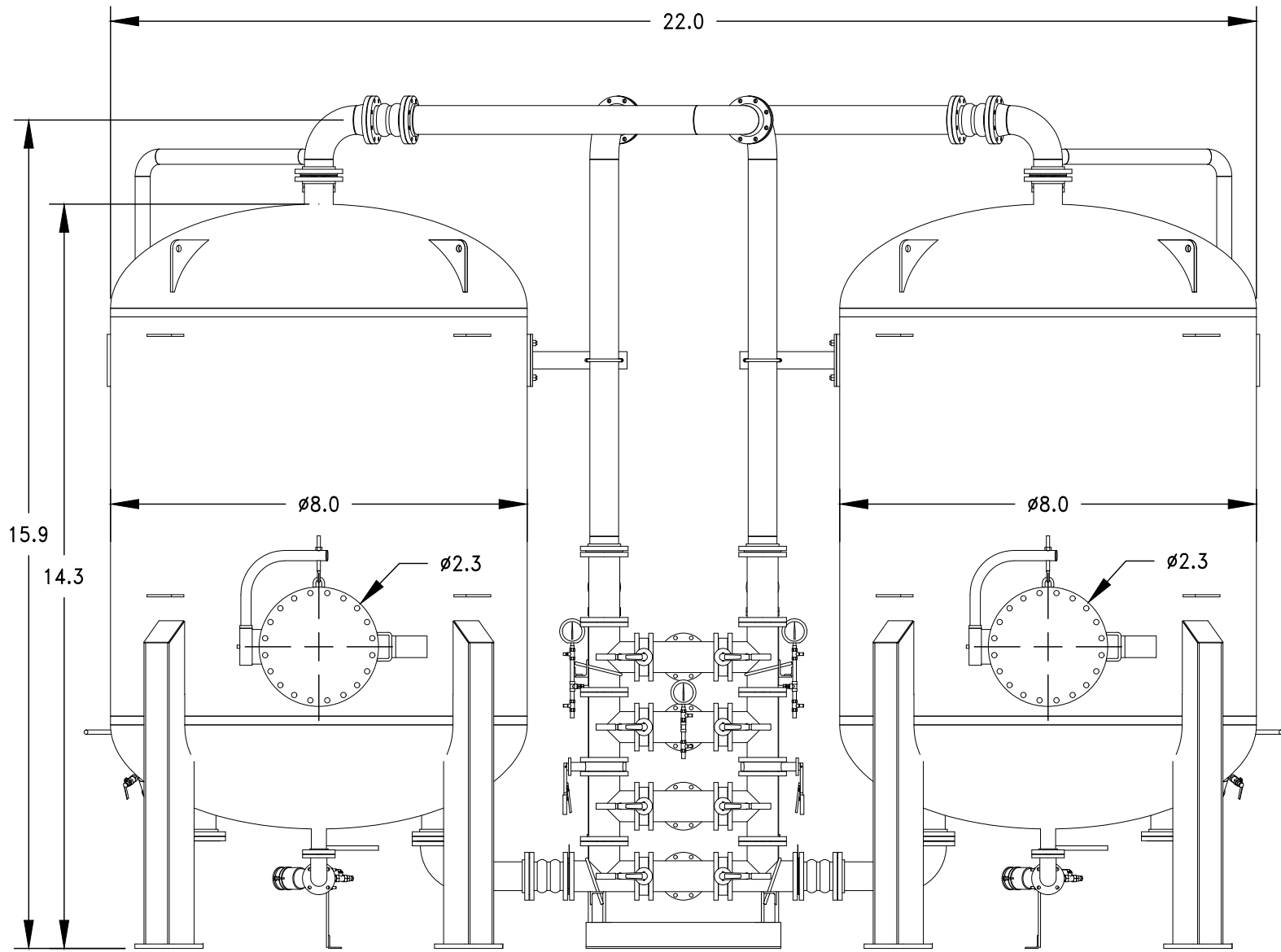
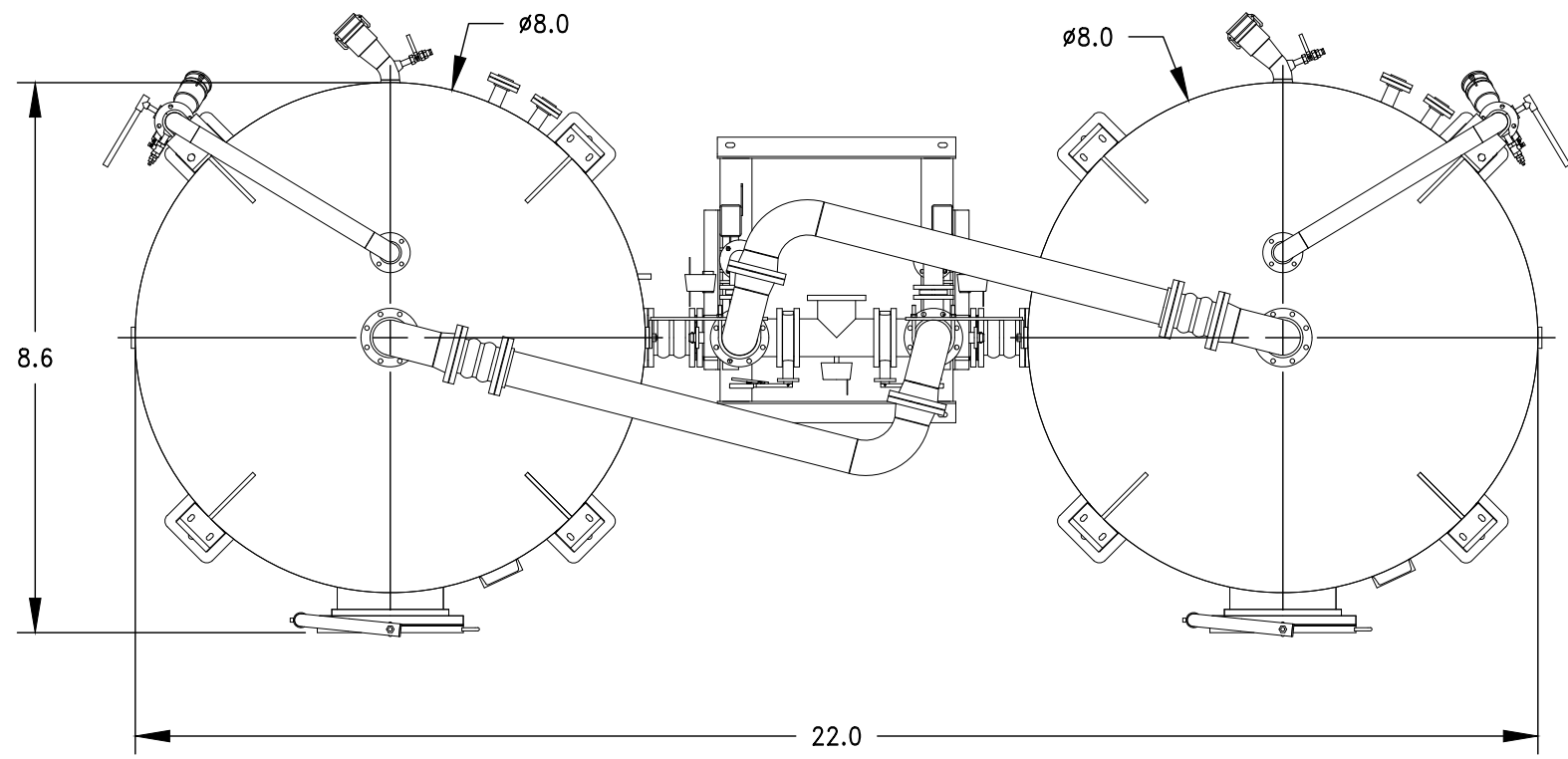
TOWN OF LEWISBORO, NY
OAKRIDGE WATER DISTRICT
WTP UPGRADE PROJECT

SITE PLAN

SHEET:
FIG #2

WARNING - IT IS A VIOLATION OF NEW YORK EDUCATION LAW SECTION 7209(2), FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION LAW, SECTION 7209(2).

H:\Drawings\Lewisboro-Oakridge\WTP Upgrades\GAC\JD-101.dwg



1
FIG #3 ALT #1 - GAC TREATMENT
SCALE: 1" = 3'

DATE: 5/27/2021
DRAWN BY: IB
SCALE:
REVIEWED BY:
PROJECT NO.: XXXXX
FILE:

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CIVIL AND ENVIRONMENTAL ENGINEERING

28 MADISON AVENUE EXTENSION, ALBANY, NY 12203 - 518.452.1290
55 SOUTH MAIN ST. ONEONTA, NY 13820 - 607.432.8073
311 NORTH MAIN STREET, LIBERTY, NY 12754 - 845.747.8962
16 EAST MARKET STREET, RED HOOK, NY 12571 - 518.452.1290
548 BROADWAY, MONTICELLO, NY 12001 - 845.791.7777

REVISIONS			
NO.	DATE	DESCRIPTION	

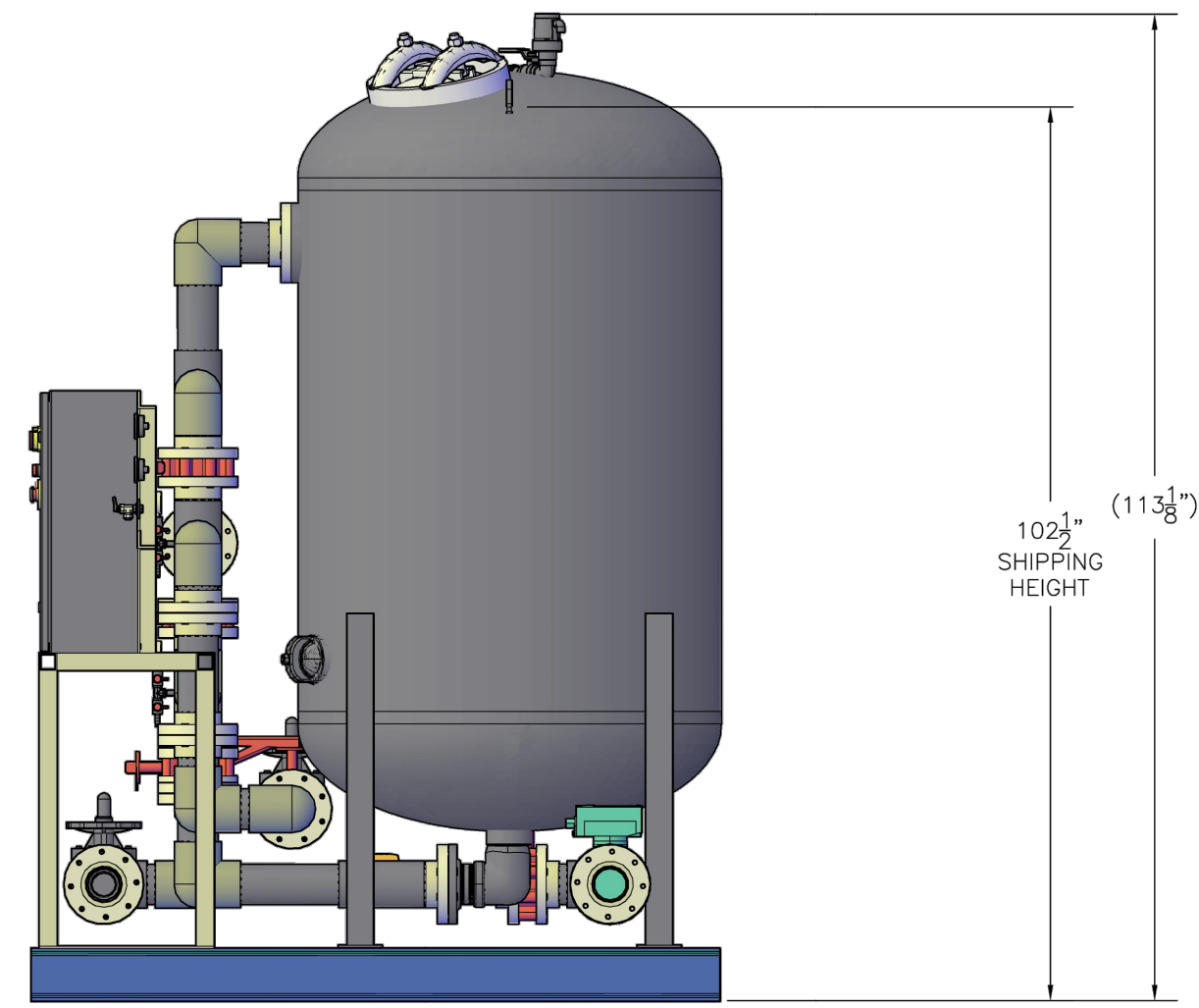
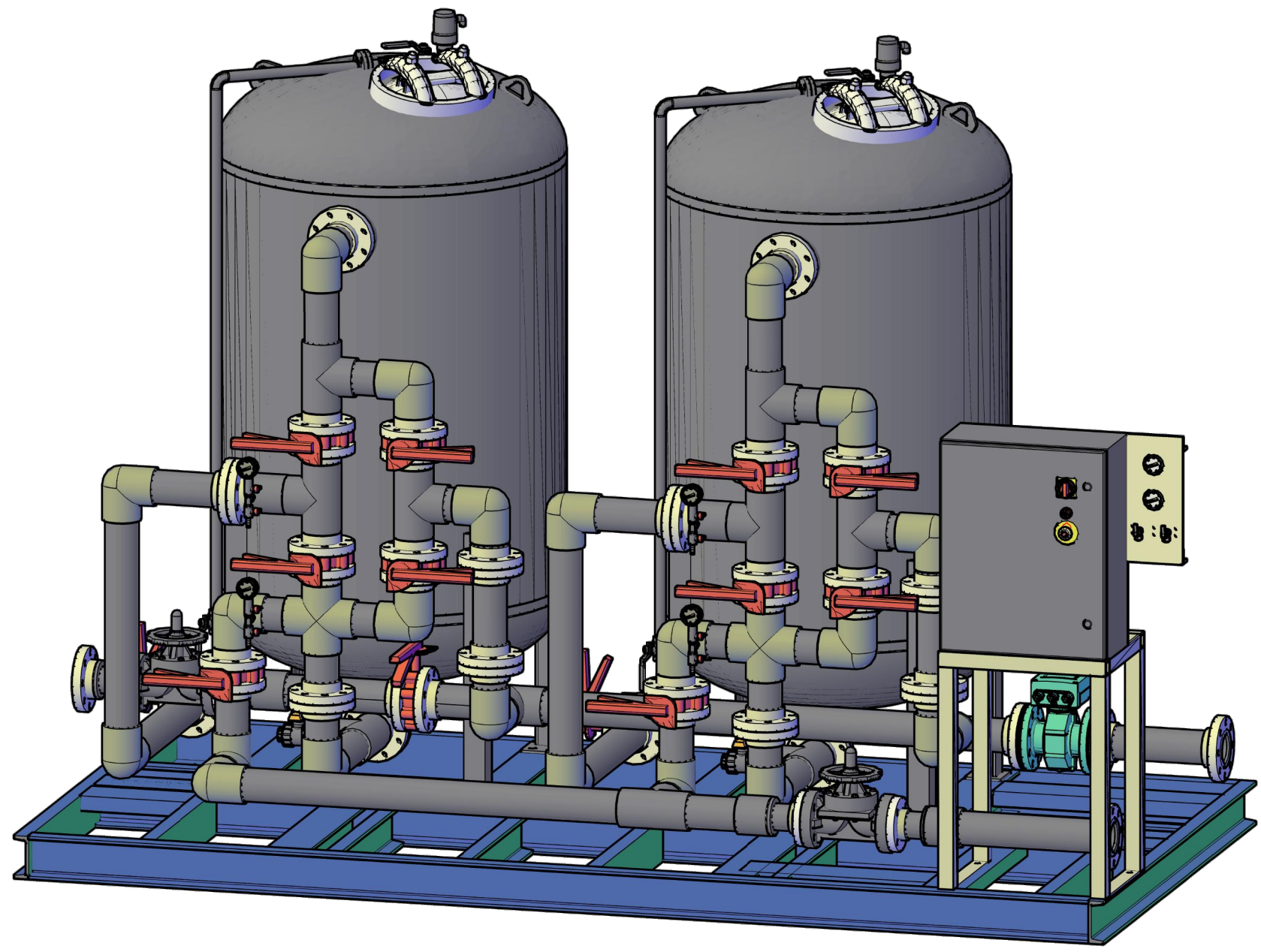
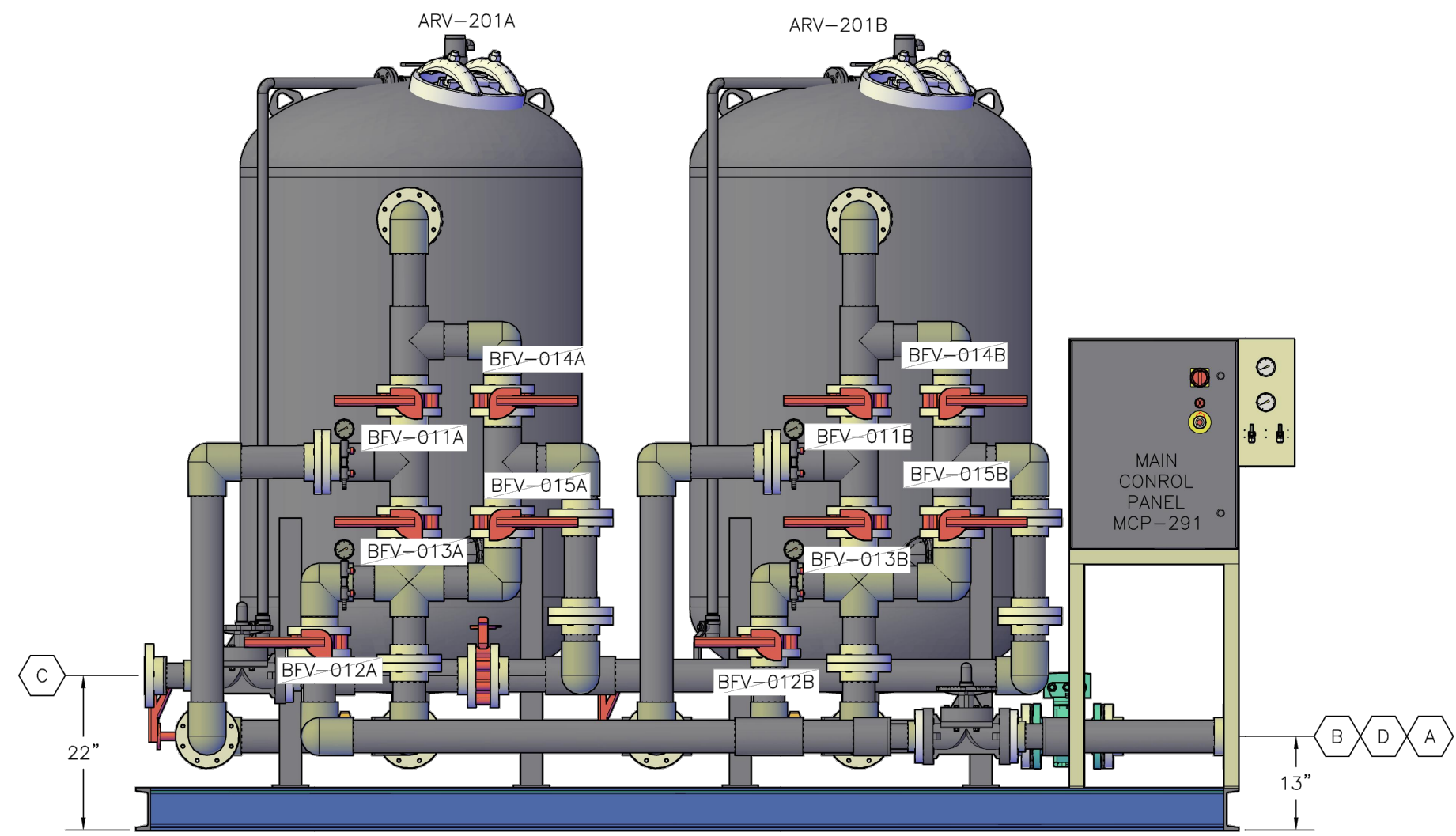
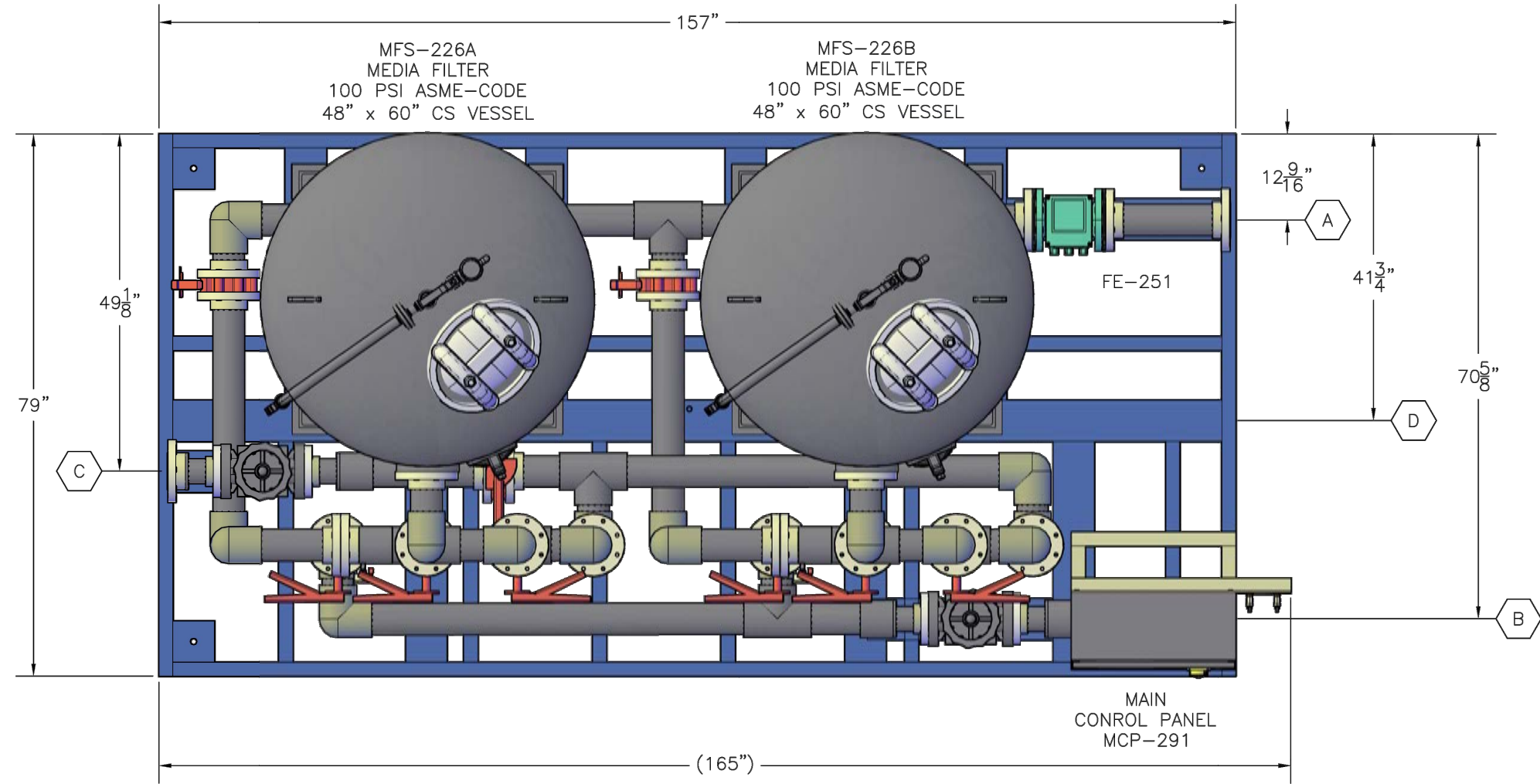
TOWN OF LEWISBORO, NY
OAKRIDGE WATER DISTRICT
WTP UPGRADE PROJECT

ALT #1 - GAC TREATMENT

SHEET:
FIG #3

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H:\Drawings\Lewisboro-Dakridge\WTP Upgrades\GAC\JD-101.dwg



1
FIG #4 ALT #2 - ION EXCHANGE TREATMENT
SCALE: 1" = 10'

DATE: 5/27/2021
DRAWN BY: IB
SCALE:
REVIEWED BY:
PROJECT NO.: XXXXX
FILE:

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CIVIL AND ENVIRONMENTAL ENGINEERING
28 MADISON AVENUE EXTENSION, ALBANY, NY 12203 - 518.452.1290
55 SOUTH MAIN ST. ONEONTA, NY 13820 - 607.432.8073
31 NORTH MAIN STREET, LIBERTY, NY 12754 - 545.747.8962
16 EAST MARKET ST. RED HOOK, NY 12571 - 518.452.1290
548 BROADWAY, MONTICELLO, NY 12051 - 845.791.7777

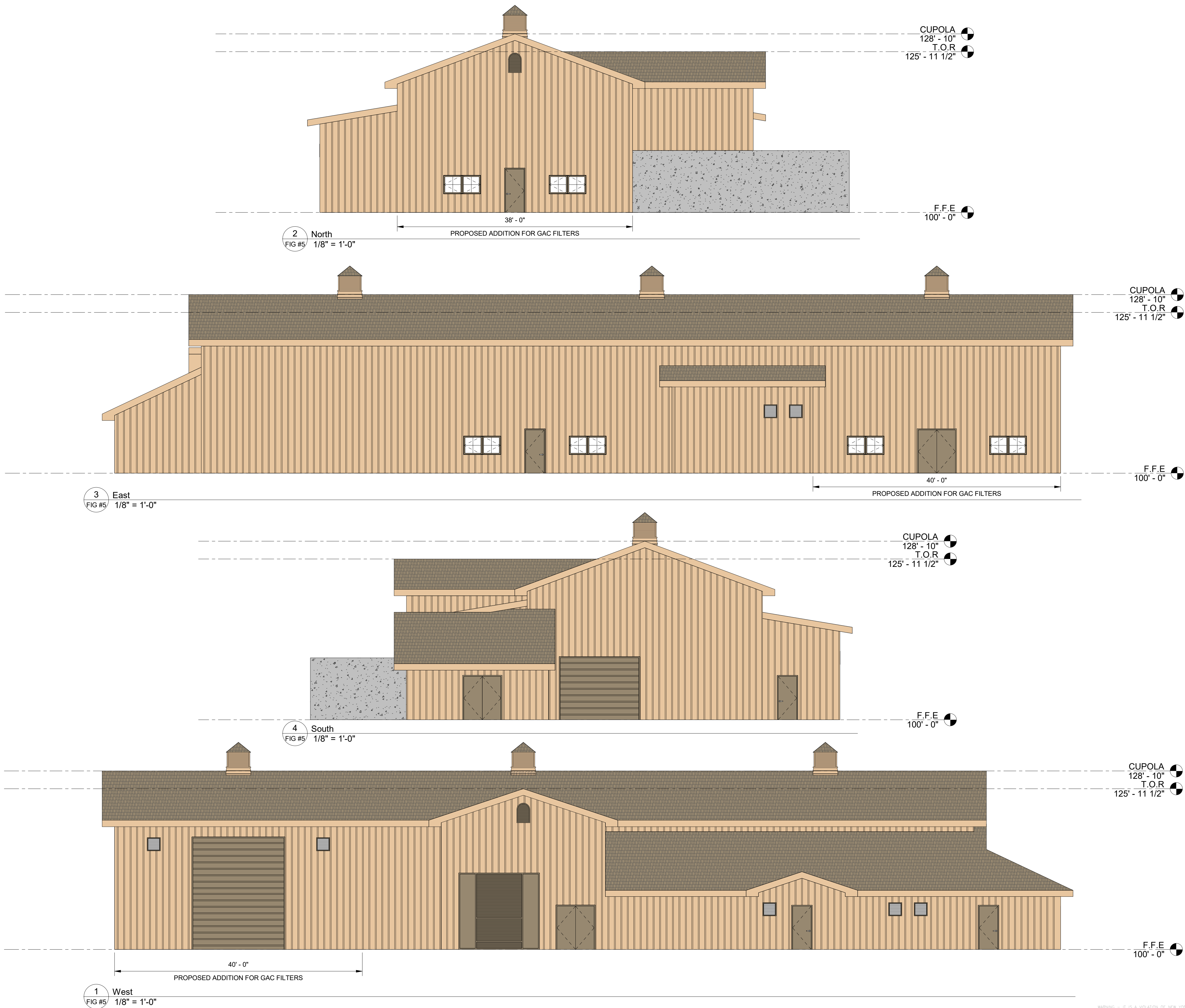
REVISIONS	
NO.	DESCRIPTION

TOWN OF LEWISBORO, NY
OAKRIDGE WATER DISTRICT
WTP UPGRADE PROJECT

ALT #2 - ION EXCHANGE
TREATMENT

SHEET:
FIG #4

WARNING - IT IS A VIOLATION OF NEW YORK EDUCATION LAW SECTION 2209(2), FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION LAW, SECTION 2209(2).



WARNING - IT IS A VIOLATION OF NEW YORK EDUCATION LAW SECTION 2203.2, FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION LAW, SECTION 2203.2.

DATE:	Issue Date
DRAWN BY:	IMB
SCALE:	1/8" = 1'-0"
REVIEWED BY:	RF
PROJECT NO.:	Project Number
FILE:	FILE

DELAWARE ENGINEERING, D.P.C.
CIVIL AND ENVIRONMENTAL ENGINEERING

28 MADISON AVENUE EXTENSION ALBANY, NY 12203 - 518.452.1290
55 SOUTH MAIN STREET, ONEONTA, NY 13320 - 607.432.8073
1000 WEST 10TH STREET, ALBANY, NY 12206 - 518.452.1290
8100 SEASIDE DRIVE, ALBANY, NY 12209 - 518.452.1290
16 EAST MARKET ST., RED HOOK, NY 12571 - 518.452.1290
548 BROADWAY, MONTICELLO, NY 12701 - 845.791.7777

NO.	DATE	DESCRIPTION

TOWN OF LEWIBORO, NY
OAKRIDGE WATER DISTRICT
WTP UPGRADE PROJECT

PROPOSED WTP
BUILDING ADDITION

SHEET:
FIG #5

APPENDIX A

Town of Lewisboro
Oakridge Water District
WCDOH Notice of Violation

March 1, 2021
NOTICE OF VIOLATION
New York State Sanitary Code, 10 NYCRR Part 5

Mr. JOEL SMITH
PO Box 500
11 Main Street
SOUTH SALEM, NY 10590

Re: 02 - MCL, AVERAGE
Violation ID: 2021 1123
Determination Date: March 1, 2021
OAKRIDGE WATER DISTRICT
PWS ID: NY5918395
Lewisboro (T), WESTCHESTER County

Dear Mr. JOEL SMITH;

THIS IS A BASIC VIOLATION REPORT.

Violation ID: 2021 1123
Determination Date: 3/1/2021
Violation Type:
Name: 02 - MCL, AVERAGE
Analyte Group: PERFLUOROCTANE SULFONIC ACID (PFOS) - 2805
Analyte Name: PERFLUOROCTANE SULFONIC ACID (PFOS)
Analyte Code: 2805
Compliance Period Begin: 1/1/2021
Compliance Period End: 3/31/2021
Violation Period Begin Date: 1/1/2021
Violation Period End Date: 3/31/2021



3/15/21

JOEL
TONY

George Latimer
County Executive

Sherlita Antler, M.D.
Commissioner of Health

March 1st, 2021

Town of Lewisboro
11 Main St
South Salem, NY 10590
Attn: The Honorable Peter H. Parsons, Town Supervisor

RE: Violation ID: 2021 1123
PFOS MCL Violation
Oakridge Water Company
Lewisboro (T)
PWS ID: NY 5918395

Dear Supervisor Parsons:

A review of Perfluorooctanesulfonic acid (PFOS), Perfluorooctanoic acid (PFOA), and 1,4-Dioxane sampling results for the 1st quarter 2021 monitoring period for the above referenced public water supply revealed that the PFOS level exceeded the Maximum Contamination Level (MCL) of 0.0000100 milligrams per liter (mg/L) with an average value for the quarter of 0.0000145 mg/L. This constitutes non-compliance with Part 5, Subpart 5-1, Section 5-1.52, Table 3 of the New York State Sanitary Code (NYSSC).

You are reminded that Tier 2 Public Notification must be made within thirty (30) days from the date of this notice in accordance with Part 5, Subpart 5-1, Section 5-1.52 Table 13 and 5-1.78 of the NYSSC. Further, certification that the above notification was made and a copy of such notifications must be provided to the Department within ten (10) days of the completion of the notification requirement. A draft of the notice must be submitted to this Department for review prior to distribution.

Please find the attached Notice of Violation form generated by the New York State Department of Health Safe Drinking Water Information System (SDWIS) and recorded on its database.

In light of the above, it is requested that a proposal to provide a corrective action to the above MCL violations must be submitted to this Department no later than May 31, 2021.

Should you have any questions or require additional information, please contact Chika Amasiani at (914) 864-7338 or the undersigned at (914) 864-7348.

Very truly yours,

Zaw T. Thein, P.E.
Associate Engineer
Bureau of Environmental Quality

ZT:CA

Department of Health
25 Moore Avenue
Mount Kisco, New York 10549

Telephone: (914) 864-7348

Fax: (914) 813-4691



APPENDIX B

Town of Lewisboro
Oakridge Water District

PFAS Sampling Data



ANALYTICAL REPORT

Lab Number:	L2123480
Client:	Envirotest Laboratories Inc. 315 Fullerton Avenue Newburgh, NY 12550
ATTN:	Debra Bayer
Phone:	(845) 562-0890
Project Name:	VRI-LEWISBORO/OAKRIDGE DW
Project Number:	42002044
Report Date:	05/21/21

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (B5084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAQ00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: VRI-LEWISBORO/OAKRIDGE DW
Project Number: 42002044

Lab Number: L2123480
Report Date: 05/21/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2123480-01	WELL 2 (420-196710-1)	DW	Not Specified	05/05/21 13:20	05/06/21
L2123480-02	WELL 2 FIELD BLANK (420-196710-2)	FIELD REAGENT BLANK	Not Specified	05/05/21 13:20	05/06/21
L2123480-03	WELL 4 (420-196710-3)	DW	Not Specified	05/05/21 12:50	05/06/21
L2123480-04	WELL 4 FIELD BLANK (420-196710-4)	FIELD REAGENT BLANK	Not Specified	05/05/21 12:50	05/06/21
L2123480-05	WELL 5 (420-196710-5)	DW	Not Specified	05/05/21 13:05	05/06/21
L2123480-06	WELL 5 FIELD BLANK (420-196710-6)	FIELD REAGENT BLANK	Not Specified	05/05/21 13:05	05/06/21
L2123480-07	WELL 6 (420-196710-7)	DW	Not Specified	05/05/21 13:25	05/06/21
L2123480-08	WELL 6 FIELD BLANK (420-196710-8)	FIELD REAGENT BLANK	Not Specified	05/05/21 13:25	05/06/21
L2123480-09	WELL 7 (420-196710-9)	DW	Not Specified	05/05/21 12:45	05/06/21
L2123480-10	WELL 7 FIELD BLANK (420-196710-10)	FIELD REAGENT BLANK	Not Specified	05/05/21 12:45	05/06/21

Project Name: VRI-LEWISBORO/OAKRIDGE DW
Project Number: 42002044

Serial_No:05212110:24
Lab Number: L2123480
Report Date: 05/21/21

SAMPLE RESULTS

Lab ID: L2123480-01
Client ID: WELL 2 (420-196710-1)
Sample Location: Not Specified

Date Collected: 05/05/21 13:20
Date Received: 05/06/21
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 133,537.1
Analytical Date: 05/14/21 18:50
Analyst: LV

Extraction Method: EPA 537.1
Extraction Date: 05/14/21 11:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 537.1 - Mansfield Lab						
Perfluorooctanoic Acid (PFOA)	10.2		ng/l	1.89	0.632	1
Perfluorooctanesulfonic Acid (PFOS)	13.9		ng/l	1.89	0.632	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[1,2-13C2]hexanoic Acid (13C-PFHxA)	89		70-130
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	74		70-130
Perfluoro-n-[1,2-13C2]decanoic Acid (13C-PFDA)	81		70-130
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	87		70-130

Project Name: VRI-LEWISBORO/OAKRIDGE DW
Project Number: 42002044

Serial_No:05212110:24
Lab Number: L2123480
Report Date: 05/21/21

SAMPLE RESULTS

Lab ID: L2123480-03
Client ID: WELL 4 (420-196710-3)
Sample Location: Not Specified

Date Collected: 05/05/21 12:50
Date Received: 05/06/21
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 133,537.1
Analytical Date: 05/14/21 19:07
Analyst: LV

Extraction Method: EPA 537.1
Extraction Date: 05/14/21 11:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Perfluorinated Alkyl Acids by EPA 537.1 - Mansfield Lab

Perfluorooctanoic Acid (PFOA)	7.26		ng/l	1.92	0.642	1
Perfluorooctanesulfonic Acid (PFOS)	5.38		ng/l	1.92	0.642	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[1,2-13C2]hexanoic Acid (13C-PFHxA)	97		70-130
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	80		70-130
Perfluoro-n-[1,2-13C2]decanoic Acid (13C-PFDA)	93		70-130
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	89		70-130

Project Name: VRI-LEWISBORO/OAKRIDGE DW
Project Number: 42002044

Serial_No:05212110:24
Lab Number: L2123480
Report Date: 05/21/21

SAMPLE RESULTS

Lab ID: L2123480-05
Client ID: WELL 5 (420-196710-5)
Sample Location: Not Specified

Date Collected: 05/05/21 13:05
Date Received: 05/06/21
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 133,537.1
Analytical Date: 05/14/21 19:25
Analyst: LV

Extraction Method: EPA 537.1
Extraction Date: 05/14/21 11:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 537.1 - Mansfield Lab						
Perfluorooctanoic Acid (PFOA)	8.95		ng/l	1.83	0.610	1
Perfluorooctanesulfonic Acid (PFOS)	4.97		ng/l	1.83	0.610	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[1,2-13C2]hexanoic Acid (13C-PFHxA)	88		70-130
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	74		70-130
Perfluoro-n-[1,2-13C2]decanoic Acid (13C-PFDA)	94		70-130
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEIFOSAA)	94		70-130

Project Name: VRI-LEWISBORO/OAKRIDGE DW
Project Number: 42002044

Serial_No:05212110:24
Lab Number: L2123480
Report Date: 05/21/21

SAMPLE RESULTS

Lab ID: L2123480-07
Client ID: WELL 6 (420-196710-7)
Sample Location: Not Specified

Date Collected: 05/05/21 13:25
Date Received: 05/06/21
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 133,537.1
Analytical Date: 05/14/21 19:42
Analyst: LV

Extraction Method: EPA 537.1
Extraction Date: 05/14/21 11:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Perfluorinated Alkyl Acids by EPA 537.1 - Mansfield Lab

Perfluorooctanoic Acid (PFOA)	9.06		ng/l	1.84	0.615	1
Perfluorooctanesulfonic Acid (PFOS)	12.7		ng/l	1.84	0.615	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[1,2-13C2]hexanoic Acid (13C-PFHxA)	95		70-130
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	79		70-130
Perfluoro-n-[1,2-13C2]decanoic Acid (13C-PFDA)	99		70-130
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEIFOSAA)	110		70-130

Project Name: VRI-LEWISBORO/OAKRIDGE DW
Project Number: 42002044

Serial_No:05212110:24
Lab Number: L2123480
Report Date: 05/21/21

SAMPLE RESULTS

Lab ID: L2123480-09
Client ID: WELL 7 (420-196710-9)
Sample Location: Not Specified

Date Collected: 05/05/21 12:45
Date Received: 05/06/21
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 133,537.1
Analytical Date: 05/14/21 20:00
Analyst: LV

Extraction Method: EPA 537.1
Extraction Date: 05/14/21 11:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 537.1 - Mansfield Lab						
Perfluorooctanoic Acid (PFOA)	10.1		ng/l	1.82	0.609	1
Perfluorooctanesulfonic Acid (PFOS)	3.98		ng/l	1.82	0.609	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[1,2-13C2]hexanoic Acid (13C-PFHxA)	96		70-130
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	78		70-130
Perfluoro-n-[1,2-13C2]decanoic Acid (13C-PFDA)	94		70-130
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	91		70-130

ANALYTICAL REPORT

Job Number: 420-190968-1

Job Description: VRI - Lewisboro/Oakridge 5918395 DW

For:

VRI Environmental Services
PO Box 943
Millbrook, NY 12545

Attention: Melissa Toro

Signature

Debra Bayer

Customer Service Manager

dbayer@envirotestlaboratories.com

02/28/2021

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EnviroTest Laboratories, Inc. Certifications and Approvals: NYSDOH 10142, NJDEP NY015, CTDOH PH-0554

Envirotest Laboratories

315 Fullerton Avenue, Newburgh, NY 12550

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ANALYTICAL REPORT

Lab Number:	L2107123
Client:	Envirotest Laboratories Inc. 315 Fullerton Avenue Newburgh, NY 12550
ATTN:	Debra Bayer
Phone:	(845) 562-0890
Project Name:	VRI-LEWISBORO/OAKRIDGE 5918395
Project Number:	42002044
Report Date:	02/27/21

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Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: VRI-LEWISBORO/OAKRIDGE 5918395
Project Number: 42002044

Lab Number: L2107123
Report Date: 02/27/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2107123-01	WELL 6 (420-190968-1)	DW	Not Specified	02/11/21 11:15	02/12/21
L2107123-02	FIELD BLANK (420-190968-2)	FIELD REAGENT BLANK	Not Specified	02/11/21 00:00	02/12/21

Project Name: VRI-LEWISBORO/OAKRIDGE 5918395
Project Number: 42002044

Serial_No:02272119:55
Lab Number: L2107123
Report Date: 02/27/21

SAMPLE RESULTS

Lab ID: L2107123-01
Client ID: WELL 6 (420-190968-1)
Sample Location: Not Specified

Date Collected: 02/11/21 11:15
Date Received: 02/12/21
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 133.537.1
Analytical Date: 02/19/21 18:01
Analyst: LV

Extraction Method: EPA 537.1
Extraction Date: 02/19/21 06:55

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 537.1 - Mansfield Lab						
Perfluorooctanoic Acid (PFOA)	11.4		ng/l	1.97	0.614	1
Perfluorooctanesulfonic Acid (PFOS)	15.5		ng/l	1.97	0.484	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[1,2-13C2]hexanoic Acid (13C-PFHxA)	103		70-130
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	93		70-130
Perfluoro-n-[1,2-13C2]decanoic Acid (13C-PFDA)	100		70-130
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	96		70-130

ANALYTICAL REPORT

Job Number: 420-188704-1

Job Description: VRI - Lewisboro/Oakridge 5918395 DW

For:
VRI Environmental Services
PO Box 943
Millbrook, NY 12545

Attention: Melissa Toro

Debra Bayer

Customer Service Manager

dbayer@envirotestlaboratories.com

02/06/2021

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EnviroTest Laboratories, Inc. Certifications and Approvals: NYSDOH 10142, NJDEP NY015, CTDOPH PH-0554

Envirotest Laboratories

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ANALYTICAL REPORT

Lab Number:	L2101092
Client:	Envirotest Laboratories Inc. 315 Fullerton Avenue Newburgh, NY 12550
ATTN:	Debra Bayer
Phone:	(845) 562-0890
Project Name:	VRI-LEWISBORO/OAKRIDGE 5918395
Project Number:	42002044
Report Date:	01/28/21

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320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: VRI-LEWISBORO/OAKRIDGE 5918395
Project Number: 42002044

Lab Number: L2101092
Report Date: 01/28/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2101092-01	WELL 2 (420-188704-1)	DW	Not Specified	01/06/21 13:35	01/08/21
L2101092-02	WELL 4 (420-188704-2)	DW	Not Specified	01/06/21 13:00	01/08/21
L2101092-03	WELL 5 (420-188704-3)	DW	Not Specified	01/06/21 13:10	01/08/21
L2101092-04	WELL 6 (420-188704-4)	DW	Not Specified	01/06/21 13:20	01/08/21
L2101092-05	WELL 7 (420-188704-5)	DW	Not Specified	01/06/21 12:55	01/08/21
L2101092-06	WELL 2 FIELD BLANK (420-188704-6)	FIELD REAGENT BLANK	Not Specified	01/06/21 13:25	01/08/21
L2101092-07	WELL 4 FIELD BLANK (420-188704-7)	FIELD REAGENT BLANK	Not Specified	01/06/21 13:00	01/08/21
L2101092-08	WELL 5 FIELD BLANK (420-188704-8)	FIELD REAGENT BLANK	Not Specified	01/06/21 13:10	01/08/21
L2101092-09	WELL 6 FIELD BLANK (420-188704-9)	FIELD REAGENT BLANK	Not Specified	01/06/21 13:20	01/08/21
L2101092-10	WELL 7 FIELD BLANK (420-188704-10)	FIELD REAGENT BLANK	Not Specified	01/06/21 12:55	01/08/21

Project Name: VRI-LEWISBORO/OAKRIDGE 5918395
Project Number: 42002044

Lab Number: L2101092
Report Date: 01/28/21

SAMPLE RESULTS

Lab ID: L2101092-01 R
Client ID: WELL 2 (420-188704-1)
Sample Location: Not Specified

Date Collected: 01/06/21 13:35
Date Received: 01/08/21
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 133,537.1
Analytical Date: 01/12/21 10:53
Analyst: LV

Extraction Method: EPA 537.1
Extraction Date: 01/10/21 10:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 537.1 - Mansfield Lab						
Perfluorooctanoic Acid (PFOA)	6.75		ng/l	1.82	0.569	1
Perfluorooctanesulfonic Acid (PFOS)	9.81		ng/l	1.82	0.449	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[1,2-13C2]hexanoic Acid (13C-PFHxA)	85		70-130
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	81		70-130
Perfluoro-n-[1,2-13C2]decanoic Acid (13C-PFDA)	70		70-130
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEFOSAA)	78		70-130

Project Name: VRI-LEWISBORO/OAKRIDGE 5918395
 Project Number: 42002044
 Serial_No: 01282110:14
 Lab Number: L2101092
 Report Date: 01/28/21

SAMPLE RESULTS

Lab ID: L2101092-02
 Client ID: WELL 4 (420-188704-2)
 Sample Location: Not Specified
 Date Collected: 01/06/21 13:00
 Date Received: 01/08/21
 Field Prep: Not Specified

Sample Depth:

Matrix: Dw
 Analytical Method: 133.537.1
 Analytical Date: 01/12/21 04:07
 Analyst: LV
 Extraction Method: EPA 537.1
 Extraction Date: 01/10/21 10:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 537.1 - Mansfield Lab						
Perfluorooctanoic Acid (PFOA)	7.94		ng/l	1.99	0.622	1
Perfluorooctanesulfonic Acid (PFOS)	3.67		ng/l	1.99	0.490	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[1,2-13C2]hexanoic Acid (13C-PFHxA)	87		70-130
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	94		70-130
Perfluoro-n-[1,2-13C2]decanoic Acid (13C-PFDA)	70		70-130
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEFOSAA)	79		70-130

Project Name: VRI-LEWISBORO/OAKRIDGE 5918395
Project Number: 42002044

Serial_No:01282110:14
Lab Number: L2101092
Report Date: 01/28/21

SAMPLE RESULTS

Lab ID: L2101092-03
Client ID: WELL 5 (420-188704-3)
Sample Location: Not Specified

Date Collected: 01/06/21 13:10
Date Received: 01/08/21
Field Prep: Not Specified

Sample Depth:

Matrix: Dw

Extraction Method: EPA 537.1

Analytical Method: 133,537.1
Analytical Date: 01/12/21 04:15
Analyst: LV

Extraction Date: 01/10/21 10:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 537.1 - Mansfield Lab						
Perfluorooctanoic Acid (PFOA)	6.13		ng/l	1.85	0.576	1
Perfluorooctanesulfonic Acid (PFOS)	4.51		ng/l	1.85	0.454	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[1,2-13C2]hexanoic Acid (13C-PFHxA)	78		70-130
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	69	Q	70-130
Perfluoro-n-[1,2-13C2]decanoic Acid (13C-PFDA)	95		70-130
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	82		70-130

Project Name: VRI-LEWISBORO/OAKRIDGE 5918395
Project Number: 42002044

Serial No: 01282110:14
Lab Number: L2101092
Report Date: 01/28/21

SAMPLE RESULTS

Lab ID: L2101092-04
Client ID: WELL 6 (420-188704-4)
Sample Location: Not Specified

Date Collected: 01/06/21 13:20
Date Received: 01/08/21
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 133.537.1
Analytical Date: 01/12/21 04:24
Analyst: LV

Extraction Method: EPA 537.1
Extraction Date: 01/10/21 10:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 537.1 - Mansfield Lab						
Perfluorooctanoic Acid (PFOA)	8.12		ng/l	1.82	0.568	1
Perfluorooctanesulfonic Acid (PFOS)	13.5		ng/l	1.82	0.448	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[1,2-13C2]hexanoic Acid (13C-PFHxA)	88		70-130
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	84		70-130
Perfluoro-n-[1,2-13C2]decanoic Acid (13C-PFDA)	75		70-130
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	103		70-130

Project Name: VRI-LEWISBORO/OAKRIDGE 5918395
Project Number: 42002044

Serial_No:01282110:14
Lab Number: L2101092
Report Date: 01/28/21

SAMPLE RESULTS

Lab ID: L2101092-05 R
Client ID: WELL 7 (420-188704-5)
Sample Location: Not Specified

Date Collected: 01/06/21 12:55
Date Received: 01/08/21
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 133,537.1
Analytical Date: 01/12/21 11:11
Analyst: LV

Extraction Method: EPA 537.1
Extraction Date: 01/10/21 10:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 537.1 - Mansfield Lab						
Perfluorooctanoic Acid (PFOA)	7.98		ng/l	1.80	0.561	1
Perfluorooctanesulfonic Acid (PFOS)	4.06		ng/l	1.80	0.442	1

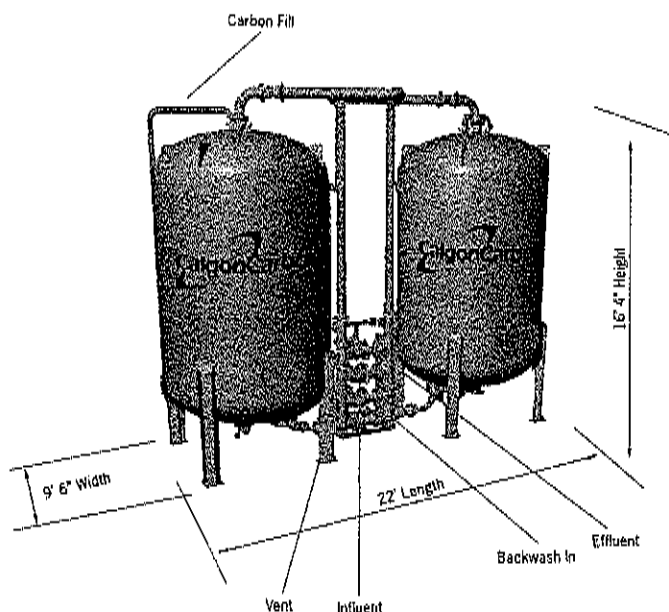
Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[1,2-13C2]hexanoic Acid (13C-PFHxA)	87		70-130
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	75		70-130
Perfluoro-n-[1,2-13C2]decanoic Acid (13C-PFDA)	72		70-130
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	77		70-130

APPENDIX C

Town of Lewisboro
Oakridge Water District
GAC Filter Equipment

MODEL 8

Modular Carbon Adsorption System



Description

The Calgon Carbon Model 8 is an adsorption system designed for the removal of dissolved organic compounds from water or other liquids using granular activated carbon. The modular design concept allows for selection of options or alternate materials to best meet the requirements of the site and treatment application.

The Model 8 system is delivered as two adsorbers and a separate compact center piping network and interconnecting piping requiring minimal space and field assembly. The pre-engineered Model 8 design assures that adsorption system functions can be performed with the system as provided. The design has the benefit of Calgon Carbon's extensive expertise and has been proven in numerous applications. The engineering package can be provided quickly and the system expedited through Calgon Carbon's production capabilities.

The process piping network for the Model 8 offers operation of the two adsorbers in parallel or two-stage series flow, with either adsorber in the lead position. The piping can also isolate either adsorber for carbon exchange or backwash operations, while maintaining flow through the other adsorber. In addition, the Calgon Carbon underdrain design provides for efficient use of the carbon through uniform collection of water at the bottom of the bed; and even distribution of backwash water to minimize carbon bed disturbance.

The Model 8 system is designed for use with Calgon Carbon's closed loop carbon exchange service. Using specially designed carbon transport trailers, the spent carbon can be removed from the adsorber via a pressurized carbon-water slurry; and fresh carbon refilled in the same manner. This closed loop transfer is accomplished without exposure of personnel to either spent or fresh carbon. Calgon Carbon can also manage the disposition of the spent carbon. It is typically returned to Calgon Carbon for reactivation, avoiding the need for the site to arrange for disposal.

Carbon Adsorbers

MODEL 8

Carbon steel ASME code stamped pressure vessels

Internal vinyl ester lining (25-35 mils) to protect carbon steel surfaces

Suitable for potable water and most liquid applications

Internal underdrain with stainless steel slotted septa for water collection and backwash distribution

Standard Adsorption System Piping

Schedule 40 carbon steel piping with cast iron fittings

Cast iron or steel wafer butterfly valves in process piping

Polypropylene lined steel pipe for resin discharge pipe

Full bore stainless steel ball valves for resin and discharge piping

Pressure gages to measure pressure drop across system and each adsorber

Rupture discs open to each vessel for emergency pressure relief

System External Coating

High solids epoxy paint system

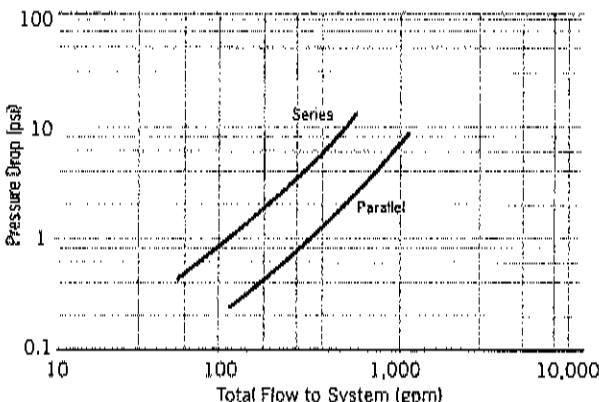
Typical System Options

In-bed water sample collection probes

System skid, shipped separately, upon which system components can be assembled

Pressure Drop Curve

F300 Carbon, 55°F, 4" Steel Pipe



Dimensions and Field Conditions	MODEL 8
Adsorber Vessel Diameter	8 ft (2,440 mm)
Process and Backwash Piping	6" (4" option)
Influent/Effluent Connections	6" 125# ANSI flange
Backwash/Vent Connections	6" 125# ANSI flange
Utility Water Connection	3/4" hose connection
Utility Air Connection	3/4" hose connection
Carbon Hose Connections	4" Kamlock type
Adsorber Side Manway	20" round flanged with davit
Adsorber Shipping Weight	16,000 lbs empty (7,300 kg)
System Operating Weight	92,000 lbs (41,800 kg)

Operating Conditions	MODEL 8
Carbon per Adsorber	10,000 lbs (9,080 kg)
Pressure Rating	125 psig (862 kPa)
Temperature Rating	150 deg F max (65°C)
Pressure Relief	Graphite rupture disc
Backwash Rate	Typical 500 gpm (25% expansion)
Carbon Transfer	Air pressurized slurry transfer
Utility Air	100 scfm at 30 psig (reduce to 15 psig for trailer)
Utility Water	100 gpm at 30 psig
Freeze Protection	None provided; enclosure or protection recommended

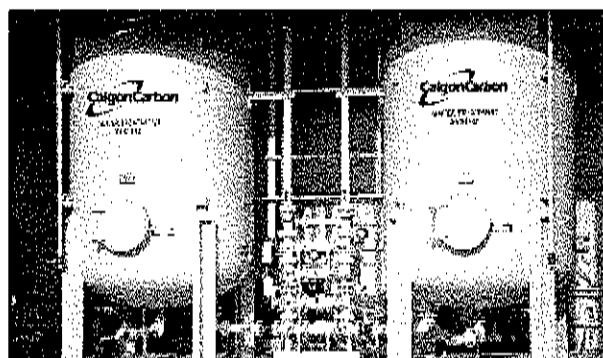
Calgon Carbon Systems and Services

The Model 8 system is designed for a variety of higher pressure water or process liquid applications at moderate flowrates. Calgon Carbon Corporation offers a wide range of carbon adsorption systems and services for a range of water or liquid flow rates and carbon usages to meet specific applications.

Calgon Carbon also provides additional services for support of water treatment systems, including supply of virgin and reactivated grades of granular activated carbon, or exchange of carbon in the treatment system, including disposal or reactivation of the spent activated carbon.

Safety Message

Wet activated carbon preferentially removes oxygen from air. In closed or partially closed containers and vessels, oxygen depletion may reach hazardous levels. If workers are to enter a vessel containing carbon, appropriate sampling and work procedures for potentially low oxygen spaces should be followed, including all applicable federal and state requirements. Please refer to the MSDS for all up to date product safety information.



Making Water and Air Safer and Cleaner

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Your local representative

Model 12-40 Adsorption System for use with Granular Activated Carbon

PART 1 General

1.01 Section Includes

- A. Adsorption System Description
- B. Adsorption System Specifications
- C. Installation and Start-up Services

1.02 References

- A. ASME Section VIII, Division 1 – American Society of Mechanical Engineers Boiler and Pressure Vessel Code
- B. ASME/ANSI B16.5 – American Society of Mechanical Engineers/American National Standard Institute
- C. U.S. Food and Drug Administration, 21 CFR 175.300 and 177.2420
- D. Steel Structures Painting Council Surface preparation Specifications and National Association of Corrosion Engineers
- E. ASME Section II, American Society of Mechanical Engineers – Materials, Parts A, B & C
- F. American Society of Testing Materials (ASTM)
- G. American Water Works Association (AWWA) – B604, Standard for Granular Activated Carbon
- H. ANSI/NSF Standard Drinking Water System Components – Health Effects

1.03 System Description

- A. Calgon Carbon Corporation will furnish the Model 12-40 Carbon Adsorption System described herein (for installation by others). The complete adsorption system includes the following.
 - a. Carbon adsorbers with internals for carbon retention
 - b. Activated carbon
 - c. Influent, effluent and backwash piping with valves
 - d. Carbon fill and discharge piping with valves
 - e. Vent and pressure relief piping
 - f. Water piping and utility connections
 - g. Accessories as shown below
 - h. Manufacturer's services
- B. The vessels, piping, valves, and carbon function as a system and are the end products of Calgon Carbon Corporation to achieve standardization for appearance, operation, maintenance, spare parts, and manufacturer's services.
- C. There will be one (1) Model 12-40 carbon adsorption system as delineated below:

System Number	Quantity	System Flow Rate GPM ¹ (EBCT –minutes)	Pressure Drop – Normal Operation PSI	Pressure Drop Backwash Operation PSI
1	One (1)	700 (30)	10 -12	20

¹ The maximum flow rate through the system is set by the Empty Bed Contact Time (EBCT) required to meet the treatment objective of the specific application, the mechanical design and available pressure drop.

1.04 Supplier's Qualifications

- A. Supplier of the adsorption system shall have the following minimum qualifications:
 - a. At least 20 years of experience successfully supplying both adsorption systems and GAC to treat water with flow rates greater than 500 gpm average daily flow.
 - b. Must own and operate an equipment fabrication facility with capabilities to both fabricate the equipment per applicable ASME code and finish lining and paint in a single facility.
 - c. Must own and operate at least two (2) GAC production facilities in the United States to guarantee the source of supply of activated carbon.

1.05 Submittals

- A. One submittal package with the following information will be provided for approval by the Owner. Fabrication will begin upon receipt of Owner's approval.
 - a. Adsorber vessel specifications and drawing including design pressure, dimensions, and capacity.
 - b. System flow diagram showing all valves, components, instrumentation and utilities.
 - c. System general arrangement showing dimensions, weights, and elevations including influent, effluent, backwash, and carbon exchange pipe connection locations.
 - d. Pressure drop information across the system.
 - e. Specification of the granular activated carbon to be utilized in the system.
 - f. Material specifications for pipe, fittings and instrumentation.
 - g. Specifications for vessel lining.
 - h. Specifications for vessel painting.
- B. The system Operating & Maintenance Manual will be provided upon completion of the project/shipment of the system.

PART 2 Products

2.01 General

- A. The Contract Documents indicate specific required features of the equipment, but do not purport to cover all details of design and construction.

2.02 Carbon Adsorber Vessels

- A. The carbon adsorbers are **Model 12-40 Carbon Adsorption Vessels**, as designed by Calgon Carbon Corporation to meet the following specifications.
- B. The carbon adsorber vessels are fabricated of carbon steel, conforming to ASTM A516 grade 70, 12'-0" diameter by 16'-0" straight side height with 2:1 elliptical top and bottom heads. Each vessel will be sized to contain 40,000 pounds of GAC and to accommodate approximately 30% bed expansion within the straight side of the vessel using Filtrasorb 400AR GAC². The vessels are designed, constructed and stamped in accordance with ASME Section VIII, Division 1 and registered with the National Board for a design pressure rating of 125 psig at 140°F. Each vessel will be provided with one (1) 20" diameter round manway located on the lower straight side portion of the vessel and one 14" x18" elliptical manway located on the bottom head. The vessels will be free standing utilizing four (4) structural steel support legs. The vessel will be provided with four (4) lift lugs located on the top head and one tailing lug on the bottom head.

² The percent bed expansion will vary depending on the apparent density of the GAC selected for a specific application.

- C. The structural aspects of the vessel will be sufficient to meet the International Building Code - IBC 2012 requirements of $S_s = 1.5$, Site Class D, $I = 1.25$. Calgon Carbon Corporation can submit detailed calculations on request illustrating the seismic characteristics of the proposed vessel.
- D. Each vessel will be designed with an underdrain system that provides uniform distribution of the treated water using a minimum of one (1) septa nozzle for every nominal square foot of vessel cross section, facilitates GAC removal without the need to open the manway to manually hose out the remaining spent GAC, and allows replacement of the septa without the need to remove external piping. The septa will be designed to contain the GAC within the adsorber and be constructed of polypropylene (pp) material.
- E. The vessel will be provided with the following nozzles:
 - a. One (1) 4" nozzle on the top head of the vessel for GAC fill.
 - b. Two (2) nozzles for GAC discharge. One (1) 6" GAC discharge nozzle is located on the vessel side wall and one (1) 4" centered on the bottom head.
 - c. One (1) 8" influent nozzle located on the top head constructed of stainless steel and provided with an internal flange to support the inlet distributor.
 - d. One (1) 8" effluent nozzle located on the bottom head.
 - e. Three (3) 2" sample nozzles located on the side wall.
 - f. One (1) 2" cone vent nozzle located on the lower side wall
- F. All surfaces will be degreased prior to sandblasting. The adsorber internal surface that will be lined will be blasted to a white metal finish (SSPC-SP5) to provide a 3 to 4 mil anchor pattern. The exterior surfaces of the adsorber will be prepared by blasting per SSPC-SP7.
- G. The interior surfaces of the vessel will be lined. The surfaces above the internal cone with a nominal lining thickness of 35 to 45 mil dry film (dft) and the surfaces under the internal cone bottom a nominal lining thickness of 10 to 12 mil dft. The lining material is a vinyl ester combined with a special curing system and inert flake pigment that meets the requirements of the U. S. Federal Register, Food and Drug Regulations Title 21, Paragraphs 175.300 and 177.2420 and the requirements of ANSI 61 when applied and cured per the manufacturer's requirements.
- H. The exterior surface of the adsorbers will be painted to a dry film thickness of 5 to 7 mil with a high solids epoxy (gray color) paint material.

2.03 Process and Utility Piping

- A. The process and utility piping on the adsorption system will include influent water to the system, treated water (effluent), backwash water supply and discharge, adsorber vent lines and granular activated carbon fill and discharge piping.
- B. The influent and effluent pipe network allows series (lead/lag) and parallel only operating modes. Lead/lag operation allows either; a) flow from the influent flange, to Adsorber A, to the pipe module, to Adsorber B, to the pipe module then to the effluent flange, or b) flow from the influent flange, to Adsorber B, to the pipe module, to Adsorber A, to the pipe module then to the effluent flange. The change in flow pattern is accomplished with a change of valve positions. The purpose of lead/lag operation allows an adsorber to act as an on-line backup and/or provides for sufficient contact time to allow adsorption of the contaminants of concern.
- C. Process piping (influent, effluent and backwash) will be 8" diameter, constructed of schedule 40 carbon steel, ASTM A53 Grade B materials with 125# ASTM A126 Class B cast iron flanged fittings.
- D. Vent piping will be 3" diameter, constructed of schedule 40 carbon steel, ASTM A53 Grade B materials.

- E. Carbon fill piping will be 4" diameter, constructed of schedule 40 carbon steel, ASTM A53 Grade B materials.
- F. Carbon discharge piping will be 4" diameter, constructed of schedule 40 polypropylene lined carbon steel, ASTM 53 Grade B materials with ppl lined flanged fittings. The connection at the vessel side wall will be a 4"x 6" ppl lined fitting. There are a total of two (2) GAC discharge lines per vessel.
- G. The vessel must be designed with an adjustable GAC removal system to allow for removal of the spent in 20,000 lb increments.
- H. Utility piping will be constructed of threaded schedule 80 carbon steel, ASTM 53 Grade B materials.
- I. All piping surfaces will be prepared by blasting per SSPC-SP7.
- J. The exterior surface of the piping will be painted to a dry film thickness of 5 to 7 mil with a high solids epoxy (gray color) paint material prior to assembly to ensure minimum oxidation at flanged connections.
- K. The piping network will be provided with a structural steel support frame for support of the piping module.

2.04 Process and Utility Valves

- A. The process and utility piping, excluding GAC fill and discharge piping will be equipped with butterfly valves for flow control. A total of ten (10) 8" diameter butterfly valves will be supplied to accommodate the process and backwash control functions. Two (2) valves are needed for backwash control, two (2) valves are needed for influent isolation, two (2) valves for effluent isolation, two (2) valve for staging of the vessels and two (2) valves for the vent function.
- B. The influent, effluent, and backwash control valves will be a cast iron wafer type body butterfly valve with aluminum-bronze disc, BUNA-N seats and stainless steel shaft to mate to 150 pound ANSI flanges. The valves are rated for 200 psig in closed position at 180°F, and meet or exceed section 5.0 of AWWA specification C-504-87.
- C. The carbon fill and discharge valves are 4" diameter full port ball valves, 316 stainless steel construction with TFE seats and seals. A total of four (4) valves are supplied, two (2) for carbon fill and two (2) for carbon discharge.
- D. Utility valves for the compressed air supply will be bronze or brass or barstock brass body regular port ball valves.

2.05 Instrumentation

- A. Instrumentation will be accessible from grade.
- B. Pressure relief will be provided by a 3" rupture disk constructed of impervious graphite and designed to relieve pressure at the design pressure of the vessel and at the maximum flow to the system. The rupture disks will be mounted off the vessel vent line and vent to atmosphere. A total of two (2) will be provided for the system.
- C. Each vessel will be provided with an indicating differential pressure switch, 4" diameter dial, scaled for 20-0-20psi. The switch is rated at 1.0 amp @ 115 volts AC for remote indication. A total of two (2) will be provided for the system³.
- D. The process piping will be equipped with pressure gauges to indicate the pressure entering and exiting each adsorber and to provide information on pressure drop across each adsorber and the system. The pressure gauges will have 4 1/2" face diameter with a stainless steel bourdon tube in a phenolic case housing (1 to 160 psig range). A total of three (3) will be provided for the system.

³ The dP switches should be wired by the customer to a control system to provide an alarm on high differential pressure.

- E. The process piping will be equipped with sample taps to enable sampling of the water entering and exiting each adsorber. A total of three (3) will be provided for the system.
- 2.06 Miscellaneous
- A. Each vessel will be provided with an inlet distribution system connected to the inlet nozzle consisting of multiple radial arms. Each arm is drilled along its length to facilitate even distribution of water during normal operation and collection of backwash water. The assembly will be constructed using 304 stainless steel.
 - B. The carbon fill and discharge will be fitted with hose connections, such that carbon transfer to and from the adsorbers can be facilitated using carbon transfer hoses. These connectors will be 4" Quick Disconnect Adaptors constructed of aluminum as manufactured by Dover Corp. as Kamlock connectors or equal.
 - C. Two (2) flush connections will be provided on each GAC fill line, one upstream and one downstream of the valve. One (1) flush connection will be provided on each GAC discharge line, downstream of the valve. The connections will be welded into the steel or stainless steel pipe or screwed into solid propylene "spacers" for the lined pipe. Flush connections will consist of a short section of ¾" pipe, a ¾" full port ball valve and a ¾" quick disconnect adaptor to match with water hose fittings.
 - D. Each vessel will be provided with one (1) 8" stainless steel effluent strainer basket mounted in the effluent line from the vessel. The basket strainer shall be constructed of 316 stainless 14 gage plate with 1/8" diameter holes drilled on 3/16" centers, covered with 40 mesh 316 stainless steel screen and topped by a 4 mesh 316 stainless steel support screen (0.063" wire diameter). A total of two (2) will be provided for the system.
 - E. The influent and effluent pipe for each vessel will be provided with a molded neoprene reinforced rubber expansion joint which allows 4 way movement and 30° angular misalignment. A total of four (4) will be provided for the system.
- 2.01 Granular Activated Carbon – 80,000# Total (40,000# per vessel).
- 2.02 Virgin GAC shall be Filtrisorb 400AR as manufactured by Calgon Carbon Corporation or Approved Equal.
- 2.03 The GAC shall be manufactured in the United States of America.
- 2.04 The GAC shall be manufactured by a producer certified for ISO 9001:2000 quality standards and at the specific plant or site holding such certification. A copy of the valid certificate must be submitted with bid. It is understood that ANSI/NSF assures the GAC against toxicological hazards only. ISO 9001:2000 Certification assures the GAC of consistent conformance to stated product quality and standards listed in the specifications.
- 2.05 The GAC shall comply with AWWA B-604 - 96.
- 2.06 The GAC shall comply with NSF 61.
- 2.07 Each vessel shall be supplied with 40,000# Acid Rinsed GAC.
- 2.08 The GAC shall conform to Food Chemical Codex when tested under the conditions of the test outlined in the Food Chemical Codex, Third Edition.
- 2.09 The GAC must be an agglomerated bituminous coal based product with petroleum and coal based pitch binders sized to a granular form prior to baking and activation, broken pellets will not be accepted. Lignite, peat, wood, coconut, sub-bituminous based or direct activated GAC will not be accepted.
- 2.10 The GAC shall be capable of removing turbidity, color, tastes, odors and other organic contamination from previously pretreated by conventional water treatment processes.

- 2.11 Data showing successful application of the GAC in municipal water plants including turbidity and organic contamination shall be submitted with bid.
- 2.12 Bidder shall indicate the source of coal, carbon manufacturing location, the agglomeration/thermal process and capacity of the manufacturing facility. The (Engineer/City) reserve the right to inspect the GAC manufacturing and thermal processing facility.
- 2.13 Product shall be Acid Rinsed (AR) GAC to meet or exceed the following:

Product Specification	Value	Test Method
Iodine Number (mg/g), min.	950	TM-4, ASTM D4607
Moisture, weight %, max.	2	TM-1, ASTM D2867
Effective size, mm	0.55 – 0.75	TM-47, ASTM D2862
Uniformity Coefficient, max.	1.9	TM-47, ASTM D2862
Abrasion No., min.	75	TM-9, AWWA B604
Trace Capacity Number, mg/cc	10	TM-79, TM-85 (converted to TCN)
Screen Size (US Sieve), weight %		
* Larger than No. 12, max.	5.0	TM-8, ASTM D2862
* Smaller than No. 40, max.	4.0	TM-8, ASTM D2862
Typical Property	Value	
Apparent Density, g/cc	0.54	TM-7, ASTM D2862
Ash	10%	TM-5, ASTM D2860
Water Soluble Ash	<1%	AWWA B604
Non-Wettable	<1%	AWWA B604

2.14 GAC Delivery

- The GAC delivery shall be under the direct supervision of the GAC manufacturer's employee, having a minimum of 5 years experience in performing carbon exchanges. Supervision by a third party or agent is not allowed.
- Bidder shall submit resumes of supervisors capable of performing carbon exchanges, indicating qualifications, years of experience and location.
- GAC shall be transported, delivered and placed in a careful manner to exclude all dust, dirt or deleterious material and to prevent physical damage to the particles.
- Before delivery occurs, a Certificate of Analysis shall be provided for the GAC being delivered. Engineer can take random samples of GAC media for analysis to confirm it meets all specification parameters. Tests can be performed on the GAC including, but not limited to, iodine, ash, and apparent density. Failure of the samples to meet the above specifications shall be cause for rejection and the Contractor shall remove such media from the site and provide media that meets specification.
- The preferred method for spent carbon removal is to be completed hydraulically using bulk truck slurry method.
- Bidder shall submit a detailed description for carbon exchange procedures.
- Failure to provide the information requested will be considered non-responsive and the bid rejected.

PART 3 Execution

3.01 Calgon Carbon Services

- A. Calgon Carbon will assign a Project Manager (PM) to facilitate the execution of the project. The PM will interface with the customer for both the technical and commercial aspects of the project.
- B. Calgon Carbon will provide an Engineering Submittal Package as outlined in paragraph 1.05A
- C. Calgon Carbon will supply Operation and Maintenance Instructions upon completion of the project/shipment of the system.
- D. A manufacturer's trained specialists, experienced in the installation of the Calgon Carbon's Adsorption Systems, and with at least five (5) years of field experience will be present at the job site and/or classroom designated by the Owner/Contractor to provide the following services:
 - Inspection of the installed equipment
 - Supervision of carbon loading
 - Start-up assistance
 - Troubleshooting
 - Operator training
- E. Calgon Carbon will retain design and fabrication documentation for a minimum period of seven (7) years following completion of the project.

3.02 Services By Others

- A. The site or designated contractor will be responsible for installation and site services, typically including:
 - 1. Site preparation, foundation design and foundation installation
 - 2. Receipt, off-loading (and storage) of adsorption system equipment
 - 3. Installation of adsorption system equipment
 - 4. Connection of the dP switch to an alarm system
 - 5. Provision of a means to keep the vessel flooded in all operating modes⁴
 - 6. Any hydrostatic test of the installed (assembled) system at the site
 - 7. System connection to existing infrastructure
 - 8. System disinfection prior to initial fill of carbon
 - 9. Utilities for bulk loading of GAC (compressed air, clean water source, backwash water disposal)
 - 10. Operation of the system during carbon fill operation
 - 11. Mechanical startup of the system

⁴ Customer should review piping and determine if an anti-siphon loop is necessary to maintain flooded conditions in the adsorber.

APPENDIX D

Town of Lewisboro
Oakridge Water District
Ion Exchange Treatment Equipment

WATER SOLUTIONS

Treating Drinking Water for PFAS



Purofine® PFA694E

Tackle PFAS Contamination Before it's a Big Problem for Your Treatment Plant.

Purofine PFA694E is a specially developed ion exchange resin with high selectivity for poly- and perfluoroalkyl substances (PFAS) such as PFOA and PFOS. The resin effectively removes contamination and makes public drinking water cleaner and safer.

- 5 to 10 times more capacity for short- & long-chain contaminants than granular activated carbon (GAC)
- Shorter contact time;
1.5 – 3 mins. vs. 10 – 13 mins. for GAC
- Reduced analytical costs
- For use as a primary removal or polishing system
- Compliant with: 41 CFR §173.25–NSF ANSI 61

Purofine PFA694E is a proprietary resin with the dual removal mechanisms of ion exchange and adsorption technology built into each bead for maximum uptake of PFAS. Water treated with this resin will consistently achieve non-detectable levels of both short- and long-chain PFAS—including PFOA and PFOS—that are well below the current Health Advisory recommendations set by the US Environmental Protection Agency and state regulations.

Extensive laboratory and pilot testing conducted by universities in both the United States and Europe has proven the effectiveness of Purofine PFA694E technology for highly effective contaminant removal, ensuring that your system will remain in compliance year after year.

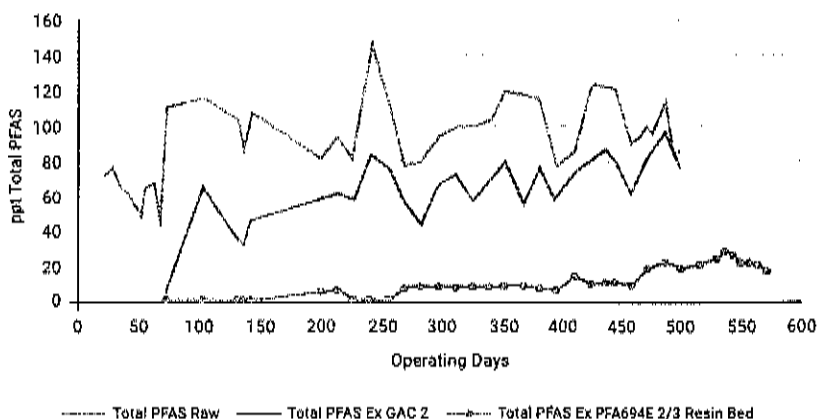
Purofine PFA694E is a robust resin that operates efficiently at higher linear velocities and with shorter contact times than carbon. This translates to lower capital costs for municipal and community water treatment systems as resin has a longer in-service life, requires a smaller system footprint and headspace, and needs less media installed to achieve superior results.

Purofine® PFA694E Resin Performance vs. Granular Activated Carbon

With higher capacity and longer in-service life, Purofine® PFA694E removes more PFAS over a longer period of time before requiring a change-out of the media.

This saves you time and money while enabling you to provide cleaner, safer water to your customers.

Total PFAS Removal
Bituminous GAC vs PFA694E resin



Purolite® Potable Water

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Uzbekistan

Purolite—the leading manufacturer of quality ion exchange, catalyst, adsorbent and specialty high-performance resins—is the only company that focuses 100% of its resources on the development and production of resin technology.

We're ready to solve your process challenges. For further information on Purolite products and services, visit www.purolite.com or contact your nearest Technical Sales Office.

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P-000086-NPOLD-0120-R5-ENG-PCO

APPENDIX E

Town of Lewisboro
Oakridge Water District
Cost Estimates

Project Name: Oakridge PFAS Upgrades

Project# :

Date: 5/26/2021

Prepared By: R. Flores



Delaware Engineering, D.P.C.

Conceptual Cost Opinion Oakridge Water System PFAS GAC Treatment								
ID	Description	Quantity	Units	Materials	Labor	Equipment	Total Unit Cost	Subtotals
1	Site Work							
1.1	Mobilization	1	LS		\$40,000.00		\$40,000.00	\$40,000.00
1.2	Sedimentation and Erosion Control	1	LS	\$1,000.00	\$5,000.00		\$6,000.00	\$6,000.00
1.3	Site Excavation	1	LS		\$40,000.00		\$40,000.00	\$40,000.00
1.4	Yard Piping	1	LS	\$2,000.00	\$60,000.00		\$62,000.00	\$62,000.00
1.5	Restoration	1	LS		\$10,000.00		\$10,000.00	\$10,000.00
								\$158,000.00
2	GAC Building							
2.1	Foundation	1	LS	\$25,000.00	\$25,000.00		\$50,000.00	\$50,000.00
2.2	Slab and Equipment Pad	1	LS	\$10,000.00	\$15,000.00		\$25,000.00	\$25,000.00
2.3	Building	1	LS	\$100,000.00	\$200,000.00		\$300,000.00	\$300,000.00
2.4	Doors and Windows	1	LS	\$20,000.00	\$10,000.00		\$30,000.00	\$30,000.00
								\$405,000.00
3	Piping							
3.1	Process Piping	1	LS	\$45,000.00	\$15,000.00		\$60,000.00	\$60,000.00
3.2	Flow Meter	1	LS	\$3,500.00	\$3,500.00		\$7,000.00	\$7,000.00
3.3	Backflow Preventor	1	LS	\$5,000.00	\$2,000.00		\$7,000.00	\$7,000.00
3.4	Backwash tank and pumps	1	LS	\$40,000.00	\$20,000.00		\$60,000.00	\$60,000.00
3.5	Piping	1	LS	\$20,000.00	\$40,000.00		\$60,000.00	\$60,000.00
3.6	Electrical	1	LS	\$30,000.00	\$30,000.00		\$60,000.00	\$60,000.00
								\$254,000.00
4	GAC Filters							
4.1	20,000 Lbs GAC System	1	LS	\$320,000.00	\$100,000.00	\$10,000.00	\$430,000.00	\$430,000.00
4.2	GA Carbon - Filtrasorb 400	1	LS	\$30,000.00	\$2,500.00		\$32,500.00	\$32,500.00
4.3	Manifold System	1	LS	\$40,000.00	\$10,000.00		\$50,000.00	\$50,000.00
								\$512,500.00
5	Pumps							
5.1	Jockey	1	EA	\$7,000.00	\$5,000.00		\$12,000.00	\$12,000.00
5.2	Booster	2	EA	\$15,000.00	\$15,000.00		\$30,000.00	\$60,000.00
5.3	High Flow	2	EA	\$30,000.00	\$15,000.00		\$45,000.00	\$90,000.00
								\$162,000.00
	Cost Summary							

2021 Construction Cost Subtotal **\$1,491,500.00**

15% Contingency **\$ 224,000.00**

15% Engineering (Preliminary, Design, Construction) **\$ 224,000.00**

Project Costs **\$1,939,500.00**

Project Name: Oakridge PFAS Upgrades

Project# :

Date: 5/26/2021

Prepared By: R. Flores



Delaware Engineering, D.P.C.

Conceptual Cost Opinion Oakridge Water System PFAS Ion Exchange Treatment								
ID	Description	Quantity	Units	Materials	Labor	Equipment	Total Unit Cost	Subtotals
1	Site Work							
1.1	Mobilization	1	LS		\$40,000.00		\$40,000.00	\$40,000.00
1.2	Sedimentation and Erosion Control	1	LS	\$1,000.00	\$5,000.00		\$6,000.00	\$6,000.00
1.3	Site Excavation	1	LS		\$40,000.00		\$40,000.00	\$40,000.00
1.4	Yard Piping	1	LS	\$2,000.00	\$60,000.00		\$62,000.00	\$62,000.00
1.5	Restoration	1	LS		\$10,000.00		\$10,000.00	\$10,000.00
								\$158,000.00
2	Treatmente Building							
2.1	Foundation	1	LS	\$25,000.00	\$25,000.00		\$50,000.00	\$50,000.00
2.2	Slab and Equipment Pad	1	LS	\$10,000.00	\$15,000.00		\$25,000.00	\$25,000.00
2.3	Building	1	LS	\$100,000.00	\$200,000.00		\$300,000.00	\$300,000.00
2.4	Doors and Windows	1	LS	\$20,000.00	\$10,000.00		\$30,000.00	\$30,000.00
								\$405,000.00
3	Piping							
3.1	Process Piping	1	LS	\$45,000.00	\$15,000.00		\$60,000.00	\$60,000.00
3.2	Flow Meter	1	LS	\$3,500.00	\$3,500.00		\$7,000.00	\$7,000.00
3.3	Backflow Preventor	1	LS	\$5,000.00	\$2,000.00		\$7,000.00	\$7,000.00
3.4	Backwash tank and pumps	1	LS	\$40,000.00	\$20,000.00		\$60,000.00	\$60,000.00
3.5	Piping	1	LS	\$20,000.00	\$40,000.00		\$60,000.00	\$60,000.00
3.6	Electrical	1	LS	\$30,000.00	\$30,000.00		\$60,000.00	\$60,000.00
								\$254,000.00
4	Ion Exchange Filters							
4.1	Cartridge Filters	1	LS	\$30,000.00	\$15,000.00		\$45,000.00	\$45,000.00
4.2	Ion Exchange Filters - (2) 4' dim by 8' H	1	LS	\$145,000.00	\$75,000.00		\$220,000.00	\$220,000.00
4.3	Piping	1	LS	\$20,000.00	\$20,000.00		\$40,000.00	\$40,000.00
4.4	Electric and controls	1	LS	\$30,000.00	\$15,000.00		\$45,000.00	\$45,000.00
4.5	Media	1	LS	\$30,000.00			\$30,000.00	\$30,000.00
								\$380,000.00
5	Pumps							
5.1	Jocky	1	EA	\$7,000.00	\$5,000.00		\$12,000.00	\$12,000.00
5.2	Booster	2	EA	\$15,000.00	\$15,000.00		\$30,000.00	\$60,000.00
5.3	High Flow	2	EA	\$30,000.00	\$15,000.00		\$45,000.00	\$90,000.00
								\$162,000.00
	Cost Summary							

2021 Construction Cost Subtotal **\$1,359,000.00**

15% Contingency **\$ 204,000.00**

15% Engineering (Preliminary, Design, Construction) **\$ 204,000.00**

Project Costs **\$1,767,000.00**



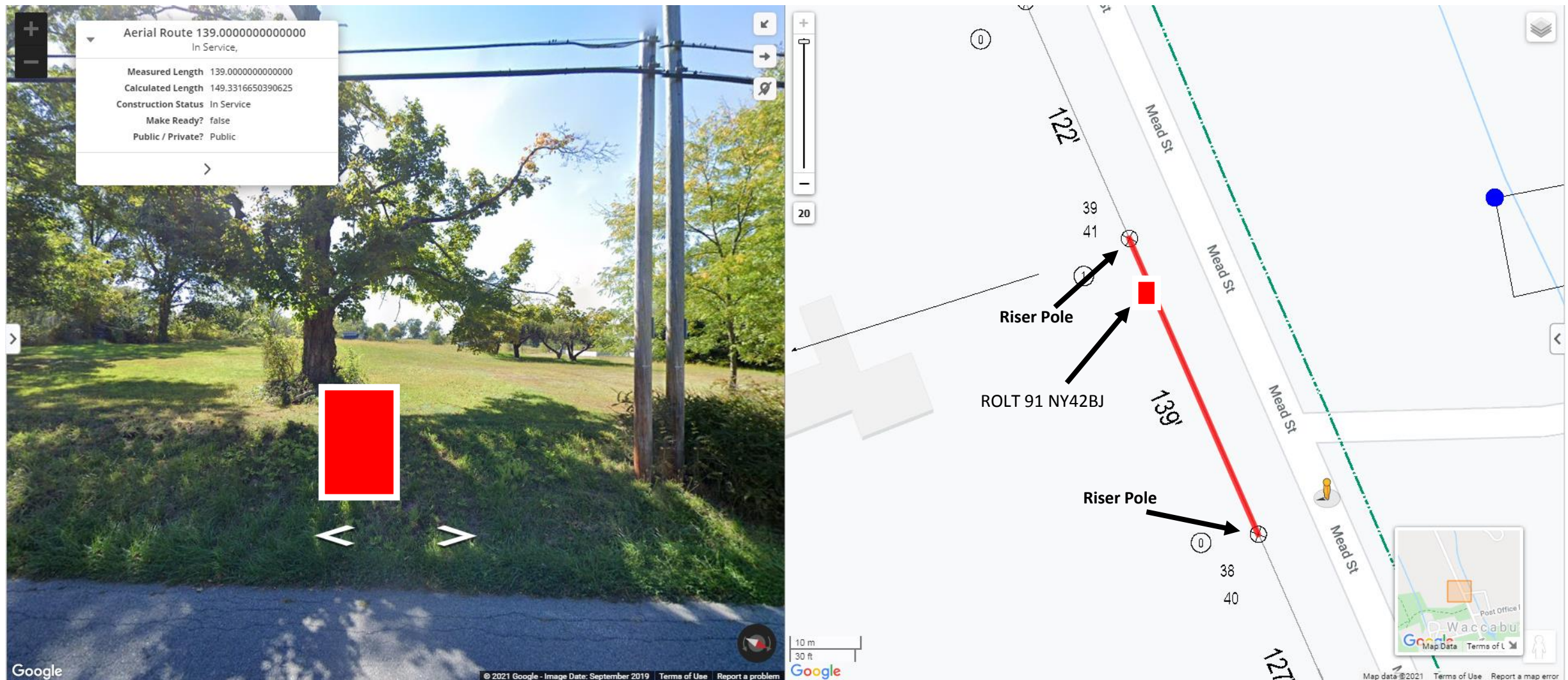
100 MEAD STREET WACCABUC N.Y. Cross St = PINE CREST MEADOW PRESERVE. Lat / Long = 41.2914, -73.5959

ROLT 91 NY42BJ



100 MEAD STREET WACCABUC N.Y. Cross St = PINE CREST MEADOW PRESERVE. Lat / Long = 41.2914, -73.5959

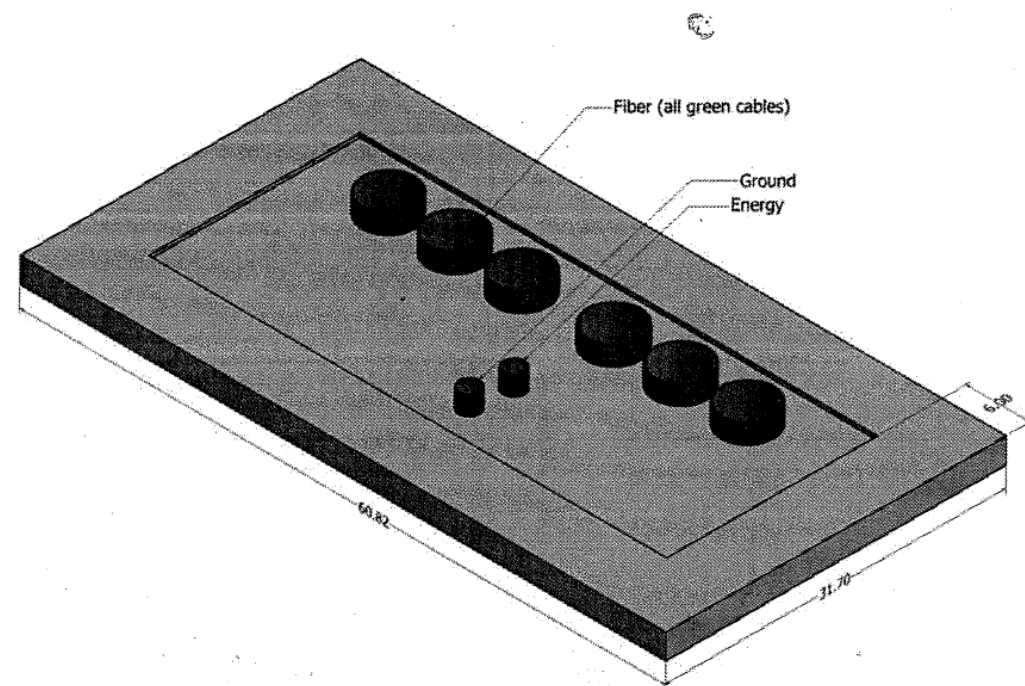
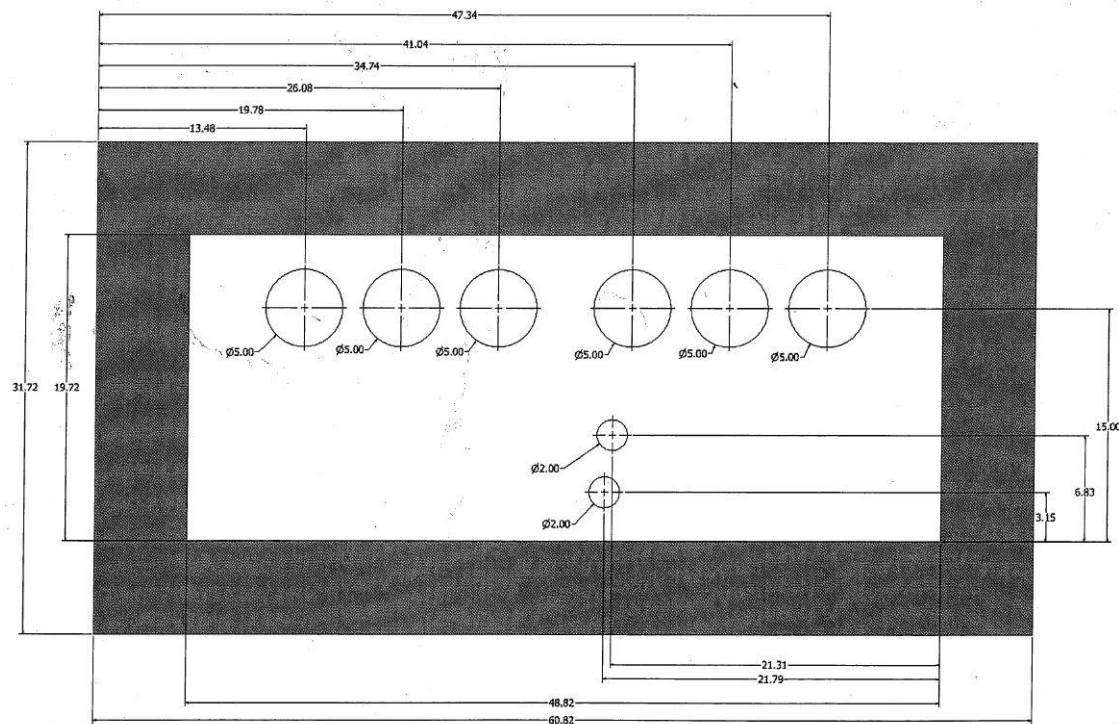
ROLT 91 NY42BJ



100 MEAD STREET WACCABUC N.Y. Cross St = PINE CREST MEADOW PRESERVE. Lat / Long = 41.2914, -73.5959

ROLT 91 NY42BJ

Pedestal installation in solid cement and massive



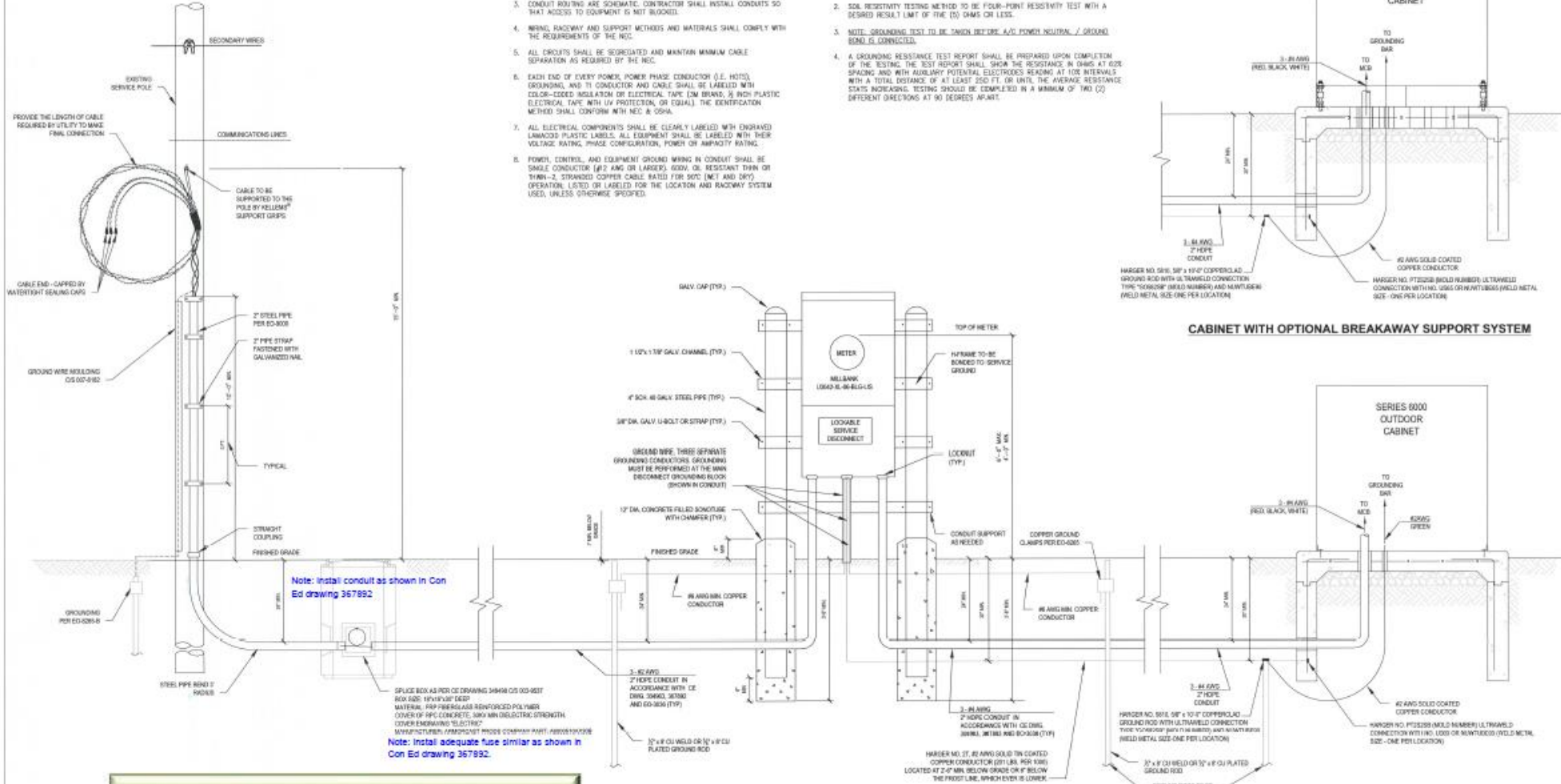
ELECTRICAL NOTES

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
2. ALL ELECTRICAL EQUIPMENT AND ACCESSORIES SHALL BE U.L. APPROVED AS LISTED.
3. CONDUIT ROUTING ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT OBSTRUCTED.
4. WIRING, RACKWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
5. ALL CIRCUITS SHALL BE SEPARATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
6. EACH END OF EVERY POWER, POWER PHASE CONDUCTION (I.E. HOT), GROUNDING, AND TH CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 5/8" WIDE PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA.
7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED UNIMAGED PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, POWER OR AMPACITY RATING.
8. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN CONDUIT SHALL BE SINGLE CONDUCTOR (1/2" AND OR LARGER) EDSV, OR RESISTANT THIN OR THIN-2, STRANDED COPPER CABLE RATED FOR 90°C (NET AND DRY) OPERATION, LISTED OR LABELED FOR THE LOCATION AND RACKWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.

GROUNDING NOTES

GROUND TESTING AFTER CONSTRUCTION

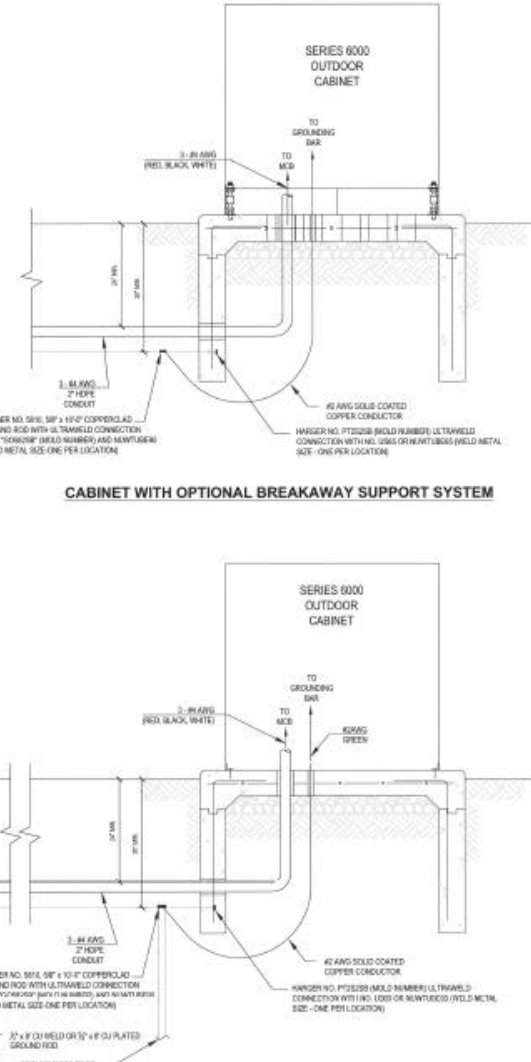
1. AFTER COMPLETION OF CONSTRUCTION OF THE GROUNDING SYSTEM, A QUALIFIED INDEPENDENT ELECTRICAL TESTING FIRM WITH A QUALIFIED TECHNICIAN USING APPROVED TEST EQUIPMENT SHALL TEST SITE TO ASCERTAIN THE RESISTANCE TO EARTH AS SPECIFIED IN ALICE USA STANDARDS AND NATIONAL ELECTRIC CODE.
2. SOIL RESISTIVITY TESTING METHOD TO BE FOUR-POINT RESISTIVITY TEST WITH A DESIRED RESULT LIMIT OF THE (5) OHMS OR LESS.
3. NOTE: GROUNDING TEST TO BE TAKEN BEFORE A/C POWER NEUTRAL / GROUND BOND IS CONNECTED.
4. A GROUNDING RESISTANCE TEST REPORT SHALL BE PREPARED UPON COMPLETION OF THE TESTING. THE TEST REPORT SHALL SHOW THE RESISTANCE IN OHMS AT 60% SPACING AND WITH AUXILIARY POTENTIAL ELECTRODES READING AT 10% INTERVALS WITH A TOTAL DISTANCE OF AT LEAST 350 FT. OR UNTIL THE AVERAGE RESISTANCE STOPS INCREASING. TESTING SHOULD BE COMPLETED IN A MINIMUM OF TWO (2) DIFFERENT DIRECTIONS AT 90 DEGREES APART.



APPROVED AS NOTED

NOTE:
CONTRACTOR TO VERIFY WITH THE UTILITY PLANNER IF THE SCOPE OF WORK INCLUDES
SERVICE POLE RUBBER ENDS AT THE SPUR BOX FOR THIS SPECIFIC INSTALLATION.

CABINET WITH OPTIONAL BREAKAWAY SUPPORT SYSTEM



0	18-04-2018	AS PER CONSTRUCTION COMMENTS	DS
1	30-09-2018	AS PER FIELD COMMENTS	DS
REV	DATE	REVISION	BY

TELECOMMUNICATIONS EQUIPMENT CABINET POWER AND GROUNDING DIAGRAM FOR H-FRAME METER MOUNTED OPTIONS

ALTEC USA - NORTH



LiRo Engineers, Inc.
A LiRo Group Company
Minnetonka, MN
(763) 769-2300

SCALE: N/A
PLAN: N/A
PROFILE: AS SHOWN
SECTION: AS SHOWN

DESIGNED BY:	DW	DRAWN BY:	SA	CHECKED BY:	ME	PROJECT NO.:	11708611	SHEET NUMBER:	E-10
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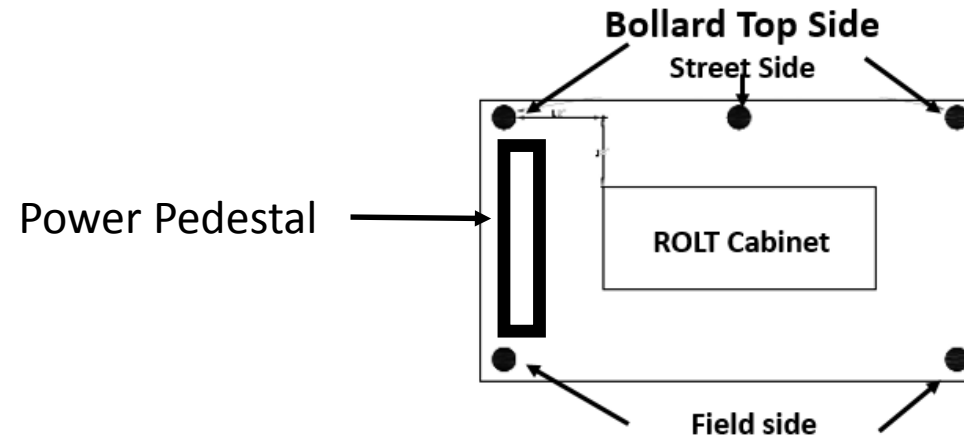
Customer Name: ALICE, Document: ALICE-TELECOM-ELECTRICAL, Diagram: Power and Grounding, Date: 18-04-2018, 11:54am, Pinned on: 04-04-2019, 11:50am, By: AutoCAD

Fiber Related Conduits:

- (4) 4" Sched 40 PVC conduits - final direction and path to be determined based on design for the applicable cabinet (one of the 4" conduits will remained stubbed for future use)
- (1) 4" Sched 40 PVC Conduit should be placed to each of the poles which support the applicable cabinet as determined by Design, this includes conduit sweep, sub-ducting and provisioning in order to receive fiber cables at the Riser Pole.

Bollards

- (5) Total Bollards should be installed – (3) are street-side to protect the cabinet and (2) are Field-side :





Catalog Number:
Item Description:
UPC Code:

U3042-XL-QG-BLG-LIS
200A 5T RL HD LVR OU
784572194694

Brand Name:	Milbank
Type:	Ringless Meter Socket
Application:	Meter Socket
Standard:	UL Listed
Voltage Rating:	600 Volts Alternating Current
Amperage Rating:	200 Continuous Ampere
Phase:	1 Phase
Frequency Rating:	60 Hertz
Number Of Cutouts:	0
Cable Entry:	Overhead and Underground
Terminal:	Lay in Line Side and Lay in Load Side
Mounting:	Surface Mount
Enclosure:	Type 3R, G90 Galvanized Steel with Powder Coat Finish



U3042-XL-QG-BLG-LIS



5 Terminal Ringless Small Closing Plate Quadplex Ground Lever Bypass 7-8 In Barrel Lock Ground With Bracket Provision Long Island Lighting Company

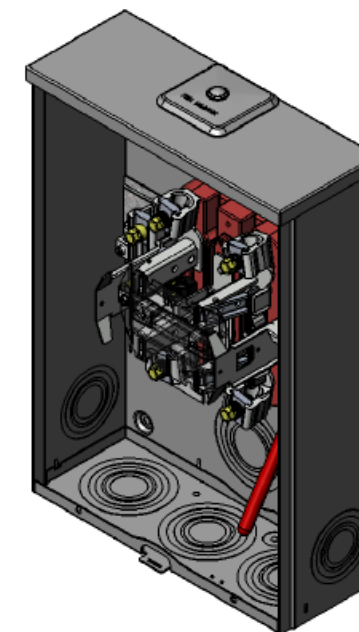
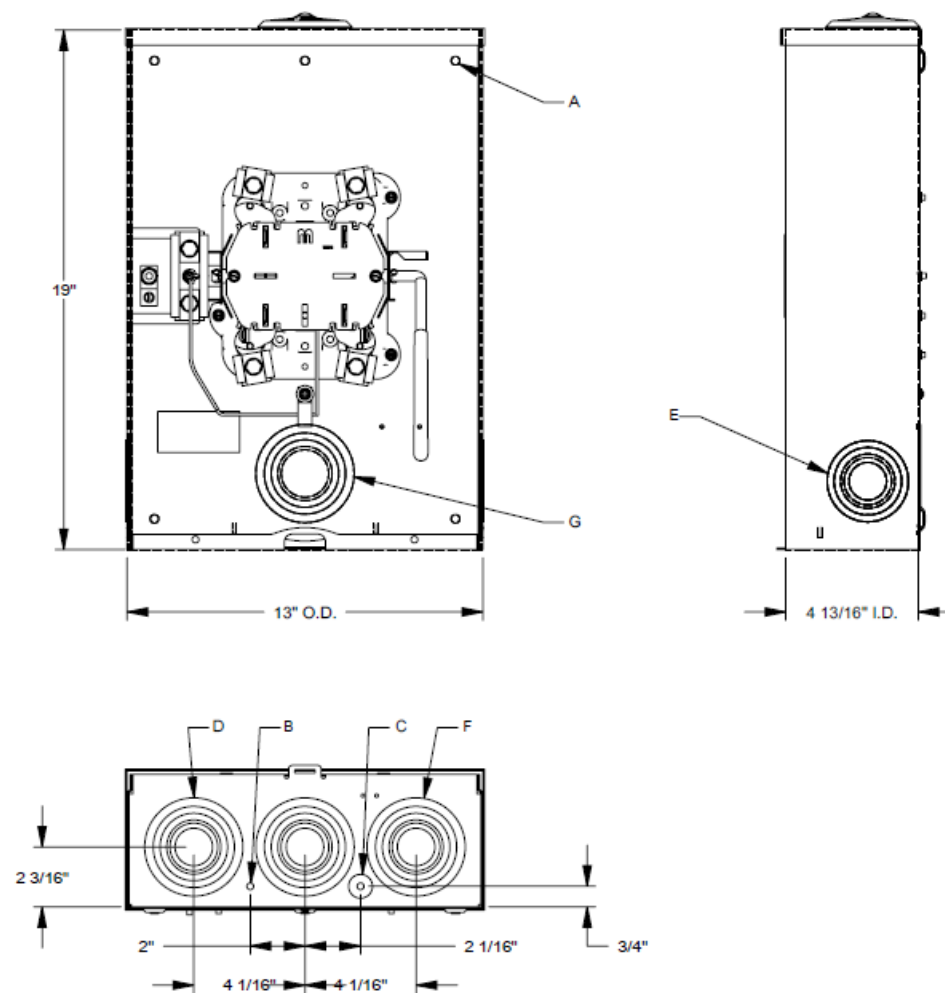
SPECIFICATIONS

Brand Name	Milbank
Type	Ringless Meter Socket
Special Features	Long Island Lighting Company
Application	Meter Socket
Standard	UL Listed;Type 3R
Voltage Rating	600 Volts Alternating Current
Amperage Rating	200 Continuous Ampere
Phase	1 Phase
Frequency Rating	60 Hertz

Please consult serving utility for their requirements prior to ordering or installing, as specifications and approvals vary by utility, and may require local electrical inspector approval. All installations must be installed by a licensed electrician and must comply with all national and local codes, laws and regulations. Milbank reserves the right to make changes in specifications and features shown without notice or obligation.

Size	4.844L x 13W x19H
Number of Main Breakers	0
Main Breaker Size	No Main Breaker
Cable Entry	Overhead or Underground
Terminal	Lay in
Insulation	Glass Polyester
Mounting	Surface Mount
Material	G90 Galvanized Steel with Powder Coat Finish
Number of Jaws	5 Terminal
Bypass Provision	Lever Bypass
Number of Meter Positions	1 Position
Equipment Ground	Quadplex Ground
Hub/Closing Plate	Small Closing Plate
Line Side Wire Range	6 AWG - 350 kcmil
Load Side Wire Range	6 AWG - 350 kcmil
Number of Receptacles	0
Height	19 IN
Length	4.844 IN
Width	13 IN

FEATURE TABLE		
ITEM	QTY	DESCRIPTION
A	5	U/L MNTG.EMBOSS
B	1	¼ SOLID K.O.
C	1	¼, ¼ CONC. K.O.
D	2	1, 1¼, 1½, 2, 2½, 3 CONC. K.O.
E	2	1, 1¼, 1½, 2, 2½ CONC. K.O.
F	1	¾, 1, 1¼, 1½, 2, 2½, 3 CONC. K.O.
G	1	1¼, 1½, 2, 2½, 2, 2½, 3 CONC. K.O.



Version:

1

All dimensions are +/- 1/16".
Drawing views are not to scale.
Utility requirements for this equipment may vary. Always consult the serving utility for their requirements prior to ordering or installing this equipment. This product must be installed by a licensed electrician. Installation of this equipment may require local electrical inspector approval.



Specifications for Electric Installations

Consolidated Edison Co. Inc

Table II
Outdoor/Indoor Box-Type
Watt-hour Meter Sockets for AC Meters

Manufacturer	Amp Rating	CATALOG		NUMBER		
		3-Wire 120/208 Volts		120/240 volts		4-Wire 120/208 Volts
		5-Jaw				7-Jaw
		Top Entry		Bottom Entry		Top or Bottom Entry
		With or Without Hub	1-1/4" Fixed Hub	Closure Plate or Solid End wall	Closure Plate	
Without By-Pass Facilities -- Residential Use Only						
EATON, Cutler-Hammer, Eaton/Cutler-Hammer See Note 1	125	U-RS101B(or T)-CR-CH	----	U-RS101B(or T)-CR-CH	----	
	200	U-RS202B(or T)-CR-CH	----	U-RS212B(or T)-CR-CH	----	
Talon	100	UAT121 - 0BOC	----	UAT121 - PBCO	----	
	200	UAT327 - 0MCO	----	UAT427 - PMCO	---	
Midwest See Note 1	125	U-RS101B(or T)-CR-MEP	----	U-RS101B(or T)-CR-MEP	----	
	200	U-RS202B(or T)-CR-MEP	----	U-RS212B(or T)-CR-MEP	----	
Milbank	125 Note 2	7490	----	7490	----	
	200	U4518	----	U4518	----	
Murray Electric Products	100	SN 152 CX	SN 152 CC	SN 152 C	SE 750CR	
	200	SS 152 CX	----	SS 152 C	---	
NavTech	125	MS-1G-100	----	MS-1G-100	----	
Siemens	100	WSN 152 CX	----	WSN 152 C	WSE 750 CR	
	100	SUAT121 - 0BCO	----	SUAT121 - PBCO	----	
	100	SUAT121 - BBCO	----	SUAT121 - BBCO	----	
	200	WSS 152 CX	----	WSS 152 C	----	
	200	SUAT327 - 0MCO	----	SUAT427 - PMCO	----	
Square D See Note 1	125	U-RS101B(or T)-CR-SQD	----	U-RS101B(or T)-CR-SQD	----	
	200	U-RS202B(or T)-CR- SQD	----	U-RS212B(or T)-CR-SQD	----	

Note 1: B stands for Small NEMA hub opening (3/4" through 2 1/4").

T in place of B stands for Large NEMA hub opening (2 1/2" through 4").

B or T can be replaced with C or U indicating a hub cover plate factory installed.

Note 2: Order Kit, Catalog No. K5709 to convert a 7490 to an insulated neutral.

Product data sheet

Characteristics

QO612L100RB

LOAD Center QO MLO 240V 100A 1PH 6SP

Product availability : Stock - Normally stocked in distribution facility



Price* : 143.00 USD



Main

Product	Load Center
Marketing Trade Name	QO
Load Center Type	Main lugs
Line Rated Current	100 A
Number of spaces	6
Short Circuit Current Rating	10 kA
Maximum Number of Single Pole Circuits	12
Maximum Number of Tandem Breakers	6
Number of Phases	1 phase
Voltage Rating	120/240 V AC

Complementary

Wire Size	AWG 8...AWG 1 (aluminium/copper)
Enclosure Rating	NEMA 3R outdoor
Cover type	Surface cover
Electrical Connection	Lugs
Grounding Bar	Grounding bar (ordered separately)
Electrical connection	Lugs
Wiring configuration	3-wire
Busbar Material	Tin plated aluminium busbar
Enclosure Material	Welded galvanized steel
Cover Finish	Baked enamel grey
Box number	2R
Product certifications	UL listed
Height	12.64 in (321 mm)

Disclaimer: The documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Width	8.9 in (226 mm)
Ordering and shipping details	
Category	00101 - QO 1PH LC,2-8CKT,NEMA 1,3R
Discount Schedule	DE3A
GTIN	00786901786690
Nbr. of units in pkg.	1
Package weight(Lbs)	9.6899999999999996
Returnability	Y
Country of origin	MX
Offer Sustainability	
Sustainable offer status	Green Premium product
RoHS (date code: YYYY)	Compliant - since 1423 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructio	Need no specific recycling operations
Contractual warranty	
Period	18 months