

**INFORMATION FOR BIDDERS  
PROPOSAL - SPECIFICATIONS  
FOR  
MAINTENANCE DREDGING OF SEDIMENT FOREBAYS  
AT BINNEY PARK POND**

**PROJECT NO. 19-22**

**OCTOBER 2019**

**TOWN OF GREENWICH  
CONNECTICUT**

**ENGINEERING DIVISION  
DEPARTMENT OF PUBLIC WORKS**

## INVITATION TO BID

Sealed bids, one (1) original and two (2) copies, will be received in the Office of the Purchasing Department and shall be opened and read aloud in the **DPW Administrative Conference Room**, Town Hall, 101 Field Point Road, Greenwich, Connecticut at **2 o'clock p.m.** (prevailing time) on **Wednesday, November 6, 2019** for the following work:

**Maintenance Dredging of Sediment Forebays  
at Binney Park Pond  
Town Project No. 19-22**

A Bid Bond for **10% of the total bid amount** must accompany each bid.

Bidders may be required to submit data covering financial resources, equipment and ability to perform the work rapidly and in a satisfactory manner.

The right is expressly reserved to reject any or all bids, to waive any informalities in the bids, or to accept such bids as appear to be in the best interest of the Town.

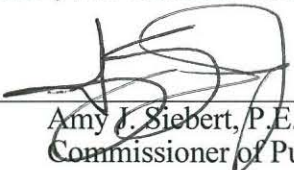
Specifications may be obtained on the Town's website, [www.greenwichct.gov/Bids](http://www.greenwichct.gov/Bids). **It is the responsibility of the prospective bidder to check the website for any addenda issued up to 48 hours prior to the bid opening.**

Drawings and specifications will be posted to the Town's website and may be downloaded at no cost. Drawings taken from the Town's website and printed on the bidder's equipment may not be to scale.

Bidders shall complete the Vendor Information & Signatory Form for all Contracts equal to or in excess of \$250,000.00. Failure to complete the Vendor Information & Signatory Form, located in Section 2, will cause the contractors bid to be disqualified.

Attention of bidders is particularly called to the requirements as to conditions of employment to be observed, insurance coverage requirements, minimum wage rates to be paid under the contract and construction safety and health course requirements.

Bidders shall complete the "Bidder Contract Compliance Monitoring Report" and the "Prohibition of Wastes Generated from Oil and Gas Drilling and Extraction Activities Certification" for all Contracts. Failure to complete the noted report and certification, located in Section 2, will cause the contractors bid to be disqualified.

  
\_\_\_\_\_  
Amy J. Siebert, P.E.  
Commissioner of Public Works

Date: October 16, 2019

## SECTION 1

### INFORMATION FOR BIDDERS

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## **INFORMATION FOR BIDDERS**

### **1.1 RECEIPT AND OPENING OF BIDS.**

Sealed bids, one (1) original and two (2) copies, will be received in the Office of the Purchasing Department and shall be opened and read aloud in the **DPW Administrative Conference Room**, Town Hall, 101 Field Point Road, Greenwich, Connecticut at **2 o'clock p.m.** (prevailing time) on **Wednesday, November 6, 2019** for the following work:

#### **Maintenance Dredging of Sediment Forebays at Binney Park Pond Town Project No. 19-22**

### **1.2 LOCATION AND DESCRIPTION OF WORK TO BE DONE.**

The Town of Greenwich Department of Public Works on behalf of the Department of Parks and Recreation is soliciting bids for the maintenance dredging of two sediment forebays. It is the intention of the Town to establish a contract with one (1) (or more) contractors who will, upon request, provide the Town of Greenwich with the services described in the Request for Bid (RFB). Unlike the Town's existing service agreements for these same services that are limited to projects costing less than \$25,000, the intention of this solicitation is to develop new contracts with prevailing wages and performance maintenance and payment bonds for possible projects costing more than \$25,000 each.

The work herein specified to be done consists of the removal and disposal offsite of approximately 500 cubic yards of sediment annually by hydraulic dredging in two sediment forebays within the upper pond of the Binney Park Pond in Greenwich, Connecticut, all as more particularly indicated, shown or described in the drawings, specifications and other contract documents and as described by the Engineer.

The Town is seeking bids for two possible scenarios. The first scenario shall be referenced as the Base Bid, where the contractor shall supply all the services to hydraulically dredge nonhazardous material. The second scenario shall be referred to as Alternative 1, where the contractor shall supply all of the services to hydraulically dredge hazardous material.

Bidders shall submit bids for both scenarios. Bidder who fail to submit bids for either scenario will be disqualified. Bidders who fail to provide bid pricing for any bid calculation item will be disqualified.

Each bidder's lump sum bid calculation total of the Base Bid and Alternative 1 will be averaged together to determine each bidder's total bid price. Each bidder's total bid price will then be computed to each other to determine the lowest bidder(s).

The final contract(s) shall include complete pricing for the Base Bid and Alternative 1 and will therefore provide the Town with the flexibility to order work, at any time during the contract terms, based on each. The Owner shall determine annually whether the Base Bid or Alternative 1 shall be awarded, based on laboratory testing, prior to Notice to Proceed.

The contract(s) shall have a one-year initial term plus four option years that may be engaged upon the mutual consent of both parties. All bid pricing shall remain firm fixed for the duration of the initial one-year contract term. Pricing may be adjusted at the beginning of each option year and shall then remain firm fixed for the duration of each option year.

The Contractor shall furnish all labor, services, materials, equipment, plant, machinery, apparatus, appliances, tools, supplies and all other things necessary to do all work required for the completion of each item of the work and as herein specified.

The location, general characteristics and principal details of the work are indicated on figures which are listed as follows:

FIGURE NUMBER	TITLE
Figure 1	Location Map
Figure 2	Existing Conditions
Figure 3	Post Dredge Conditions
Figure 4	Annual Dredging Plan

The above drawings are the contract drawings, sometimes referred to herein as the "Drawings". Additional drawings showing details in accordance with which the work is to be done will be furnished from time to time by the Engineer, if found necessary, and shall then become a part of the contract drawings.

### 1.3 CONTRACT DOCUMENTS.

The 'Drawings', 'Invitation to Bid', 'Information for Bidders', Forms for 'Bid', 'Agreement' and 'Bonds', 'General Conditions' and 'Technical and Materials Specifications' become the contract documents and may be obtained on the Town's website, [www.greenwichct.gov/bids](http://www.greenwichct.gov/bids).

Drawings and specifications will be posted to the Town's website and may be downloaded at no cost. Drawings taken from the Town's website and printed on the bidder's equipment may not be to scale.

### 1.4 NON-REFUNDABLE FEE FOR DRAWINGS AND DOCUMENTS.

Drawings and specifications will be posted to the Town's website and may be downloaded at no cost. Drawings taken from the Town's website and printed on the bidder's equipment may not be to scale.

### 1.5 QUESTIONS REGARDING DRAWINGS AND DOCUMENTS.

In general, no answer will be given to prospective bidders in reply to an oral question if the question involves an interpretation of the intent or meaning of the drawings or other contract documents or the equality or use of products or methods other than those designated or described on the drawings or in the specifications. Any information given to bidders other than by means of the drawings and other contract documents, including addenda, as described below, is given informally, for information and the convenience of the bidder only, and is not guaranteed. The bidder agrees that such information shall not be used as the basis of nor shall the giving of any such information entitle the bidder to assess any claim or demand against the Town or the Engineer on account thereof.

To receive consideration, such questions shall be submitted in writing to the Project Engineer, **Gabriella Circosta-Cohee, P.E., Senior Civil Engineer, Town of Greenwich, DPW Engineering Division, 101 Field Point Road, Greenwich, CT 06830** or by email to [gcohee@greenwichct.org](mailto:gcohee@greenwichct.org) at least **five (5) days** before the established date for receipt of Bids. If the questions involve the acceptability or use of any unspecified products or methods, it must be accompanied by drawings, specifications or other data in sufficient detail to enable the Engineer to determine the acceptability, equality and suitability of the unspecified product or method. In general, the Engineer will neither approve nor disapprove particular products prior to the opening of Bids; such products will be considered when offered by the Contractor for incorporation into the work.

The Engineer will set forth as addenda, which shall become a part of the contract documents, such questions received as above provided as in their sole judgment are appropriate or necessary and their decision regarding each. **It is the responsibility of the prospective bidder to check the Town's website ([www.greenwichct.gov/bids](http://www.greenwichct.gov/bids)) for any addenda issued up to 48 hours prior to the bid opening.**

The Contractor agrees to use the products and methods designated or described in the specifications as amended by the addenda. Any addenda issued shall take precedence over drawings or specifications.

Where there is a conflict between specifications and drawings, the higher standard shall prevail.

#### **1.6 BIDDERS TO INVESTIGATE.**

Bidders are required to submit their bids upon the following express conditions which shall apply to and be deemed a part of every bid received.

Bidders must satisfy themselves by personal examination of the site of the work and by such other means as they may wish, as to the actual conditions there existing, the character and requirements of the work, the difficulties attendant upon its execution, and the accuracy of all estimated quantities stated in the Bid.

Any subsurface information furnished is based on an interpretation made at specific locations as indicated and no assurance is given that these conditions are necessarily typical of other locations or that they have remained unchanged since the field data were obtained. Further, no assurance is given that the presence or absence of water and other subsurface conditions at the time of these explorations will be representative of actual conditions at the time of construction. The Contractor shall be solely responsible for any assumptions, deductions, or conclusions they may make or which may be derived from their examination of any available subsurface information.

#### **1.7 INFORMATION NOT GUARANTEED.**

All information given on the drawings or in the other contract documents relating to subsurface and other conditions, natural phenomena, existing pipes and other structures is furnished only for the information and convenience of bidders and is not guaranteed.

It is agreed and understood that the Town does not warrant guarantee that the subsurface or other conditions, natural phenomena, existing pipes or other structures encountered during construction will be the same as those indicated on the drawings or in the other contract documents and the bidder or Contractor shall assume all risk with respect to such conditions.

It is agreed further and understood that no bidder or Contractor shall use or be entitled to use any of the information made available to them or obtained in any examination made by them in any manner as a basis of or ground for, any claim or demand against the Town or the Engineer, arising from or by reason of any variance which may exist between the information made available and the actual subsurface or other conditions, natural phenomena, existing pipes or other structures actually encountered during the construction work.

The Contractor shall dig test pits, contact appropriate parties, or do any other necessary work, and at their own expense, to locate subsurface and other structures both shown and not shown on the drawings, in advance to performing work near the structure.

#### **1.8 BLANK FORM FOR BID.**

All bids must be upon the blank form for "Bid Sheet", which is given in Section 2, and must state the proposed price of each item of the work, both in words and in figures, and be signed by the bidder with their business address and place of residence.

#### **1.9 TIME LIMITS AND TIME CHARGE.**

The Contractors shall commence with the work within **ten (10) days** after receipt of 'Notice to Proceed' from the Town.

Time is of the essence of this contract and as prosecution of the work will inconvenience property owners, vehicular traffic, and pedestrians and adversely affect business in the area, it is essential that the work be pressed vigorously to completion. Also, the cost to the Town of administration of the contract, including

engineering, inspection and supervision of construction, will be increased or decreased as the time occupied in the work is lengthened or shortened and the deprivation to the residents of the Town of the needed improvement herein contracted for will cause damages to the Town, the exact amount of which will be difficult to ascertain. Therefore, in order to avoid the uncertainties and time consuming effort involved, it is hereby estimated that the reasonably probable, foreseeable damages which will arise in the event of the Contractor's delay are hereby expressed in terms of a time charge which will be made against the Contractor, and dates for completion, suspension and/or commencement of work will be established in accordance with the following provisions.

A time charge of **One Thousand Five Hundred Dollars (\$1,500.00)** per day will be made against the Contractor for each and every day (Saturdays, Sundays and legal holidays excluded) that the work is in progress beyond **forty-five (45)** calendar days (no days excluded) after the Contractor has been notified to commence with the work. The amount of time charge will be deducted from the monthly and final payments due the Contractor as these are made. This time charge will continue, except as provided below, until the work is completed and accepted, but not including retainer, maintenance or repair period, if any. The Engineer's decision concerning whether the work has been completed shall be final, as provided in Article 4.4 of this contract.

Each bidder should include in their estimate of the cost of the work, a sum equal to the amount derived by multiplying said time charge by the number of days which they estimate the time charge will apply. This sum shall not appear as a separate item of the bid, but shall be distributed among the various items on which prices are asked on the bid sheet. The time charge will be suspended during the period of any delay that may be caused by the Town, either through change of plan or through ordering suspension of the work for any reason other than failure on the part of the Contractor to comply with the specifications, said suspension must be certified by engineer.

If any delay is caused to the Contractor by specific orders of the Engineer to stop the work (for reasons other than failure on the part of the Contractor to comply with the requirements of the contract documents), such delay will entitle the Contractor to an equivalent extension of time, and the suspension of the time charge only during such an extension of time. When extra or additional work is ordered by the Engineer, the Contractor will be allowed a suspension of the time charge expressed in days and derived by dividing the cost of such additional work by the time charge factor.

The time charge factor is that number derived by dividing the total amount of the contract on which the award is made by the number of days between date work is started and date of completion and acceptance of the repair and alteration, etc., deducting Saturdays, Sundays and legal holidays.

### **1.10 WITHDRAWAL OF BID.**

Except as hereinafter in this article otherwise expressly provided, once their bid is submitted and received by the Town for consideration and comparison with other bids similarly submitted, the Bidder agrees that they may not and will not withdraw it within **sixty (60)** consecutive calendar days after the actual date of opening of Bids.

Upon proper written request and identification, Bids may be withdrawn only as follows

1. At any time prior to the designated time for the opening of bids
2. Provided the bid has not theretofore been accepted by the Town, at any time subsequent to the expiration if the period during which the bidder has agreed not to withdraw their bid.

Unless a bid is withdrawn as provided above, the Bidder agrees that it shall be deemed open for acceptance until the 'agreement' has been executed by both parties thereto or until Town notifies a Bidder in writing that their bid is rejected or that the Town does not intend to accept it, or returns their bid deposit. Notice of acceptance of a bid shall not constitute rejection of any other bid.

### **1.11 CONTRACT BONDS.**

The Bidder whose bid is accepted agrees to furnish the 'contract bonds' in the forms which follow in Section 5, entitled 'Contract Bonds', each in the sum of the full amount of the bid, including allowance for contingencies and extra work, and/or contract price as determined by the Engineer, and duly executed and acknowledged by the said Bidder as principle and by a surety company qualified to do business under the laws of the State of Connecticut and satisfactory to the Town, as surety, for the faithful performance of the contract and payment for labor and materials. The premiums for such bonds shall be paid by the Contractor. The 'Contract Bond' is only required for contracts exceeding \$100,000.

For contracts that require a Performance, Maintenance and Payment Bond, the contractor shall maintain all of the specified required insurance coverage and continue to document the specified required insurance coverage for one (1) year after completion of the work of the contract (or other such time as the contractor or other agreement requires).

The Bidder must provide a letter from the bonding company stating that their company is able to receive performance bonding within one weeks' time after receipt of award on the Town of Greenwich Performance, Maintenance and Payment Bond Form (enclosed herein) for this project in the total amount of the bid. The letter must be on the bonding company's letterhead with their name address and telephone number and must be submitted with the bid.

### **1.12 ABILITY AND EXPERIENCE OF BIDDER.**

No award will be made to any Bidder who cannot satisfy the Town that they have sufficient ability and experience in this class of work and sufficient capital and plant to enable them to prosecute and complete the work successfully within the time named, or, where such time is not named, within reasonable period of time as is determined by the Engineer. The Town's decision or judgment on these matters shall be final, conclusive and binding.

The Town may make such investigations as it deems necessary, and the Bidder shall furnish to the Town, under oath if so required, all such information and data for this purpose as the Town may request.

The ability of any Bidder to obtain a performance bond will not be regarded as the sole test of such Bidder's competency or responsibility.

### **1.13 BIDS.**

The Town may reject bids which in its sole judgment are either incomplete, conditional, obscure or not responsive or which contain additions not called for, erasures not properly initialed, alterations or similar irregularities, or the Town may waive such omissions, conditions or irregularities.

### **1.14 RIGHT TO REJECT OR ACCEPT BIDS.**

The Town reserves the right to reject any or all bids with or without reason, or to accept any bid even if it is not the low bid, should the Town deem it to be in the public interest or the interest of the Town to do so. The Town's decision on the qualifications of any bid and/or its decision to accept any bid, or reject any or all bids shall be final, conclusive and binding on all Bidders.

### **1.15 RIGHT TO ALTER FORM, QUANTITY, OF WORK.**

The Town further reserves the right to make alterations in the lines, grade, plan, form and quantity of the work herein contemplated, either before award of contract to the successful Bidder and/or before or after the commencement of the work because of priority restrictions, insufficient funds in appropriations, or other cause. If such alterations diminish the quantity of the work to be done, they shall not constitute a claim for damage or for anticipated profits on the work dispensed with, or affect the prices bid for the various classes of work remaining. If they increase the amount of work, such increase shall be paid for according to the quantity actually done and at



the price or prices bid for the various classes of work, or if not susceptible of classification, the price or prices shall be agreed upon in writing in advance, and in case of failure to so agree, the Contractor shall do the work as aforesaid as extra work.

#### **1.16 EXECUTION OF AGREEMENT.**

The Bidder whose bid is accepted will be required and agrees to duly execute the 'agreement' and furnish the required contract bonds and insurance certificates within ten (10) days after award of the contract.

#### **1.17 INSURANCE CERTIFICATES.**

The Bidder is required to submit with their bid a signed 'Insurance Procedure Form', enclosed herein. By signing this form, the Bidder acknowledges that they will provide the insurance coverage required for the contemplated work at no additional charge to the Town of Greenwich.

The Contractor will not be permitted to start any construction work until they have submitted certificates covering all insurance and in such form called for under that article of the 'agreement', titled 'Insurance', and has obtained approval in writing of such certificates from the Town.

#### **1.18 COMPARISON OF BIDS.**

Bids will be compared on the basis of the sum of the quantities multiplied by respective unit prices, added to lump-sum prices, all as stated in the 'Bid Sheet'.

In the event that there is a discrepancy in the Bid Sheet between the Lump-Sum or unit prices written in words and figures, the prices written in words shall govern.

The Town agrees to examine and consider each bid submitted in consideration of the Bidder's agreements, as hereinabove set forth in the Bid Sheet.

#### **1.19 BID SECURITY.**

Each bid must be accompanied by a bid bond prepared on the form of bid bond attached hereto duly executed and acknowledged by the Bidders, as principal, and by a surety company qualified to do business in the State of Connecticut and satisfactory to the Town, as surety.

The bid bond shall be in the sum of **10% of the total bid amount** and shall be enclosed in the sealed envelope containing the Bid. Each bid bond may be held by the Town as security for the fulfillment of the Bidder's 'agreement' as hereinabove set forth and as set forth in the Bid Sheet. Should the Bidder fail to fulfill such agreements, the Bid Bond shall become payable to the Town, as liquidated damages, otherwise, the Bid Bond shall become null and void.

#### **1.20 ITEMS.**

The work to be done under this contract has been divided into parts or items to enable each Bidder to bid on the different portions of the work in accordance with their estimate of their cost and so that the actual quantity of work executed under each item may be paid for at the price bid for that particular item.

#### **1.21 MINIMUM PREVAILING WAGES.**

The minimum prevailing wages paid on this project, when applicable, shall be as shown on the State of Connecticut Labor Department, Wage and Workplace Standards Division, 'Schedule of Prevailing Rates' a copy of which is attached to these specifications or, if not attached, shall be issued by addendum. See Section 4.48 of these specifications.

## **1.22 CONSTRUCTION SAFETY AND HEALTH COURSE.**

Pursuant to Connecticut General Statutes Section 31-53b the Bidder awarded a Contract for new construction of \$1,000,000 or more or rehabilitation, repair or the like of \$100,000 or more must furnish proof with the weekly certified payroll for the first week each employee begins work that any person performing the work of a mechanic, laborer or worker has completed a course of at least ten (10) hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration in accordance with regulations adopted by the State of Connecticut Labor Commissioner. See Section 4.48 of these specifications.

## **1.23 NON-CONNECTICUT CONTRACTORS.**

Pursuant to Connecticut General Statutes § 12-430(7), as amended by Connecticut Public Act #11-61, Sec.66, a nonresident contractor shall comply with the State of Connecticut's bonding requirements.

## **1.24 SUPPLIERS AND SUBCONTRACTORS.**

The Town would appreciate it if all bidders would include Greenwich suppliers and subcontractors in solicitation of prices for the proposed work.

## **1.25 PROHIBITION OF WASTES GENERATED FROM OIL AND GAS DRILLING AND EXTRACTION ACTIVITIES.**

Pursuant to Town of Greenwich, Chapter 15: Utilities, Town Code, Ordinance Prohibiting Waste Associated with Natural Gas and Oil Extraction, the Town prohibits, the application of natural gas waste or oil waste, whether or not such waste has received Beneficial Use Determination or other approval for use from DEEP (Department of Energy & Environmental Protection) or any other regulatory body, on any road or real property located within the Town for any purpose; the introduction of natural gas waste or oil waste into any wastewater treatment facility within or operated by the Town; the introduction of natural gas waste or oil waste into any solid waste management facility within or operated by the Town; the storage, disposal, sale, acquisition, transfer, handling, treatment and/or processing of waste from natural gas or oil extraction.

## SECTION 2

### BID

To the Town of Greenwich, Connecticut, herein called the Town, acting by and through its Department of Public Works **Maintenance Dredging of Sediment Forebays at Binney Park Pond, Town Project No. 19-22**, in Greenwich, Connecticut.

The undersigned, as Bidder, herein referred to as singular and masculine, declares as follows

- (1) The only parties interested in this bid as principals are named herein
- (2) This bid is made without collusion with any other person, firm or corporation
- (3) No officer, agent or employee of the owner is directly or indirectly interested in this bid

(4) They have carefully examined the site of the proposed work and fully informed and satisfied themselves as to the conditions there existing, the character and requirements of the proposed work, the difficulties attendant upon its execution and the accuracy of all estimated quantities stated in this bid, and they have carefully read and examined the drawings, the annexed proposed 'agreement' and the specifications and other contract documents therein referred to and knows and understands the terms and provisions thereof

(5) And they understand that the quantities of work tabulated in this bid or indicated on the drawings or in the specifications or other contract documents are only approximate and are subject to increase or decrease as deemed necessary by the Engineer

And they agree that, if this bid is accepted they will contract with the Town, as provided in the copy of the contract documents deposited in the office of the Engineering Division of the Department of Public Works, this bid form being part of said contract documents and that they will perform all the work and furnish all the materials and equipment, and provide all labor, services, plant, machinery, apparatus, tools, appliances, supplies and all within the time therein prescribed and according to the requirements of the contract documents and of the Engineer as therein set forth, and that they will take in full payment therefore the Lump-Sum or unit price applicable to each item of the work as stated in the following Bid Sheets.

Bidders must bid on each item. All entries in the entire bid must be made clearly and in ink. Prices bid must be written in both words and figures. Bidders should insert extended item prices obtained from quantities and unit prices and insert the total price and applicable addenda numbers where indicated.

Materials and supplies purchased for this Contract which are to be physically incorporated in and become a permanent installation in the work will be exempt from the Connecticut Sales and Use Tax under the Connecticut Education, Welfare and Public Health Tax Act. Each bidder shall take this exemption into account in calculating their Bid for the Work.

The undersigned understands that information relative to subsurface and other conditions, natural phenomena, existing pipes and other structures (surface and/or subsurface) has been furnished only for their information and convenience without any warranty or guarantee, express or implied, that the subsurface and/or other conditions, natural phenomena, existing pipes and other structures (surface and/or subsurface) actually encountered will be the same as those shown on the drawings or in any of the other contract documents and they agree that they shall not use or be entitled to use any such information made available to them through the contract documents or otherwise or obtained by them in their own examination of the site, as a basis of or ground for any claim against the Town, arising from or by reason of any variance which may exist between the aforesaid information made available to or acquired by them and the subsurface and/or other conditions, natural phenomena, existing pipes and other structures (surface and/or subsurface) actually encountered during the construction work, and they have made due allowance therefore in this bid.

**BIDDING SHEETS  
FOR  
MAINTENANCE DREDGING OF SEDIMENT FOREBAYS  
AT BINNEY PARK  
GREENWICH, CONNECTICUT  
TOWN PROJECT NO. 19-22**

TO: Amy J. Siebert, P.E.  
Commissioner of Public Works  
Town Hall  
101 Field Point Road  
Greenwich, CT 06836-2540

Date: \_\_\_\_\_, 2019  
From: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Telephone: \_\_\_\_\_

Dear Madam:

\_\_\_\_\_ shall install and/or furnish all materials and perform all work as required by and as called for by the drawings and specifications for Town Project No. 19-22 Maintenance Dredging of Sediment Forebays at Binney Park in Greenwich, Connecticut.

The quantities on the Bidding Sheets are estimated and may not reflect the actual quantities that the Town may order. The total bid prices will be calculated by multiplying the estimated quantities by the unit bid prices. The Town reserves the right to increase, decrease or direct the awarded contractor to proceed with the Base Bid or Alternative 1, depending on the most recent sediment laboratory results.

All bid pricing shall remain firm fixed for the duration of the initial one-year contract term. Pricing may be adjusted at the beginning of each option year and shall then remain firm fixed for the duration of each option year.

**Base Bid**

Item No.	Estimated Quantity	Brief Description of Item and Bid in Writing and Figures	Total in Figures
02482BB	500	C.Y. Dredging and Dewatering of Dredged Material (Nonhazardous), per Cubic Yard of _____ Dollars and _____ Cents (\$ _____)	\$ _____
02901BB	1	L.S. Miscellaneous Work and Cleanup, per Lump Sum of _____ Dollars and _____ Cents (\$ _____)	\$ _____
<b>TOTAL BASE BID PRICE</b>			<b>\$ _____</b>

**BIDDING SHEETS  
FOR  
TOWN PROJECT NO. 19-22**

**Alternative 1**

Item No.	Estimated Quantity		Brief Description of Item and Bid in Writing and Figures	Total in Figures
02482Alt1	500	C.Y.	Dredging and Dewatering of Dredged Material (Hazardous), per Cubic Yard of _____ Dollars and _____ Cents (\$ _____)	\$ _____
02901Alt1	1	L.S.	Miscellaneous Work and Cleanup, per Lump Sum of _____ Dollars and _____ Cents (\$ _____)	\$ _____

**TOTAL ALTERNATIVE 1 BID PRICE \$ \_\_\_\_\_**

**PRICING IN OPTIONAL YEARS OF CONTRACT**

Pricing shall remain fixed for each year of this contract. The bidder shall indicate below if pricing may either increase or decrease prior to the start of the optional years of the contract:

\_\_\_\_\_ **Yes, pricing may increase or decrease prior to the start of the option years.**

\_\_\_\_\_ **No, Pricing will not increase or decrease at the start of the option years.**

**If pricing may increase or decrease at the start of the option years, the bidder shall indicate below the maximum percentage or the potential increases or decreases for each optional year. The maximum allowable increase is 2% per year.**

Option Year	Maximum Labor Price Increase (if any)	Maximum Labor Price Decrease (if any)
1	%	%
2	%	%
3	%	%
4	%	%

**BIDDING SHEETS  
FOR  
TOWN PROJECT NO. 19-22**

For informal comparison only and not to be considered as part of this bid, the average total price as described in the Information for Bidders, Article headed "Comparison of Bids" for Project No. 19-22 is:

\_\_\_\_\_ Dollars and  
(written words)

\_\_\_\_\_ Cents (\$\_\_\_\_\_).  
(written words)

The Bid(s) include Addenda Number .....\_\_\_\_\_

Notes:

1. Include "Time Charge" in the bid prices (see Article 1.9 of "Information for Bidders").
2. For "Minimum Wage Schedule", see Section 9 of these Contract Documents.
3. The basis of award of this Contract will be made to the lowest responsible bidder based on the average total of the Base Bid and Alternative 1 to determine each bidders total bid price. The Owner shall determine annually whether the Base Bid or Alternative 1 shall be awarded, based on laboratory testing, prior to Notice to Proceed.

The undersigned agrees that for extra work, if any, performed in accordance with the terms and provisions of the annexed form of Agreement, they will accept compensation as stipulated therein in full payment for such Extra Work.

If this bid is accepted by the Town, the undersigned agrees to complete the entire work provided to be done under the contract within the time stipulated in the Information for Bidders, Article 1.9 headed "Time Limits and Time Charge."

As provided in the Information for Bidders, the bidder hereby agrees that they will not withdraw this bid within **sixty (60)** consecutive calendar days after the actual date of the opening of bids, and that, if the Town shall accept this bid, the bidder will duly execute and acknowledge the Agreement and furnish, duly executed and acknowledged, the required Contract Bonds and Insurance Certificates within ten (10) days after date of the award of the contract.

Should the bidder fail to fulfill any of their agreements as hereinabove set forth, the Town shall have the right to retain as liquidated damages, the amount of the bid check which shall become the Town's property. If a Bid Bond was given, it is agreed that the amount thereof shall be paid as liquidated damages to the Town by surety.

The undersigned has read and agrees to provide the types and required insurance coverage limits, as defined by Article 4.6 "Insurance". The submitted bid includes the cost relating to the insurance requirements for the contract work.

The bidder, by submittal of this bid, agrees with the Town that the amount of the bid security deposited with this bid fairly and reasonably represents the amount of damages the Town will suffer due to the failure of the bidder to fulfill their agreements as above provided.

\_\_\_\_\_  
(Name of Bidder)

\_\_\_\_\_  
(Signature and Title of Authorized Representative)

\_\_\_\_\_  
(Business Address)

\_\_\_\_\_  
(Type or Print Name of Authorized Representative)

\_\_\_\_\_  
(City and State)

\_\_\_\_\_  
(Affix Corporate Seal)

\_\_\_\_\_  
(Federal Tax Identification Number)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Telephone Number)

\_\_\_\_\_  
(Fax Number)

\_\_\_\_\_  
(E-Mail Address)

The Bidder is - a corporation incorporated in the State of \_\_\_\_\_  
 - A partnership - An Individual. (Bidder must add and delete as necessary to make the foregoing sentence read correctly.)

If the Bidder is a corporation, Affix corporate seal and give below the names of its President, Treasurer and General Manager. If a partnership, give full names and residential addresses of all general partners and if an individual, give residential address if different from business address.

The required names and addresses of all persons interested in the foregoing bid, as principals, are as follows

PRINCIPAL NAME & TITLE	ADDRESS

\_\_\_\_\_   
 Affix Corporate Seal

The Bidder is requested to list below five (5) references for similar work of equal size to that included in the proposed contract that they have done within the last three years which will enable the Town to judge their experience, skill and business standing. Please include project date, contact person and phone number.

COMPANY NAME	PROJECT DATE	CONTACT PERSON	PHONE NUMBER

(ADD SUPPLEMENTARY PAGE IF NECESSARY.)



**CERTIFICATE AS TO MINIMUM PREVAILING WAGES**

The undersigned, being duly sworn, deposed and says

1. That they are the \_\_\_\_\_ of the Contractor,  
(Title)

In the project hereinafter referred to, and is authorized to execute this certification on behalf of the Contractor,

2. In connection with **Maintenance Dredging of Sediment Forebays at Binney Park Pond, Town Project No. 19-22**, in Greenwich, Connecticut, it is hereby certified that the Contractor has read and understands the provisions of Section 4.48, Prevailing Wages, of these specifications and has included in their bid price the cost of compliance with their requirements.

3. This certification is made at the request of the Town of Greenwich for the purpose of inducing the Town to enter into a contract for the project work and knowing that the Town will rely upon the truth of the representation herein made.

Subscribed and sworn to

Before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_.

\_\_\_\_\_  
(SIGNATURE OF PERSON  
AUTHORIZED TO SIGN)

\_\_\_\_\_  
(TYPE OR PRINT NAME OF PERSON  
AUTHORIZED TO SIGN)

\_\_\_\_\_  
NOTARY PUBLIC

**Vendor Information & Signatory Form**  
**For all Contracts Equal to or Greater than \$250,000**

Vendor Name: \_\_\_\_\_

Primary Business Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_ Web Site: \_\_\_\_\_

**Secondary Business Location(s) if any:**

Business Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_ Web Site: \_\_\_\_\_

Business Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_ Web Site: \_\_\_\_\_

Type of Entity: Corporation: \_\_\_\_\_ Type of Corp.: \_\_\_\_\_ LLC: \_\_\_\_\_  
Partnership: \_\_\_\_\_ Joint Venture: \_\_\_\_\_ Sole Proprietorship: \_\_\_\_\_  
Other (please describe): \_\_\_\_\_

1. CT State Business License Number (if applicable): \_\_\_\_\_  
State Agency issuing license: \_\_\_\_\_
2. Number of years in business under entity name: \_\_\_\_\_
3. Provide below the full names of entity's owners (> 20% ownership), officers and managers. (use a separate sheet of paper if necessary)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. Has the entity changed its name within the past 3 years?  
a. YES  NO
5. If yes, provide former name(s): \_\_\_\_\_
6. Have there been any recent (within the last three years) changes in control/ownership, > 20% of the entity?  
a. YES  NO
7. If yes, explain. (use a separate sheet of paper if necessary)
8. Have officers or principals of the entity ever had any license suspended or revoked (other than Driver's License) for any reason?  
a. YES  NO
9. If yes, please explain. (use a separate sheet of paper if necessary)
10. Is the entity or has the entity, or any of its principals, officers, members or owners ever been a party to or involved in any US civil, criminal, antitrust violation, regulatory action, settlements, lawsuit or other legal action involving the Town of Greenwich or any other municipality in the States of CT or NY related to the vendor's business activities?  
a. YES  NO
11. If the answer to question number 10 is 'yes', please explain below. (use a separate sheet of paper if necessary.)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

12. Has any principal, officer, member or owner of the undersigned entity within the last three years been a principal, officer, member or owner of any entity that has filed for bankruptcy or been voluntarily or involuntarily dissolved?  
 a. YES  NO   
 b.

13. Name and title of person completing / responsible for submission of this bid or contract and the responses to this questionnaire: \_\_\_\_\_

14. Telephone number and email address for person identified in questions #13:  
 Phone No.: \_\_\_\_\_ Email Address: \_\_\_\_\_

15. If requested by the Town during the solicitation process, the vendor hereby agrees to provide the Town with copies of the most recent three (3) years of Loss History Reports for all lines of insurance coverage from its insurance carrier (as named herein) for all contracts and RFPs/RFQs/RFBs equal to or in excess of \$250,000.  
 a. YES  NO

Name of Insurance Carrier: \_\_\_\_\_

The loss history reports shall include claims data for all fifty US states; detail of each claim for the past three years for AL, GL, WC; and a summary page with the annual total claim amounts for the past three years for AL, GL, and WC.

16. Have any claims been made against the entity's performance bond? YES  NO

17. Please indicate whether your entity is currently debarred from doing business in the State of Connecticut or any other state.  
 a. YES  List of States: \_\_\_\_\_ NO

18. Please indicate whether your entity has ever been convicted of OSHA violations.  
 a. YES  (Attach separate page(s) with explanation.) NO

With regard to item No.17 and 18, the vendor understands and agrees that it has a continuing obligation to inform the Town of any OSHA violation and if it is debarred from doing business in the State of Connecticut or any other State after it has submitted this Vendor Information Form. The Vendor understands and agrees that its obligation to keep the Town informed of any change in status continues up to and including the time of award of the contract and if vendor is awarded the contract, its obligation shall continue during the entire duration of the contract.

19. Provide below an inventory list of all major equipment owned by the entity that would be used on this project:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

20. Provide a complete list of the entity's current public customers located in the State of Connecticut:

CUSTOMER	ADDRESS	CONTRACT ANNUAL AMOUNT

**FAILURE TO COMPLETE THIS FORM OR FAILURE TO PROVIDE THE NECESSARY BACK UP INFORMATION FOR ANY QUESTION ON THIS FORM MAY RESULT IN DISQUALIFICATION.**

Signature \_\_\_\_\_ Date: \_\_\_\_\_

Print Name and Title \_\_\_\_\_

**TOWN OF GREENWICH CONNECTICUT**

**CERTIFICATION FOR BIDS, RFQ's, RFB's, RFP's**

**PROHIBITION OF WASTES GENERATED FROM OIL & GAS DRILLING AND  
EXTRACTION ACTIVITIES**

Pursuant to Town of Greenwich, Chapter 15: Utilities, Town Code, Ordinance Prohibiting Waste Associated with Natural Gas and Oil Extraction:

“We, \_\_\_\_\_

hereby submit a bid for materials, equipment and/or labor for the Town of Greenwich. The bid is for bid documents titled

\_\_\_\_\_

We hereby represent, warrant and agree that no natural gas waste or oil waste will be used by the undersigned bidder or any contractor, sub-contractor, agent or vendor in connection with the bid; nor will the undersigned bidder or any contractor, sub-contractor, agent or vendor thereof apply any natural gas waste or oil waste to any road or real property within the Town of Greenwich as a result of the submittal of this bid if selected.”

\_\_\_\_\_

Date

\_\_\_\_\_

Signed

\_\_\_\_\_

Print Name

\_\_\_\_\_

Company

\_\_\_\_\_

Address

## **BID BOND**

### **INSTRUCTIONS IN USE OF BOND FORM**

1. The Bid Bond form given on the following pages shall be used.
2. The surety on the Bond may be any corporation authorized to act as surety in the State of Connecticut.
3. The full name and business or residence address of each individual party to the Bond shall be inserted in the space provided therefore, and each such party shall sign the Bond with their usual signature on the line opposite the scroll seal.
4. If the principals are partners, their individual names appear in the space provided therefore, with the recital that they are partners composing a firm, naming it, and the Bond shall be executed by a general partner who has been authorized to act on behalf of the partnership.
5. If the principal or surety is a corporation, the name of the state in which incorporated shall be inserted in the space provided therefore and said instrument shall be executed and attested under the corporate seal as indicated in the form. If the corporation has no corporate seal, the fact shall be stated, in which case a scroll of adhesive seal shall appear following the corporate name.
6. The official character and authority of the person or persons executing the Bond for a corporation shall be certified by a proper officer, in lieu of such certificate, there may be attached to the Bond, copies of so much of the records of the corporation as will show the official character and authority of the officers signing, duly certified by a proper office, under the corporate seal, to be true copies.
7. If the principal or surety is a Limited Liability Company (LLC), the names of the members shall appear in the spaces provided therefore, with the recital that they are members of an LLC, naming it, and the Bond shall be executed by a managing member who has been authorized to act on behalf of the LLC. The official character and authority of the person or persons executing the Bond for an LLC shall be certified by a proper managing member. In lieu of such certificate, there may be attached to the Bond, copies of so much of the records of the LLC as will show the official character and authority of the members signing, duly certified by a proper member to be true copies.
8. The date of this Bond must not be prior to the date of the instrument in connection with which it is given.

**FORM OF BID BOND**

**\*\*\* BID BOND \*\*\***

**TOWN OF GREENWICH**

\_\_\_\_\_ Date Bond Executed

\_\_\_\_\_  
Principals

\_\_\_\_\_  
Surety

\_\_\_\_\_ Penal Sum of Bond (Expressed in Words and Figures)

\_\_\_\_\_ Date of Bid

Know all persons by these presents, that we, the principals and surety above named, are held and firmly bound unto the Town of Greenwich, Connecticut, in the penal sum of the amount stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents. The condition of this obligation is such that whereas the principal has submitted the accompanying Bid, dated as shown above, for:

\_\_\_\_\_  
Project Name

Now, therefore, if the principal shall not withdraw said Bid within the period specified therein after the opening of the same, or if no period be specified, within sixty (60) days after the said opening, and shall within the period specified therefore, or, if no period be specified, within ten (10) days after the prescribed forms are presented to them for signature, execute such further contractual documents, if any, as may be required by the terms of the Bid as accepted, and give bonds with good and sufficient surety or sureties as may be required, for the faithful performance and proper fulfillment of the resulting contract, and for the protection of all persons supplying labor and materials in the prosecution of the work provided for in such contract or in the event of the withdrawal of said Bid within the period specified, or the failure to enter into such contract and give such bonds within the time specified, if the principal shall pay the Town of Greenwich, Connecticut, the difference between the amount specified in said Bid and the amount for which said Town may procure the required work, supplies and services, if the latter amount be in excess of the former, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

In witness whereof, the above-bounden parties have executed this instrument under their several seals on the date indicated above. The name and corporate seal (if applicable) of each corporate party being hereto affixed.

\_\_\_\_\_  
Name of Partnership

\_\_\_\_\_  
Business Address (SEAL)

\_\_\_\_\_  
Partner - (Hereunto Duly Authorized)

IN THE PRESENCE OF

WITNESS  
1. \_\_\_\_\_ AS TO  
2. \_\_\_\_\_ AS TO  
3. \_\_\_\_\_ AS TO  
4. \_\_\_\_\_ AS TO

INDIVIDUAL PRINCIPAL  
\_\_\_\_\_  
(SEAL)  
\_\_\_\_\_  
(SEAL)  
\_\_\_\_\_  
(SEAL)  
\_\_\_\_\_  
(SEAL)

\*\*\*\*\*

ATTEST

\_\_\_\_\_

\*  
\*  
\* \_\_\_\_\_  
\* CORPORATE PRINCIPAL  
\*  
\* \_\_\_\_\_  
\* BUSINESS ADDRESS  
\*  
\* AFFIX  
\* CORPORATION  
\* SEAL  
\*  
\* \_\_\_\_\_  
\* BY-(HEREUNTO DULY AUTHORIZED)  
\*  
\*  
\* \_\_\_\_\_  
\* TITLE

\*\*\*\*\*

ATTEST

\_\_\_\_\_

\*  
\*  
\* \_\_\_\_\_  
\* CORPORATE SURETY  
\*  
\* \_\_\_\_\_  
\* BUSINESS ADDRESS  
\*  
\* AFFIX  
\* CORPORATION  
\* SEAL  
\*  
\* \_\_\_\_\_  
\* BY-(HEREUNTO DULY AUTHORIZED)  
\*  
\*  
\* \_\_\_\_\_  
\* TITLE

\*\*\*\*\*

**CERTIFICATE AS TO CORPORATE PRINCIPAL**

I, \_\_\_\_\_, certify that I am the \_\_\_\_\_  
of the Corporation/Limited Liability Company named as Principal in the within Bond, that \_\_\_\_\_  
\_\_\_\_\_, who signed the said Bond on behalf of  
the Principal, was then \_\_\_\_\_ of \_\_\_\_\_  
said Corporation/Limited Liability Company, that I know their signature and their signature thereto is  
genuine, and that said Bond was duly signed, sealed (if a Corporation) and attested for and in behalf of  
said Corporation/Limited Liability Company by authority of its governing body.

\_\_\_\_\_  
(CORPORATE SEAL)

\_\_\_\_\_  
(CORPORATE SECRETARY)



**SECTION 4**  
**AGREEMENT**

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This agreement, herein referred to as the "Agreement", executed this \_\_\_\_\_ day of \_\_\_\_\_ in the year Two Thousand and \_\_\_\_\_, by and between the Town of Greenwich, Connecticut, acting \_\_\_\_\_ Through its Department of Public Works, duly authorized therefore, which acts, herein solely for said Town and without personal liability to itself, Party of the first part, and \_\_\_\_\_ Party of the second part.

Witnesseth, that the parties to these presents, each in consideration of the undertakings, promises and agreements on the part of the other herein contained, have undertaken, promised and agreed and do hereby undertake, promise and agree, the party of the first part for itself, its successors and assigns, and the party of the second part for themselves and their heirs, executors, administrators, successors and assigns, as follows

#### 4.1 DEFINITIONS.

Wherever the words hereinafter defined or pronouns used in their stead occur in the contract documents, they shall have the following meaning

The word 'Owner' or 'Town' shall mean the party of the first part above designated.

The word 'Contractor' shall mean the party of the second part above designated.

The word 'State' shall mean the State of Connecticut including its Department of Transportation and any office, department, board, council, commission, institution or other entity of the State.

The word 'Architect' and/or the word 'Engineer' shall mean that person or firm duly appointed by the Town to undertake the duties and powers herein assigned to the Engineer, acting either directly or through duly authorized representatives.

The word 'Specifications' when used herein shall be deemed to refer to the General Conditions, Technical and Materials Specifications and Special Conditions, if any.

The words 'Herein', 'Hereinafter', 'Hereunder' and words of like import, shall be deemed to refer to the contract documents.

The word 'Project' means certain improvements to be made to the **Maintenance Dredging of Sediment Forebays at Binney Park Pond, Town Project No. 19-22**, which include, but are not limited to, **the removal and disposal offsite of approximately 500 cubic yards of sediment annually by hydraulic dredging in two sediment forebays within the upper pond of the Binney Park Pond.**

#### 4.2 THE CONTRACT DOCUMENTS.

The 'Agreement', the 'Information for Bidders', the Contractor's 'Bid' as accepted by the owner, the 'Special Conditions', if any, the 'General, Technical and Materials specifications', the 'Drawings' and all addenda and amendments to any of the foregoing, collectively constitute the contract documents, and are sometimes herein referred to as the "Contract".

The contract documents are complementary, and what is called for by anyone shall be as binding as if called for by all. In the event of any conflict or inconsistency between the provisions of the 'Special Conditions', if any, and the provisions of any of the other contract documents, the provisions of the "Special Conditions", if any shall prevail. In the event of conflict or inconsistency between the provisions of the 'Agreement' and the provisions of the contract documents other than the 'special Conditions', if any, the provisions of the 'agreement' shall prevail.

### **4.3 OBLIGATIONS AND LIABILITY OF CONTRACTOR.**

The Contractor shall do all the work and perform and furnish all the labor, services, materials, equipment, plant, machinery, apparatus, appliances, tools, supplies and all other things (except as otherwise expressly provided herein) necessary and as herein specified for the proper performance and completion of the work in the manner and within the time hereinafter specified, in strict accordance with the drawings, specifications and other contract documents, in conformity with the directions and to the satisfaction of the Engineer, and at the prices herein agreed upon therefore.

All parts of the work and all fixtures, equipment, apparatus and other items indicated on the drawings and not mentioned in the specifications, or vice versa, and all work and material usual and necessary to make the work complete in all its parts, including all incidental work necessary to make it complete and satisfactory and ready for use and operation, whether or not they are indicated on the drawings or mentioned in the specifications, shall be furnished and executed the same as if they were called for both by the drawings and by the specifications.

The Contractor shall coordinate their operations with those of any other Contractors who may be employed on other work of the Town, shall avoid interference therewith, and shall cooperate in the arrangements for storage of materials and equipment.

The Contractor shall notify the Fire and Police Departments prior to any construction which is expected to block off vehicular or pedestrian traffic.

The Contractor shall conduct their work so as to interfere as little as possible with private business and public travel. Wherever and whenever necessary or required, they shall maintain fences, furnish watchmen, maintain lights and take such other precautions as may be necessary to protect life and property and at their own expenses unless specifically provided for otherwise herein.

The Contractor shall have complete responsibility for the work and the protection thereof and for preventing injuries to persons and damage to the work and property and utilities on or about the work, until final completion and acceptance thereof. They shall in no way be relieved of their responsibility by any right of the Engineer to give permission or directions relating to any part of the work, by any such permission or directions given, or by failure of the Engineer to give such permission or directions. The Contractor shall bear all costs, expenses, losses and damages on account of the quantity or character of the work or the nature of the land (including but not limited to subsurface conditions) in or under or on which the work is done being different from that indicated or shown in the contract documents or from what was estimated or expected, or on account of the weather, elements, or other causes. The Contractor shall indemnify and save harmless the Town and the Engineer and their officers, agents, servants and employees, from and against any and all claims, demands, suits, proceedings, liabilities, judgments, awards, losses, damages, costs and expenses, including attorneys' fees, on account of bodily injury, sickness, disease, death or other damages sustained by any person or persons or injury or damage to or destruction of any property, directly or indirectly arising out of, relating to or in connection with the work, whether or not due or claimed to be due in whole or in part to the active, passive or concurrent negligence or fault of the Contractor, their officers, agents, servants or employees, any of their subcontractors, the Town, the Engineer or any of their respective officers, agents, servants, or employees and/or any other person or persons, and whether or not such claims, demands, suits or proceedings are just, unjust, groundless, false or fraudulent, and the Contractor shall and does hereby assume and agrees to pay for (or, in the case of professional liability matters indemnify for,) the defense of all such claims, demands, suits and proceedings, provided, however, that the Contractor shall not be required to indemnify the Town, the Engineer, their officers, agents, servants or employees, against any such damages, occasioned solely by defects in maps, plans, drawings, designs, or specifications prepared, acquired or used by the Engineer and/or solely by the negligence or fault of the Engineer, and provided further, that the Contractor shall not be required to indemnify the Town, their officers, agents, servants, or employees, against such damages occasioned solely by acts or omissions of the Town in connection with the work.

The Contractor shall conduct their operations so as not to damage existing structures or work installed either by them or by other Contractors. In case of any such damage resulting from their operations, they shall repair and make good as new, the damaged portions at their own expense with the consent of the damaged party. In the event that consent is not given, the Contractor shall continue to be liable for the damages caused.

The Contractor shall be as fully responsible to the Town for the acts and omissions of their subcontractors, their officers, agents, servants and employees as they are for their own acts and omissions and those of their own officers, agents, servants and employees.

Should the Contractor sustain any loss, damage or delay through any act or omission of any other Contractor or any subcontractor of any such other contractor or any material supplier, the Contractor shall have no claim against the Town therefore, other than for an extension of time, but shall have recourse solely to such other Contractor, subcontractor or material supplier.

If any other Contractor or any subcontractor of any such other Contractor shall suffer or claim to have suffered loss, damage or delay by reason of the acts or omissions of the Contractor or of any of their subcontractors, the Contractor agrees to assume the defense against any such claim and to reimburse such other Contractor or subcontractor for such loss or damage. The Contractor agrees to and does hereby indemnify and save harmless the Town from and against any and all claims by such other Contractor or subcontractors, alleging such loss, damage or delay and from and against any and all claims, demands, suits, proceedings, liabilities judgments, awards, losses, damages, costs and expenses including attorneys' fees arising out of, relating to or resulting from such claims.

The Contractor shall promptly pay all federal, state and local taxes which may be assessed against them in connection with the work or their operations under the agreement and/or the other contract documents, including, but not limited to, taxes attributable to the purchase of material and equipment, to the performance of services and the employment of persons in the prosecution of the work.

#### **4.4 AUTHORITY OF THE ENGINEER.**

The Engineer shall be the sole judge of the intent and meaning of the drawings, special conditions, if any, and technical and material specifications and their decisions thereon and their interpretation thereof shall be final, conclusive and binding on all parties.

The Engineer shall be the Town's representative during the life of the contract and they shall observe the work in progress on behalf of the Town. They shall have authority (1) to act on behalf of the Town to the extent expressly provided in the contract or otherwise in writing. (2) to stop the work whenever such stoppage may be necessary, in their sole discretion, to prevent improper execution of the work or otherwise to protect the interests of the Town. (3) to approve and direct the sequence of execution and general conduct of the work and to direct that changes be made in such sequence where, in their sole discretion, public necessity or welfare, the interest of the Town or the progress of the work shall require. Such approval and/or direction shall, however, in no way relieve or diminish the responsibility of the Contractor for or in the conduct or the work. (4) to determine the amount, quality, acceptability and fitness of all work, materials and equipment required by the contract. (5) to decide all questions which arise in relation to the work, the execution thereof, and the fulfillment of the contract.

The Contractor shall proceed without delay to perform the work as directed, instructed, determined or decided by the Engineer and shall comply promptly with such directions, instructions, determinations or decisions. If the Contractor has any objections thereto, they may require that any such direction, instruction, determination or decision be put in writing and within ten (10) days after receipt of any such writing they may file a written protest with the Town stating clearly and in detail their objections, the reasons therefore and the nature and amount of additional compensation, if any, to which they claim they will be entitled thereby. A copy of such protest shall be filed with the Town. Unless the Contractor files such written

protest with the Town and Engineer within such ten (10) day period, they shall be deemed to have waived all grounds for protest of such direction, instructions, determination or decision and all claims for additional compensation or damages occasioned thereby, and shall further be deemed to have accepted such direction, instruction, determination or decision as being fair, reasonable and finally determinative of their obligations and rights under the contract.

The Engineer's decision on any matter mentioned above shall be final and conclusive when made in good faith and in the exercise of their best judgment and shall be accepted by the Contractor and the owner in all cases.

#### **4.5 SUPERVISION OF WORK.**

The Contractor shall give the work the constant attention necessary to ensure the expeditious and orderly progress thereof and shall cooperate with the Engineer in every possible way.

At all times, the Contractor shall have as their agent on the work a competent superintendent capable of reading and thoroughly understanding the drawings and specifications, with full authority to execute the directions of the Engineer without delay and to supply promptly such labor, services, materials, equipment, plant, apparatus, appliances, tools, supplies and other items as may be required. Such superintendent shall not be removed from the work without the prior written consent of the Engineer. If, in the opinion of the Engineer, the superintendent or any successor proves incompetent, the Contractor shall replace them with another person approved by the Engineer, such approval, however, shall in no way relieve or diminish the Contractor's responsibility for the new superintendent.

Whenever the Contractor or their agent or superintendent is not present on any part of the work where it may be necessary to give directions or instructions with respect to such work, such directions or instructions may be given by the Engineer to and shall be received and obeyed by the foreman or any other person in charge of the particular work involved.

#### **4.6 INSURANCE.**

##### Insurance Requirements:

Before starting and until final completion and acceptance of the work called for in the Contract and expiration of the guarantee period provided for in the Contract, the Contractor shall procure and maintain insurance of the types and amounts checked in paragraphs A through F, below.

The Contractor shall require each of its subcontractors to procure and maintain, until final completion, acceptance and guarantee of each subcontractor's work, the same insurance of the types and amounts as checked in paragraphs A through F below.

##### Certification and Cancellation:

The Contractor shall furnish, prior to the start of work called for in the Contract, three (3) certificates to the Town of each insurance policy or policies with the Code Number of the policy for each, a representation that policy cannot be canceled or amended by the insurer in less than sixty (60) days after the Town has received written notice of cancellation or amendment by certified or registered mail, also a representation that the insurer will notify the Town immediately of any lapse in coverage cancellation or restrictive amendment and also attach a true copy of the broker or agent's license to do business in Connecticut. Such certificates shall be on the Town form attached hereto and shall contain an affirmative representation that the coverage afforded is as required herein.

The Contractor shall furnish prior to the start of work called for in the contract the Acord certificate of insurance form for insurance documentation purposes as well as an endorsement letter from their Agent/Broker.

The awarded vendor will be required to provide insurance coverage as specified on the **Insurance Requirements Sheet, enclosed herein**, of this Request for Bid. Upon award, the **Acord certificate of insurance form** must be completed by the vendor's insurance agent/broker and submitted to the Engineering Division. The Town of Greenwich must be added as an additional insured on the Acord form. The signing agent/broker must also certify in writing that the Town of Greenwich has been endorsed as an additional insured on the General Liability insurance policy. This letter shall be addressed to the Engineering Division and **must follow exactly the format of the 'Sample Agent/Broker Letter' enclosed herein**. The letter must be dated **on or after** the date stated on the Acord certificate of insurance. If the insurance coverage required is provided on more than one Acord certificate of insurance, then additional endorsement letters are also required. **The authorized representative who signs the Acord form must sign the letter as well.**

*The Town of Greenwich will not accept insurance coverage, other than Excess Liability coverage, from insurance providers that are surplus lines writers in Connecticut. All insurance companies providing coverage, other than excess liability coverage, must be licensed in the state of Connecticut. Please provide this information to your insurance agent/broker.*

Company name and address must conform on all documents including insurance documentation. The Contract number, project name and a brief description must be inserted in the "Description of Operations" section of the Acord form. **It must be confirmed on the Acord Form that the Town of Greenwich is endorsed as an additional insured by having the appropriate box checked off and stating such in the "Description of Operations" section. The "Description of Operations" section should also reference Contract No. (provided to the awarded vendor), Construction of the Maintenance Dredging of Sediment Forebays at Binney Park Pond, Town Project No. 19-22, in Greenwich, CT.**

The vendor **should submit with the bid** the signed, original "Insurance Procedure" form, **enclosed herein**, which states that the vendor agrees to provide the specified insurance coverage for this Bid at no additional charge above any insurance charge declared in the bid.

# TOWN OF GREENWICH

## INSURANCE PROCEDURE

### **PLEASE NOTE:**

**RETURN THIS COMPLETED FORM WITH YOUR BID/PROPOSAL. FAILURE TO DO SO MAY RESULT IN YOUR BID/PROPOSAL BEING REJECTED.**

Please take the insurance requirements of the Contract to your agent/broker immediately upon receipt of the bid documents to determine your existing coverage and any costs for new or additional coverage required for the work noted in this Request for Bid/Proposal. Any bids/proposals which contain exceptions to the insurance requirements may be considered nonresponsive and may be rejected.

#### **STATEMENT OF VENDOR:**

**I have read the insurance requirements for this work and have taken the documentation to my insurance agent/broker. The bid/proposal cost reflects any additional costs relating to insurance requirements for this work.**

**If I am awarded this contract, I or my insurance agent shall submit all of the required insurance documentation to the Town of Greenwich Engineering Division within ten (10) days after the date of the award of the contract.**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Contractor



## Insurance Requirement Sheet

**Insurance Requirements:** Before starting and until final completion and acceptance of the work called for in the Contract and expiration of the guarantee period provided for in the Contract, the Contractor and its subcontractors, if any, shall procure and maintain insurance of the types and amounts checked in paragraphs A through F below for all Contract operations.

- A. General Liability, with minimum coverages for combined bodily injury and property damage liability of \$2,000,000 general aggregate, \$1,000,000 per occurrence including:
  - 1. Commercial General Liability.
  - 2. Town as additional insured. Contractor's insurance must be primary and non-contributory.
  - 3. Owners and Contractors Protective Liability (separate policy in the name of the Town).
  
- B. Comprehensive Automobile Liability, with minimum coverages of \$1,000,000 combined single limit for bodily injury and property damage, including, where applicable, coverage for any vehicle, all owned vehicles, scheduled vehicles, hired vehicles, non-owned vehicles and garage liability.
  
- C. Excess Liability, with minimum coverage of \$5,000,000 in umbrella form, or such other form as approved by Town Department Head and Risk Management Director.
  
- D. Workers' Compensation and Employer's Liability, with minimum coverages as provided by Connecticut State Statutes.
  
- E. Professional Liability (for design and other professionals for Errors and Omissions), with minimum coverage of \$1,000,000. If the policy is on a claims-made basis, coverage shall be continually renewed or extended for three (3) years after work is completed under the Contract.
  
- F. Other (Builder's Risk, etc.):\_\_\_\_\_.
  
- G. **CERTIFICATE HOLDER: TOWN OF GREENWICH**  
**ATTN: ENGINEERING DIVISION (Also fill in on ACORD Certificate of Insurance)**  
**101 Field Point Road, Greenwich, CT 06830.**

The **Acord certificate of insurance form** must be executed by your insurance agent/broker and returned to this office. The most current Acord form should be used for insurance documentation purposes. Company name and address must conform on all documents including insurance documentation. It is required that the agent/broker note the individual insurance companies providing coverage, rather than the insurance group, on the Acord form. The Contract number (provided to the awarded Contractor), project name and a brief description must be inserted in the "Description of Operations" field. It must be confirmed on the Acord Form that the Town of Greenwich is endorsed as an additional insured by having the appropriate box checked off and stating such in the "Description of Operations" field. A letter from the awarded vendor's agent/broker certifying that the Town of Greenwich has been endorsed onto the general liability policy as an additional insured is also mandatory. This letter must follow exactly the format provided by the Purchasing Department and must be signed by the same individual authorized representative who signed the Acord form. If the insurance coverage required is provided on more than one Acord certificate of insurance, then additional agent/broker letters are also required. Contract development will begin upon receipt of complete, correct insurance documentation.

The Contractor shall be responsible for maintaining the above insurance coverages in force to secure all of the Contractor's obligations under the Contract with an insurance company or companies with an AM Best Rating of A:VII or better, licensed to write such insurance in Connecticut and acceptable to the Risk Manager, Town of Greenwich. For excess liability only, non-admitted insurers are acceptable, provided they are permitted to do business through Connecticut excess line brokers per listing on the current list of Licensed Insurance Companies, Approved Reinsurers, Surplus Lines Insurers and Risk Retention Groups issued by the State of Connecticut Insurance Department.

**SAMPLE  
AGENT/BROKER  
(LETTERHEAD)**

**(Date)**

Town of Greenwich  
Engineering Division  
101 Field Point Road  
Greenwich, CT 06830

Re: **(Name of the Insured)**  
Town of Greenwich Contract No. XXXX

To Whom It May Concern:

The undersigned hereby certifies as follows:

- (1) I am a duly licensed insurance agent under the laws of the State of **[insert state]** and an authorized representative of all companies affording coverage under the Acord form submitted herewith;
- (2) The Town of Greenwich has been endorsed as an additional insured under general liability policy no. **[insert policy number]**, issued by **[insert company affording coverage]** to **[name of insured]**;
- (3)] The general liability policy referenced in paragraph (2) above meets or exceeds the coverage in Commercial General Liability ISO form CG 00 01 10 01, including contractual liability;
- (4) The policies listed in the Acord form submitted to the Town of Greenwich in connection with the above referenced contract have been issued to the insured in the amounts stated and for the periods indicated in the Acord form; and
- (5) The Town of Greenwich shall be given thirty (30) days prior written notice of cancellation, lapse or restrictive amendment (except ten days' notice of nonpayment) of the policies listed in the Acord form.

Sincerely,

**(Signature)**

Authorized Representative for all companies listed in the Acord form

#### **4.7 PATENTS.**

The Contractor shall indemnify and save harmless the Town and all persons acting for or on behalf of the Town from all claims and liability of any nature or kind, and all damages, costs and expenses, including attorneys' fees, arising from or occasioned by an infringement or alleged infringement of any patent rights on any invention, process, materials, equipment, article, or apparatus, or any part hereof, furnished and installed by the Contractor, or arising from or occasioned by the use or manufacture thereof, including their use by the Town.

#### **4.8 COMPLIANCE WITH LAWS.**

The Contractor shall keep themselves fully informed of all existing and future Federal, State and local laws, ordinances, rules and regulations affecting those engaged or employed on the work, the materials and equipment used in the work or the conduct of the work, and of all orders, decrees and other requirements of bodies or tribunals having any jurisdiction or authority over the same. If any discrepancy or inconsistency is discovered in the drawings, specifications or other contract documents in relation to any such law, ordinance, rule, regulation, order decree or other requirement, the Contractor shall forthwith report the same to the Engineer in writing. The Contractor shall at all times observe and comply with and cause all their agents, servants, employees and subcontractors to observe and comply with all such existing and future laws, ordinances, rules regulations, orders, decrees, and other requirements, and they shall protect, indemnify and save harmless the Town, its officers, agents, servants, and employees, from and against any and all claims, demands, suits, proceedings, liabilities, judgments, penalties, losses, damages, costs and expenses, including attorneys' fees, arising from or based upon any violation or claimed violation of any such law, ordinance, rule, regulation, order, decree or other requirement, whether committed by the Contractor or any of their agents, servants, employees or subcontractors.

#### **4.9 PROVISIONS REQUIRED BY LAW DEEMED INSERTED.**

Each and every provision of law and clause required by law to be inserted in the contract shall be deemed to be inserted herein, and the contract shall be read and enforced as though they were included herein. If through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party, the contract shall forthwith be physically amended to make such insertion.

#### **4.10 PERMITS.**

The Contractor shall, at their own expense, take out and maintain all necessary permits from the State, Town, or other public authorities, shall give all notices required by law and shall post all bonds and pay all fees and charges incidental to the due and lawful prosecution of the work.

#### **4.11 NOT TO SUBLET OR ASSIGN.**

The Contractor shall constantly give their personal attention to the faithful prosecution of the work, shall keep the same under their personal control, shall not assign the contract or sublet the work or any part thereof without the previous written consent of the Town, and shall not assign any of the monies payable under the contract, or their claim thereto, unless by and with the like written consent of the Town and the surety on the contract bonds. Any assignment or subletting in violation hereof shall be void and unenforceable.

#### **4.12 TIME FOR COMMENCEMENT AND COMPLETION OF WORK.**

The Contractor shall commence with the work within **ten (10) days** after receipt of notice to proceed from the Town. The rate of progress shall be such that the work shall be performed and completed in accordance with the contract before the expiration of the time limit stipulated, if any, under article 1.9, 'time limits and time charge', which time is of the essence of the agreement.

#### **4.13 LIQUIDATED DAMAGES OR TIME CHARGE.**

Liquidated damages or time charge, if any, shall be as specified under article 1.9, 'time limits and time charge'.

#### **4.14 NIGHT AND SUNDAY WORK.**

No work shall be done at night or on Sunday except (1) usual protective work, such as pumping and the tending of lights and fires, (2) work done in case of emergency threatening injury to persons or property, or (3) if all of the conditions set forth in the next paragraph below are met.

No work other than that included in (1) and (2) above, shall be done at night except when (A), in the sole judgment of the Engineer, the work will be of advantage to the Town and can be performed satisfactorily at night, (B) the work will be done by a crew organized for regular and continuous night work, and (C) the Engineer has given written permission for such night work.

#### **4.15 EMPLOY COMPETENT INDIVIDUALS.**

The Contractor shall employ only competent individuals on the work and shall not employ individuals or means which may cause strikes, work stoppages or disturbance by workers employed by the Contractor, any subcontractor, the Town, the Engineer or any other Contractor. Whenever the Engineer notifies the Contractor in writing that in their opinion, any person on the work is incompetent, unfaithful, disorderly, or otherwise unsatisfactory or not employed in accordance with the provisions of the contract, such person shall be discharged from the work and shall not again be employed on it, except with the written consent of the Engineer.

#### **4.16 EMPLOY SUFFICIENT LABOR AND EQUIPMENT.**

If in the sole judgment of the Engineer, the Contractor is not employing sufficient labor, plant, equipment or other means to complete the work within the time specified, the Engineer may, after giving written notice, require the Contractor to employ such additional labor, plant, equipment and other means as the Engineer deems necessary to enable the work to progress properly.

#### **4.17 INTOXICATING LIQUORS.**

The Contractor shall not sell and shall neither permit nor suffer the introduction or use of intoxicating liquors upon or about the work.

#### **4.18 ACCESS TO WORK.**

The Town, the Engineer and their officers, agents, servants, and employees may at any and all times and for any and all purposes, enter upon the work and the site thereof and the premises used by the Contractor, and the Contractor shall at all times provide safe and proper facilities therefore.

#### **4.19 EXAMINATION OF WORK.**

The Engineer shall be furnished by the Contractor with every reasonable facility for examining and inspecting the work and for ascertaining that the work is being performed in accordance with the requirements and intent of the contract, even to the extent of requiring the uncovering or taking down portions of finished work by the Contractor. Should the work thus uncovered or taken down prove satisfactory, the cost of uncovering or taking down and the replacement thereof, shall be considered as extra work unless the original work was done in violation of the contract in point of time or in the absence of the Engineer or their inspector and without their written authorization, in which case said cost shall be borne by the Contractor. Should the work uncovered or taken down prove unsatisfactory, said cost shall likewise be borne by the Contractor.

#### **4.20 DEFECTIVE WORK.**

The inspection of the work shall not relieve the Contractor of any of their obligations to perform and complete the work as required by the contract. Defective work shall be corrected and unsuitable materials, equipment, apparatus and other items shall be replaced by the Contractor, notwithstanding that such work, materials, equipment, apparatus and other items may have been previously overlooked or accepted or estimated for payment. If the work or any part thereof shall be found defective at any time before the final acceptance of the work, the Contractor shall forthwith make good such defect in a manner satisfactory to the Engineer. If any material, equipment, apparatus or other items brought upon the site for use or incorporation in the work, or selected for the same, is condemned by the Engineer as unsuitable or not in conformity with the specifications or any of the other contract documents, the Contractor shall forthwith remove such materials, equipment, apparatus and other items from the site of the work and shall at their own cost and expense, make good and replace the same and any material furnished by the Town which shall be damaged or rendered defective by the handling or improper installation by the Contractor, their agents, servants, employees or subcontractors.

#### **4.21 PROTECTION AGAINST WATER AND STORM.**

The Contractor shall take all precautions necessary to prevent damage to the work by storms or by water entering the site of the work directly or through the ground. In case of damage by storm or water, the Contractor shall at their own cost and expense make such repairs or replacements or rebuild such parts of the work as the Engineer may require in order that the finished work may be completed as required by the Contractor.

The Engineer may suspend the performance of any work at any time when, in their judgment, the conditions are not suitable or the proper precautions are not being taken, whatever the weather may be, in any season. The Contractor agrees that they shall not have or assert any claim for or be entitled to any additional compensation or damages on account of any such suspension.

#### **4.22 MISTAKES OF CONTRACTOR.**

The Contractor shall promptly correct and make good any and all defects, damages, omissions, or mistakes for which they and/or their agents, servants, employees or subcontractors are responsible, and they shall pay to the Town all costs, expenses, losses and damages resulting there from or by reason thereof as determined by the Engineer.

#### **4.23 RIGHT TO MATERIALS.**

Nothing in the contract shall be constructed as vesting in the Contractor any right or property in the materials, equipment, apparatus and other items furnished after they have been installed or incorporated in or attached or affixed to the work or the site, but all such materials, equipment, apparatus and other items shall, upon being so installed, incorporated, attached or affixed, become the property of the Town.

#### **4.24 CHANGES.**

The Town, through the Engineer, may make changes in the work and in the drawings and specifications therefore by making alterations therein, additions thereto or omissions there from. All work resulting from such changes shall be performed and furnished under and pursuant to the terms and conditions of the contract. If such changes result in an increase or decrease in the work to be done hereunder, or increase or decrease the quantities thereof, adjustment in compensation shall be made therefore, at the unit prices stipulated in the contract for such work, except that if unit prices are not stipulated for such work, compensation for additional or increased work shall be made as provided hereinafter under the article titled 'extra work', and for eliminated or decreased work the Contractor shall allow the Town a reasonable credit as determined by the Engineer. Except in an emergency endangering life or property, no change shall be made unless in pursuance of a written order from the Engineer authorizing the change and no claim for additional compensation shall be valid unless the change is so ordered.

The Contractor agrees that they shall neither have nor assert any claim for or be entitled to any

additional compensation for damages or for loss of anticipated profits on work that is eliminated.

#### **4.25 EXTRA WORK.**

The Contractor shall perform any extra work (work in connection with the contract but not provided for herein) when and as ordered in writing by the Engineer, at the unit prices stipulated in the contract for such work, or, if none are so stipulated, either (A) at the price agreed upon before such work is commenced and named in the written order for such work, or (B) if the Engineer so elects, for the reasonable cost of such work, as determined by the Contractor and approved by the Engineer, plus a percentage of such cost, as set forth below. No extra work shall be paid for unless specifically ordered as such, in writing by the Engineer.

The cost of extra work done under (B) above, shall include the reasonable cost to the Contractor of materials installed and equipment used, common and skilled labor, and foremen and the fair rental of all machinery and equipment used on the extra work for the period of such use.

At the request of the Engineer, the Contractor shall furnish itemized statements of the cost of the extra work ordered as above, and give the Engineer access to all records, accounts, bills and vouchers and correspondence relating thereto.

The Contractor may include in the cost of extra work the amounts of additional premiums, if any, (other than premiums on bonds) paid on the required insurance on account of such extra work of social security or other direct assessments upon the Contractor's payroll by Federal or other properly authorized public agencies and of other approved assessments when such assessments are not normally included in payments made by the Contractor directly to their employees, but in fact are, and customarily recognized as, part of the cost of doing work.

The fair rental for all machinery and equipment shall be based upon the most recent edition of 'Compilation of Rental Rates for Construction Equipment', published by the Associated Equipment Distributors, or a similar publication approved by the Engineer. Rental for machinery and equipment shall be based upon an appropriate fraction of the approved monthly rate schedule. If said extra work requires the use of machinery or equipment not already on the site of the work, the cost of transportation, not exceeding a distance of 100 miles, of such machinery or equipment to and from the work shall be added to the fair monthly rental, provided however, that this shall not apply to machinery or equipment already required to be furnished under the terms of the contract.

The Contractor shall not include in the cost of extra work any cost or rental for small tools, buildings, or any portion of the time of the Contractor, their superintendent, or their office and engineering staff.

To the cost of extra work done by the Contractor's own forces under (B) above (determined as stated above), the Contractor shall add ten (10) percent to cover their overhead, use of capital, the premium on the bonds as assessed upon the amount of this extra work, and profit.

In the case of extra work done under (B) above, by a subcontractor, the subcontractor shall compute, as above, their cost for the extra work, to which they shall add ten (10) percent in the case of the Contractor, and the Contractor shall be allowed an additional ten (10) percent of the subcontractor's cost for the extra work to cover the costs of the Contractor's overhead, use of capital, the premium on the bonds as assessed upon the amount of this extra work, and profit. Said subcontractor's cost must be reasonable and approved by the Engineer.

If extra work is done under (B) above, the Contractor and/or subcontractor shall keep daily records of such extra work. The daily record shall include the names of persons employed; the nature of the work performed, and hours worked materials and equipment incorporated, and machinery or equipment used, if any, in the prosecution of such extra work. This daily record, to constitute verification that the work was done, must be signed both by the Contractor's authorized representative and by the Engineer. A separate daily record shall be submitted for each extra work order. Extension of time on account of extra work shall, when applicable, be provided for under Article 1.09, 'Time Limits and Time Charge'.

#### **4.26 CHANGES NOT TO AFFECT BONDS.**

It is distinctly agreed and understood that any changes made in the work or the drawings or specifications therefore (whether such changes increase or decrease the amount thereof or the time required for its performance) or any changes in the manner or time of payments made by the Town to the Contractor, or any other modifications of the contract, shall in no way annul, release, diminish or affect the liability of the surety on the contract bonds given by the Contractor, it being the intent hereof that notwithstanding such changes, the liability of the surety on said bonds continue and remain in full force and effect.

#### **4.27 CLAIMS FOR DAMAGES.**

If the Contractor makes claim for any damages alleged to have been sustained by breach of contract or otherwise, they shall, within ten (10) days after occurrence of the alleged breach or within ten (10) days after such damages are alleged to have been sustained, whichever date is the earlier, file with the Engineer a written, itemized statement in triplicate of the details of the alleged breach and the details and amount of the alleged damages. The Contractor agrees that unless such statement is made and filed as so required, their claim for damages shall be deemed waived, invalid and unenforceable and that they shall not be entitled to any compensation for any such alleged damages within ten (10) days after the timely filing of such statement, the Engineer shall file with the Town one copy of the statement and shall file with the Town and the Contractor their determination thereon.

The Contractor shall not be entitled to claim any additional compensation for damages by reason of any direction, instruction, determination or decision of the Engineer, nor shall any such claims be considered, unless the Contractor shall have complied in all respects with the third paragraph of that article above, of this agreement titled 'Authority of the Engineer', including, but not limited to the filing of a written protest in the manner and within the time therein provided.

#### **4.28 ABANDONMENT OF WORK OR OTHER DEFAULT.**

If the work shall be abandoned, or any part thereof shall be sublet without previous written consent of the Town, or the contract or any monies payable hereunder shall be assigned otherwise than as herein specified, or if at any time the Engineer shall be of the opinion and shall so certify in writing, that the conditions herein specified as to rate of progress are not being complied with, or that the work or any part thereof is being unnecessarily or unreasonably delayed, or that the Contractor has violated or is in default under any of the provisions of the contract, or if the Contractor becomes bankrupt or insolvent or goes or is put into liquidation or dissolution, either voluntarily or involuntarily, or petitions for an arrangement or reorganization under the bankruptcy act, or makes a general assignment for the benefit of creditors or otherwise acknowledges insolvency, the happening of any of which shall be and constitute a default under the contract, the Town may notify the Contractor in writing, with a copy of such notice mailed to the surety, to discontinue all work or any part thereof. Thereupon, the Contractor shall discontinue such work or such part thereof as the Town may designate, and the Town may, upon giving such notice, by contract or otherwise as it may determine, complete the work of such part thereof and charge the entire cost and expense of so completing the work, the Town shall be entitled to reimbursement from the Contractor and the Contractor agrees to pay to the Town any losses, damages, costs and expenses, including attorneys' fees, sustained or incurred by the Town by reason of any of the foregoing causes. For the purpose of such completion, the Town may for itself or for any Contractors employed by the Town, take possession of and use or cause to be used, any and all materials, equipment, plant, machinery, appliances, tools, supplies and such other items of every description that may be found or located at the site of the work.

All costs, expenses, losses, damages, attorneys' fees, and any and all other charges incurred by the Town under this deducted and/or paid by the Town out of any monies due or article shall be charged against the Contractor and deducted and/or paid by the Town out of any monies due or payable or to become due or payable under the Contract to the Contractor. In computing the amounts chargeable to the Contractor, the Town shall not be held to a basis of the lowest prices for which the completion of the work or any part thereof might have been accomplished, but all sums actually paid or obligated therefore to effect its prompt completion shall be charged to and against the account of the Contractor. In case the costs, expenses, losses, damages, attorneys' fees and other charges together with all payments therefore made to and for the account of the Contractor are less than the sum which would have been payable under the contract if the work had

been properly performed and completed by the Contractor, the Contractor shall be entitled to receive the difference, and in case such costs, expenses, losses, damages, attorneys' fees and other charges, together with all payments, theretofore made to or for the account of the Contractor shall exceed the said sum, the Contractor shall pay the amount of the excess to the Town.

#### **4.29 PRICES FOR WORK.**

The Town shall pay and the Contractor shall receive the prices stipulated in the bid made a part hereof as full compensation for everything performed and furnished and for all risks and obligations undertaken by the Contractor under and as required by the contract.

#### **4.30 MONIES MAY BE RETAINED.**

The Town may at any time retain from any monies which would otherwise be payable hereunder so much thereof as the Town may deem necessary to complete the work hereunder and to reimburse it for all costs, expenses, losses, damage and damages chargeable to the Contractor hereunder. See articles 4.32 and 4.35.

#### **4.31 USE OR PARTIAL PAYMENT NOT ACCEPTANCE.**

It is agreed that this is an entire contract for one whole and complete work or result and that neither the Town's entrance upon or use of the work or any part thereof nor any partial payments by the Town shall constitute an acceptance of the work or any part thereof before its entire completion and final acceptance.

#### **4.32 PROGRESS ESTIMATES.**

Once a month, except as hereinafter provided, the Engineer shall make an estimate in writing of the total amount and value of the work done or any part thereof before its entire completion and final acceptance.

The Town shall retain **five (5) percent** of such estimated value as part of the security for fulfillment of the contract by the Contractor and shall deduct from the balance all previous payments made to the Contractor, all sums chargeable against the Contractor and all sums to be retained under the provisions of the contract.

The Town shall pay monthly to the Contractor, the balance not deducted and/or retained as aforesaid, except that payment may be withheld at any time if, in the judgment of the Engineer, the work is not proceeding in accordance with the contract. If the Town deems it expedient to do so, it may cause estimates and payments to be made more frequently than one in each month. No progress estimate or payment need to be made when, in the judgment of the Engineer, the total value of the work done since the last estimate amounts to less than One Thousand Dollars (\$1,000). Estimates of Lump-Sum items shall be based on a schedule dividing each such item into its appropriate component parts together with a quantity and a unit price for each part so that the sum of the products of prices and quantities will equal the contract Lump-Sum price for the item. This schedule shall be submitted by the Contractor for, and must have the approval of the Engineer before the first estimate becomes due.

If the Engineer determines that the progress of the work will be benefitted by the delivery to the site of certain materials and equipment, when available, in advance of actual requirement therefore, and if such materials, and equipment are delivered and properly stored and protected, the cost to the Contractor or subcontractor as established by invoices or other suitable vouchers satisfactory to the Engineer, less the retained percentages as above provided, may be included in the progress estimates, provided always that they be duly executed and delivered by the Contractor to the Engineer, at the same time a bill of sale in form satisfactory to the Town, transferring and assigning to the Town full ownership and title to such materials or equipment.

Prior to contract signing, the Contractor shall submit for review by the Engineer a Schedule of Values. The Contractor will use the approved schedule to submit for payment as items are completed and accepted by the Town. The schedule's values are to correspond to the cost breakdown of the project



submitted by the Contractor. At the project completion, the Contractor shall have submitted for payment, 98% of the project value, leaving two percent (2%) retainage for the warranty period of one year. The contract cannot be signed until the schedule and associated values has been approved by the Engineer.

The Contractor shall submit certified monthly payrolls in accordance with article 4.48. No progress payment will be processed until the payrolls submitted are current and up to date.

#### **4.33 FINAL ESTIMATE AND PAYMENT.**

As soon as practicable after the final completion and acceptance of the work by the Engineer, the Engineer shall make a final estimate in writing of the quantity of work done under the contract and the amount earned by the Contractor. The Engineer also shall fix the date of completion of the work and incorporate the same into the final estimate.

The Town shall pay to the Contractor, the entire amount found by the Engineer to be earned and due hereunder after deducting there from all previous payments, all charges against the Contractor as provided for hereunder, and all amounts to be retained under the provisions of the contract (see article 4.35). Except as in this article otherwise provided, such payment shall be made not later than fifteen (15) days after, but in no event before, the expiration of the time within which claims for labor performed or materials or equipment furnished must be filed under the applicable lien law, or if such time is not specified by law, the expiration of thirty (30) days after the completion of the Engineer's final estimate.

Final payment shall not be processed until the Contractor submits to the Town (A) an affidavit for final payment in the form attached hereto that payrolls, bills for materials, equipment, supplies and other indebtedness connected with the work has been paid or otherwise satisfied, and (B) consent of the surety to final payment has been furnished.

All quantities shown on progress estimates and all prior payments shall be subject to correction in the final estimate and payment.

#### **4.34 GUARANTEE.**

The Contractor guarantees that the work and services to be performed under the contract, and all workmanship, materials and equipment performed, furnished, used or installed in the construction of the same, shall be free from defects and flaws, and shall be performed and furnished in strict accordance with the drawings, specifications, and other contract documents, that the strength of all parts of all manufactured equipment shall be adequate and as specified and that the performance test requirements of the contract shall be fulfilled. This guarantee shall be for a period of one year from and after the date of completion and acceptance of the work as stated in the final estimate. The Contractor shall repair, correct or replace as required, promptly and without charge, all work, equipment and materials, or parts thereof, which fail to meet the above guarantee or which in any way fail to comply with or fail to be in strict accordance with the terms and provisions and requirements of the contract during such one-year period, and also shall repair, correct or replace all damage to the work resulting from such failure.

If the manufacturer's warrantee for equipment and materials installed is greater than the one-year period for warrantee specified above, the warrantee will be passed through to the Town. Upon completion of the project by the Contractor and acceptance by the Town, all warrantees will be passed through to the Town and all paperwork turned over to the Town.

CERTIFICATE FOR PAYMENT

TO: TOWN PROJECT NUMBER:  
FROM:  
CONTRACTOR:  
TOWN PROJECT:  
PREPARATION DATE:

CONTRACT NUMBER:  
PAYMENT PERIOD TO:  
PAYMENT NUMBER:

The Contractor is entitled to the present payment stated below for work substantially completed on the Subject Project. The Account tabulations are shown on the Attached sheets:

1. ORIGINAL CONTRACT AMOUNT .....\$ \_\_\_\_\_  
2. NET CHANGE BY CONTRACT SUPPLEMENT NUMBER(s): .....\$ \_\_\_\_\_

3. TOTAL CONTRACT TO DATE .....\$ \_\_\_\_\_

4. TOTAL CONTRACT AMOUNT EARNED TO DATE..... \$ \_\_\_\_\_

5. LESS \_\_\_% RETAINAGE OF COMPLETED WORK ... (\$ \_\_\_\_\_)

6. LESS PREVIOUS CERTIFICATES FOR PAYMENT:

PAYMENT NUMBER 1 DATED: \_\_\_\_\_ (\$ \_\_\_\_\_)

PAYMENT NUMBER 2 DATED: \_\_\_\_\_ (\$ \_\_\_\_\_)

PAYMENT NUMBER 3 DATED: \_\_\_\_\_ (\$ \_\_\_\_\_)

PAYMENT NUMBER 4 DATED: \_\_\_\_\_ (\$ \_\_\_\_\_)

PAYMENT NUMBER 5 DATED: \_\_\_\_\_ (\$ \_\_\_\_\_)

PAYMENT NUMBER 6 DATED: \_\_\_\_\_ (\$ \_\_\_\_\_)

PAYMENT NUMBER 7 DATED: \_\_\_\_\_ (\$ \_\_\_\_\_)

7. PRESENT PAYMENT DUE CONTRACTOR .....\$ \_\_\_\_\_

8. BALANCE OF CONTRACT ..... \$ \_\_\_\_\_

**TOWN PROJECT REPRESENTATIVE / INSPECTOR'S CERTIFICATE FOR PAYMENT:**

In accordance with the Contract Documents and based on on-site observations and the data comprising the above payment, I declare that the construction for which this payment is being made has been performed substantially in accordance with the Contract Drawings and Specifications and approved change orders. Construction is about \_\_\_\_\_ percent complete.

Prepared By: Project Representative/Date \_\_\_\_\_ Checked By: \_\_\_\_\_ Date \_\_\_\_\_

Reviewed for Payment By: Project Mgr/Date \_\_\_\_\_ Approved for Payment By: Deputy Commissioner Date \_\_\_\_\_

DISTRIBUTION:  
GO 110

Page \_\_\_ of \_\_\_

CONTINUATION SHEET

CERTIFICATE FOR PAYMENT: The Project Representative's signed Certification is attached.  
 In the tabulations below, amounts are stated to the nearest dollar and percent.

TOWN PROJECT: TOWN PROJECT NUMBER: CONTRACT NUMBER:								PAYMENT PERIOD TO: PAYMENT NUMBER: PREPARATION DATE:
ITEM NUMBER	DESCRIPTION OF WORK	BID QUANTITY AND UNIT	UNIT PRICE \$	TOTAL BID \$	QUANTITY COMPLETED THIS PERIOD	QUANTITY COMPLETED TO DATE	TOTAL COMPLETED TO DATE \$	PERCENT PROJECT COMPLETE %
			\$				\$	

AFFIDAVIT FOR FINAL PAYMENT

The undersigned, being duly sworn, deposed and says

1. That they are the \_\_\_\_\_ of the Contractor  
(TITLE)

In the project hereinafter referred to and is authorized to execute this affidavit on behalf of the Contractor,

2. In connection with Contract Number \_\_\_\_\_,  
the construction of **Maintenance Dredging of Sediment Forebays at Binney Park Pond, Town Project No. 19-22**, it is represented that:

- a) all payrolls, bills for service, materials, supplies, equipment and other indebtedness bills for service, materials, supplies and that there are no outstanding claims against the undersigned by any subcontractor or material supplier.
- b) the provisions of Section 4.48 of these specifications, Minimum Wages, have been complied with.

3. This Affidavit is made at the request of the Town of Greenwich for the purpose of inducing final payment and knowing that it will rely upon the truth of the representation herein made.

Subscribed and sworn to

Before me this \_\_\_\_\_ day

Of \_\_\_\_\_ 20 \_\_\_\_\_

\_\_\_\_\_  
(SIGNATURE OF PERSON  
AUTHORIZED TO SIGN)

\_\_\_\_\_  
NOTARY PUBLIC

\_\_\_\_\_  
(TYPE OR PRINT NAME OF PERSON  
AUTHORIZED TO SIGN)

GO 102

#### **4.35 RETAIN MONEY FOR REPAIRS.**

The Town shall retain out of the monies otherwise payable to the Contractor hereunder **five (5) percent** of the total construction cost for period of thirty (30) days after completion and acceptance of the work and two (2) percent of the total construction cost for the remainder of the one year guarantee period. The Town may expend said retainers, in the manner hereinafter provided, in making such repairs, corrections or replacements in the work as the Town, in its sole judgment, may deem necessary.

If at any time within the said period of guarantee any part of the work requires repairing, correction or replacement, the Town may notify the Contractor in writing to make the required repairs, corrections or replacements. If the Contractor neglects to commence making such repairs, corrections or replacements to the satisfaction of the Town within five (5) days from the date of receipt of such notice, or having commenced, fails to prosecute such work with diligence, the Town may employ other persons to make the same. The Town shall pay the cost and expense of the same out of the amounts retained for that purpose.

Upon the expiration of the said period of guarantee, provided that the work at that time is in good order, the Contractor will be entitled to receive the whole or such part of the sum last aforesaid, if any, as may remain after the cost and expense of making said repairs, corrections or replacements, in the manner aforesaid, have been paid there from.

#### **4.36 APPLICATION OF MONIES RETAINED.**

The Town may apply any monies retained hereunder to reimburse itself for any and all costs, expenses, losses, damage and damages, liabilities, suits, judgments and awards incurred, suffered or sustained by the Town and chargeable to the Contractor hereunder or as determined hereunder.

#### **4.37 LIENS.**

If at any time any notices of lien or other legal process are filed for labor performed or materials or equipment manufactured, furnished, or delivered to or for the work, the Contractor shall, at their own cost and expense, promptly discharge, remove or otherwise dispose of the same, and until such discharge, removal or disposition, the Town shall have right to retain from any monies payable hereunder an amount which, in its sole judgment, it deems necessary to satisfy such liens and pay the costs and expenses, including attorneys' fees of defending any actions brought to enforce the same, or incurred in connection therewith or by reason thereof.

#### **4.38 CLAIMS.**

If at any time there be any evidence of any claims for which the Contractor is or may be liable or responsible hereunder, the Contractor shall promptly settle or otherwise dispose of the same, and until such claims are settled or disposed of, the Town may retain from any monies which would otherwise be payable hereunder so much thereof as, in its sole judgment, it may deem necessary to settle or otherwise dispose of such claims and to pay the costs and expenses, including attorneys' fees, or defending any actions brought to enforce such claims or incurred in connection therewith or by reason thereof.

#### **4.39 NO WAIVER.**

Neither the inspection by the Town or the Engineer, nor any order, measurement, approval, determination, decision or certificate by the Engineer, nor any order by the Town for the payment of money, nor any payment for or use, occupancy, possession or acceptance of the whole or any part of the work by the Town, nor any extension of time, nor any other act or omission of the Town or of the Engineer shall constitute or be deemed to be an acceptance of any defective or improper work, materials, or equipment nor operate as a waiver of any requirements or provision of the contract, nor of any remedy, power or right to damages for breach of contract. Any and all rights and/or remedies provided for in the contract are intended and shall be construed to be cumulative and, in addition to each and every other right and remedy provided for herein or by law, the Town shall be entitled as of right to a writ of injunction against any breach or threatened breach of the contract by the Contractor, their subcontractors or by any other person or persons.

#### **4.40 LIABILITY OF TOWN.**

No person, firm or corporation, other than the Contractor, who signed this contract as such, shall have any interest herein or rights hereunder, no claim shall be made or be valid either against the Town or any agent of the Town and neither the Town nor any agent of the Town shall be liable for or be held to pay any money, except as herein provided. The acceptance by the Contractor of the payment as fixed in the final estimate shall operate as and shall be a full and complete release of the Town and of every agent of the Town of and from any and all claims, demands, and liabilities of, by or to the Contractor for anything done or furnished for or arising out of or relating to or by reason of the work or for or on account of any act or neglect of the Town or of any agent of the Town or of any other person, arising out of, relating to or by reason of the work, except the claim against the Town for the unpaid balance, if any there be, of the amounts retained as herein provided.

#### **4.41 RETURN OF DRAWINGS.**

All drawings furnished by the Town or the Engineer to the Contractor may be used only in connection with the prosecution of the work and shall be returned by the Contractor upon completion of the work.

#### **4.42 CLEANING UP.**

The Contractor at all times shall keep the site of the work free from rubbish and debris caused by their operations under the contract. When the work has been completed, the Contractor shall remove from the site of the work all of their plant, machinery, tools, construction equipment, temporary work and surplus materials so as to leave the work and the site clean and ready for use.

The Contractor shall keep all street and sidewalk pavements clear of stone, earth, mud, debris and other materials which may result from the Contractor's operation.

#### **4.43 LEGAL ADDRESS OF CONTRACTOR.**

The Contractor's business address and their office at or near the site of the work are both hereby designated as places to which communications shall be delivered. The depositing of any letter, notice or other communication in a postpaid wrapper directed to the Contractor's business address in a post office box regularly maintained by the post office department or the delivery at either designated address of any letter, notice or other communication by mail or otherwise shall be deemed sufficient service thereof upon the Contractor, and the date of such service shall be the date of receipt. The first-named address may be changed at any time by an instrument in writing executed and acknowledged by the Contractor and delivered to the Engineer. Service of any notices, letter, or other communication upon the Contractor personally shall likewise be deemed sufficient service.

#### **4.44 HEADINGS.**

The headings or titles of any section, article, paragraph, provision or part of the contract documents shall not be deemed to limit or restrict the content, meaning or effect of such section, article, paragraph, provision or part.

#### **4.45 MODIFICATION OR TERMINATION.**

Except as otherwise expressly provided herein, the contract may not be modified or terminated except in writing, signed by the parties hereto.

#### **4.46 GOVERNING LAW.**

The laws of the State of Connecticut shall govern this Contract and any and all litigation related to this Contract. In the event of litigation related to this Contract, the exclusive forum shall be the State of

Connecticut and the exclusive venue for such litigation shall be the Judicial District for Stamford/Norwalk at Stamford.

#### **4.47 RESIDENT'S PREFERENCE.**

The Contractor shall comply with the current provisions of Section 31-52 and 31-52a of the General Statutes of the State of Connecticut, a part of which is quoted below.

##### **(A) PUBLIC BUILDINGS**

"In the employment of labor to perform the work specified herein, preference shall be given to citizens of the United States, who are, and continuously for at least three months prior to the date hereof, have been residents of the labor market area, as established by the labor commissioner, in which such work is to be done, and if no such qualified person is available, then to citizens who have continuously resided in the county in which the work is to be performed for at least three months prior to the date hereof, and then to citizens of the State who have continuously resided in the State at least three months prior to the date hereof."

##### **(B) PUBLIC WORKS PROJECTS OTHER THAN PUBLIC BUILDINGS**

"In the employment of mechanics, laborers or workmen to perform the work specified herein, preference shall be given to residents of the State who are, and continuously for at least six months prior to the date hereof have been residents of this State, and if no such person is available then to residents of other states."

(C) The above provisions of Section 31-52 and 31-52a shall not apply where the State of Connecticut or any subdivision thereof may suffer the loss of revenue granted or to be granted from any agency or department of the Federal Government as a result of said sections or regulative procedures pursuant thereto.

#### **4.48 PREVAILING WAGE RATES; CONSTRUCTION SAFETY AND HEALTH COURSE.**

Projects shall be subject to the payment of minimum prevailing wages where the total cost of all work to be performed by all Contractors and Subcontractors in connection with new construction of any public works project is One Million Dollars (\$1,000,000) or more and where the total cost of all work to be performed by all Contractors and Subcontractors in connection with any remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project is One Hundred Thousand Dollars (\$100,000) or more.

The Purchasing Department has the flexibility to request the minimum prevailing wages and include them in the Request for Bid (RFB) when a budgeted estimate is less than \$100,000 for renovation, or \$1,000,000 for new work, in the event that bids come in over the threshold for minimum prevailing rates.

The Purchasing Department is:

- responsible for requesting Prevailing Wage Rates from the State of Connecticut
- required to (upon receipt of the Prevailing Wage Rates) advertise the Requests for Bid (RFB) within twenty (20) calendar days of the date of the letter from the State
- required to attach the Prevailing Wages to the RFB as an exhibit

The minimum prevailing wages paid on a project, when applicable, shall be as shown on the State of Connecticut Labor Department, Wage and Workplace Standards Division, 'Schedule of Prevailing Rates'.

Except as noted below, the Contractor shall comply with the current provisions of Connecticut General Statutes §31-53, a part of which is quoted as follows:

"The wages paid on an hourly basis to any mechanic, laborer or workman employed upon the work herein contracted to be done and the amount of payment or contribution paid or payable on behalf of each such employee to any employee or welfare fund, as defined in subsection (H) of section 31-53 of the

General Statutes, shall be at a rate equal to the rate customary or prevailing for the same work in the same trade or occupation in the Town in which such public works project is being constructed. Any Contractor who is not obligated by agreement to make payment or contribution on behalf of such employees to any such employee welfare fund shall pay to each employee as part of his wages the amount of payment or contribution for his classification on each pay day."

For qualifying projects, all Contractors and Subcontractors shall submit certified weekly payrolls on forms furnished by the Town for all contracts meeting the stated monetary limits. The certified payrolls shall be submitted with the Contractor's monthly certificate for payment.

Public Act #02-69, "An Act Concerning Annual Adjustments to Prevailing Wages", passed and signed into law on October 1, 2002, is summarized below and shall be followed.

The prevailing wage rates applicable to any awarded contract or subcontract are subject to annual adjustments each July 1 for the duration of the project.

Each Contractor that is awarded a contract shall pay the annual adjusted prevailing wage rate that is in effect each July 1, as posted by the Department of Labor.

It is the Contractor's responsibility to obtain the annual adjusted prevailing wage rate increases directly from the Department of Labor web site. The annual adjustments will be posted on the Department of Labor's web page: [www.ctdol.state.ct.us](http://www.ctdol.state.ct.us). Contractors without Internet access must contact the division listed below.

Contractor's questions can be directed to Contract Compliance Unit, Wage and Workplace Standards Division, Connecticut Department of Labor, 200 Folly Brook Blvd., Wethersfield, CT 06109 at 860-263-6790.

The Contractor shall also furnish proof with the weekly certified payroll for the first week each employee begins work that any person performing the work of a mechanic, laborer or worker has completed a course of at least ten (10) hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration in accordance with Connecticut General Statutes Section 31-53b and regulations adopted by the State of Connecticut Labor Commissioner.

#### **4.49 PAYMENT OF SUBCONTRACTORS**

As required by Section 49-41a of the Connecticut General Statutes, within thirty (30) days after payment to the Contractor by the Town for work under this contract, the Contractor shall pay any amount due any subcontractor, whether for labor performed or materials furnished when such labor or materials have been included in a requisition submitted by such Contractor and paid by the Town.

The general contractor shall include in each of its subcontracts, a provision requiring each subcontractor to pay any amounts due any of its subcontractors, whether for labor performed or materials furnished, within thirty days after such subcontractor receives a payment from the general contractor which encompasses labor or materials furnished by such subcontractor.



In witness whereof, the parties of this agreement have hereunto set their hands and seals as of the day and year first above written

TOWN OF GREENWICH, CONNECTICUT

BY

\_\_\_\_\_  
COMMISSIONER OF PUBLIC WORKS  
(PARTY OF THE FIRST PART)

\_\_\_\_\_  
CONTRACTOR  
(PARTY OF SECOND PART)

APPROVED AS TO LEGAL SUFFICIENCY

\_\_\_\_\_  
TOWN ATTORNEY

I hereby certify that the contract sum does not exceed the unencumbered balance of amounts duly appropriated and against which this contract is chargeable.

\_\_\_\_\_ 20 \_\_\_\_\_

BY

\_\_\_\_\_  
COMPTROLLER

ATTEST

\_\_\_\_\_

**CERTIFICATE OF ACKNOWLEDGEMENT OF CONTRACTOR  
IF A CORPORATION  
FOR AGREEMENT**

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20 \_\_\_\_\_,

BEFORE ME PERSONALLY CAME \_\_\_\_\_

TO ME KNOWN, WHO BEING BY ME FULLY SWORN, DID DEPOSE AND SAY AS FOLLOWS.

THAT THEY RESIDE AT \_\_\_\_\_

AND IS THE \_\_\_\_\_

OF \_\_\_\_\_

the corporation described in and which executed the foregoing instrument that they know the corporate seal of said corporation, that the seal affixed to the foregoing instrument is such corporate seal and it was so affixed by order of the board of directors of said corporation, and that by the like order, they signed thereto their name and official designation.

\_\_\_\_\_  
NOTARY PUBLIC (SEAL)

MY COMMISSION EXPIRES \_\_\_\_\_

**CERTIFICATE OF ACKNOWLEDGMENT OF CONTRACTOR  
IF AN LLC  
FOR AGREEMENT**

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20 \_\_\_\_\_,

BEFORE ME PERSONALLY CAME \_\_\_\_\_

TO ME KNOWN, WHO BEING BY ME FULLY SWORN, DID DEPOSE AND SAY AS FOLLOWS.

THAT THEY RESIDE AT \_\_\_\_\_

AND IS THE \_\_\_\_\_

OF \_\_\_\_\_

the LLC described in and which executed the foregoing instrument, that there is no seal for said LLC, and that by order of the members of said LLC, he signed thereto his name and official designation.

\_\_\_\_\_  
NOTARY PUBLIC (SEAL)

MY COMMISSION EXPIRES \_\_\_\_\_

**CERTIFICATE OF ACKNOWLEDGMENT OF CONTRACTOR  
IF AN LLC  
FOR AGREEMENT**

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20 \_\_\_\_\_,

BEFORE ME PERSONALLY CAME \_\_\_\_\_

TO ME KNOWN, WHO BEING BY ME FULLY SWORN, DID DEPOSE AND SAY AS FOLLOWS.

THAT THEY RESIDE AT \_\_\_\_\_

AND IS THE \_\_\_\_\_

OF \_\_\_\_\_

the LLC described in and which executed the foregoing instrument, that they know the seal of said LLC, that the seal affixed to the foregoing instrument is such LLC seal and it was so affixed by order of the board of directors of said LLC, and that by the like order, they signed thereto their name and official designation.

\_\_\_\_\_  
NOTARY PUBLIC (SEAL)

MY COMMISSION EXPIRES \_\_\_\_\_

**SECTION 5**

**\*\*\* CONTRACT BOND \*\*\***

**PERFORMANCE, MAINTENANCE AND PAYMENT BOND**

BOND NO. \_\_\_\_\_

KNOW ALL PERSONS BY THESE PRESENTS, that we \_\_\_\_\_,  
\_\_\_\_\_, as principal, and \_\_\_\_\_,  
\_\_\_\_\_,

a corporation organized under the laws of the state of

\_\_\_\_\_ and authorized to do business in the State  
of Connecticut as surety, are holden and firmly bound jointly and severally unto the TOWN OF  
GREENWICH, CONNECTICUT, thereafter referred to as the Town, a territorial corporation

located in the County of Fairfield, in the penal sum of

\_\_\_\_\_ Dollars

(\$ \_\_\_\_\_), to be paid to it or its certain attorney, successors or assigns, to which payment  
well and truly to be made, we the said obligors to bind ourselves, and each of us, our heirs, executors,  
administrators and successors firmly by these presents.

IN WITNESS WHEREOF we have hereunto set or caused to be set our respective hands, names and seals  
this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the above named principal has entered  
into a certain written contract with the TOWN OF GREENWICH, CONNECTICUT, dated the  
\_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_, for construction of \_\_\_\_\_

according to the plans, specifications, and other contract documents prepared by the Engineering Division of  
the Department of Public Works, which contract is hereby referred to and made a part hereof as fully and to  
the same extent as if copied at length herein.

NOW, THEREFORE, if the said principal shall well and faithfully perform said contract according to its  
provisions and fully indemnify and save harmless the Town from all cost and damages which the Town may  
suffer by reason of failure so to do, and shall pay for all equipment, appurtenances, materials and labor  
furnished, used or employed in the execution of said contract, and shall indemnify and save harmless the  
Town from all suits or claims of any nature or description against the Town by reason of any injuries or  
damages sustained by any person or persons on account of any act or omissions of said principal, their  
servants or agents, or their subcontractors in the construction of the work or in guarding the work, or on  
account of the use of faulty or improper materials, or by reason of claims under the workmen's  
compensation laws or laws by any employee of the principal or their subcontractors or by reason of the use  
of any patented material, machinery, device, equipment, process, method of construction or design in any  
way involved in the work and shall indemnify the Town against such defective workmanship, material and  
equipment as may be discovered within one (1) year after completion and final acceptance of the work, and  
shall make good in such defective workmanship and material as may be discovered within said period of  
one year, then this obligation shall be void, otherwise to remain in full force and effect.

The surety hereby stipulates and agrees that any modifications, omissions or additions in or to the terms of the aforesaid contract, or in or to the plans or specifications therefore, or any extension of time shall in no way affect the obligation of the surety under this bond, the surety hereby waiving any and all rights to any notice of any such modifications, omissions, changes, additions or extensions.

CONTRACTOR \_\_\_\_\_

By \_\_\_\_\_

SURETY \_\_\_\_\_

By \_\_\_\_\_

COUNTERSIGNED AT \_\_\_\_\_, CONNECTICUT

---

LOCAL RESIDENT AGENT

**CERTIFICATE OF ACKNOWLEDGEMENT OF CONTRACTOR  
IF A CORPORATION  
FOR CONTRACT BOND**

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20 \_\_\_\_\_,

BEFORE ME PERSONALLY CAME \_\_\_\_\_

TO ME KNOWN, WHO BEING BY ME FULLY SWORN, DID DEPOSE AND SAY AS FOLLOWS.

THAT THEY RESIDES AT \_\_\_\_\_

AND IS THE \_\_\_\_\_

OF \_\_\_\_\_

the corporation described in and which executed the foregoing instrument that they know the corporate seal of said corporation, that the seal affixed to the foregoing instrument is such corporate seal and it was so affixed by order of the board of directors of said corporation, and that by the like order, they signed thereto their name and official designation.

\_\_\_\_\_  
NOTARY PUBLIC (SEAL)

MY COMMISSION EXPIRES \_\_\_\_\_

**CERTIFICATE OF ACKNOWLEDGMENT OF CONTRACTOR  
IF AN LLC  
FOR CONTRACT BOND**

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20 \_\_\_\_\_,

BEFORE ME PERSONALLY CAME \_\_\_\_\_

TO ME KNOWN, WHO BEING BY ME FULLY SWORN, DID DEPOSE AND SAY AS FOLLOWS.

THAT THEY RESIDES AT \_\_\_\_\_

AND IS THE \_\_\_\_\_

OF \_\_\_\_\_

the LLC described in and which executed the foregoing instrument, that they know the seal of said LLC, that the seal affixed to the foregoing instrument is such LLC seal and it was so affixed by order of the board of directors of said LLC, and that by the like order, they signed thereto their name and official designation.

\_\_\_\_\_  
NOTARY PUBLIC (SEAL)

MY COMMISSION EXPIRES \_\_\_\_\_



**CERTIFICATE OF ACKNOWLEDGMENT OF CONTRACTOR  
IF AN LLC  
FOR CONTRACT BOND**

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20 \_\_\_\_\_,

BEFORE ME PERSONALLY CAME \_\_\_\_\_

TO ME KNOWN, WHO BEING BY ME FULLY SWORN, DID DEPOSE AND SAY AS FOLLOWS.

THAT THEY RESIDES AT \_\_\_\_\_

AND IS THE \_\_\_\_\_

OF \_\_\_\_\_

the LLC described in and which executed the foregoing instrument, that there is no seal for said LLC, and that by order of the members of said LLC, he signed thereto his name and official designation.

\_\_\_\_\_  
NOTARY PUBLIC (SEAL)

MY COMMISSION EXPIRES \_\_\_\_\_

**SECTION 6**  
**GENERAL CONDITIONS**

<u>TITLE</u>	<u>ARTICLE</u>
INTRODUCTION TO THE TECHNICAL SPECIFICATIONS.....	6.1
DEFINITIONS .....	6.2
ABBREVIATIONS.....	6.3
HANDLING AND DISTRIBUTION .....	6.4
MATERIALS - SAMPLES – INSPECTIONS	
APPROVAL .....	6.5
INSPECTION OF WORK AWAY FROM SITE .....	6.6
CONTRACTOR'S SHOP AND WORKING DRAWINGS .....	6.7
OCCUPYING PRIVATE LAND.....	6.8
INTERFERENCE WITH AND PROTECTION OF STREETS .....	6.9
STORAGE OF MATERIALS AND EQUIPMENT .....	6.10
INSUFFICIENCY OF SAFETY PRECAUTIONS .....	6.11
SANITARY REGULATIONS .....	6.12
LINES, GRADES AND MEASUREMENT .....	6.13
DIMENSIONS OF EXISTING STRUCTURES.....	6.14
WORK TO CONFORM .....	6.15
COMPUTATION OF QUANTITIES.....	6.16
PLANNING AND PROGRESS SCHEDULES.....	6.17
PRECAUTIONS OF ADVERSE WEATHER.....	6.18
UNDERGROUND INSTALLATIONS .....	6.19

## 6.1 INTRODUCTION TO THE TECHNICAL SPECIFICATIONS

The following Technical Specifications shall apply to the various items of work which constitute the construction contemplated under this Contract except as supplemented and/or amended by Supplemental Technical Specifications. In cases of conflict between the Technical Specifications and the Supplemental Technical Specifications, the provisions of the Supplemental Technical Specifications shall apply.

To avoid excessive overlapping and repetition, there are certain sections and items that referred to in other sections. In these cases, it is understood that the words such as culvert and sewer; sanitary and storm; utility and sewer; manhole and catch basins; structure and culvert; etc., are interchangeable. In cases where references are not given and the need arises for a specification, similar sections or related items shall govern.

Further, it is provided that whenever anything is, or is to be, done if, as, or, when, or where "contemplated, required, determined, directed, specified, authorized, ordered, given, designated, indicated, considered necessary, deemed necessary, permitted reserved, suspended, established, approved, disapproved, acceptable, unacceptable, suitable, accepted, satisfactory, unsatisfactory, sufficient, insufficient, rejected, or condemned", it shall be understood as if the expression were followed by the words "by the Engineer" or "to the Engineer".

Within the Technical and/or Supplemental Technical Specifications of this Contract the following definitions shall apply:

1. **STANDARD SPECIFICATIONS:** Shall mean the State of Connecticut, Department of Transportation, Bureau of Highways, "Standard Specifications for Roads, Bridges and Incidental Construction, Form 817, dated 2016, as amended to date. Only those portions of the standard specifications that are referred to in the "**DESCRIPTION**" and/or "**MATERIALS**" and/or "**CONSTRUCTION METHODS**" and/or "**METHOD OF MEASUREMENT**" and/or "**BASIS OF PAYMENT**" section of this Contract's Technical and/or Supplemental Technical Specifications, not supplemented and/or amended therein, shall apply. Within the referred to portions of the Standard Specifications wherein the following terms are used they shall mean respectively;

State, Town, Owner,  
Department, Commissioner

The Commissioner of Public Works  
The Town of Greenwich, Connecticut  
or other duly authorized representative

Architect and/or Engineer

The Deputy Commissioner  
Department of Public Works  
Engineering Division  
The Town of Greenwich, Connecticut  
or other duly authorized representative

Inspector

Resident Project Representative of  
the Department of Public Works  
Engineering Division  
The Town of Greenwich, Connecticut  
or other duly authorized representative

Laboratory

Laboratory designed by the Engineer

Special Provisions

Supplemental Technical Specifications

2. **APPLICABLE SAFETY CODES:** Shall mean the latest edition including any and all amendments, revisions and additions thereto of the Federal Department of Labor. Occupational safety and Health Administration's "Occupational Safety and Health standards" and "Safety and health Regulations for Construction", the State of Connecticut, Labor Department, "Construction Safety Code", or State of Connecticut "Building Code", whichever is the more stringent for the

applicable requirements.

3. **ITEMS**: Reference within the text of these Specifications to items **without** a number but title only are Technical Specification Items within this contract. Sections for Articles referred to with a number refer to the State of Connecticut Department of Transportation, Bureau of High ways specification Sections or Articles.
4. **LOCAL REGULATORY AGENCY(IES)**: Local Regulatory Agency(ies) shall be defined as the governing body or authority having jurisdiction over or responsibility for a particular activity within the scope of this Contract.
5. **"THESE SPECIFICATIONS"**: Where used in the text of the Technical Specifications items shall mean the Technical Specifications for this contract.
6. **BID PROPOSAL ITEMS**: Payment will **only** be made for items in the **Bid Proposal**. Other items may be included in the specifications but payment for items not listed in the Bid Proposal will be included in the cost of other items of work. Bid Proposal items shall have the same basic alpha-numeric designation as the same items in the specifications with significant suffixes added as required.

## **6.2 DEFINITIONS.**

Wherever the words defined in this section or pronouns used in their stead occur in the specifications, they shall have the meanings herein given.

### **AS DIRECTED, AS REQUIRED, ETC.**

Wherever in the specifications, or on the drawings, the words 'As Directed', 'As Required', 'As Ordered', 'As Permitted', or words of like import are used, it shall be understood that the direction, order, request, requirements, or permission of the Engineer is intended. Similarly, the words 'Approved', 'Acceptable', 'Satisfactory', and words of like import shall mean approved by, acceptable to, or satisfactory to the Engineer.

### **ELEVATION**

The figures given on the drawings or in the other contract documents after the word 'Elevation' or abbreviation of it shall mean the distance in feet above datum adopted by the Engineer.

### **ROCK**

The word 'Rock' wherever used as the name of any excavated material or material to be excavated, shall mean only boulders and pieces of concrete or masonry exceeding one (1) cubic yard in volume, or solid ledge rock which, in the opinion of the Engineer, requires, for its removal, drilling and blasting, wedging, sledging, barring or breaking up with a power operated tool. No soft or disintegrated rock which can be removed with a hand pick or power-operated excavator or shovel, no loose, shaken or previously blasted rock or broken stone in rock fillings or elsewhere, and no rock exterior to the maximum limits of measurement allowed, which may fall into the excavation, will be measured or allowed as 'Rocks'.0

### **EARTH**

The word 'Earth', wherever used as the name of an excavated material or material to be excavated, shall mean all kinds of material other than rock as above defined.

## **6.3 ABBREVIATIONS.**

Where any of the following abbreviations are used in the specifications, they shall have the meaning set forth opposite each.

AASHO	AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS
ACI	AMERICAN CONCRETE INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ASA	AMERICAN STANDARDS ASSOCIATION
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERING
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
NEC	NATIONAL ELECTRICAL CODE, LATEST EDITION
CONN-DOT	STATE OF CONNECTICUT, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS, FORM 817, 2016

#### **6.4 HANDLING AND DISTRIBUTION.**

The Contractor shall handle, haul and distribute all materials and all surplus material on the different portions of the work, as necessary or required, shall provide suitable and adequate storage room for materials and equipment during the progress of the work, and be responsible for the protection, loss of, or damage to materials and equipment furnished by them, until the final completion and acceptance of the work.

Storage and demurrage charges by transportation companies and vendors shall be borne by the Contractor.

#### **6.5 MATERIALS.**

Samples - inspection - approval. Unless otherwise expressly provided on the drawings or in any of the other contract documents, only new material and equipment shall be incorporated in the work. All material and equipment furnished by the Contractor to be incorporated in the work shall be subject to the inspection and approval of the Engineer. No material shall be processed or fabricated for the work or delivered to the work site without prior approval of the Engineer.

As soon as possible after execution of the agreement, the Contractor shall submit to the Engineer the names and addresses of the manufacturers and suppliers of all materials and equipment they propose to incorporate into the work. When shop and working drawings are required as specified below, the Contractor shall submit prior to the submission of such drawings, data in sufficient detail to enable the Engineer to determine whether the manufacturer and/or supplier have the ability to furnish a product meeting the specifications. As requested, the Contractor shall also submit data relating to the materials and equipment they propose to incorporate into the work in sufficient detail to enable the Engineer to identify and evaluate the particular product and to determine whether it conforms to the contract requirements. Such data shall be submitted in a manner similar to that specified for submission of shop and working drawings.

Facilities and labor for the storage, handling and inspection of all materials and equipment shall be furnished by the Contractor. Defective materials and equipment shall be removed immediately from the site of the work.

If the Engineer so requires, either prior to or after commencement of the work, the Contractor shall submit samples of materials for such special tests as the Engineer deems necessary to demonstrate that they conform to the specifications. Such samples, including concrete test cylinders, shall be furnished, taken, stored, packed and shipped by the approved molds for making concrete test cylinder. Except as otherwise expressly specified, with technical specifications, the Town shall make arrangements for, and pay for the

tests.

All samples shall be packed so as to reach their destination in good condition, and shall be labeled to indicate the material represented, the name of the building or work and location for which the material is intended and the name of the Contractor submitting the sample. To ensure consideration of samples, the Contractor shall notify the Engineer by letter that the samples have been shipped and shall properly describe the samples in the letter. The letter of notification shall be sent separate from and should not be enclosed with the samples.

The Contractor shall submit data and samples, or place their orders, sufficiently early to permit consideration, inspection, testing and approval before the materials and equipment are needed for incorporation in the work. The consequence of their failure to do so shall be the Contractor's sole responsibility.

When required, the Contractor shall furnish to the Engineer triplicate sworn copies of manufacturer's shop or mill tests (or reports from independent testing laboratories) relative to materials, equipment, performance rating and concrete data.

After approval of the samples, data, etc., the materials and equipment used on the work shall in all respects conform therewith.

## **6.6 INSPECTION OF WORK AWAY FROM THE SITE.**

If work to be done away from the construction site is to be inspected on behalf of the Town during its fabrication, manufacture, or testing, or before shipment, the Contractor shall give notice to the Engineer of the place and time where such fabrication, manufacture, testing, or shipping is to be done. Such notice shall be in writing and delivered to the Engineer in ample time so that the necessary arrangements for the inspection can be made.

## **6.7 CONTRACTOR'S SHOP AND WORKING DRAWINGS.**

The Contractor shall submit for approval (in reproducible form unless otherwise specified) shop and working drawings of concrete reinforcement, structural details, piping layout, wiring, materials fabricated especially for the contract and materials and equipment for which such drawings are specifically requested.

Such drawings shall show the principal dimensions, weight, structural and operating features, space required, clearances type and/or brand of finish or shop coat, grease fittings, etc., depending on the subject of the drawing, when it is customary to do so. When the dimensions are of particular importance, or when so specified, the drawings shall be certified by the manufacturer or fabricator as correct for the contract.

When so specified or if considered by the Engineer to be acceptable, manufacturer's specifications, catalog data, descriptive matter, illustrations, etc., may be submitted for approval in place of shop and working drawings. In such case for requirements shall be as specified for shop and working drawings, insofar as applicable, except that the submission shall be in quadruplicate.

The Contractor shall be responsible for the prompt and timely submittal of all shop and working drawings so that there shall be no delay to the work due to the absence of such drawings.

No material or equipment shall be purchased or fabricated especially for the contract until the required shop and working drawings have been submitted as hereinabove provided as conforming to the contract requirements. All such materials and equipment and the work involved in their installation or incorporated into the work shall then be as shown in and represented by said drawings.

Until the necessary approval has been given, the Contractor shall not proceed with any portion of the work (such as the construction of foundations), the design or details of which are dependent upon the design or details of work, materials, equipment or other features for which approval is required.

All shop and working drawings shall be submitted to the Engineer by and/or through the Contractor, who shall be responsible for obtaining shop and working drawings from their subcontractors and returning approved drawings to them. Unless otherwise approved, all shop and working drawings shall be prepared on standard size, 24 inch by 36 inch sheets, except those which are made by changing existing standard shop or working drawings. All drawings shall be clearly marked with the names of the Town, Contractor and building, equipment, or structure to which the drawings apply, and shall be accompanied by a letter of transmittal giving a list of the drawing numbers and the names mentioned above.

Only drawings which have been checked and corrected by the fabricator should be submitted to the Contractor by their subcontractors and vendors. Prior to submitting drawings to the Engineer, the Contractor shall check thoroughly all such drawings to satisfy themselves that the subject matter thereof conforms to the drawings and specifications in all respects. All drawings which are correct shall be marked with the date, checker's name and indication of the Contractor's approval, and then shall be submitted to the Engineer. Other drawings shall be returned for correction.

The approval of shop and working drawings, etc., will be general only and shall not relieve or in any respect diminish the responsibility of the Contractor for details of design, dimensions, etc., necessary for proper fitting and construction of the work as required by the contract and for achieving the result and performance specified hereunder.

Should the Contractor submit for approval, equipment that requires modifications to the structures, piping, layout, etc., they shall also submit for approval, details of the proposed modifications. If such equipment and modifications are approved, the Contractor, at no additional cost to the Town, shall do all work necessary to make such modifications.

The marked-up reproducible of the shop and working drawings or one marked-up copy of catalog cuts will be returned to the Contractor. The Contractor shall furnish additional copies of such drawings or catalog cuts when so requested.

## **6.8 OCCUPYING PRIVATE LAND.**

The Contractor shall not (except after written consent from the proper parties) enter or occupy with persons, tools, materials, or equipment, any land outside the right-of-way or property of the Town. A copy of the written consent shall be given to the Engineer.

## **6.9 INTERFERENCE WITH AND PROTECTION OF STREETS.**

The Contractor shall not close or obstruct any portion of a street, road or private way without obtaining permits therefore from the proper authorities. If any street, road or private way shall be rendered unsafe by the Contractor's operations, they shall make such repairs or provide such temporary ways or guards as shall be acceptable to the Engineer and to the proper authorities. See 'Agreement', Article 4.42, 'Clean Up'.

Streets, roads, private ways and walks not closed shall be maintained passable and safe by the Contractor, who shall assume and have full responsibility for the adequacy and safety of provisions made therefore.

The Contractor shall, at least 24 hours in advance, notify the Police and Fire Department in writing, with a copy to the Engineer, if the closure of a street or road is necessary. They shall cooperate with the Police Department in the establishment of alternate routes and shall provide adequate detour signs, plainly marked and well-lighted, in order to minimize confusion.

## **6.10 STORAGE OF MATERIALS AND EQUIPMENT.**

All excavated materials, construction equipment and materials and equipment to be incorporated in the work shall be placed so as not to injure any part of the work or existing facilities and so that free access can be had at all times to all parts of the work and to all public utility installations in the vicinity of the

work. Materials and equipment shall be kept neatly piled and compactly stored in such locations as will cause a minimum of inconvenience to public travel and adjoining owners, tenants and occupants.

#### **6.11 INSUFFICIENCY OF SAFETY PRECAUTIONS.**

If at any time, in the sole judgment of the Engineer, the work is not properly lighted, barricaded, or in any other respects safe in regard to public travel, persons on or about the work, or public or private property, the Engineer shall have the right to order such safeguards to be erected and such precautions to be taken as they deem advisable and the Contractor shall comply promptly with such orders. If, under such circumstances, the Contractor does not or cannot immediately put the work and the safeguards into proper and approved condition or if the Contractor or their representative is not upon the site so that they can be notified immediately of the insufficiency of safety precautions, the Engineer may put the work into such a condition that it shall be, in their opinion, in all respects safe. The Contractor shall pay all costs and expenses incurred by the Engineer or Town in so doing. Such action of the Engineer, or their failure to take such action, shall in no way relieve or diminish the responsibility of the Contractor for any and all costs, expenses, losses, liability, claims, suits, proceedings, judgments, awards or damages resulting from, by reason of or in connection with any failure to take safety precautions or the insufficiency of the safety precautions taken by them or by the Engineer acting under authority of this article or for failure to comply with the provisions of any state or federal occupational safety and health laws, rules or regulations.

#### **6.12 SANITARY REGULATIONS.**

When deemed necessary by the Engineer, the suitable Contractor shall provide sanitary facilities for the use of those employed on the work. Such facilities shall be made available when the first employees arrive on the site of the work, shall be properly secluded from public observation and shall be constructed and maintained during the progress of the work in suitable numbers and at such points and in such manner as may be required or approved.

The Contractor shall maintain the sanitary facilities in a satisfactory and sanitary condition at all times and shall enforce their use. They shall rigorously prohibit the committing of nuisances on the site of the work, on the lands of the Town, or on adjacent property.

The Town and the Engineer shall have the right to inspect such facilities at all times to determine whether or not they are being properly and adequately maintained.

#### **6.13 LINES, GRADES AND LAYOUT OF WORK.**

The Town shall provide the Contractor with a convenient base line and bench mark and it shall be the Contractor's responsibility to lay out their work as required to construct the work and/or as directed by the Engineer. The layout plan shall be prepared by the Engineer and provided to the Contractor prior to construction.

#### **6.14 DIMENSIONS OF EXISTING STRUCTURES.**

Where the dimensions and locations of existing structures are of importance in the installation or connection of any part of the work, the Contractor shall verify such dimensions and locations in the field before the fabrication of any material or equipment which is dependent on the correctness of such information.

#### **6.15 WORK TO CONFORM.**

During its progress, and on its completion, the work shall conform truly to the lines, levels and grades indicated on the drawings or given by the Engineer and shall be built in a thoroughly substantial and workmanlike manner, in strict accordance with the drawings, specifications and other contract documents and the directions given from time to time by the Engineer.

All work done without instructions having been given therefore by the Engineer, without proper



lines or levels, or performed during the absence of the Engineer, will not be estimated or paid for except when such work is authorized in writing by the Engineer. Work, not so authorized, may be ordered uncovered or taken down, removed and replaced at the Contractor's expense.

#### **6.16 COMPUTATION OF QUANTITIES.**

For estimating quantities in which the computation of areas by geometric methods would be comparatively laborious, it is agreed that the planimeter shall be considered an instrument precision adapted to the measurement of such areas.

It is further agreed that the computation of the volume prismsoids shall be by the method of average end areas.

#### **6.17 PLANNING AND PROGRESS SCHEDULES.**

Before starting the work and from time to time during its progress, as the Engineer may request, the Contractor shall submit to the Engineer a written description of the methods they plan to use in doing the work and the various steps they intend to take.

Within two (2) days after the date of starting work, the Contractor shall prepare and submit to the Engineer (A) a written schedule fixing the respective dates for the start and completion of various parts of the work. Each such schedule shall be subject to review, approval and change by the Engineer from time to time during the progress of the work.

#### **6.18 PRECAUTIONS DURING ADVERSE WEATHER.**

During adverse weather and against the possibility thereof, the Contractor shall take all necessary precautions so that the work may be properly done and satisfactory in all respects. When required, protection shall be provided by use of plastic sheets, tarpaulins, wood and building-paper shelters or other approved means.

The Engineer may suspend construction operations at any time when, in their sole judgment, the conditions are unsuitable or the proper precautions are not being taken, whatever the weather may be, in any season.

#### **6.19 UNDERGROUND INSTALLATIONS**

Prior to opening an excavation, effort shall be made to determine whether underground installations, i.e., sewer, water, fuel, electric lines, etc. will be encountered and, if so, where such underground installations are located. When the excavation approaches the estimated location of such an installation, the exact location shall be determined by careful probing or hand digging, and when it is uncovered, proper support shall be provided for the existing installation. Utility companies shall be contacted and advised of proposed work prior to the start of actual excavation.

"CALL BEFORE YOU DIG," toll free, statewide, 1-800-922-4455 at least 24 hours in advance of performing any excavation.

**TOWN OF GREENWICH, CONNECTICUT  
DEPARTMENT OF PUBLIC WORKS  
MAINTENANCE DREDGING OF SEDIMENT FOREBAYS  
AT BINNEY PARK**

**TOWN PROJECT NO. 19-22**

**SECTION 7  
TECHNICAL PROVISIONS  
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## SECTION 01010

### SUMMARY OF WORK

#### PART 1 GENERAL

##### 1.01 LOCATION OF WORK

- A. The work under this Contract is located at the upper pond of the Binney Park Pond, adjacent to the intersection of Arch Street and Sound Beach Avenue in Old Greenwich, Connecticut, as shown on the enclosed Location Plan. The work shall be within the Town property as shown on the Dredging Plan.

##### 1.02 SCOPE OF WORK

- A. Furnish all labor, materials, equipment and incidentals required and perform the work in its entirety as shown on the Dredging Plan and as specified herein.
- B. The Work within the Bid includes, but is not necessarily limited to, the following:
  - 1. Hydraulic dredging to remove and dispose offsite accumulated sediment in 16,400 ft<sup>2</sup> of the sediment forebays of the upper pond within the Binney Park Pond, with Sediment Forebay I containing 11,800 ft<sup>2</sup> and Sediment Forebay II containing 4,600 ft<sup>2</sup>. The material is stored between -1.0 and 3.2 NAVD88 generating approximately 500 cubic yards of material. The location of the accumulated sediment in each forebay varies and is shown on Figure 2.
  - 2. Post construction, the disturbed areas needed for access shall be restored to their original condition.
- C. The Contractor's attention is directed to the fact that there is a stone weir separating the two forebays and a second stone weir separating Sediment Forebay II from the lower pond.
- D. Contractor is required to perform all dredging activities by accessing the work area only from the access points identified on the Dredging Plan. Equipment needed to complete the work is only permitted to be stored on Arch Street for the duration of the project. Binney Park will be kept open to the public throughout the duration of the project.
- E. Material dredged must be removed and disposed offsite; storage of dredged material will not be permitted on site and space is not available for dewatering of material.
- F. Contractor shall submit a work plan identifying the anticipated construction methods, sequencing and work details in accordance with the requirements in Section 02482 and paragraph 1.04 below to the Engineer at least 10 days prior to commencement of work.
- G. Contractor shall maintain the flow within the pond. By-pass facilities to convey flow around the work area will not be permitted.
- H. Contractor is responsible to repair pavement, curbing or turf damaged as a result of the project at no extra cost to the Owner.
- I. All labor, materials, tools, equipment and incidentals required to complete the work shall be provided by the Contractor.
- J. Truck traffic shall be limited to Arch Street via Sound Beach Avenue. Trucks will not be permitted on Wesskum Wood Road.

- K. As per Inland, Wetlands and Watercourse Agency (IWWA) Permit #2012-03 Special Conditions, the compliance statement must be filed by the contractor before work commences. The Town will coordinate a meeting with IWWA staff at the site prior to starting work.

#### 1.03 ABBREVIATIONS AND REFERENCES

ANSI	-	American National Standards Institute
ASCE	-	American Society of Civil Engineers
ASTM	-	American Society of Testing Materials
FED. SPEC.	-	Federal Specifications
OSHA	-	Occupational Safety and Health Act

Where reference is made to a specification by one of the above-mentioned or other associations, it is understood that the latest revisions thereof shall apply. In case of conflict, this specification shall take precedence over the above noted Specifications.

#### 1.04 WORK PLAN

- A. Contractor to provide the Engineer with a work plan that includes, but is not limited to: traffic management; erosion and sedimentation controls to prohibit transport of sediment from the work area; piping or pumping systems; method of dredging; transportation routes and disposal facility information. Said plan shall be submitted by the Contractor to the Owner prior to commencement of work and coordinated with the Owner.

#### 1.05 CONTRACTOR'S USE OF PREMISES

- A. Coordinate use of the premises with Gabriella M. Circosta-Cohee, Engineering Division, Town of Greenwich.
- B. Contractor shall limit access to the work area to the locations identified on the Dredging Plan.

#### PART 2 MATERIALS (NOT USED)

#### PART 3 EXECUTION (NOT USED)

#### PART 4 MEASUREMENT AND PAYMENT

- A. There will be no direct payment for this item, and the cost thereof shall be considered as included in the general cost of the work.

END OF SECTION

## SECTION 01046

### CONTROL OF WORK

#### PART 1 GENERAL

##### 1.1 GENERAL

- A. The Work of this contract will proceed according to the following guidelines unless otherwise noted or indicated on the Dredging Plan.
- B. The Contractor shall attend a pre-construction conference with the Greenwich Department of Public Works prior to commencement of any work.
- C. Before beginning any work, the Contractor shall provide a Work Plan to the Engineer for review and approval outlining the methods and equipment proposed for use in the performance of the work and for protecting the site and adjacent areas from damage of any kind.
- D. Normal work hours shall be from 7:00 AM to 6:00 PM Monday through Friday and 9:00 AM to 5:00 PM on Saturday. No work will be allowed on Sundays or holidays.
- E. Binney Park will remain open to the public. The Contractor shall plan/schedule their work accordingly.
- F. Truck traffic shall be limited to Arch Street via Sound Beach Avenue. No truck traffic will be permitted on Wesskum Wood Road.

##### 1.2 CONTRACTOR'S OPERATIONS

- A. Furnish labor and equipment that will be efficient, appropriate and large enough to secure a satisfactory quality of work and a rate of progress to ensure the completion of the work within the Contract Time stipulated in the Information for Bidders. If at any time such operation appears to the Engineer to be inefficient, inappropriate or insufficient for securing the quality of work required or for producing the rate of progress aforesaid, he/she may order the Contractor to increase the efficiency, change the character or increase dedicated labor and/or equipment and the Contractor shall conform to such order. Failure of the Engineer to give such order shall in no way relieve the Contractor of their obligation to secure the quality of the work and rate of progress required.

##### 1.3 COORDINATION WITH THE OWNER

- A. Contractor shall coordinate schedule, access to the site with representative of the Owner and Engineer.
- B. Damages to pavement, curb, turf and other structures shall be repaired in-kind at the expense of the Contractor. The Contractor will take care not to disturb the park area, especially the trees.
- C. The Contractor shall dispose of excavated materials at a location agreed upon by the Owner and Engineer. The Contractor shall be responsible for transport and disposal of all dredged material.

##### 1.4 WORK LOCATIONS

- A. Work shall be located substantially as indicated on the Drawings, but the Owner and Engineer reserve the right to make such modifications in locations as may be found desirable to avoid interference with existing structures or for other reasons.

- B. The Contractor's work zone shall be as described in the Summary of Work.

#### 1.5 PROTECTION AND RELOCATION OF EXISTING STRUCTURES AND UTILITIES

- A. The Contractor shall assume full responsibility for the protection of all buildings, structures and utilities, public or private, including poles, signs, fences, services to buildings, playground equipment, trees, shrubs, flagpole, monument, utilities, gas pipes, water pipes, hydrants, sewers, drains and electric and telephone cables, whether or not they are shown on the Drawings. The Contractor shall carefully support and protect all such structures and utilities from injury of any kind. Any damage resulting from the Contractor's operations shall be repaired by the Contractor at the Contractor's expense, with no reimbursement by the Owner.
- B. Assistance will be given to the Contractor in determining the location of existing services. The Contractor, however, shall bear full responsibility for obtaining all locations of underground structures and utilities.
- C. Contractor shall notify all utility companies in writing at least 72 hours (excluding Saturdays, Sundays and Legal holidays) before excavating in any public way or property. Also notify Call Before You Dig, telephone 811/1-800-922-4455 at least 72 hours prior to start of work.
- D. Protection and temporary removal and replacement of existing utilities and structures as described in this Section shall be a part of the work under the Contract and all costs in connection therewith shall be included in the Total Price Bid in the Bid Form.
- E. If, in the opinion of the Engineer, permanent relocation of a utility owned by the Town is required, the Engineer may direct the Contractor, in writing, to perform the work. Work so ordered will be paid for at the Contract unit prices, if applicable, or as extra work. If relocation of a privately owned utility is required, the Owner will notify the Utility to perform the work as expeditiously as possible. Cooperate with the Owner and Utility. No claim for delay will be allowed due to such relocation.
- F. Under no circumstances shall the Contractor damage any water lines, hydrants, service connections, valves and appurtenances, drains or sewers during the work. Should the Contractor damage any portion of the system, the Contractor shall make the necessary repairs to the satisfaction of the Owner and Engineer, at no additional cost to the Owner and Engineer.

#### 1.6 MAINTENANCE OF FLOW

- A. The Contractor shall maintain flow through the Pond and any drains that normally discharge to the pond as specified in Section 01510.
- B. In the event of a major storm or hurricane event, the Contractor shall demobilize.

#### 1.7 COOPERATION WITH THIS CONTRACT

- A. All firms or persons authorized to perform any work under this Contract shall cooperate with the Contractor and his/her Subcontractors or trades and shall assist in incorporating the work of other trades where necessary or required.

#### 1.8 CLEANUP AND DISPOSAL OF EXCESS MATERIALS

- A. During the course of the work, keep the site of operations as clean and neat as possible. Dispose of all residue resulting from the construction work and, at the conclusion of the work, remove and haul away equipment, temporary structures and any other refuse remaining from the construction operations and leave the entire site of the work in a neat and orderly condition.

- B. Dispose of excavated material in accordance with Section 02125.
- C. In order to prevent environmental pollution arising from the construction activities related to the performance of this Contract, the Contractor and his/her subcontractors shall comply with all applicable Federal, State and local laws and regulations concerning waste material disposal, as well as the specific requirements stated in this Section and elsewhere in the Specifications.
- D. The Contractor is advised that the disposal of excavated material in wetlands, stream corridors and plains is strictly prohibited even if the permission of the property owner is obtained. Any violation of this restriction by the Contractor or any person employed by them, will be brought to the immediate attention of the responsible regulatory agencies, with a request that appropriate action be taken against the offending parties. Therefore, the Contractor will be required to remove the fill at their own expense and restore the area impacted.

#### 1.9 RESTORATION

- A. The Contractor is required to restore all areas to conditions that existed prior to construction or as shown on the Drawings. Existing area disturbed by the construction shall be replaced to the limits and thicknesses existing prior to construction or as shown on the Drawings.
- B. Existing signs, lampposts, fences and stone walls which may be damaged by the Contractor shall be reinstalled in a vertical position at the same location from which they were removed. Damaged items shall be replaced with an item equal to or better than the damaged items.
- C. Existing concrete, bituminous, timber or granite curbing shall be protected. Curbing which is damaged during construction shall be replaced with curbing of equal quality and dimension at the Contractor's expense.

#### PART 2 PRODUCTS (NOT USED) PART 3 EXECUTION (NOT USED)

#### PART 4 MEASUREMENT AND PAYMENT

- A. There will be no direct payment for this item, and the cost thereof shall be considered as included in the general cost of the work.

END OF SECTION

## SECTION 01300

### SUBMITTALS

#### PART 1 GENERAL

##### 1.01 DESCRIPTION OF REQUIREMENTS

- A. This Section specifies the general methods and requirements of submissions applicable to the following work-related submittals: Product Data, Work Plan and Construction Schedule.
- B. All submittals shall be clearly identified by reference to Specification Section, Paragraph, Drawing Number or Detail as applicable. Submittals shall be clear and legible and of sufficient size for sufficient presentation of data.

##### 1.02 PRODUCT DATA

###### A. Product Data

- 1. Product data as specified in individual Sections, include, but are not necessarily limited to, standard prepared data for manufactured products (sometimes referred to as catalog data), such as the manufacturer's product specification and installation instructions, manufacturer's printed statements of compliances and applicability, catalog cuts, product photographs, production or quality control inspection and test reports and certifications, product operating and maintenance instructions and printed product warranties, as applicable to the Work.

##### 1.03 CONTRACTOR'S RESPONSIBILITIES

- A. The Contractor shall review product data, including those by subcontractors, prior to submission to determine and verify the following:
  - 1. Field measurements
  - 2. Field construction criteria
  - 3. Catalog numbers and similar data
  - 4. Conformance with the Specifications
- B. Each product data submitted by the Contractor shall have affixed to it the following Certification Statement including the Contractor's Company name and signed by the Contractor: "Certification Statement: by this submittal, I hereby represent that I have determined and verified all field measurements, field construction criteria, materials, dimensions, catalog numbers and similar data and I have checked and coordinated each item with all Contract requirements." Product data sheets 11-in x 17-in and smaller shall be bound together in an orderly fashion and bear the above Certification Statement on the cover sheet. The cover sheet shall fully describe the packaged data and include a listing of all items within the package. Provide to the Engineer a copy of each submittal transmittal sheet for product data at the time of submittal of said product data.



- C. The Contractor shall utilize a 10-character submittal identification numbering system in the following manner:
1. The first character shall be a D, S, P, M, or R, which represents Shop/Working Drawing and other Product Data (D), Sample (S), Preliminary Submittal (P), Operating/ Maintenance Manual (M), or Request for Information (R).
  2. The next five digits shall be the applicable Section Number.
  3. The next three digits shall be the numbers 001 to 999 to sequentially number each initial separate item or drawing submitted under each specific Section Number.
  4. The last character shall be a letter, A to Z, indicating the submission, or resubmission of the same Drawing, i.e., "A=1st submission, B=2nd submission, C=3d submission, etc. A typical submittal number would be as follows:

D-03300-008-B

D	=	Shop Drawing
03300	=	Section for Concrete
00800	=	The eighth initial submittal under this Section
B	=	The second submission (first resubmission) of that particular shop drawing

- D. Notify the Engineer in writing, at the time of submittal, of any deviations in the submittals from the requirements of the Contract Documents.
- E. The review and approval of product data by the Engineer shall not relieve the Contractor from their responsibility with regard to the fulfillment of the terms of the Contract. All risks of error and omission are assumed by the Contractor and the Engineer will have no responsibility therefor.
- F. No portion of the work requiring product data shall be started nor shall any materials be fabricated or installed prior to the approval or qualified approval of such item. Fabrication performed, materials purchased or on-site construction accomplished which does not conform to approved data shall be at the Contractor's risk. The Owner will not be liable for any expense or delay due to corrections or remedies required to accomplish conformity.
- G. Project work, materials, fabrication, and installation shall conform with approved applicable product data.
- H. On projects consisting of lump sums (in whole or in part), submit a proposed schedule of values providing a breakdown of lump sum items into reasonably small components – generally disaggregated by building, area and/or discipline. The purpose of the schedule of values is for processing partial payment applications. If requested by the Engineer, provide sufficient substantiation for all or some items as necessary to demonstrate that the proposed schedule of values is a reasonable representation of the true cost breakdown of the Work. The schedule of values shall not be unbalanced to achieve early payment or over-payment in excess of the value of work or any other mis-distribution of the costs. If, in the opinion of the Engineer, the schedule of values is unbalanced, the Contractor shall reallocate components to achieve a balanced schedule acceptable to the Engineer.

#### 1.04 CONTRACTOR'S WORK PLAN

- A. The Contractor shall submit a work plan for each significant phase of construction associated with

the work.

- B. The work plan shall be submitted to the ENGINEER for review at a minimum of ten (10) working days prior to starting a particular phase of construction. The work shall not proceed without the Owner's approval of work plan.
- C. The work plan shall include, but may not be limited to, the following information to accurately describe the proposed work:
  - 1. Scope and schedule of work
  - 2. Proposed labor force (crews) and equipment
  - 3. Backup Equipment
  - 4. Equipment Staging Area
  - 5. Management of excavated material
  - 6. Decanting procedures
  - 7. Maintenance of vehicular and pedestrian traffic
  - 8. Transportation route information
  - 9. Disposal facility information
  - 10. Sedimentation and erosion control measures
  - 11. Provisions for emergency vehicle access and traffic
  - 12. Restoration plan
  - 13. Professional Certification Form

#### 1.05 SUBMISSION REQUIREMENTS

- A. Make submittals promptly in accordance with approved schedule and in such sequence as to cause no delay in the Work or in the work of any other contractor.
- B. Each submittal, appropriately coded, will be returned within 30 working days following receipt of submittal by the Engineer.
- C. Number of submittals required:
  - 1. Product Data as defined in Paragraph 1.02 B: One copy submitted electronically via email as a pdf to the project manager.
- D. Submittals shall contain:
  - 1. The date of submission and the dates of any previous submissions.
  - 2. The Project title and number.

3. Contractor identification.
4. The names of:
  - a. Contractor
  - b. Supplier
  - c. Manufacturer
5. Identification of the product, with the specification section number, page and paragraph(s).
6. Field dimensions, clearly identified as such.
7. Relation to adjacent or critical features of the Work or materials.
8. Applicable standards, such as ASTM or Federal Specification numbers.
9. Identification of deviations from Contract Documents.
10. Identification of revisions on resubmittals.
11. An 8-in by 3-in blank space for Contractor and Engineer stamps.

#### 1.06 REVIEW OF PRODUCT DATA AND WORKING DRAWINGS

- A. The review of data will be for general conformance with the design concept and Contract Documents. They shall not be construed:
  1. as permitting any departure from the Contract requirements;
  2. as relieving the Contractor of responsibility for any errors, including details, dimensions, and materials;
  3. as approving departures from details furnished by the Engineer, except as otherwise provided herein.
- B. The Contractor remains responsible for details and accuracy, for coordinating the work with all other associated work and trades, for selecting fabrication processes, for techniques of assembly, and for performing work in a safe manner.
- C. If the data as submitted describe variations and show a departure from the Contract requirements which Engineer finds to be in the interest of the Owner and to be so minor as not to involve a change in Contract Price or Contract Time, the Engineer may return the reviewed drawings without noting an exception.
- D. Submittals will be returned to the Contractor under one of the following codes.

Code 1 - "APPROVED" is assigned when there are no notations or comments on the submittal. When returned under this code the Contractor may release the equipment and/or material for manufacture.

Code 2 - "APPROVED AS NOTED". This code is assigned when a confirmation of the notations and comments IS NOT required by the Contractor. The Contractor may release the equipment or material for manufacture; however, all notations and comments must be incorporated into the final product.

Code 3 - "APPROVED AS NOTED/CONFIRM". This combination of codes is assigned when a confirmation of the notations and comments IS required by the Contractor. The Contractor may release the equipment or material for manufacture; however, all notations and comments must be incorporated into the final product. This confirmation shall specifically address each omission and nonconforming item that was noted. Confirmation is to be received by the Engineer within 15 calendar days of the date of the Engineer's transmittal requiring the confirmation.

Code 4 - "APPROVED AS NOTED/RESUBMIT". This combination of codes is assigned when notations and comments are extensive enough to require a resubmittal of the package. The Contractor may release the equipment or material for manufacture; however, all notations and comments must be incorporated into the final product. This resubmittal is to address all comments, omissions and non-conforming items that were noted. Resubmittal is to be received by the Engineer within 15 calendar days of the date of the Engineer's transmittal requiring the resubmittal.

Code 5 - "NOT APPROVED" is assigned when the submittal does not meet the intent of the Contract Documents. The Contractor must resubmit the entire package revised to bring the submittal into conformance. It may be necessary to resubmit using a different manufacturer/vendor to meet the Contract Documents.

Code 6 - "COMMENTS ATTACHED" is assigned where there are comments attached to the returned submittal which provide additional data to aid the Contractor.

Codes 1 through 5 designate the status of the reviewed submittal with Code 6 showing there has been an attachment of additional data.

- E. Resubmittals will be handled in the same manner as first submittals. On resubmittals the Contractor shall direct specific attention, in writing on the letter of transmittal and on resubmitted shop drawings by use of revision triangles or other similar methods, to revisions other than the corrections requested by the Engineer, on previous submissions. Any such revisions which are not clearly identified shall be made at the risk of the Contractor. The Contractor shall make corrections to any work done because of this type of revision that is not in accordance to the Contract Documents as may be required by the Engineer.
- F. Partial submittals may not be reviewed. The Engineer will be the only judge as to the completeness of a submittal. Submittals not complete will be returned to the Contractor and will be considered "Not Approved" until resubmitted. The Engineer may at his/her option provide a list or mark the submittal directing the Contractor to the areas that are incomplete.
- G. Repetitive Review
  - 1. Shop drawings and other submittals will be reviewed no more than twice at the Owner's expense. All subsequent reviews will be performed at times convenient to the Engineer and at the Contractor's expense, based on the Engineer's then prevailing rates. The Contractor shall

reimburse the Owner for all such fees invoiced to the Owner by the Engineer. Submittals are required until approved.

2. Any need for more than one resubmission, or any other delay in obtaining Engineer's review of submittals, will not entitle Contractor to extension of the Contract Time.

H. If the Contractor considers any correction indicated on the shop drawings to constitute a change to the Contract Documents, the Contractor shall give written notice thereof to the Engineer at least seven working days prior to release for manufacture.

I. When the shop drawings have been completed to the satisfaction of the Engineer, the Contractor shall carry out the construction in accordance therewith and shall make no further changes therein except upon written instructions from the Engineer.

#### 1.07 DISTRIBUTION

A. Distribute electronic copy of approved shop drawings and copies of approved product data, where required, to the job site file and elsewhere as directed by the Engineer.

#### 1.08 SCHEDULES

A. Provide all schedules required by Section 6.17 of the General Conditions.

#### 1.10 GENERAL PROCEDURES FOR SUBMITTALS

A. Coordination of Submittal Times: Prepare and transmit each submittal sufficiently in advance of performing the related work or other applicable activities, or within the time specified in the individual work sections, of the Specifications, so that the installation will not be delayed by processing times including disapproval and resubmittal (if required), coordination with other submittals, testing, purchasing, fabrication, delivery and similar sequenced activities. No extension of time will be authorized because of the Contractor's failure to transmit submittals sufficiently in advance of the Work.

#### PART 2 PRODUCTS (NOT USED)

#### PART 3 EXECUTION (NOT USED)

#### PART 4 MEASUREMENT AND PAYMENT

A. There will be no direct payment for this item, the cost thereof shall be considered as included in the general cost of the work.

END OF SECTION

SECTION 01510

MAINTENANCE OF FLOW

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. Contractor shall submit to the Engineer a work plan and schedule to complete the Work.
- B. Contractor shall be responsible for maintaining the existing pond elevation and all stormwater flows into and through the pond during construction of the work of this project.
- C. Provide all labor, equipment, power and materials necessary to maintain stormwater flow, as required. The Contractor shall immediately remove and dispose of all offensive matter spilled during the dredging at their own expense.
- D. The Contractor shall be required to repair at their own expense any damage to property, caused by their operations.
- E. Should damage of any kind occur to the existing water mains, drains, or sewers the Contractor shall, at his own expense, make repairs to the satisfaction of the Engineer.
- F. All procedures for maintaining flows must meet the approval of the Engineer.

1.02 ANTICIPATED FLOW RATES

- A. The Contractor shall be responsible for maintaining flows from the influent culverts at the north end of the pond from the Main and Easterly Branches. During periods of high flow, the Contractor shall stop work. When high flows are anticipated the Contractor shall make efforts to minimize potential damage to the work area, including but not limited to the removal of any equipment within the pond area.
- B. Estimated flow rates entering the Binney Park Pond from the Main Stem (Cider Mill Brook) and the Easterly Tributary (Laddins Brook) during dry weather and storm conditions are as follows (all flows in cubic feet per second; cfs):

	<u>Main Stem</u>	<u>Easterly Tributary</u>	<u>Total</u>
Base flow	1.14	0.8	1.94
2-year storm	216	353	569
10-year storm	441	656	1,097
25-year storm	542	784	1,326

1.03 SUBMITTALS

- A. Submit to the Engineer a detailed written plan of all methods of flow maintenance and protection.
- B. Plan shall include:
  - 1. Method of filtration

2. Anticipated duration of filtration
  3. Detailed procedure and plan for filtering the impacted flow
- C. The Contractor shall submit to the Engineer detailed plans and descriptions outlining all provisions and precautions to be taken by the Contractor regarding the handling of existing stormwater flows. This plan must be specific and complete, including such items as schedules, locations, elevations, capacities of equipment, materials, and all other incidental items necessary and/or required to insure proper protection of the facilities, including protection of the access and pumping locations from damage. No construction shall begin until all provisions and requirements have been reviewed and approved by the Engineer.

## PART 2 PRODUCTS

### 2.01 MATERIALS

- A. All filtration, including the return flow and downstream filtration, must be acceptable by the Engineer.

## PART 3 EXECUTION

### 3.01 INSTALLATION

- A. The Contractor shall inspect the filtration regularly (every 4 hours) to ensure that the system is working correctly and shall maintain on site personnel to monitor the operations, as required.
- B. The Contractor shall terminate the dredge process if the filtration fails or is in need of repair and/or replacement.

## PART 4 MEASUREMENT AND PAYMENT

- A. There will be no direct payment for this item, the cost thereof shall be considered as included in the general cost of the work.

END OF SECTION

## SECTION 01600

### DELIVERY, STORAGE AND HANDLING

#### PART 1 GENERAL

##### 1.01 GENERAL

- A. This Section specifies the general requirements for the delivery, handling, storage and protection for all items required in the construction of the work. Specific requirements, if any, are specified with the related item.

##### 1.02 TRANSPORTATION AND DELIVERY

- A. Transport and handle items in accordance with manufacturer's printed instructions.
- B. Schedule delivery to reduce long term on-site storage prior to installation and/or operation.
- C. All items delivered to the site shall be unloaded and placed in a manner which will not hamper the Contractor's normal construction operation or those of subcontractors and other contractors and will not interfere with the flow of necessary traffic.
- D. Provide equipment and personnel to unload all items delivered to the site.
- E. Pay all demurrage charges if failed to promptly unload items.

##### 1.03 STORAGE AND PROTECTION

- A. Store and protect products in accordance with the manufacturer's instructions.
- B. Arrange storage of products to permit access for inspection. Periodically inspect to make sure products are undamaged and are maintained under specified conditions.

#### PART 2 MATERIALS (NOT USED)

#### PART 3 EXECUTION (NOT USED)

#### PART 4 MEASUREMENT AND PAYMENT

- A. There will be no direct payment for this item, the cost thereof shall be considered as included in the general cost of the work.

END OF SECTION



## SECTION 01601

### CONTROL OF MATERIALS

#### PART 1 GENERAL

##### 1.01 GENERAL

- A. This Section specifies the control of materials to be used in the construction of the work. Specific requirements, if any, are specified with the related item.

#### PART 2 MATERIALS

##### 2.01 APPROVAL OF MATERIALS

- A. All materials furnished by the Contractor shall be subject to the inspection and approval of the Engineer.
- B. As specified in Section 01300, the Contractor shall submit to the Engineer, data relating to materials they propose to furnish for the work. Such data shall be in sufficient detail to enable the Engineer to identify the particular product and to form an opinion as to its conformity to the specifications.
- C. Facilities and labor for handling and inspection of all materials shall be furnished by the Contractor. If the Engineer requires, either prior to beginning or during the progress of the work, the Contractor shall submit additional samples or materials for such special tests as may be necessary to demonstrate that they conform to the specifications. Such samples shall be furnished, stored, packed, and shipped as directed at the Contractor's expense. Except as otherwise noted, the Owner will make arrangements for and pay for the tests.
- D. Any delay of approval resulting from the Contractor's failure to submit samples or data promptly shall not be used as a basis of a claim against the Owner or the Engineer.
- E. The materials used on the work shall correspond to the approved samples or other data.

#### PART 3 EXECUTION (NOT USED)

#### PART 4 MEASUREMENT AND PAYMENT

- A. There will be no direct payment for this item, the cost thereof shall be considered as included in the general cost of the work.

END OF SECTION

SECTION 01700

CONTRACT CLOSEOUT

PART 1: GENERAL

1.01 SCOPE OF WORK

- A. This Section specifies administrative and procedural requirements for project closeout, including but not limited to:
  - 1. Record Documents
  - 2. Closeout Procedures
  - 3. Final Cleaning
  - 4. Adjusting

1.02 RECORD DOCUMENTS

- A. Maintain on site, one set of the following documents; actual revisions to the work shall be recorded in these documents:
  - 1. Contract Drawings.
  - 2. Specifications.
  - 3. Addenda.
  - 4. Change Orders and other Modifications to the Contract.
  - 5. Reviewed product data, and samples.
- B. Store Record Documents separate from documents used for construction.
- C. Record information concurrent with construction progress.
- D. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
  - 1. Manufacturer's name and product model and number.
  - 2. Product substitutions or alternates utilized.
  - 3. Changes made by Addenda and Modifications.
- E. Contract Drawings and Product Data: Legibly mark each item to record actual construction including:

1. Field changes of dimension and detail.
  2. Details not on original Contract Drawings.
  3. Final grading based on Post Dredging Hydrographic Survey.
- F. Submit documents to Engineer with Application for Final Payment.

#### 1.03 CLOSEOUT PROCEDURES

- A. Provide all deliverables as specified, prior to submitting the final payment application.
- B. Provide submittals to Engineer that are required by governing or other authorities having applicable jurisdiction including but not limited to permit close out information for those permits obtained by the Contractor, certificates of occupancy, etc.
- C. Submit Application for Final Payment identifying total adjusted Contract Sum, previous payments and sum remaining due, following submittal and approval of Record Documents and Record Drawings.
- D. Submit Contractor's Final Release and Release of Liens with final payment application.

#### 1.04 FINAL CLEANING

- A. Complete the following cleaning operations before requesting inspection for Certification of Substantial Completion.
  1. Remove labels that are not permanent labels.
  2. Clean the site, including landscape areas, of rubbish, litter and other foreign substances. Sweep paved areas broom clean; remove stains, spills and other foreign deposits. Rake grounds that are neither paved nor planted, to a smooth even-textured surface.

#### PART 2 PRODUCTS (NOT USED)

#### PART 3 EXECUTION (NOT USED)

#### PART 4 MEASUREMENT AND PAYMENT

- A. There will be no direct payment for this item, the cost thereof shall be considered as included in the general cost of the work.

END OF SECTION

## SECTION 01701

### WORK ON TOWN PROPERTY

#### PART 1 GENERAL

##### 1.01 SCOPE OF WORK

- A. Contractor shall coordinate site access with the Department of Parks and Recreation.
- B. The Contractor shall take special care to preserve and restore the disturbed property to its original condition after work is completed.
- C. For review and approval, the Contractor shall provide a work plan indicating how the site is to be accessed and limit of disturbance. In that work plan, the Contractor shall include all measures to be taken to restore the disturbed areas to existing or better condition.
- D. The Contractor shall take care to limit damages to the facility's grounds, and is responsible for restoration of any areas disturbed by their operations. Should the Contractor damage any pavement, the Contractor shall be responsible for repairing damages to pre-existing conditions or better at their own expense.

##### 1.02 WORK ON BINNEY PARK PROPERTY

- A. Contractor shall take all precautions necessary to minimize disturbance to retaining walls (stone, concrete block or other), shrubs, landscaping, trees, lamp posts, fences, walkways, footbridges, etc., and other features of the park property. No cutting of trees or removal of shrubs will be allowed. The Contractor will be responsible for restoration of the property to a condition at least equal to that existing prior to construction.
- B. If trees or shrubs are damaged during construction to such degree as to affect their growth or diminish their beauty or usefulness, they shall be replaced at the Contractor's expense by items of kind and quality at least equal to that existing at the start of the work.
- C. Fences, walks, stone walls and other property features which might be damaged by the Contractor's operations shall be removed, and replaced at the Contractor's expense to a condition at least equal to that existing at the start of the work.
- D. Pre-construction photos and video shall be taken of property features to document condition and type of such features as specified.

##### 1.03 SITE ACCESS

- A. Access to the site shall be coordinated with the Owner and Engineer. Contractor shall not access the property until authorized by the Owner.
- B. Upon completion of the construction, all traces of access shall be removed and all property features and landscaping which existed prior to the start of work shall be replaced or restored to their original condition.

##### 1.04 RESTORING PARK PROPERTY AND RIGHTS-OF-WAY

- A. The Contractor shall be responsible for all damage to the property due to his or her operations. Contractor shall protect from injury all walls, fences, cultivated shrubbery and vegetables, fruit trees, pavement, underground facilities, such as water, sewer and drain pipe, or other utilities which may be encountered during the project. If removal and replacement are required, it shall be done in a workmanlike manner so that replacement is equivalent to that which existed prior to construction.
- B. Existing trees, shrubs, plants, and bushes shall be fully protected as specified in Section 01046.
- C. Contractor shall repair or replace damaged items to pre-construction conditions. Contractor shall clean all areas where work took place or used to conduct work and leave areas in the condition existing prior to construction.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

PART 4 MEASUREMENT AND PAYMENT

- A. There will be no direct payment for this item, the cost thereof shall be considered as included in the general cost of the work.

END OF SECTION

## SECTION 02100

### SITE PREPARATION

#### PART 1 GENERAL

##### 1.01 SCOPE OF WORK

- A. Furnish all labor, materials, equipment and incidentals required, complete as shown on the Drawings and as specified herein.
- B. Obtain all permits required for site preparation work prior to proceeding with the work.
- C. Contractor shall be aware of flood zones, wetland boundaries and buffer zones as shown on the Drawings and shall direct daily work activities to limit disturbance of these areas to the satisfaction of the Owner and in accordance with all permits.
- D. Protect from injury or defacement of existing buildings to remain, pavements, fencing, lights, building and structure walls, utilities, signs, off site pavements indicated to be retained/protected, and other objects indicated by the Engineer to be preserved.
- E. Provide all required insurance, bonds and all other work associated with establishing the work on the site including mobilization.

##### 1.02 RELATED WORK

- A. Erosion and Sedimentation Control is included in Section 02270.
- B. Dredging and Dewatering of Dredged Material is included in Section 02482.

##### 1.03 SUBMITTALS

- A. Submit, in accordance with Section 01300, copies of all permits required prior to work.

##### 1.04 PRESERVATION OF PROPERTY

- A. Any damage to on-site structures, paving, gas, water, sewer, storm drain, electric lights, or any other pipes, mains, conduits, overhead or underground utility wire, fences, walls, walkways, buildings, and any other property shall be repaired at no cost to the Owner. Should any damage or injury be caused by the Contractor or anyone in his employ, or by work under this Contract, the Contractor shall at his own expense, make good such damage and assume responsibility for such damage and assume responsibility for such injury without cost to the Owner.

#### PART 2 PRODUCTS

##### 2.01 TREE PROTECTION

- A. All existing trees and the areas under their perimeter driplines adjacent to limit of work and trees specifically denoted on the Drawings shall be protected to the maximum extent practicable. Individual trees shall also be protected with temporary tree protection as shown on the Drawings and as directed by the Owner or Engineer. Take special care to protect root zone area of all trees from compaction and disturbance.

#### PART 3 EXECUTION

### 3.01 PROTECTION

- A. Trees and other vegetation designated on the Drawings or directed by the Engineer to remain shall be protected from damage.
- B. Maintain protection until all work in the vicinity of the work being protected has been completed.
- C. Do not operate heavy equipment within the branch spread of existing trees.
- D. Immediately repair any damage to existing tree crowns, trunks, or root systems. Roots exposed and/or damaged during the work shall immediately be cut off cleanly inside the exposed or damaged area.
- E. Restrict construction activities to those areas within the limits of construction designated on the Drawings as well as transport routes as shown on the Drawings.

## PART 4 MEASUREMENT AND PAYMENT

### 4.01 MEASUREMENT

- A. Measurement of Site Preparation costs shall be on a lump sum basis.

### 4.02 PAYMENT

- A. There will be no direct payment for this item, and the cost thereof shall be considered as included in the general cost of the work.

END OF SECTION

## SECTION 02125

### TRANSPORTATION AND DISPOSAL OF SOIL, SEDIMENT AND/OR DEBRIS

#### PART 1 GENERAL

##### 1.01 SCOPE OF WORK

- A. The work specified in this section shall involve the off-site transportation and disposal of materials at an approved, permitted off-site facility.
- B. The Engineer will provide the Contractor with waste characterization data prior to the commencement of the Work.
- C. Disposal of all excavated material shall be in compliance with all federal, state, and local requirements. The Contractor shall obtain all necessary permits, licenses and approvals for the off-site disposal of materials.

##### 1.02 REFERENCES

- A. Compliance with all applicable regulations, including but not limited to the following, is required. All work shall be conducted in compliance with applicable regulations and policies, as well as any changes or addenda to the same as set forth prior to the completion of the work. Nothing in this section will limit the Contractor's responsibility to adhere to these regulations and recognized standards and regulatory practices. The Owner, Owner's Licensed Environmental Professional (LEP), and/or the Engineer will not be responsible at any time for Contractor's violations of any applicable local, state, or federal regulations or endangerment of his employees or of his subcontractors.
- B. Code of Federal Regulations (CFR)
  - 1. Resources Conservation and Recovery Act (40 CFR 260 through 267)
  - 2. Occupational Safety and Health Administration (OSHA), with special emphasis to 29 CFR 1926.65/1910.120 (Hazardous Waste Operations and Emergency Response)
  - 3. U.S. Department of Transportation Regulations (49 CFR 171 through 179)

##### 1.03 SUBMITTALS

- A. All submittals shall be made in accordance with Section 01300 and shall be submitted prior to the initiation of the Work.
- B. The Contractor shall submit correspondence from an authorized representative of the proposed treatment/disposal facility stating the facility's intent to accept from the Contractor the specified materials. This submittal shall also include a copy of the facility acceptance criteria and a copy of the facility's operational permit.
- C. No facility may be substituted for the one designated in the Contractor's submittals unless approved by the Owner in writing.



- D. The Contractor shall submit copies of transportation and disposal documentation, including bills of lading and/or manifests and weight tickets/receipts for disposal of all excavated materials to the Owner.

## PART 2 MATERIALS (NOT USED)

## PART 3 EXECUTION

### 3.01 WASTE CHARACTERIZATION

- A. The Engineer is responsible for waste characterization sampling of material. Prior to the start of the Work, the Engineer shall collect samples of the material to be disposed of for waste characterization purposes. The Engineer shall provide for laboratory analysis of these waste characterization samples for analyses required by typical disposal facilities for the waste. The Engineer shall provide these waste characterization sample results to the Contractor for the Contractor's use in obtaining disposal facility approval and coordinating all waste disposal.
- B. The Contractor shall prepare necessary paperwork (waste profiles, manifests, etc.) to be used to transport the waste to the disposal facility.
- C. The Town of Greenwich will be the designated Generator of project wastes where a Generator is required to be named. The Town of Greenwich has a Generator ID for the facility to be placed on manifests if required and a representative of the Town will sign all waste manifests. The Contractor shall notify the Town a minimum of 72 hours in advance of shipping any wastes offsite so that appropriate personnel can be made available to review and sign waste manifests.

### 3.02 TRANSPORTATION

- A. All transport containers/vehicles used to transport excavated materials shall have a metal dump body free from any holes and a sealable tailgate.
- B. All excavated materials shall be covered and secured during transport to prevent shifting and to ensure that seepage of water into and release of material out of the dump body is prevented.
- C. Transport vehicles/containers, loading, weight limits, unloading, and decontamination procedures shall meet all appropriate state and federal DOT standards.
- D. The Contractor shall transport bulk waste material to an approved waste disposal/recycling facility, as arranged by the Contractor, in accordance with all local, state and federal regulations.
- E. Excavated materials shall be kept below the top of the truck container.
- F. If material is spilled on the exterior of the transport vehicles while loading, the material shall be brushed off, collected, and disposed of with other excavated materials of the same waste type before the vehicle leaves the Site.
- G. The Contractor shall transport waste to receiving facilities in accordance with USDOT, USEPA and OSHA regulations.
- H. The Contractor shall utilize hauler(s) that are licensed as necessary in all states affected by transport.

### 3.03 SHIPPING PAPERS

- A. The Contractor shall prepare all documentation required for transport and disposal. Transport of the excavated materials shall take place under a Bill of Lading (BOL) and/or any additional shipping papers and/or waste manifests that may be required by the disposal facility or disposal state.
- B. The Contractor shall provide the Engineer with a copy of the BOL and/or manifest and any supporting documentation at least 72 hours prior to planned removal of the material from the Site.
- C. The Engineer shall review the BOL and/or manifest and supporting documentation prior to signature by Owner or Owner's Representative.
- D. The Contractor shall maintain a tracking system that shall be kept on site and available for inspection at any time. The tracking system shall document for each truck load the truck registration number and state of registration, driver name, description of load including source of material being disposed, BOL and/or manifest log sheet number, date of removal from site, date of arrival at facility, and date BOL log sheets and/or manifest returned with facility signature.
- E. The Contractor shall verify that each truck load is accompanied by a complete BOL and original signed log sheet and/or manifest completed for the load it is carrying. Each BOL and/or manifest shall be accompanied by an attached list of all load identification numbers that are transported under said shipping papers.
- F. The Contractor shall submit weight slips to Engineer following receipt of the material at disposal facility.
- G. Wastes shall not be delivered to any facility other than that specified in the BOL and/or manifest.

### 3.04 OFF-SITE DISPOSAL

- A. The Contractor shall identify the specific facility(ies) intended for use prior to any Work. Substitutions or additions shall not be permitted without prior written approval from the Owner or Engineer.
- B. Acceptance of Material: The Contractor shall be responsible for acceptance of the specific material at the approved disposal facility, for ensuring that the facility is properly permitted to accept the stated material, and that the facility provides the stated treatment and/or disposal services.
- D. The Owner or the Engineer reserves the right to contact and visit the disposal facilities and regulatory agencies to verify the agreement to accept the stated material and to verify any other information provided. This does not in any way relieve the Contractor of his responsibilities under this contract.
- E. Contractor's Responsibility: In the event that the identified and approved facility ceases to accept the stated materials, or the facility does not provide sufficient disposal capacity, or the facility ceases operations, it shall be the Contractor's responsibility to arrange for an alternate approved and permitted disposal facility. The Contractor is responsible for making the necessary arrangements to utilize the facility, and the alternate facility must be approved in writing by the Owner or the Engineer in the same manner and with the same requirements as for the original facility.

### 3.05 RECORDKEEPING

- A. Records: Transportation, treatment and disposal methods and dates, the quantities of waste, the name and addresses of transporter(s) and the disposal facility shall be recorded and available for the Owner or the Engineer's inspection. The Contractor shall submit copies of all such documentation to the Owner at project completion.
- B. Specific records to be kept and transferred to the Owner at project completion shall include the following, at a minimum:
  - 1. Original copies of all shipping papers.
  - 2. One copy of all waste profile sheets.
  - 3. Copies of weight slips for each load of material delivered to the disposal facility.
  - 4. Lone original copies of all certifications of final treatment/disposal signed by the responsible disposal facility official.
- C. Documentation of Treatment or Disposal: The excavated materials must be taken to the approved disposal facility which has EPA or appropriate state permits and identification numbers and complies with all of the provisions of the disposal regulations. Documentation of acceptance by the facility shall be furnished to the Engineer not later than five (5) working days following the delivery of the waste to the facility.

#### PART 4 MEASUREMENT AND PAYMENT

- A. There will be no direct payment for this item, and the cost thereof shall be considered in the cost for Item No. 02482, Dredging.

END OF SECTION

## SECTION 02270

### EROSION AND SEDIMENTATION CONTROL

#### PART 1 GENERAL

##### 1.01 SCOPE OF WORK

- A. Furnish all labor, materials, equipment and incidentals required and perform all installation, maintenance, removal and area cleanup related to erosion and sedimentation control work as shown on the Drawings and as specified herein. The work shall include, but not necessarily be limited to; installation of temporary access ways and ground protection, catch basin filters, sediment removal and disposal, turbidity control curtains, device maintenance, removal of temporary devices and final cleanup.

##### 1.02 RELATED WORK

- A. Dredging and Dewatering of Dredged Material is included in Section 02482.
- B. Miscellaneous work and cleanup is included in Section 02901

##### 1.03 SUBMITTALS

- A. Submit, in accordance with Section 01300, within 10 days after award of Contract, technical product literature for all commercial products, including those to be used for erosion and sedimentation control.

##### 1.04 REFERENCE STANDARDS

- A. EPA document titled: "Stormwater Management for Construction Activities – Developing Pollution Prevention Plans and Best Management Practices" document number EPA 832-R-92-005, dated 1992, or most recent.
- B. Connecticut Stormwater Quality Manual (2004).
- C. State or appropriate County Conservation District standards may be substituted for the EPA standard if the State or County Conservation District standard is equal to, or more detailed than, the EPA standard.
- D. Connecticut Guidelines for Soil Erosion and Sediment Control (2002).

##### 1.05 QUALITY ASSURANCE

- A. Be responsible for the timely installation and maintenance of all sedimentation control devices necessary to prevent the movement of sediment from the construction site to offsite areas or into the stream system via surface runoff or underground drainage systems. Measures in addition to those shown on the Drawings necessary to prevent the movement of sediment off site shall be installed, maintained, removed, and cleaned up at the expense of the Contractor. No additional charges to the Owner will be considered.
- B. Erosion and sedimentation control measures shall conform to the requirements, standards and guidelines presented in the Reference Standards.

- C. Where the Contractor’s efforts to control erosion and sedimentation have been demonstrated to be ineffective or potentially ineffective in the opinion of the Engineer, the Engineer may order that additional measures be implemented and constructed at no additional cost to the Owner.
- D. Contractor shall keep parking areas and access roads as well as adjacent public streets free of tracked mud and soil from Contractor's activities. Sweep and dispose of swept material on a weekly basis at a minimum, or more frequently, as directed by the Owner.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Temporary access ways shall have ground protection in place consisting of lightweight, versatile construction mats constructed of HDPE specifically designed for this purpose such as “Duradeck” by Signature Systems Group, or approved equal.
- B. Catch Basin sediment control devices shall be sediment capture devices specifically designed for this purpose such as “Silt Sack” by Geo-Synthetics, LLC or approved equal.

2.02 TURBIDITY CONTROL CURTAIN

- A. Turbidity control curtain shall consist of flexible polyester reinforced vinyl filter fabric dielectrically welded to provide an upper hem for enclosing flotation material and a lower hem for enclosing ballast material. Adequate flotation and ballast shall be provided for each installation. Each curtain shall be made up of one or more sections run from shoreline to shoreline, length as required per each installation. Multiple sections shall be connected using shackled and bolted load lines with reinforced PVC pipe for watertight fabric closure. Appropriate depth of fabric, flotation material and ballast shall be used for each installation.
- B. Filter fabric for turbidity control curtains shall meet the following properties:

	<u>Average Physical Property</u>	<u>ASTM Standard</u>
1. Weight	6.2 oz/yd	D3776
2. Thickness	15 mils	D1777
3. Elongation at Break	28 percent (warp)/ 24 percent (fill)	D4637
4. Puncture Strength	180 lbs	D4833
5. A.O.S. Std. Sieve	70 to 100	D4751
6. Flow Rate	23gpm/sq. ft.	D4491

PART 3 EXECUTION

3.01 INSTALLATION

- A. Turbidity Control Curtain Installation
  - 1. Turbidity control curtains shall be installed and approved by the Engineer prior to commencing any dredging work. Turbidity control curtains shall be used during the entire dredging operation to minimize increases in turbidity outside the area of dredging.

2. Turbidity control curtains shall be installed where shown on the Drawings. These shall remain in place during the entire period of dredging work and shall be removed only after final acceptance of the dredging work.
  3. All turbidity control curtains shall extend the full depth of the pond and their depth adjusted as required to match bottom contours as the dredging work progresses.
  4. The turbidity control curtains shall be maintained in good operating conditions during the entire period of dredging work.
  5. Temporary turbidity control curtains shall be installed downstream of the dredging work at each stone weir for each sediment forebay.
- B. Access ways shall be surfaced with ground protection and installed according to manufacturer's recommendations
- C. Catch Basins shall have sediment control filters installed according to manufacturer's recommendations.

### 3.02 MAINTENANCE AND INSPECTIONS

#### A. Inspections

1. Make a visual inspection of all erosion and sedimentation control devices once per week and promptly after every rainstorm. If such inspection reveals that additional measures are needed to prevent movement of sediment to offsite areas, promptly install additional devices as needed. Sediment controls in need of maintenance shall be repaired promptly.

#### B. Device Maintenance

##### 1. Turbidity Control Curtain

- a. Remove accumulated sediment as needed.
- b. Replace damaged fabric, or patch with a 2-ft minimum overlap.
- c. Make other repairs as necessary to ensure that the curtain is filtering all flow directed downstream.

### 3.03 REMOVAL AND FINAL CLEANUP

- A. Once the site has been fully stabilized against erosion, remove sediment control devices and all accumulated silt. Dispose of silt and waste materials in proper manner. Regrade all areas disturbed during this process and stabilize against erosion with surfacing materials as indicated on the Drawings.

## PART 4 MEASUREMENT AND PAYMENT

### 4.01 MEASUREMENT

- A. Measurement for Erosion and Sedimentation Control shall be on a lump sum basis.

### 4.02 PAYMENT

- A. Payment for Erosion and Sedimentation Control shall be on a lump sum basis and shall be included in Base Bid Item 02901, Miscellaneous Work and Cleanup. Price and payment shall be full compensation for providing all work specified in this Section and all else incidental thereto for which separate payment is not provided under other items in the Bid Form.

END OF SECTION

## SECTION 02311

### EXCAVATION AND LOADING OF SOIL, SEDIMENT AND/OR DEBRIS

#### PART 1 GENERAL

##### 1.01 SCOPE OF WORK

- A. Areas of sediment and/or debris to be excavated and/or disposed of are shown on the dredging plan. These areas are subject to change based upon field conditions.

##### 1.02 REFERENCES

- A. Compliance with all applicable regulations, including but not limited to the following, is required. All work shall be conducted in compliance with applicable regulations and policies, as well as any changes or addenda to the same as set forth prior to the completion of the work. Nothing in this section will limit the Contractor's responsibility to adhere to these regulations and recognized standards and regulatory practices.

1. The Connecticut Department of Energy and Environmental Protection (CT DEEP) *General Permit for Contaminated Soil and/or Sediment Management (Staging and Transfer)* issued September 20, 2013.

##### 1.03 SUBMITTALS

- A. The following shall be submitted prior to the initiation of the Work.
  1. Prior to commencement of the Work, submit for review by the Engineer, a plan describing the proposed sequence, methods and equipment to be used for staging and loading of materials.

#### PART 2 MATERIALS (NOT USED)

#### PART 3 EXECUTION

##### 3.01 EXCAVATION OF MATERIAL

- A. The Contractor shall excavate the sediment and/or debris in a systematic manner to allow for the Engineer's evaluation as described herein. Contractor shall maintain appropriate care when excavating. Contractor will not alter, remove or damage existing subgrade improvements (drainage pipes etc.) during excavation.
- B. The Contractor shall excavate sediment and/or debris to the limits and depths shown on the Dredging Plan. Incidental sediment excavated beyond the limits shown to achieve these horizontal limits for the full depth of the excavation shall be disposed of with the sediment and/or debris at no additional cost to Owner.
- C. The Contractor shall only excavate beyond the horizontal and vertical limits shown where directed by the Engineer and will only be compensated for additional excavated volume beyond the limits shown on the Drawings if directed and approved by the Engineer.
- D. The Contractor will use materials such as tread mats in areas where minimal impact to surfaces is intended by the Engineer.



3.02 ELIMINATION OF FREE DRAINING LIQUIDS:

- A. Free draining liquids shall be removed from the sediment and/or debris to allow for over the road transportation and as required for the acceptance by the intended disposal facility.

3.03 STAGING OF MATERIAL

- A. Staging and stockpiling of sediment and/or debris is not permitted.

3.04 LOADING OF MATERIAL

- A. Contractor shall coordinate all loading activities and exercise care while loading sediment and/or debris to minimize spillage.
- B. Contractor is to comply with all state and local requirements regarding the loading and shipping of excavated materials.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. Excavation and Loading of Soil, Sediment and/or Debris shall be measured on a per cubic yard basis.

4.02 PAYMENT

- A. There will be no direct cost for this item, the cost therefore shall be included in the bid price of Item No. 02482, Dredging.

END OF SECTION

## SECTION 02482

### DREDGING AND DEWATERING OF DREDGED MATERIAL

#### PART 1 GENERAL

##### 1.01 SCOPE OF WORK

- A. Furnish all labor, materials, equipment and incidentals necessary and perform all dredging of the Pond and dewatering of dredged material as shown on the Dredging Plan and as specified herein.

##### 1.02 RELATED WORK

- A. Control of Work is included in Section 01046.
- B. Submittals is included in Section 01300.
- C. Maintenance of flow is included in Section 01510.
- D. Contract closeout is included in Section 01700
- E. Site preparation is included in Section 02100.
- F. Transportation and Disposal of Soil, Sediment and/or Debris is included in Section 02125.
- G. Sedimentation and erosion control is included in Section 02270.

##### 1.03 SUBMITTALS

- A. Submit, in accordance with Section 01300, copies of all documentation required to establish compliance with the Contract Documents. Submittals shall include the following:
  - 1. A work plan for the proposed work shall be submitted within 30 days of the Notice to Proceed. The work plan shall include descriptions of all methods, materials, equipment and incidentals being proposed to perform all the work as shown on the Drawings and as specified herein. Do not proceed any further until written approval of work plan has been received.
  - 2. Technical product literature for all products to be used in the work.
  - 3. Drawings showing the proposed drying/containment basins, identifying all access points, equipment and piping.
  - 4. Pre- and Post-Dredging Hydrographic Survey
    - a. Contractor shall provide complete pre-dredging hydrographic survey including topographic contours and tin surface performed by a licensed professional hydrographic surveyor registered in the State of Connecticut, retained by the Contractor and approved by the Owner prior to commencement of dredging activities.

- b. Prior to contract closeout Contractor shall provide complete post-dredging hydrographic survey including topographic contours, tin surface and final dredging volume performed by a licensed professional hydrographic surveyor registered in the State of Connecticut, retained by the Contractor and approved by the Owner.

#### 1.04 REFERENCE STANDARDS

##### A. ASTM International

1. ASTM D1557 - Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup>)(2,700kN-m/m<sup>3</sup>).
2. ASTM D1777 - Standard Test Method for Thickness of Textile Materials.
3. ASTM D3776 - Standard Test Methods for Mass Per Unit Area (Weight) of Fabric.
4. ASTM D4491 - Standard Test Methods for Water Permeability of Geotextiles by Permittivity.
5. ASTM D4637 - Standard Specification for EPDM Sheet Used in Single-Ply Roof Membrane.
6. ASTM D4751 - Standard Test Method for Determining Apparent Opening Size of a Geotextile.
7. ASTM D4833 - Standard Test Method for Index Puncture Resistance of Geotextiles, Geomembranes and Related Products.
8. ASTM D5073 – Standard Practice for Depth Measurement of Surface Water.

##### B. International Hydrographic Organization, Standards for Hydrographic Surveys, Latest edition.

- C. Where reference is made to one of the above standards, the revision in effect at the time of bid opening shall apply.

#### 1.05 QUALITY ASSURANCE

- A. Be responsible for the timely installation and maintenance of all sedimentation and erosion control measures and all turbidity control curtains necessary to perform all dredging, dewatering and drying of dredged material and disposal of dried material as specified and as shown on the Drawings. Measures in addition to those shown on the Drawings shall be installed, maintained, removed and cleaned up at the expense of the Contractor.
- B. All measures and methods shall conform to the requirements outlined in the Order of Conditions appended to these Specifications.

## PART 2 PRODUCTS

### 2.01 TURBIDITY CONTROL CURTAIN

- A. Turbidity control curtain shall be as specified in Section 02270.

## PART 3 EXECUTION

### 3.01 DREDGING

- A. The dredging work in the Pond shall proceed in accordance with the Order of Conditions appended to these Specifications and the Contractor's approved work plan. The dredging work shall consist of the removal of materials below the water level.
- B. Prior to all excavation, Contractor shall complete a hydrographic survey of the Pond. The survey shall be conducted by a registered hydrographic surveyor in the State of Connecticut approved by the Owner whose work is procured and paid for by the Contractor. An existing hydrographic plan showing 1-ft contours using a 50-ft grid system shall be prepared and submitted along with an AutoCAD Civil 3D compatible file including xml files and tin surface to the Engineer for review and approval.
- C. Dredging work shall begin only after erosion control measures have been installed in accordance with Section and 02270 and the site has been prepared in accordance with Section 02100.
- D. Removal of material below the water surface shall be defined as dredging work and shall be performed by hydraulic dredging with a vacuum truck, hydraulic pump and vacuum box capable of handling approximately 500 cubic yards of material. Material removed by hydraulic dredging shall be piped directly to drying/containment vehicles prior to disposal.
- E. Dredging of Pond shall strictly conform to the new contours shown on the Dredging Plan. Care shall be exercised so as not to undercut or otherwise disturb the existing bank areas, except those areas specifically being removed.
- F. Over-dredging of material beyond the contours shown on the Drawings will not be allowed unless directed and approved by the Engineer. The Contractor shall closely monitor dredging activities to ensure that over-dredging does not occur. The Contractor shall not be reimbursed for dredging beyond the contours and limits shown on the Drawings unless directed and approved by the Engineer.
- G. Access to the pond for dredging work shall be limited to those areas as described in the contract documents. All bank and wetland areas disturbed by the dredging operations shall be restored to their original condition.

### 3.02 DEWATERING/DRYING OF DREDGED MATERIALS

- A. Temporary drying/containment areas are not permitted within the pond or within the park area. The park shall be kept fully operational throughout the duration of the dredging work.
- B. Adjustable decanting devices shall be utilized to allow for the removal of supernatant from the dredged material being dewatered/dried. All supernatant shall be discharged to the Pond after treatment by proper sedimentation devices. Facilities for treatment of the supernatant shall be provided and maintained. Such facilities shall be adequate to assure that turbidity in the receiving water will not be increased by more than 25 nephelometric turbidity units (NTU), as measured by the Engineer. Turbidity measurements of the pond and discharges to the pond will be made by the Engineer on a daily basis.

- C. The dredged material shall be dewatered/dried so that the moisture content is no greater than 20 percent as measured by ASTM D1557, Method D.
- D. Excavated material shall be dried so that free liquids are not present, as determined by Paint Filter Test (EPA Method 9095A), prior transport. "Wet soils" shall not be loaded for transport. The Contractor shall be responsible for ensuring that free-liquid does not develop during transport. The Contractor shall be responsible to properly dispose of any free liquids that may result during transportation.

### 3.03 FINAL ACCEPTANCE OF DREDGING WORK

- A. A hydrographic survey of the Pond shall be conducted after completion of the dredging work. The survey shall be conducted by a registered hydrographic surveyor in the State of Connecticut, approved by the Owner, whose work is procured and paid for by the Contractor. A final hydrographic plan showing 1-ft contours using a 10-ft grid system shall be prepared and submitted along with an AutoCAD Civil 3D compatible file including xml files and tin surface to the Engineer for review and approval.
- B. The turbidity control curtains shall not be removed until the Pond has been surveyed and the final dredged contours accepted by the Engineer. The Engineer reserves the right to require additional dredging work if Engineer determines that the new contours have not been met.

## PART 4 MEASUREMENT AND PAYMENT

### 4.01 MEASUREMENT

- A. Dredging shall be measured on a cubic yard basis.

### 4.02 PAYMENT

- A. This work will be paid at the bid price for Base Bid Item No. 02482BB, Dredging-Nonhazardous; and Item No. 02482Alt1, Dredging - Hazardous.
- B. Bid Item No. 02482Alt1 is included as a contingency in the event that hazardous material is found in the final waste characterization sampling. The quantity provided is a contingency and shall not be assumed to be the actual quantity in the event that hazardous material is identified. The Owner shall determine whether the Base Bid Items or Alternative 1 Items apply prior to Notice of Award each year.
- C. The first 75 percent of the total cubic yards of dredged material shall be paid based on the actual volume of dredged material excavated and loaded for disposal. The remaining 25 percent of the dredged material will be paid upon acceptance of the final hydrographic plan in proportion to the total cubic yards excavated.
- D. This work will be paid for at the contract unit price per cubic yard of material, excavated, loaded, manifested, transported and disposed of, which price and payment shall include loading impact material at the stockpile area, manifesting, transporting the material to an approved disposal facility, all disposal costs associated with the material, recordkeeping and all else incidental thereto for which separate payment is not provided under other items in the Bid.

- E. Each separate classification of impacted materials (non-hazardous; or hazardous) will be paid for at the unit price rate associated with each specific classification of materials. The contract unit price per ton for each classification shall include all items noted in 4.02D.
- F. This price and payment shall be full compensation for furnishing all labor, materials and equipment required for dredging of the Pond to the proposed elevations shown on the Plan. The total amount of material removed and to be paid for under this payment item will be measured by computing the volume between the surveyed bottom surface of the Pond before and after dredging has been completed. Payment under this item shall include dredging of material to established grades, handling and decanting dredged materials.

END OF SECTION

## SECTION 02901

### MISCELLANEOUS WORK AND CLEANUP

#### PART 1 GENERAL

##### 1.01 SCOPE OF WORK

- A. Furnish all labor, materials, equipment and incidentals required and perform the miscellaneous work not specified in other sections but necessary for the proper completion of the work as shown on the Drawings.
- B. When applicable, perform the work in accordance with other related Sections. When no applicable specification exists, perform the work in accordance with the best modern practice and/or as directed by the Engineer.
- C. The work of this Section includes, but is not limited to, the following:
  - 1. Cleaning up
  - 2. Incidental work
  - 3. Environmental protection procedures/erosion and sedimentation control

##### 1.02 SUBMITTALS

- A. Submit to the Engineer, in accordance with Section 01300, a breakdown of the lump sum for miscellaneous work and cleanup including the above items as a minimum. This breakdown shall be subject to approval by the Engineer and when so approved shall become the basis for determining progress payments and for negotiation of change orders, if required.

#### PART 2 PRODUCTS

##### 2.01 MATERIALS

- A. Materials required for this Section shall be the same quality of materials that are to be restored. Where possible, re-use existing materials that are removed.
- B. All items shall be restored to a condition equal to or better than existed prior to the beginning of work.

#### PART 3 EXECUTION

##### 3.01 CLEANING UP

- A. Remove all construction material, excess excavation, equipment and other debris remaining on the job as a result of construction operations and restore the site of the work to a neat and orderly condition.

##### 3.02 INCIDENTAL WORK

- A. Do all incidental work not otherwise specified, but obviously necessary to the proper completion of the work as shown on the Drawings and as specified herein.

3.03 ENVIRONMENTAL PROTECTION PROCEDURES/EROSION AND SEDIMENTATION CONTROL

- A. Furnish, install, maintain and remove all erosion and sedimentation control measures including, but not limited to siltation control devices, erosion control blankets, turbidity control curtain, dewatering filtration basins and berms as specified in Section 02270.
- B. Other environmental protection measures to be paid for under this Item include noise protection and dust control.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. Miscellaneous work and cleanup shall be measured on a lump sum basis.

4.02 PAYMENT

- A. This work will be paid at the bid price of Base Bid Item No. 02901, Miscellaneous Work and Cleanup.
- B. Payment for Miscellaneous Work and Cleanup, will be at the lump sum price bid for Item 02901. This price and payment shall be full compensation for furnishing all labor, materials and equipment required to do all work specified in this Section 02901, or as shown on the Drawings and any other miscellaneous work not specifically included for payment under any other item, but necessary to complete the Contract, including but not limited to items found in Section 02270, Erosion and Sedimentation Control; and permitting requirements of the Contractor as specified. Partial payments shall be based on the schedule of values breakdown of the items specified in this Section submitted by the Contractor in accordance with Section 01300.

END OF SECTION



APPENDIX A

STATE OF CONNECTICUT DEPARTMENT OF LABOR WAGE RATES

APPENDIX B

GREENWICH IWWA ORDER OF CONDITIONS



# TOWN OF GREENWICH

Town Hall • 101 Field Point Road • Greenwich, CT 06830

Inland Wetlands  
and  
Watercourses Agency  
(203) 622-7736  
(Fax) (203) 622-7764

Patricia M.P. Sesto  
*Director*

August 30, 2016

James Michel, Deputy Commissioner  
Department of Public Works  
Town of Greenwich  
101 Field Point Road  
Greenwich, CT 06830

Re: Application #2016-089 to Town of Greenwich to dredge Binney Park pond at 0 Sound Beach Avenue

**PERMIT #2016-101**

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Dear Mr. Michel:

The Inland Wetlands and Watercourses Agency found the proposed activities in the above mentioned application are regulated activities that will not have a significant impact on the inland wetlands and watercourses involved. Following this summary ruling, the Agency decided to issue the enclosed permit with conditions.

**Your attention is directed to the special and standard conditions because those in BOLD require action either prior to the start of clearing or construction activities or within a specific time period after the receipt of the permit.**

The statement and permit are on file in the office of this Agency.

The effective date of the permit is the date of issue. The permit expires five years from the effective date, but when deemed necessary, the Agency may extend the period according to the provisions in Section 11.11 of the Regulations.

If you have any questions concerning this permit or the functions and values of wetlands in Greenwich, please let me know.

Sincerely,

Brian Harris, Chairman  
Elliot Benton, Vice Chairman  
Stephan Skoufalos, Secretary

cc: CDM Smith, Inc.



INLAND WETLANDS  
AND  
WATERCOURSES

**PERMIT #2016-101**  
**Application #2016-089**

Issued to: James Michel, Deputy Commissioner, Public Works  
Department of Public Works  
Town of Greenwich  
101 Field Point Road  
Greenwich, CT 06830

Date Issued: August 22, 2016

Following a duly noticed public meeting, the Inland Wetlands & Watercourses Agency approved regulated activities on the property of the Town of Greenwich at Binney Park, Sound Beach Avenue, Tax Account #06-4511/s. The permitted activity consists of dredging of an estimated 9,500 cubic yards of sediment from the 3.2 acre pond in Binney Park, as further described in the following documents.

1. Completed application with supporting documentation signed by agent Cindy Baumann, P.E., of CDM Smith, Inc., dated June 21, 2016.
2. Plans entitled "Town of Greenwich, Connecticut – Binney Park Pond Maintenance Dredging and Bank Restoration" prepared by CDM Smith, Inc. – Cover Sheet – Legend and Notes – Existing Conditions-Upper Binney Park Pond – Existing Conditions-Lower BPP – Site Preparation and Erosion and Sediment Control Plan-Upper BPP – Site Preparation and Erosion and Sediment Control Plan-Lower BPP – Site Plan-Upper BPP – Site Plan-Lower BPP – Profiles – Details I – Details II – Details III; and "Binney Park Pond Sediment Forebays" – Figure 5A, Anticipated Impacts to Natural Resource Protection Areas-Upper BPP – Figure 5A, Anticipated Impacts to Natural Resource Protection Areas-Lower BPP – dated June 2016.
3. Soils report prepared by Andrew R. Poyant and Connor H. Venneman of CDM Smith, Inc., dated May 23, 2016.
4. Wetlands functions and values assessment prepared by CDM Smith, Inc., date-stamped "Received" by IWWA June 22, 2016.
5. Staff Report, dated July 19, 2016, prepared by Robert Clausi.

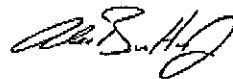
After a full review of the considerations set forth in Section 10 of the Regulations and other pertinent factors, this permit is issued with the following special and standard conditions:

SPECIAL CONDITIONS:

1. **Prior to the commencement of any on-site permit related activity, a revised restoration planting plan shall be submitted to reflect testimony and discussion of this application. The revisions shall include plans for plantings beds along the shoreline, north of the two island bridges and up to the areas of "stabilized lawn." The beds shall be fifteen feet wide or extend to within two feet of the pathway, whichever is less. Around the full periphery of the pond, settling basin, and watercourses, shade trees shall supplement existing trees with the end result being a tree every 30± feet. Shrubs and herbaceous plants shall be proposed as infill within the newly created buffer area described above. Areas of emergent growth at the shore north of the bridges shall be maintained to the extent feasible. Breaks in the buffer plantings and emergent plants are permissible to maintain views from existing benches.**
2. **The applicant shall investigate and propose herbaceous cover other than lawn for areas labeled as "stabilized grass."**
3. **Prior to the commencement of any on-site permit related activity, final construction designs and project phasing plan shall be submitted for review and approval by Wetlands Agency staff. Once approved, these plans shall be submitted in both paper and digital formats.**
4. **Prior to the commencement of any on-site permit related activity, the permittee shall provide Agency staff with the results of chemical analysis of the pond sediment.**
5. **Prior to the commencement of any on-site permit related activity, the Greenwich Department of Public Works shall schedule a site meeting with their contractor and Wetlands Agency staff to review the final plans, including water handling, erosion and sedimentation control, stockpile locations, vehicle and equipment storage and refueling locations, and spill procedures.**
6. Work within the watercourse corridor shall be limited to periods of low flow. Low flow periods normally occur between August and October. Wetlands Agency staff may determine if the work can occur at other times following an on-site field investigation to evaluate flow conditions.
7. Sediment excavated from the pond shall be properly disposed of off-site.
8. The planting plan shall be fully implemented within nine months of commencing dredging activities. The planting plan shall be considered consistent with this permit provided at least 80% of the plants are thriving two years after installation. It is the permittee's responsibility to replace plants during this two year period to maintain this level of compliance.
9. The permittee shall advise Agency staff of their intent to conduct the annual maintenance dredging of the forebays and any changes to the approved protocol prior to commencing each operation. Authorization to perform the annual maintenance dredging shall run with the life of this permit. The permittee may request an extension of this permit of up to five more years sixty days prior to the expiration of the initial permit period.

**STANDARD CONDITIONS:**

1. This permit expires on August 22, 2021. If the authorized activity is not completed on or before this date, said activity shall cease and, if not previously revoked or specifically extended, this permit shall be null and void.
2. **Prior to the commencement of any on-site permit related activity, the attached compliance statement shall be signed by the contractor engaged to perform the regulated activities and then returned to the Agency office. This form shall serve as written notice to the Agency as to when work is planned to commence.** The permittee shall also provide written notice to the Agency upon completion of the regulated activities.
3. The permittee shall employ best management practices, consistent with the terms and conditions of this permit and provisions of the *Connecticut Guidelines for Soil Erosion and Sediment Control* (2002, as revised), to control storm water discharges, to prevent erosion and sedimentation and to otherwise prevent pollution of wetlands or watercourses. For information and technical assistance, contact the Agency staff. The permittee shall immediately inform the Agency of any problems involving wetlands or watercourses which develop during the course of, or which are caused by, the authorized work.
4. Any material, man-made or natural, which is in any way disturbed and/or utilized during work authorized herein, shall not be deposited in any wetland or watercourse, either on or off site, unless specifically authorized in this permit.
5. Fuel oil tanks shall be installed above ground or within the structure unless specifically approved otherwise by the Agency or its staff.
6. This permit shall not be assigned or transferred by the permittee to any other party without the written consent of the Greenwich Inland Wetlands and Watercourses Agency.
7. This permit may be revoked or suspended if the permittee exceeds the conditions or limitations of this permit, or has secured this permit through deception or inaccurate information.
8. This permit does not obviate the permittee's obligation to obey all other applicable federal, state and local laws or to obtain any applicable federal, state and local permits.



Brian Harris, Chairman  
Elliot Benton, Vice Chairman  
Stephan Skoufalos, Secretary



INLAND WETLANDS AND WATERCOURSES AGENCY

APPLICATION # 2016-089

PERMIT # 2016-101

As the contractor engaged by, Town of Greenwich to  
perform the activities described in the Greenwich Inland Wetlands and Watercourses Permit # 2016-101  
at Sound Beach Avenue (Binney Park) I have read the permit  
(PROPERTY ADDRESS)  
and will comply with all conditions therein.

Work will commence on or about \_\_\_\_\_ and be completed within \_\_\_\_\_ months.

\_\_\_\_\_  
Contractor Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City

\_\_\_\_\_  
State

\_\_\_\_\_  
Zip Code

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Fax Number

\_\_\_\_\_  
Email Address

\_\_\_\_\_  
Signature

**MAIL TO:** Greenwich Inland Wetlands and Watercourses Agency  
Town Hall  
101 Field Point Road  
Greenwich, CT 06830  
Telephone: (203) 622-7736  
Fax: (203) 622-7764

APPENDIX C

SEDIMENT SAMPLE RESULTS AND ANALYTICAL DATA





Ms. Gabriella Circosta Cohee  
Town Hall, Department of Public Works Engineering  
101 Field Point Road  
Greenwich, CT 06836-2540

07 October 2019

Re: Binney Park Upper Pond Sediment Samples, Sound Beach Avenue, Greenwich, CT

Per your request, soil core samples were collected from the upper stretch of pond located adjacent to Sound Beach Avenue and Arch Street at the above referenced facility on 23 September 2019. A composite sample was collected from five cores around the pond at a depth of ~0' to 2' below the sediment surface. The core samples were examined and field screened to:

- Visually inspect and document the soil types;
- Visually inspect and determine the presence or absence of gross contamination;
- Screen samples in the field for the presence of total gross VOC compounds with a photoionization detector (PID) calibrated with a known concentration of isobutylene

The samples varied between coarse sand and organic plant materials. None of the core samples had PID readings above background concentrations, indicating volatile organics and lighter petroleum hydrocarbon fractions may not have been present in significant concentrations. The samples were composited and the resulting sample was collected in glassware provided by the laboratory. After collection, the soil sample was stored on ice, and submitted to Complete Environmental Testing (CET) Laboratories in Stratford, CT for chemical analysis. The sample was analyzed for CT ETPH, and the following EPA Methods: 8260C VOCs, 8270D PNAs, 8082A PCBs, 8081B pesticides, 8151A herbicides, 6010C total RCRA8 metals, 7471B mercury, 8081B-1311 TCLP pesticides, 9012B total cyanide, 1010A flashpoint, and 9045D pH; as well as SM2540 G % solids, SW 846 reactive cyanide and sulfide reactivity, and pH.

The following table summarizes analytical results with respect to applicable CT Department of Energy & Environmental Protection (DEEP) Remediation Standard Regulations (RSRs) criteria and the Massachusetts DEP landfill criteria as set forth in the document "*REUSE AND DISPOSAL OF CONTAMINATED SOIL AT MASSACHUSETTS LANDFILLS DEPARTMENT OF ENVIRONMENTAL PROTECTION POLICY # COMM-97-001*". Exceedances are noted, if present. A copy of the analytical results is appended. Chemical constituents with concentrations well below applicable RSR criteria have not been included in the table to allow for easier data assimilation by the reviewer, but are present in the appended data sheets. Criteria related to US Environmental Protection Agency (EPA) characteristic hazardous waste numerical criteria for herbicides based on TCLP analyses have not been included as all constituents were below laboratory reporting limits and therefore below hazardous waste threshold values.

With respect to non-regulatory criteria, the solids content was 75%. This correlated well with field observations, as soils in the upper layers were higher in organic muck, and deeper layers were more consistent with inorganic (sands/silts) materials. The pH was neutral, and no reactive sulfides or cyanide were present. The flashpoint was high, indicating the material was thermally stable. The chemical parameters indicated the sediments were free or relatively free of contamination with respect to metals, herbicides, pesticides, PCBs, and volatile organic compounds (VOCs). Some compounds typically associated with asphalt fragments and sediments from street runoff were present. These included extractable total petroleum hydrocarbons (ETPH) and some semi-volatile organic compounds (SVOCs) also referred to as polynuclear aromatic hydrocarbons (PNAs).

Analytical Data Table

COMPOUND	CT RES DEC	CT I/C DEC	MA Unlined Landfill	MA Lined Landfill	Sample BP
% solids					75
Cyanide total (mg/kg)	1400	41000			ND<1.3
Flashpoint (°F)					>200°F
Reactive sulfide (mg/kg)					ND<27
Reactive cyanide (mg/kg)					ND<6.7
pH					7.03
<b>Metals – Total (mg/kg)</b>					
Arsenic	10	10	40	40	ND<1.3
Barium	4700	140000			
Cadmium	34	1000	30	80	ND<0.64
Chromium	NE	NE	1000	1000	26
Lead	400	1000	1000	2000	41
Mercury	20	610	10	10	ND<0.17
Selenium	340	10000			ND<3.2
Silver	340	10000			ND<2.6
<b>Metals – TCLP (mg/l)</b>	GA PMC	GW PC			
Arsenic	0.05	0.050			ND<0.05
Barium	1	1.0			0.38
Cadmium	0.005	0.005			ND<0.05
Chromium	0.05	0.05			ND<0.05
Lead	0.015	0.015			<b>0.15</b>
Mercury	0.002	0.002			ND<0.002
Selenium	0.05	0.050			ND<0.05
Silver	0.04	0.04			ND<0.02
ETPH (mg/kg)	500	2500	2500	5000	190
8151A Chlorinated herbicides (mg/kg)	-	-			ND<RL
8081B-1311 TCLP Herbicides (mg/kg)					ND<0.05
8081B Chlorinated pesticides (mg/kg)					
DDD/DDE/DDT	1.8	17			0.340/0.055/0.049
All others					ND
8082A PCBs (mg/kg)	1	10	<2	<2	ND<0.13
VOCs total (mg/kg)			4	10	ND<RL
VOCs individual (mg/kg)					ND<RL
Total SVOCs (mg/kg)			100	100	5.75
SVOCs (mg/kg)					
Benzo(a)anthracene	1	7.8			0.55
Benzo(b)fluoranthene	1	7.8			0.74
Benzo(a)pyrene	1	1			0.58
Indeno(1,2,3-cd)pyrene	1	7.8			0.42
<b>US EPA Hazardous Waste (mg/l)</b>					
Lead (TCLP)	5				0.15
Herbicides (TCLP)	Varies				ND<RL

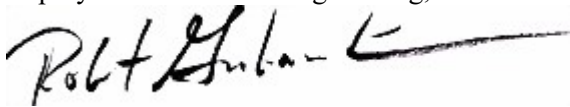
RES DEC = Residential DEC, I/C DEC = Industrial/Commercial DEC, ND = None Detected, ND<RL = ND below reporting limit, NT = Not Tested, NE = Criteria not established, **BOLD** = greater than RES DEC or GWPC; **BOLD UNDERLINED** = greater than RES DEC and > I/C DEC

From a regulatory perspective, the analyses indicated that if the sediments were to be removed, they would not be classified as a characteristic hazardous waste under EPA regulations, and met Massachusetts DEP criteria for disposal in either lined or unlined landfills. With respect to the CT DEEP RSRs, four PNAs in the regulations are often exceeded if even small quantities of asphalt fragments are present in a soil sample. These include benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, and indeno(1,2,3-cd)pyrene. These compounds were present but were below the residential Direct Exposure Criteria (DEC) values.

The TCLP analyses indicated only one constituent of concern (COC), lead, was present above a RSR threshold. The GA PMC and GWPC criteria are 0.015 mg/l and the sample had a toxicity characteristic leaching procedure (TCLP) concentration of 0.15 mg/l. It is common to retest samples using an accepted alternative criteria, the synthetic precipitation leaching procedure (SPLP) analysis and the concentration is often lower for the COC. If reuse in a residential/recreational setting is contemplated, the soils should be retested after excavation and prior to delivery to a site of that nature.

Based on the above, any excess soils to be removed for off-site disposal will not be a hazardous waste and will be suitable for landfill acceptance in Massachusetts. The soils should not be used as clean fill in Connecticut unless they are composited and retested and the testing demonstrates that all compounds are below the applicable RSR values. Should you have any questions regarding the above, please contact me.

Sincerely,  
Osprey Environmental Engineering, LLC

A handwritten signature in black ink, appearing to read "Robert Grabarek", with a long horizontal stroke extending to the right.

Robert Grabarek, P.E., L.S., LEP  
President



Client: Mr. Robert Grabarek  
Osprey Enviromental  
146 East Main St  
Clinton, CT 06413

# Analytical Report

## CET# 9090702

Report Date: October 02, 2019  
Project: Greenwich

Connecticut Laboratory Certificate: PH 0116  
Massachusetts Laboratory Certificate: M-CT903  
Rhode Island Laboratory Certificate: 199



New York NELAP Accreditation: 11982  
Pennsylvania Certificate: 68-02927

CET # : 9090702  
Project: Greenwich

**SAMPLE SUMMARY**

The sample(s) were received at 29.3°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
GBP	9090702-01	Soil	9/23/2019 11:00	09/23/2019

CET # : 9090702  
Project: Greenwich

**Analyte: Percent Solids [SM 2540 G]**

**Analyst: KWM**

**Matrix: Soil**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
9090702-01	GBP	75	1.0	%	1	B9I2460	09/24/2019	09/25/2019 14:19	

**Analyte: Cyanide,Total [EPA 9012B]**

**Analyst: MLG**

**Matrix: Soil**

**Prep: EPA 9013**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
9090702-01	GBP	ND	1.3	mg/kg dry	1	B9I2617	09/26/2019	09/26/2019 10:58	

**Analyte: Flashpoint [EPA 1010A]**

**Analyst: MTL**

**Matrix: Soil**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
9090702-01	GBP	>200 F	NA	°F	1	B9I2634	09/26/2019	09/26/2019 14:09	

**Analyte: Reactive Sulfide [SW 846 Ch. 7]**

**Analyst: MLG**

**Matrix: Soil**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
9090702-01	GBP	ND	27	mg/kg dry	1	B9I2741	09/27/2019	09/27/2019 14:28	

**Analyte: Reactive Cyanide [SW 846 Ch. 7]**

**Analyst: MLG**

**Matrix: Soil**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
9090702-01	GBP	ND	6.7	mg/kg dry	1	B9I2740	09/27/2019	09/27/2019 14:28	

CET # : 9090702  
Project: Greenwich

**Analyte: pH [EPA 9045D]**

**Analyst: DRH**

**Matrix: Soil**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
9090702-01	GBP	7.03 @25.4°C	NA	pH Units	1	B9I2614	09/25/2019	09/25/2019 15:10	

**Analyte: Mercury [EPA 7471B]**

**Analyst: KWM**

**Matrix: Soil**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
9090702-01	GBP	ND	0.17	mg/kg dry	1	B9I2518	09/25/2019	09/25/2019 13:58	

CET # : 9090702  
 Project: Greenwich

**Client Sample ID GBP**

**Lab ID: 9090702-01**

**Total Metals**  
**Method: EPA 6010C**

**Analyst: SS**  
**Matrix: Soil**

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
<b>Lead</b>	<b>41</b>	2.6	1	EPA 3051A	B9I2619	09/26/2019	09/26/2019 19:39	
Selenium	ND	3.2	1	EPA 3051A	B9I2619	09/26/2019	09/26/2019 19:39	
Cadmium	ND	0.64	1	EPA 3051A	B9I2619	09/26/2019	09/26/2019 19:39	
<b>Chromium</b>	<b>26</b>	2.6	1	EPA 3051A	B9I2619	09/26/2019	09/26/2019 19:39	
Arsenic	ND	1.3	1	EPA 3051A	B9I2619	09/26/2019	09/26/2019 19:39	
<b>Barium</b>	<b>54</b>	2.6	1	EPA 3051A	B9I2619	09/26/2019	09/26/2019 19:39	
Silver	ND	2.6	1	EPA 3051A	B9I2619	09/26/2019	09/26/2019 19:39	

**TCLP Metals**  
**Method: EPA 6020A-1311**

**Analyst: CED**  
**Matrix: Extract**

Analyte	Result (mg/L)	RL (mg/L)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
<b>Lead</b>	<b>0.15</b>	0.013	1	EPA 3005A	B9I2538	09/25/2019	09/26/2019 16:27	
Selenium	ND	0.050	1	EPA 3005A	B9I2538	09/25/2019	09/26/2019 16:27	
Cadmium	ND	0.0050	1	EPA 3005A	B9I2538	09/25/2019	09/26/2019 16:27	
Chromium	ND	0.050	1	EPA 3005A	B9I2538	09/25/2019	09/26/2019 16:27	
Arsenic	ND	0.050	1	EPA 3005A	B9I2538	09/25/2019	09/26/2019 16:27	
<b>Barium</b>	<b>0.38</b>	0.050	1	EPA 3005A	B9I2538	09/25/2019	09/26/2019 16:27	
Silver	ND	0.020	1	EPA 3005A	B9I2538	09/25/2019	09/26/2019 16:27	
Mercury	ND	0.0020	1	EPA 3005A	B9I2538	09/25/2019	09/26/2019 16:27	

**Conn. Extractable TPH**  
**Method: CT-ETPH**

**Analyst: ACS**  
**Matrix: Soil**

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
<b>ETPH</b>	<b>190</b>	67	1	EPA 3550C	B9I2443	09/24/2019	09/25/2019 20:02	R
<i>Surrogate: Octacosane</i>	<i>107 %</i>	<i>50 - 150</i>			B9I2443	09/24/2019	09/25/2019 20:02	
R C16-C36 Unknown								

**Chlorinated Pesticides**  
**Method: EPA 8081B**

**Analyst: JRO**  
**Matrix: Soil**

Analyte	Result (ug/kg dry)	RL (ug/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
Alpha-BHC	ND	6.5	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	



CET # : 9090702  
 Project: Greenwich

**Client Sample ID GBP**

**Lab ID: 9090702-01**

**Chlorinated Pesticides**

**Analyst: JRO**

**Method: EPA 8081B**

**Matrix: Soil**

Analyte	Result (ug/kg dry)	RL (ug/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
Gamma-BHC	ND	6.5	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
Heptachlor	ND	6.5	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
Aldrin	ND	6.5	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
Beta-BHC	ND	6.5	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
Delta-BHC	ND	6.5	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
Heptachlor Epoxide	ND	6.5	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
Endosulfan I	ND	6.5	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
<b>4,4-DDE</b>	<b>55</b>	1.3	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
Dieldrin	ND	1.3	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
Endrin	ND	6.5	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
<b>4,4-DDD</b>	<b>340</b>	1.3	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
Endosulfan II	ND	6.5	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
<b>4,4-DDT</b>	<b>49</b>	1.3	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
Endrin Aldehyde	ND	6.5	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
4,4-Methoxychlor	ND	6.5	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
Endosulfan Sulfate	ND	6.5	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
Endrin Ketone	ND	6.5	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
Chlordane	ND	39	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
Toxaphene	ND	130	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
Alachlor	ND	65	1	EPA 3545A	B9I2450	09/24/2019	10/01/2019 11:51	
<i>Surrogate: TCMX [1C]</i>	<i>94.9 %</i>	<i>30 - 150</i>			B9I2450	09/24/2019	<i>10/01/2019 11:51</i>	
<i>Surrogate: DCB [1C]</i>	<i>107 %</i>	<i>30 - 150</i>			B9I2450	09/24/2019	<i>10/01/2019 11:51</i>	
<i>Surrogate: TCMX [2C]</i>	<i>101 %</i>	<i>30 - 150</i>			B9I2450	09/24/2019	<i>10/01/2019 11:51</i>	
<i>Surrogate: DCB [2C]</i>	<i>121 %</i>	<i>30 - 150</i>			B9I2450	09/24/2019	<i>10/01/2019 11:51</i>	

**PCBs by ASE**

**Analyst: ALR**

**Method: EPA 8082A**

**Matrix: Soil**

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
PCB-1016	ND	0.13	1	EPA 3545A	B9I2451	09/24/2019	09/25/2019 14:50	
PCB-1221	ND	0.13	1	EPA 3545A	B9I2451	09/24/2019	09/25/2019 14:50	
PCB-1232	ND	0.13	1	EPA 3545A	B9I2451	09/24/2019	09/25/2019 14:50	
PCB-1242	ND	0.13	1	EPA 3545A	B9I2451	09/24/2019	09/25/2019 14:50	
PCB-1248	ND	0.13	1	EPA 3545A	B9I2451	09/24/2019	09/25/2019 14:50	
PCB-1254	ND	0.13	1	EPA 3545A	B9I2451	09/24/2019	09/25/2019 14:50	
PCB-1260	ND	0.13	1	EPA 3545A	B9I2451	09/24/2019	09/25/2019 14:50	
PCB-1268	ND	0.13	1	EPA 3545A	B9I2451	09/24/2019	09/25/2019 14:50	
PCB-1262	ND	0.13	1	EPA 3545A	B9I2451	09/24/2019	09/25/2019 14:50	

CET # : 9090702  
Project: Greenwich

Client Sample ID GBP

Lab ID: 9090702-01

PCBs by ASE  
Method: EPA 8082A

Analyst: ALR

Matrix: Soil

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: TCMX [1C]	98.3 %	30 - 150			B9I2451	09/24/2019	09/25/2019 14:50	
Surrogate: TCMX [2C]	102 %	30 - 150			B9I2451	09/24/2019	09/25/2019 14:50	
Surrogate: DCB [1C]	74.9 %	30 - 150			B9I2451	09/24/2019	09/25/2019 14:50	
Surrogate: DCB [2C]	80.4 %	30 - 150			B9I2451	09/24/2019	09/25/2019 14:50	

Chlorinated Herbicides  
Method: EPA 8151A

Analyst: JRO

Matrix: Soil

Analyte	Result (ug/kg dry)	RL (ug/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
Dalapon	ND	670	1	EPA 3545A	B9I2501	09/25/2019	09/27/2019 14:24	
3,5-Dichlorobenzoic acid	ND	27	1	EPA 3545A	B9I2501	09/25/2019	09/27/2019 14:24	
4-Nitrophenol	ND	130	1	EPA 3545A	B9I2501	09/25/2019	09/27/2019 14:24	
Dicamba	ND	27	1	EPA 3545A	B9I2501	09/25/2019	09/27/2019 14:24	
Dichloroprop	ND	130	1	EPA 3545A	B9I2501	09/25/2019	09/27/2019 14:24	
2,4-D	ND	130	1	EPA 3545A	B9I2501	09/25/2019	09/27/2019 14:24	
PCP	ND	34	1	EPA 3545A	B9I2501	09/25/2019	09/27/2019 14:24	
Silvex	ND	27	1	EPA 3545A	B9I2501	09/25/2019	09/27/2019 14:24	
2,4,5-T	ND	27	1	EPA 3545A	B9I2501	09/25/2019	09/27/2019 14:24	
Dinoseb	ND	27	1	EPA 3545A	B9I2501	09/25/2019	09/27/2019 14:24	
2,4-DB	ND	270	1	EPA 3545A	B9I2501	09/25/2019	09/27/2019 14:24	
Picloram	ND	27	1	EPA 3545A	B9I2501	09/25/2019	09/27/2019 14:24	
Surrogate: DCPAA [1C]	76.7 %	30 - 150			B9I2501	09/25/2019	09/27/2019 14:24	
Surrogate: DCPAA [2C]	87.1 %	30 - 150			B9I2501	09/25/2019	09/27/2019 14:24	

TCLP Organics  
Method: EPA 8081B-1311

Analyst: JRO

Matrix: Extract

Analyte	Result (ug/L)	RL (ug/L)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
Alpha-BHC	ND	0.050	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	
Gamma-BHC	ND	0.050	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	
Heptachlor	ND	0.050	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	
Aldrin	ND	0.050	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	
Beta-BHC	ND	0.050	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	
Delta-BHC	ND	0.050	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	
Heptachlor Epoxide	ND	0.050	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	

CET # : 9090702  
Project: Greenwich

Client Sample ID GBP

Lab ID: 9090702-01

TCLP Organics

Method: EPA 8081B-1311

Analyst: JRO

Matrix: Extract

Analyte	Result (ug/L)	RL (ug/L)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
Endosulfan I	ND	0.050	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	
4,4-DDE	ND	0.050	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	
Dieldrin	ND	0.010	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	
Endrin	ND	0.010	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	
4,4-DDD	ND	0.050	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	
Endosulfan II	ND	0.050	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	
4,4-DDT	ND	0.050	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	
Endrin Aldehyde	ND	0.050	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	
4,4-Methoxychlor	ND	0.050	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	
Endosulfan Sulfate	ND	0.050	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	
Endrin Ketone	ND	0.050	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	
Chlordane	ND	2.0	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	
Toxaphene	ND	8.0	1	EPA 3510C	B9I2747	09/27/2019	09/30/2019 14:29	
<i>Surrogate: TCMX [1C]</i>	<i>68.5 %</i>	<i>30 - 150</i>			B9I2747	09/27/2019	<i>09/30/2019 14:29</i>	
<i>Surrogate: TCMX [2C]</i>	<i>71.0 %</i>	<i>30 - 150</i>			B9I2747	09/27/2019	<i>09/30/2019 14:29</i>	
<i>Surrogate: DCB [1C]</i>	<i>87.0 %</i>	<i>30 - 150</i>			B9I2747	09/27/2019	<i>09/30/2019 14:29</i>	
<i>Surrogate: DCB [2C]</i>	<i>95.5 %</i>	<i>30 - 150</i>			B9I2747	09/27/2019	<i>09/30/2019 14:29</i>	

Semivolatile Organics

Method: EPA 8270D

Analyst: ALM

Matrix: Soil

Analyte	Result (ug/kg dry)	RL (ug/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
Phenol	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
1,3-Dichlorobenzene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
n-Nitroso-di-n-propylamine	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Pyridine	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	*F1
n-Nitroso-dimethylamine	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
bis(2-Chloroethyl)ether	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Aniline	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	*I
2-Chlorophenol	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
1,4-Dichlorobenzene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Benzyl Alcohol	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
1,2-Dichlorobenzene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
bis(2-Chloroisopropyl)ether	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Hexachloroethane	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
2-Methyl Phenol	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
3+4 Methyl Phenol	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Naphthalene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	

Client Sample ID GBP  
 Lab ID: 9090702-01

Semivolatile Organics  
 Method: EPA 8270D

Analyst: ALM  
 Matrix: Soil

Analyte	Result (ug/kg dry)	RL (ug/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
2-Nitrophenol	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
2,4-Dichlorophenol	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Hexachlorobutadiene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
4-Chloro-3-methylphenol	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Nitrobenzene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Isophorone	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
2,4-Dimethylphenol	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
bis(2-Chloroethoxy)methane	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Benzoic Acid	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
1,2,4-Trichlorobenzene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
2,6-Dichlorophenol	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
4-Chloroaniline	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	*F1
1,2,4,5-Tetrachlorobenzene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
2-Methyl Naphthalene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Acenaphthylene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Acenaphthene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Dibenzofuran	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Fluorene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Hexachlorocyclopentadiene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	*F1*C1*I
2,4,6-Trichlorophenol	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
2,4,5-Trichlorophenol	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
2,4-Dinitrophenol	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	*C1
4-Nitrophenol	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
2-Chloronaphthalene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
2-Nitroaniline	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Dimethylphthalate	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
2,6-Dinitrotoluene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
4-Nitroaniline	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
2,4-Dinitrotoluene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
2,3,4,6-Tetrachlorophenol	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
4-Chlorophenyl-phenylether	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Diethylphthalate	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Phenanthrene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Anthracene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Carbazole	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
<b>Fluoranthene</b>	<b>1200</b>	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
<b>Pyrene</b>	<b>1000</b>	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
n-Nitrosodiphenylamine	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Pentachlorophenol	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
3-Nitroaniline	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
4,6-Dinitro-2-methylphenol	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	*C1
1,2-Diphenylhydrazine	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	

CET # : 9090702  
Project: Greenwich

Client Sample ID GBP

Lab ID: 9090702-01

Semivolatile Organics  
Method: EPA 8270D

Analyst: ALM  
Matrix: Soil

Analyte	Result (ug/kg dry)	RL (ug/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
4-Bromophenyl-phenylether	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Hexachlorobenzene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Di-n-butylphthalate	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Pentachloronitrobenzene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
<b>Benzo[a]anthracene</b>	<b>550</b>	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
<b>Chrysene</b>	<b>740</b>	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Butylbenzylphthalate	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
3,3-Dichlorobenzidine	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	*I
bis(2-Ethylhexyl)phthalate	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Di-n-octylphthalate	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
<b>Benzo[b]fluoranthene</b>	<b>740</b>	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Benzo[k]fluoranthene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
<b>Benzo[a]pyrene</b>	<b>580</b>	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
<b>Indeno[1,2,3-cd]pyrene</b>	<b>420</b>	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
Dibenz[a,h]anthracene	ND	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
<b>Benzo[g,h,i]perylene</b>	<b>520</b>	400	1	EPA 3545A	B9I2530	09/25/2019	09/26/2019 18:22	
<i>Surrogate: 2-Fluorophenol</i>	<i>40.3 %</i>	<i>30 - 130</i>			B9I2530	09/25/2019	09/26/2019 18:22	
<i>Surrogate: Phenol-d6</i>	<i>42.8 %</i>	<i>30 - 130</i>			B9I2530	09/25/2019	09/26/2019 18:22	
<i>Surrogate: Nitrobenzene-d5</i>	<i>34.7 %</i>	<i>30 - 130</i>			B9I2530	09/25/2019	09/26/2019 18:22	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>42.4 %</i>	<i>30 - 130</i>			B9I2530	09/25/2019	09/26/2019 18:22	
<i>Surrogate: 2,4,6-Tribromophenol</i>	<i>55.8 %</i>	<i>30 - 130</i>			B9I2530	09/25/2019	09/26/2019 18:22	
<i>Surrogate: Terphenyl-d14</i>	<i>51.4 %</i>	<i>30 - 130</i>			B9I2530	09/25/2019	09/26/2019 18:22	

Volatile Organics  
Method: EPA 8260C

Analyst: TWF  
Matrix: Soil

Analyte	Result (ug/kg dry)	RL (ug/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
Dichlorodifluoromethane	ND	24	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	*C1
Chloromethane	ND	16	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Vinyl Chloride	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Bromomethane	ND	16	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Chloroethane	ND	16	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Trichlorofluoromethane	ND	65	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Acetone	ND	240	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	*C1
Acrylonitrile	ND	13	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Trichlorotrifluoroethane	ND	65	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
1,1-Dichloroethene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	*C1
Methylene Chloride	ND	97	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	

Complete Environmental Testing, Inc.

**Client Sample ID GBP**  
**Lab ID: 9090702-01**

**Volatile Organics**  
**Method: EPA 8260C**

**Analyst: TWF**  
**Matrix: Soil**

Analyte	Result (ug/kg dry)	RL (ug/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
Carbon Disulfide	ND	16	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	*C1
Methyl-t-Butyl Ether (MTBE)	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
trans-1,2-Dichloroethene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	*C1
1,1-Dichloroethane	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
2-Butanone (MEK)	ND	41	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
2,2-Dichloropropane	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	*C1
cis-1,2-Dichloroethene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Bromochloromethane	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Chloroform	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Tetrahydrofuran	ND	41	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	*I
1,1,1-Trichloroethane	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Carbon Tetrachloride	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
1,1-Dichloropropene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Benzene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
1,2-Dichloroethane	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Trichloroethene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
1,2-Dichloropropane	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Dibromomethane	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Bromodichloromethane	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Methyl Isobutyl Ketone	ND	41	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	*F2*C2
cis-1,3-Dichloropropene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Toluene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
trans-1,3-Dichloropropene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
2-Hexanone	ND	41	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
1,1,2-Trichloroethane	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Tetrachloroethene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
1,3-Dichloropropane	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Dibromochloromethane	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
1,2-Dibromoethane	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
trans-1,4-Dichloro-2-Butene	ND	41	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Chlorobenzene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
1,1,1,2-Tetrachloroethane	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Ethylbenzene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
m+p Xylenes	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
o-Xylene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Styrene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Bromoform	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Isopropylbenzene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
1,1,2,2-Tetrachloroethane	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Bromobenzene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
1,2,3-Trichloropropane	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
n-Propylbenzene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	

CET # : 9090702  
 Project: Greenwich

**Client Sample ID GBP**  
**Lab ID: 9090702-01**

**Volatile Organics**  
**Method: EPA 8260C**

**Analyst: TWF**  
**Matrix: Soil**

Analyte	Result (ug/kg dry)	RL (ug/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
2-Chlorotoluene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
4-Chlorotoluene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
1,3,5-Trimethylbenzene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
tert-Butylbenzene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
1,2,4-Trimethylbenzene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
sec-Butylbenzene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
1,3-Dichlorobenzene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
4-Isopropyltoluene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
1,4-Dichlorobenzene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
1,2-Dichlorobenzene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
n-Butylbenzene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
1,2-Dibromo-3-Chloropropane	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
1,2,4-Trichlorobenzene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Hexachlorobutadiene	ND	8.1	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
Naphthalene	ND	16	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
1,2,3-Trichlorobenzene	ND	16	2.42	EPA 5035A-L	B9I2643	09/26/2019	09/26/2019 17:19	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>122 %</i>		<i>70 - 130</i>		B9I2643	09/26/2019	<i>09/26/2019 17:19</i>	
<i>Surrogate: Toluene-d8</i>	<i>100 %</i>		<i>70 - 130</i>		B9I2643	09/26/2019	<i>09/26/2019 17:19</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>114 %</i>		<i>70 - 130</i>		B9I2643	09/26/2019	<i>09/26/2019 17:19</i>	

All questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

This technical report was reviewed by Timothy Fusco



David Ditta  
Laboratory Director



Project Manager

Report Comments:

Sample Result Flags:

- E- The result is estimated, above the calibration range.
- H- The surrogate recovery is above the control limits.
- L- The surrogate recovery is below the control limits.
- B- The compound was detected in the laboratory blank.
- P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
- D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.
- + - The Surrogate was diluted out.
- \*C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
- \*C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
- \*F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
- \*F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
- \*I- Analyte exceeds method limits from second source standard in Initial Calibration Verification (ICV). No directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit

Reporting Limit (RL) is the limit of detection for an analyte after any adjustment made for dilution or percent moisture.

All analyses were performed in house unless a Reference Laboratory is listed.

Samples will be disposed of 30 days after the report date.



CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<b>CT-ETPH in Soil</b>	
ETPH	CT
<b>EPA 1010A in Soil</b>	
Flashpoint	CT,NY,PA
<b>EPA 6010C in Soil</b>	
Lead	CT,NY,PA
Selenium	CT,NY,PA
Cadmium	CT,NY,PA
Chromium	CT,NY,PA
Arsenic	CT,NY,PA
Barium	CT,NY,PA
Silver	CT,NY,PA
<b>EPA 6020A in Water</b>	
Lead	CT
Selenium	CT
Cadmium	CT
Chromium	CT
Arsenic	CT
Barium	CT
Silver	CT
Mercury	CT
<b>EPA 7471B in Soil</b>	
Mercury	CT,NY,PA
<b>EPA 8081B in Soil</b>	
Alpha-BHC	CT,NY,PA
Gamma-BHC	CT,NY,PA
Heptachlor	CT,NY,PA
Aldrin	CT,NY,PA
Beta-BHC	CT,NY,PA
Delta-BHC	CT,NY,PA
Heptachlor Epoxide	CT,NY,PA
Endosulfan I	CT,NY,PA
4,4-DDE	CT,NY,PA
Dieldrin	CT,NY,PA
Endrin	CT,NY,PA
4,4-DDD	CT,NY,PA
Endosulfan II	CT,NY,PA
4,4-DDT	CT,NY,PA
Endrin Aldehyde	CT,NY,PA
4,4-Methoxychlor	CT,NY,PA
Endosulfan Sulfate	CT,NY,PA
Endrin Ketone	CT,NY,PA
Chlordane	CT,NY,PA
Toxaphene	CT,NY,PA

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<b><i>EPA 8081B in Soil</i></b>	
Alachlor	CT
<b><i>EPA 8081B in Water</i></b>	
Alpha-BHC	CT
Gamma-BHC	CT
Heptachlor	CT
Aldrin	CT
Beta-BHC	CT
Delta-BHC	CT
Heptachlor Epoxide	CT
Endosulfan I	CT
4,4-DDE	CT
Dieldrin	CT
Endrin	CT
4,4-DDD	CT
Endosulfan II	CT
4,4-DDT	CT
Endrin Aldehyde	CT
4,4-Methoxychlor	CT
Endosulfan Sulfate	CT
Endrin Ketone	CT
Chlordane	CT
Toxaphene	CT
Alachlor	CT
<b><i>EPA 8082A in Soil</i></b>	
PCB-1016	CT,NY,PA
PCB-1221	CT,NY,PA
PCB-1232	CT,NY,PA
PCB-1242	CT,NY,PA
PCB-1248	CT,NY,PA
PCB-1254	CT,NY,PA
PCB-1260	CT,NY,PA
PCB-1268	CT,NY,PA
PCB-1262	NY,PA
<b><i>EPA 8151A in Soil</i></b>	
Dalapon	CT
Dicamba	CT
Dichloroprop	CT
2,4-D	CT
PCP	CT
Silvex	CT
2,4,5-T	CT
Dinoseb	CT
2,4-DB	CT

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>EPA 8260C in Soil</i>	
Dichlorodifluoromethane	CT,NY,PA
Chloromethane	CT,NY,PA
Vinyl Chloride	CT,NY,PA
Bromomethane	CT,NY,PA
Chloroethane	CT,NY,PA
Trichlorofluoromethane	CT,NY,PA
Acetone	CT,NY,PA
Acrylonitrile	CT
Trichlorotrifluoroethane	CT,NY,PA
1,1-Dichloroethene	CT,NY,PA
Methylene Chloride	CT,NY,PA
Carbon Disulfide	CT,NY,PA
Methyl-t-Butyl Ether (MTBE)	CT,NY,PA
trans-1,2-Dichloroethene	CT,NY,PA
1,1-Dichloroethane	CT,NY,PA
2-Butanone (MEK)	CT,NY,PA
2,2-Dichloropropane	CT,NY,PA
cis-1,2-Dichloroethene	CT,NY,PA
Bromochloromethane	CT,NY,PA
Chloroform	CT,NY,PA
Tetrahydrofuran	CT
1,1,1-Trichloroethane	CT,NY,PA
Carbon Tetrachloride	CT,NY,PA
1,1-Dichloropropene	CT,NY,PA
Benzene	CT,NY,PA
1,2-Dichloroethane	CT,NY,PA
Trichloroethene	CT,NY,PA
1,2-Dichloropropane	CT,NY,PA
Dibromomethane	CT,NY,PA
Bromodichloromethane	CT,NY,PA
Methyl Isobutyl Ketone	CT,NY,PA
cis-1,3-Dichloropropene	CT,NY,PA
Toluene	CT,NY,PA
trans-1,3-Dichloropropene	CT,NY,PA
2-Hexanone	CT,NY,PA
1,1,2-Trichloroethane	CT,NY,PA
Tetrachloroethene	CT,NY,PA
1,3-Dichloropropane	CT,NY,PA
Dibromochloromethane	CT,NY,PA
1,2-Dibromoethane	CT,NY,PA
trans-1,4-Dichloro-2-Butene	CT,NY,PA
Chlorobenzene	CT,NY,PA
1,1,1,2-Tetrachloroethane	CT,NY,PA
Ethylbenzene	CT,NY,PA
m+p Xylenes	CT,NY,PA

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<b>EPA 8260C in Soil</b>	
o-Xylene	CT,NY,PA
Styrene	CT,NY,PA
Bromoform	CT,NY,PA
Isopropylbenzene	CT,NY,PA
1,1,2,2-Tetrachloroethane	CT,NY,PA
Bromobenzene	CT,NY,PA
1,2,3-Trichloropropane	CT,NY,PA
n-Propylbenzene	CT,NY,PA
2-Chlorotoluene	CT,NY,PA
4-Chlorotoluene	CT,NY,PA
1,3,5-Trimethylbenzene	CT,NY,PA
tert-Butylbenzene	CT,NY,PA
1,2,4-Trimethylbenzene	CT,NY,PA
sec-Butylbenzene	CT,NY,PA
1,3-Dichlorobenzene	CT,NY,PA
4-Isopropyltoluene	CT,NY,PA
1,4-Dichlorobenzene	CT,NY,PA
1,2-Dichlorobenzene	CT,NY,PA
n-Butylbenzene	CT,NY,PA
1,2-Dibromo-3-Chloropropane	CT,NY,PA
1,2,4-Trichlorobenzene	CT,NY,PA
Hexachlorobutadiene	CT,NY,PA
Naphthalene	CT,NY,PA
1,2,3-Trichlorobenzene	CT
<b>EPA 8270D in Soil</b>	
Phenol	CT,NY,PA
1,3-Dichlorobenzene	CT,NY,PA
n-Nitroso-di-n-propylamine	CT,NY,PA
Pyridine	CT,NY,PA
n-Nitroso-dimethylamine	CT,NY,PA
bis(2-Chloroethyl)ether	CT,NY,PA
Aniline	CT,NY,PA
2-Chlorophenol	CT,NY,PA
1,4-Dichlorobenzene	CT,NY,PA
Benzyl Alcohol	CT,NY,PA
1,2-Dichlorobenzene	CT,NY,PA
bis(2-Chloroisopropyl)ether	CT,NY,PA
Hexachloroethane	CT,NY,PA
2-Methyl Phenol	CT,NY,PA
3+4 Methyl Phenol	CT,NY,PA
Naphthalene	CT,NY,PA
2-Nitrophenol	CT,NY,PA
2,4-Dichlorophenol	CT,NY,PA
Hexachlorobutadiene	CT,NY,PA

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<b><i>EPA 8270D in Soil</i></b>	
4-Chloro-3-methylphenol	CT,NY,PA
Nitrobenzene	CT,NY,PA
Isophorone	CT,NY,PA
2,4-Dimethylphenol	CT,NY,PA
bis(2-Chloroethoxy)methane	CT,NY,PA
Benzoic Acid	CT,NY,PA
1,2,4-Trichlorobenzene	CT,NY,PA
2,6-Dichlorophenol	CT,NY,PA
4-Chloroaniline	CT,NY,PA
1,2,4,5-Tetrachlorobenzene	CT,NY,PA
2-Methyl Naphthalene	CT,NY,PA
Acenaphthylene	CT,NY,PA
Acenaphthene	CT,NY,PA
Dibenzofuran	CT,NY,PA
Fluorene	CT,NY,PA
Hexachlorocyclopentadiene	CT,NY,PA
2,4,6-Trichlorophenol	CT,NY,PA
2,4,5-Trichlorophenol	CT,NY,PA
2,4-Dinitrophenol	CT,NY,PA
4-Nitrophenol	CT,NY,PA
2-Chloronaphthalene	CT,NY,PA
2-Nitroaniline	CT,NY,PA
Dimethylphthalate	CT,NY,PA
2,6-Dinitrotoluene	CT,NY,PA
4-Nitroaniline	CT,NY,PA
2,4-Dinitrotoluene	CT,NY,PA
2,3,4,6-Tetrachlorophenol	CT,NY,PA
4-Chlorophenyl-phenylether	CT,NY,PA
Diethylphthalate	CT,NY,PA
Phenanthrene	CT,NY,PA
Anthracene	CT,NY,PA
Carbazole	CT,NY,PA
Fluoranthene	CT,NY,PA
Pyrene	CT,NY,PA
n-Nitrosodiphenylamine	CT,NY,PA
Pentachlorophenol	CT,NY,PA
3-Nitroaniline	CT,NY,PA
4,6-Dinitro-2-methylphenol	CT,NY,PA
1,2-Diphenylhydrazine	CT
4-Bromophenyl-phenylether	CT,NY,PA
Hexachlorobenzene	CT,NY,PA
Di-n-butylphthalate	CT,NY,PA
Pentachloronitrobenzene	CT,NY,PA
Benzo[a]anthracene	CT,NY,PA
Chrysene	CT,NY,PA

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<b><i>EPA 8270D in Soil</i></b>	
Butylbenzylphthalate	CT,NY,PA
3,3-Dichlorobenzidine	CT,NY
bis(2-Ethylhexyl)phthalate	CT,NY,PA
Di-n-octylphthalate	CT,NY,PA
Benzo[b]fluoranthene	CT,NY,PA
Benzo[k]fluoranthene	CT,NY,PA
Benzo[a]pyrene	CT,NY,PA
Indeno[1,2,3-cd]pyrene	CT,NY,PA
Dibenz[a,h]anthracene	CT,NY,PA
Benzo[g,h,i]perylene	CT,NY,PA
<b><i>EPA 9012B in Soil</i></b>	
Cyanide, Total	CT
<b><i>EPA 9045D in Soil</i></b>	
pH	CT,NY,PA
<b><i>SM 2540 G in Soil</i></b>	
Percent Solids	CT
<b><i>SW 846 Ch. 7 in Soil</i></b>	
Reactive Cyanide	CT
Reactive Sulfide	CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2020
NY	New York Certification (NELAC)	11982	04/01/2020
PA	Pennsylvania DEP	68-02927	05/31/2020



COMPLETE ENVIRONMENTAL TESTING, INC.

# CHAIN OF CUSTODY

Volatile Soils Only:  
 Date and Time in Freezer  
 Client:  
 CET

80 Lupes Drive  
 Stratford, CT 06615  
 Tel: (203) 377-9984  
 Fax: (203) 377-9952  
 e-mail: cet1@cetlabs.com  
 Bottle Request e-mail: bottleorders@cetlabs.com

Matrix  
 A=Air  
 S=Soil  
 W=Water  
 DW=Drinking  
 Water  
 C=Cassette  
 Solid  
 Wipe  
 Other  
 (Specify)

Turnaround Time \*\*  
 (check one)

Same Day \*  
 Next Day \*  
 Two Day \*  
 Three Day \*  
 Sid (5-7 Days)

8260 CT List	8260 Aromatics	8260 Halogens	CT ETPH	8270 CT List	8270 PNAS	PCBs	SOX	BASE	Pesticides	8 RCRA	13 Priority Poll	15 CT DEP	Total	SPLP	TCLP	Dissolved	Field Filtered	Lab to Filter	
X	X		X	X		X	X	X	X	X									

Additional Analysis	
X	CN Flashpt
X	Reactivity
X	PH
X	TCLP CERAS
X	TCLP PESTICIDES
X	HERBICIDES

Sample ID/Sample Depths  
 (include Units for any sample depths provided)

Collection Date/Time

GBP

09/23/19 11:00am

PRESERVATIVE (CI-HCl, N-HNO<sub>3</sub>, S-H<sub>2</sub>SO<sub>4</sub>, Na-NaOH, C=Cool, O-Other)

CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, O-Other)

Soil VOCs Only (M=MeOH B=Sodium Bisulfate W=Water F=Empty Vial E=Encore)

RELINQUISHED BY: [Signature] DATE/TIME: 09/23/19 RECEIVED BY: [Signature] DATE/TIME: 09/24/19

RELINQUISHED BY: [Signature] DATE/TIME: RECEIVED BY: [Signature]

RELINQUISHED BY: DATE/TIME: RECEIVED BY:

NOTES:

**Client / Reporting Information**

Company Name: OSP2M  
 Address:  
 City: State: Zip:  
 Report To: E-mail:  
 Phone #: Fax #:

**Project Information**  
 Project: Greenwich PO #:  
 Location: BP Project #:  
 CET Quote # Collector(s): R. GRASIACT  
 QA/QC  Std  Site Specific (MS/MSD) \*  RCP Pkg \*  DQAW \*  
 Data Report  PDF  EDD - Specify Format: Other:  
 RSR Reporting Limits (check one)  GA  GB  SWP  Other:  
 Laboratory Certification Needed (check one)  CT  NY  RI  MA  
 Temp Upon Receipt: 29.3 °C Evidence of Cooling: Y N  
 PAGE 1 OF 1

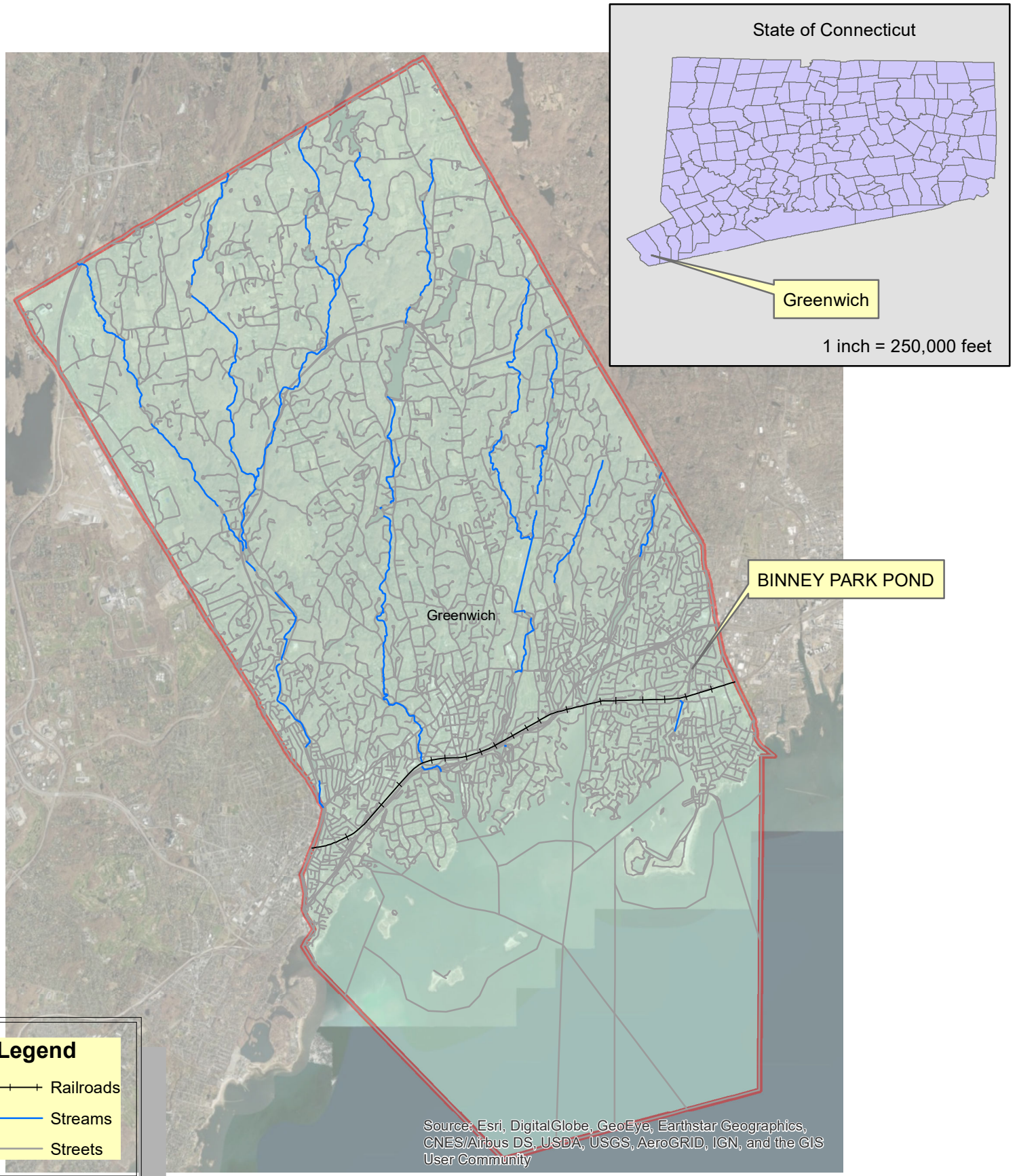
\* Additional charge may apply. \*\* TAT begins when the samples are received at the Lab and all issues are resolved. TAT for samples received after 3 p.m. will start on the next business day. All samples picked up by courier service will be considered next business day receipt for TAT purposes.

APPENDIX D

PLANS AND FIGURES



# MAINTENANCE DREDGING OF SEDIMENT FOREBAYS AT BINNEY PARK POND TOWN PROJECT NO. 19-22



State of Connecticut

Greenwich

1 inch = 250,000 feet

BINNEY PARK POND

Greenwich

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

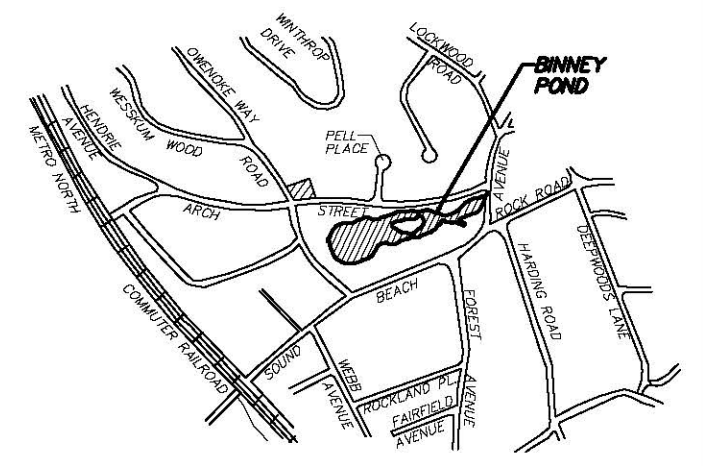
### Legend

- +— Railroads
- Streams
- Streets

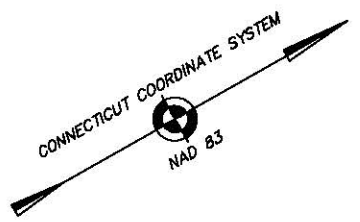
0 0.5 1 2 3 4 Miles

Figure 1 - Location Map  
Date: September 2019  
Source: Data from US Census  
Geographic Coordinate System

CONTOURS AND ELEVATIONS DEPICTED HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

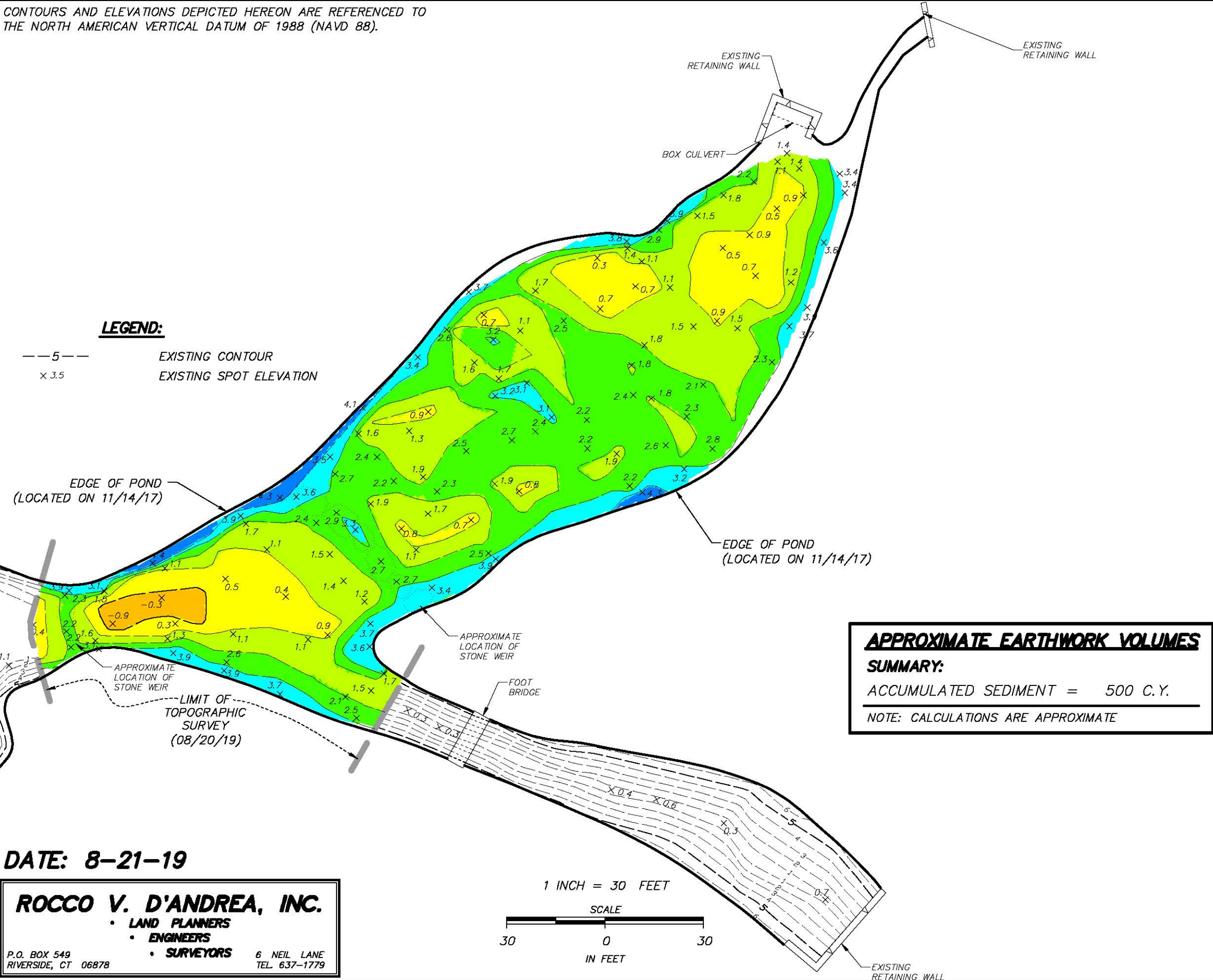


LOCATION MAP



**LEGEND:**

- 5--- EXISTING CONTOUR
- x 3.5 EXISTING SPOT ELEVATION



**ELEVATION ZONE ANALYSIS**

- Equal or Less than -1.00
- Greater than -1.00
- Greater than 0.00
- Greater than 1.00
- Greater than 2.00
- Greater than 3.00
- Greater than 4.00
- Greater than 5.00

**APPROXIMATE EARTHWORK VOLUMES**  
**SUMMARY:**  
 ACCUMULATED SEDIMENT = 500 C.Y.  
 NOTE: CALCULATIONS ARE APPROXIMATE

**"AS-BUILT" GRADING**

SKETCH "AB"	AS-BUILT ELEVATION ZONE ANALYSIS
PREPARED FOR	TOWN OF GREENWICH A. VITTI EXCAVATORS, LLC
LOCATION	"BINNEY PARK" GREENWICH, CONNECTICUT

DATE: 8-21-19

**ROCCO V. D'ANDREA, INC.**  
 • LAND PLANNERS  
 • ENGINEERS  
 • SURVEYORS  
 P.O. BOX 549 RIVERSIDE, CT 06878  
 6 NEIL LANE TEL. 637-1779

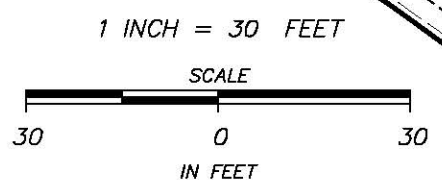
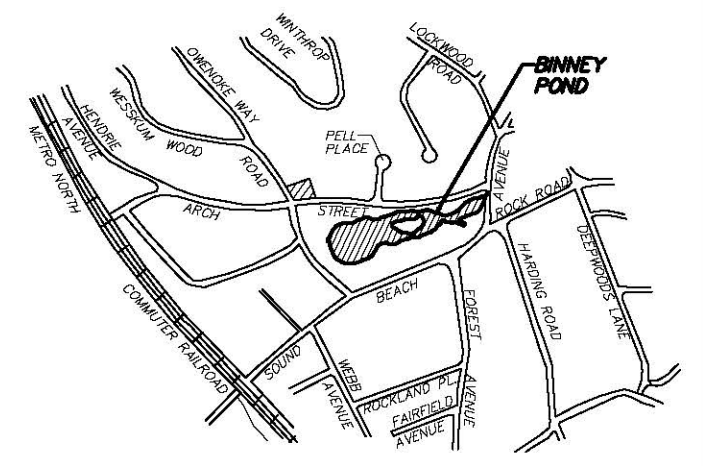
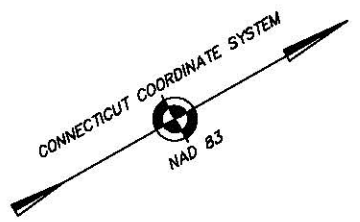


Figure 2

CONTOURS AND ELEVATIONS DEPICTED HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

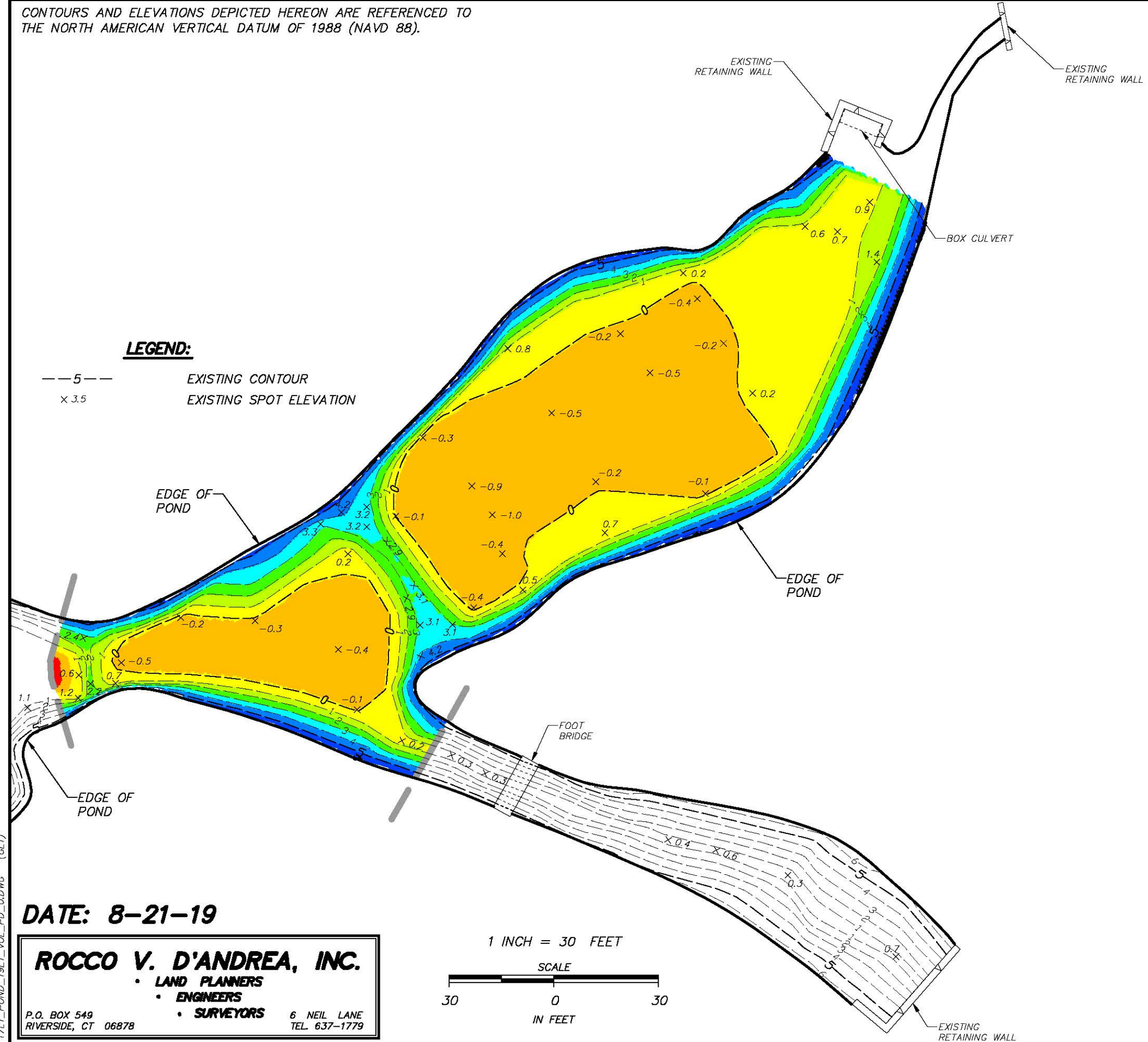


**LOCATION MAP**



**LEGEND:**

---5--- EXISTING CONTOUR  
 X 3.5 EXISTING SPOT ELEVATION



**ELEVATION ZONE ANALYSIS**

- Equal or Less than -1.00
- Greater than -1.00
- Greater than 0.00
- Greater than 1.00
- Greater than 2.00
- Greater than 3.00
- Greater than 4.00
- Greater than 5.00

**PREVIOUS GRADING**

SKETCH "PD"	<b>POST-DREDGING ELEVATION ZONE ANALYSIS</b>
PREPARED FOR	<b>TOWN OF GREENWICH A. VITI EXCAVATORS, LLC</b>
LOCATION	<b>"BINNEY PARK" GREENWICH, CONNECTICUT</b>

**DATE: 8-21-19**

**ROCCO V. D'ANDREA, INC.**  
 • LAND PLANNERS  
 • ENGINEERS  
 • SURVEYORS

P.O. BOX 549  
 RIVERSIDE, CT 06878

6 NEIL LANE  
 TEL. 637-1779

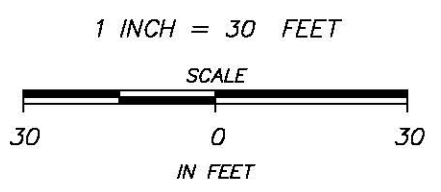


Figure 3

