Rockland Green
172 Main Street
Nanuet, NY 10954

REQUEST FOR PROPOSALS

RFP-2024-02

Replacement of an Existing Stream Culvert

at the

Mulch Processing Area

West Nyack Transfer Station

April 18, 2024

TABLE OF CONTENTS

Appendix B – Insurance Requirements

Appendix C – Prevailing Wage

Appendix D – Technical Specifications (including own Table of Contents)

Appendix E – Drawings

Appendix F – Draft Contract

Appendix G – US Army Corps of Engineers Nationwide Permit No. 3

RECEIPT CONFIRMATION

[This form must be completed by each member of the Proposer team]

PLEASE COMPLETE AND RETURN THIS CONFIRMATION FORM WITHIN FIVE (5) BUSINESS DAYS OF RECEIVING THE RFP PACKAGE TO:

Ms. Dee Louis, Engineer II
Rockland Green
172 Main Street
Nanuet, NY 10954
Phone: (845) 753-2200 (Ext. 613)
Fax: (845) 753-2281
Email: dlouis@rocklandgreen.com
Failure to return this form may result in no further communication or addenda regarding this RFP.

Company Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Contact: _____

Phone Number: _____ Fax Number: _____

Email: _____

I have received a copy of the above noted Proposal.

_____ We will be submitting a Proposal (for RFP #2024-02)

_____ We will NOT be submitting a Proposal (please indicate reason)

I authorize Rockland Green to send further correspondence that Rockland Green deems to be of an urgent nature by the following method:

Courier Collect: _____ Mail: _____

Signature: _____

Title: _____

NOTICE TO PROPOSERS

RFP 2024-02

Replacement of an Existing Stream Culvert

Mulch Processing Area

West Nyack Transfer Station

NOTICE IS HEREBY GIVEN THAT Rockland Green is seeking proposals for the removal of an existing 60-inch concrete culvert and installation of a new 84-inch multi-plate round culvert, including adjacent stream restoration, at the Mulch Processing Area located on the property of West Nyack Municipal Solid Waste Transfer Station, 166 South Route 303, West Nyack, NY 10994.

The Request for Proposal ("RFP") document # RFP 2024-02 may be obtained from the offices of Rockland Green located at 172 Main Street, Nanuet, NY 10954 between the hours of 9:00 AM and 4:00 PM, Monday through Friday, except holidays, on or after April 18, 2024.

Sealed proposals will be received by Rockland Green until June 7, 2024 at 2:00 p.m. local time, in the offices of Rockland Green, located at 172 Main Street, Nanuet, NY 10954. Any proposals not delivered in person should be mailed to: Dee Louis, Engineer II, Rockland Green, 172 Main Street, Nanuet, NY 10954.

All proposals shall be submitted in sealed envelopes and shall be plainly marked on the outside with the statement "RFP 2024-02 " with the Proposer's name and the title of the RFP. The attention of the Proposers is directed to the applicable federal, state, and local law requirements and to the "Affidavit of Non-Collusion" in the proposal forms. Rockland Green encourages the fullest possible utilization of minority and women's business enterprises (M/WBE's).

By order of
Rockland Green
172 Main Street
Nanuet, New York 10954
By: Gerard M. Damiani, Jr., Executive Director

I. PURPOSE OF RFP

Rockland Green is issuing this Request for Proposals ("RFP") to companies who are interested in providing the services described herein.

II. BACKGROUND

Rockland Green is a public benefit corporation organized and existing under the laws of the State of New York. Rockland Green's administrative offices are located at 172 Main Street Nanuet, NY 10954. Rockland Green's purpose, as reflected in its mission statement, is to "develop the education, programs, and technology to lead the waste prevention, recovery, responsible disposal movement, and animal management services in Rockland County." Rockland Green owns and operates multiple facilities that handle various types of waste streams throughout the county. These include the following operations at the West Nyack (Clarkstown) Transfer Station:

- A Municipal Solid Waste Transfer Station for collection and transfer of solid waste and construction and demolition debris (the largest transfer station in the county).
- A Yard Waste Composting Facility which produces compost from leaves and other green waste.
- A mulch processing area that produces wood chips from brush and trees (the area where the culvert replacement work is scheduled to be completed).
- A concrete and asphalt crushing operation that recycles demolished concrete and asphalt debris. This is adjacent to the mulch processing area.

III. SCOPE OF SERVICES SUMMARY

Rockland Green's objective is to enter into a contract with the selected Proposer to provide the following services:

1. Furnish all equipment, materials, and labor to work within the limits of an active stream in accordance with US Army Corps of Engineers (USACOE) regulations and guidelines as described in Nationwide Permit No. 3 for "Maintenance Activities". A copy of which is included as Appendix G of this RFP.

2. Furnish and install all temporary and permanent excavation and embankment protection as necessary to complete the work, including Best Management Practices for temporary stream flow diversion (note specification requirement for Delegated Design), erosion and sediment controls, and downstream sediment protection per New York State Guidelines. The evaluation of proposals will include review of Proposer's experience with this type of work.
3. Coordinate with Rockland Green and the operator (WeCare/Denali) of the Mulch Processing Area to establish daily work zones, vehicular patterns, temporary traffic barriers, removal of materials, delivery of materials, temporary stockpile locations, and other coordination efforts to minimize disruption to ongoing mulching operations.
4. Remove the existing concrete culvert, removal of existing block guide walls and jersey barriers to the limits shown on the drawings(to be relocated on site for future use by Rockland Green), miscellaneous debris, and fill to the limits shown on the drawings.
5. Furnish and install a new 84-inch multi-plate round culvert in accordance with the enclosed plans and specifications, including foundation, stream bed reestablishment, backfill, slope protection and armoring, gravel roadway subbase surface over culvert, installation of an asphalt millings driving surface over subbase (Rockland Green will provide asphalt millings), new 2'x2'x6' interlocking concrete block walls (double course) along the access roadway over culvert (as shown on drawings), repair/replacement of existing asphalt millings that were disturbed, and all site restoration (including new vegetation as necessary).

Also be advised that construction activities will be performed while mulching operations continue west of the culvert replacement area. All work to be completed in accordance with the plans and specifications included with this RFP 2024-02.

Proposers must identify on Business Proposal Form 3, any and all of the exceptions taken to the scope of services, or any other aspect of the requirements stated in this RFP. Failure to identify such exceptions in the proposal may result in Rockland Green's rejection of the proposal.

IV. PROCUREMENT SCHEDULE

Issuance of RFP(1)	April 18, 2024
Pre-Proposal Site Visit(2)	April 30, 2024
Deadline for Clarification Questions from Proposers	May 9, 2024
Rockland Green Response to Clarification Questions	May 17, 2024
Deadline for Submittals	June 7, 2024
Award of Contract	June 27, 2024

(1) Within five (5) business days following the receipt of the RFP package, the Receipt Confirmation Form found at the front of this RFP must be completed and returned to Rockland Green as indicated thereon.

(2) ***A mandatory Pre-Proposal site visit will be held at 10:00 a.m. at the West Nyack Transfer Station located at 166 South Route 303, West Nyack, NY 10994.***

(3) Proposals are due no later than 2:00 p.m. on the Proposal due date. One (1) original and three (3) hard copies of each Proposal shall be submitted in a single envelope, bearing on the outside the name of the Proposer and the name of the procurement.

V. CONSTRUCTION SCHEDULE

Time is of the essence for completion of construction activities. It is Rockland Green's intent to maintain a full level of service (ongoing operations) at the mulch processing area during the active construction period and access to the culvert location will be shared (vehicular access). Coordination will be necessary for some work activities which may include alternative vehicle routing daily through the mulch processing area and Concrete & Asphalt Recycling Area. Coordination with Rockland Green is expected to ensure that transfer station operations will not be disrupted. In addition, it is Rockland Green's desire to minimize the duration of construction activities so that full operational services to the mulch processing area may be restored as soon as possible.

Construction activities shall not begin until Proposer has completed or received the following:

1. A fully executed Contract, including all required forms, bonds, and proof of insurance.

2. A written Notice to Proceed from Rockland Green that will formally establish contract dates based on the specified contract duration periods noted below, with initiation from the date of Notice to Proceed to establish the date for Substantial Completion.
3. Submittal of a Construction Progress Schedule as described in the specifications, including expected delivery time for critical materials with greater than a two week delivery time.
4. Submittal of a written Schedule of Values(s) for all lump sum price items (if work is expected to extend beyond one month).
5. Submittal of a written schedule (tabular list) for all shop drawing submittals, including prioritization of key submittals where rapid review(s) are requested.
6. Written receipt of all shop drawing approvals from Rockland Green's Engineer.
7. Delivery of all equipment and other temporary facilities associated with mobilization of work crews.

Once Rockland Green is satisfied that the above conditions have been met, Rockland Green will issue a written (email) **Notice to Commence Work** that will initiate construction activities. The Contract dates will be established as follows:

Notice of Award	June 22, 2023
Contract Date (Contract Execution)	Within 14 Calendar Days of Notice of Award
Notice to Proceed	Within 5 Calendar Days of Contract Date
Date of Substantial Completion	60 Calendar Days from Notice to Proceed Date
Date of Final Completion	30 Calendar Days from Date of Substantial Completion

If Proposer believes there will be a delay in delivery of some materials or equipment, they shall immediately inform Rockland Green in writing documenting reasons for the delay. Shipping delays will not be justification for price adjustments, nor automatically be a justification for a modification to the contract times.

VI. QUESTIONS

All questions concerning this RFP must be submitted in writing by the deadline in the schedule above, to Dee Louis at dlouis@rocklandgreen.com. Rockland Green will respond to all questions submitted prior to the deadline set forth above.

VII. PROPOSAL SUBMISSION REQUIREMENTS

This section contains instructions regarding the required content and organization of the Proposals. All Proposers must provide all required information in the order set forth below. Rockland Green reserves the right to add or delete specific items from the final award or to negotiate modifications to specific items prior to such award.

Proposals must be received by the deadline in the schedule above. Proposals received after the deadline will be late and ineligible for consideration. Each proposal shall be prepared simply and economically avoiding the use of elaborate promotional materials beyond those sufficient to provide a complete, accurate, and reliable presentation. Rockland Green is not interested in receiving marketing brochures, generic narratives, or laundry lists of unrelated experience in the response.

One (1) original and three (3) copies of the proposal shall be submitted. One copy must be clearly marked “original” and must contain all original executed copies. Late proposals will be considered non-responsive and may be returned to the Proposer unopened. NO PROPOSAL will be accepted unless filed on or before the date and at the place designated herein. When sent by mail, the sealed Proposal, marked as above, shall be enclosed in an additional envelope similarly marked and addressed to the person stipulated in the Notice to Proposers. Proposals received prior to the time of opening will be securely kept unopened. Proposals received thereafter will be returned unopened.

All hard copy submittals must be delivered by hand, regular mail or by a nationally recognized express mail carrier to Rockland Green at the address listed below. The package or box must be clearly marked on the outside with the proposer’s name and the statement

"Response to RFP-2024-02 Enclosed". The response shall be typed or printed on 8-1/2 inch by 11-inch paper, with a minimum font size of 12.

Proposals shall be submitted with the Proposal Forms set forth in this RFP. All blank spaces for Proposal prices shall be properly filled in, in ink, or typed, in both words and figures. In case any price shown in words and its equivalent shown in figures do not agree, the written words shall be binding on the Proposer. All Proposal Forms included in this RFP must be completed and submitted with all blank spaces for Proposal prices filled in with the Proposal amount to be considered a responsible Proposer.

All submittals become the property of Rockland Green and will not be returned.

VIII. STATEMENT OF RIGHTS AND GENERAL PROCUREMENT CONDITIONS

This RFP constitutes only an invitation to provide a proposal to Rockland Green. This section describes Rockland Green's responsibilities, rights, and options as they relate to various business, legal, and financial aspects of procurement. Rockland Green reserves, holds and may at its sole discretion, exercise the following rights and options with respect to this RFP. By responding to this RFP, proposers acknowledge and consent to the following conditions relative to the RFP process.

1. This RFP does not obligate Rockland Green to contract for any services whatsoever.
2. All costs incurred by a proposer in connection with responding to this RFP, the evaluation and selection process, and any negotiations entered into with Rockland Green will be borne by the proposer, and with the express understanding that no claim can be made for reimbursement from Rockland Green for any associated costs.
3. Rockland Green has the right to cancel this RFP without issuing another RFP.
4. Rockland Green reserves the right to select and enter into negotiations with the proposer(s) who best satisfies the interests of Rockland Green and is most responsive to the RFP, and not necessarily on the basis of price or any other single factor.
5. Any and all responses not received by the deadline for receipt of proposals may be rejected and returned unopened in Rockland Green's sole discretion.

6. Rockland Green may select and enter into negotiations with one or more, or none of the proposers whose response best satisfies the interests of Rockland Green and to discontinue and resume such negotiations at any time prior to execution of an agreement.
7. Rockland Green reserves the right to determine in Rockland Green's sole discretion which, if any, proposers are responsive and deemed qualified, and at any time to determine that any or all proposers will not be selected for further consideration.
8. Rockland Green reserves the right to eliminate any proposer who submits an incomplete and inadequate response or is not responsive to the requirements of this RFP.
9. Rockland Green may reject non responsive submissions without evaluation, but also has the right, in its sole discretion, to waive any technicalities, immaterial irregularities or minor noncompliance.
10. Rockland Green reserves the right to reject, for any reason, any and all proposals and components thereof and to eliminate any and all proposers responding to the RFP from further consideration for this procurement.
11. Rockland Green reserves the right to issue additional requests and/or amendments to this RFP and to cancel this RFP at any time.
12. Rockland Green reserves the right to conduct investigations of the proposers and their responses to this RFP and to request additional evidence to support the information included in any such response.
13. Rockland Green reserves the right to conduct interviews with representatives from proposers.
14. Rockland Green reserves the right to conduct clarification discussions, at any time, with one or more proposers, request additional information, and to receive questions from proposers and provide answers as it deems appropriate.
15. Rockland Green reserves the right to modify deadlines.
16. Rockland Green reserves the right to enter into agreements for only portions of the services contemplated by the responses submitted or not to enter into any agreement[s].

17. Neither Rockland Green, its staff, its representative, nor any of its consultants will be liable for any claims or damages resulting from the solicitation, collection, review, or evaluations of responses to this RFP.
18. Rockland Green reserves the right to enter into concurrent or sequential negotiations with two (2) or more proposers.
19. No contract awarded by Rockland Green shall be binding and valid until fully executed by the parties.
20. Rockland Green reserves the right to designate, at any time, one (1) or more proposers with whom it may select to have a full evaluation of their proposal.
21. If a site visit is required, Rockland Green reserves the right to waive the site visit on a case-by case basis.
22. The proposals will constitute formal offers to Rockland Green that are binding on the proposer for 180 calendar days from the submittal date of the proposal.

Minority and Women's Business Enterprises

Rockland Green encourages the fullest possible utilization of Minority and Women Owned Business Enterprises.

Authority to Do Business in New York

Any entity formed under the laws of the State of New York must provide a certificate of good standing from the New York Secretary of State, and any entity not formed under the laws of the State of New York must provide a certificate of authority from the New York State Secretary of State to do business in New York in accordance with Article 13 of the New York Business Corporation Law.

No Discrimination

The proposers shall not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, sexual orientation, age, disability, military status,

predisposing genetic characteristics, or marital status and will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal employment opportunities without discrimination.

Confidentiality

The New York State Freedom of Information Law, Public Officers Law, Article 6, Sections 84-90 provides for public access to government records. However, proposals may contain trade secrets and other technical, financial, or administrative data whose public disclosure could cause substantial injury to the proposer's competitive position. Proposers must clearly indicate whether there are portions of their proposals that contain trade secrets and other technical, financial, or administrative data whose public disclosure could cause substantial injury to the proposer's competitive positions. Accordingly, to protect the proposer from release of this sensitive information under the State Freedom of Information Law, the proposer should specifically identify and mark the pages of its submittal(s) that contain such information and insert the following notice in the front of its submittal:

Notice

The data on pages [_____] of this proposal identified by an asterisk (*) contain technical or financial information, which are trade secrets and/or whose disclosure would cause substantial injury to the proposer's competitive position. The proposer requests that such data be used only for the evaluation of the proposal but understands that the disclosure will be limited to the extent that Rockland Green considers proper under the law. If an Agreement is entered into with this proposer, Rockland Green shall have the right to use or disclose the data, as provided in the Agreement, unless otherwise obligated by law.

Rockland Green does not assume any responsibility for disclosure or use of marked data for any purpose. In the event properly marked data are requested, pursuant to the State Freedom of Information Law, the proposer will be advised of the request and may expeditiously submit to Rockland Green a detailed statement indicating the reasons it has for believing that the information is exempt from disclosure under the law. This statement will be used by Rockland Green in making its determination as to whether disclosure is proper under the law.

Correction, Modification, or Withdrawal of Proposal

A proposer may correct, modify, or withdraw a proposal by written notice received by Rockland Green prior to the time and date set for the receipt of proposals. For any proposals received by Rockland Green, Rockland Green may elect to waive minor informalities or may elect to allow the proposer to correct them.

Record of Proposals

All proposals are the property of Rockland Green and will not be returned. Rockland Green will use its best efforts to prevent the unauthorized disclosure of proprietary information, provided same is properly identified in accordance with this RFP. In no event will Rockland Green assume liability for any loss, damage, or injury, which may result from any disclosure or use of marked data within proposals.

Security Bond

A security bond or certified check in the amount of 5% of the proposed price made payable to Rockland Green must accompany the proposal. The bond shall provide that prior to the expiration or termination of the bond, the proposer shall (1) if so, requested by Rockland Green, negotiate an agreement with Rockland Green, and (2) if Rockland Green selects the proposer's proposal as the most advantageous proposal, enter into a contract. If the proposer fails to comply with the above, the surety will pay to Rockland Green, as liquidated damages, the full amount of the security bond or, as applicable; the certified check shall become the property of Rockland Green and be deposited in Rockland Green's accounts.

Any security bond must be valid for at least 180 days from the proposal submission date. If the contract has not been executed prior to the expiration of the security bond, Rockland Green may require the renewal of the security bond for an additional 180 days. No proposal will be considered unless it is accompanied by the required certified check or security bond. The form

of the Security Bond and Surety Letter of Intent, which must be submitted, is described in Business Proposal Form 5.

The certified check or security bond submitted by a proposer will be returned within ten (10) business days after the earliest to occur of (1) the rejection of the proposal of such proposer by Rockland Green and (2) the execution of the contract by and between Rockland Green and the selected proposer.

Labor and Materials Payment Bond

A Labor and Materials Payment Bond shall be provided to Rockland Green for 100% of the value of the work and in accordance with "Business Proposal Form 5" in Appendix A.

Independent and Separate Prices

Where separate prices are required by this RFP for specific services, such prices are understood to be independent and separable. Accordingly, elimination or modification by Rockland Green of any portion of the proposed scope of services should not affect the price proposed for any other portion of the scope of services. Rockland Green will reserve the right after contract award to modify the scope of services within the limits of applicable law.

Sales Tax

The New York State Tax Law exempts from sales and use taxes, imposed under Article 28 and pursuant to Article 29 thereof, the sale or use of tangible property incorporated in structures, buildings, or real property owned by an exempt organization. Rockland Green is an exempt organization, and therefore, proposers should not include sales and use tax in their proposals.

Insurance

Proposer shall possess or be able to obtain all insurance such as, Professional Liability Insurance, Commercial General Liability/Auto, and Workmen's Compensation Insurance, and other types of coverage, as indicated in the Insurance Requirements found in Appendix B to this RFP

Labor, Wages, and Equal Employment Opportunity.

Proposer will be expected to be familiar with and to comply with all Federal, State, and local labor laws, rules, regulations, ordinances, and executive orders, including without limitation, requirements for minimum wages, prevailing wages and benefits, workmen's compensation, and equal employment opportunity.

Affirmative Action.

Proposer must also agree to comply with the affirmative action requirements of County Resolution 471 of 1975 if the proposer (1) employs a minimum of fifteen (15) employees and (2) does a minimum of fifty thousand dollars ($50,000) per annum business with Rockland County. See Business Proposal Form 8.

IX. DETAILED SCOPE OF SERVICES

Furnish and Install a new 84-inch stream culvert, complete, at the West Nyack Transfer station in accordance with the plans and specifications included with this RFP 2024-02 .

X. QUALIFICATIONS AND EXPERIENCE

Proposers must provide the following information for the Proposer**:**

- A summary of your company's experience in providing the services requested herein.
- A list projects of a similar nature and scope completed by the proposer in the past 5 years (minimum of 3 projects). Specifically, for work within streams or navigable waterways that are regulated by the USACOE. These can be utility crossings, stream restoration, culvert installation, or other similar projects.
- Contact information for listed references, including project size, completion date, and any other relevant details for completed projects.

- The name of the Project Superintendent and Project Foreman assigned to be on site and their related experience. Experience of other key personnel may be requested by Rockland Green as part of the evaluation process.
- Upon request by Rockland Green, provide additional information related to qualifications to clarify or supplement the qualifications information requested in Appendix A of this RFP.
- Financial Information
- Evidence of Authorization to conduct business in the State.
- Evidence that demonstrates the ability to obtain the required insurance set forth herein.

XI. COMPENSATION

The selected Proposer shall invoice Rockland Green on or before the tenth (10^{th}) calendar day of each month after commencement of services, but no more frequently than once monthly. The selected Proposer may submit a payment request for the period ending the last calendar day of the previous month. Payment Request shall be in such format and include whatever supporting information as may be reasonably required by the Engineer. In its Payment Request, the selected Proposer may request payment for ninety percent (90%) of that portion of the Contract Price allocable to the Contract Services that have been properly provided, including labor, materials and equipment properly incorporated in the Work, and materials or equipment necessary for the Work and properly stored at the Project Site (or elsewhere if offsite storage is approved in writing by the Engineer), less the total amount of previous payments received from Rockland Green. Refer to the Draft Contract for full payment procedures, warranty period, and release of retainage.

Proposers must complete the price proposal form attached as Price Proposal Form 1.

XII. CONTENTS OF PROPOSALS

Proposers are required to submit with their proposals all the information, documentation, and Forms requested in this RFP. The proposal must be organized as follows; details on each of the items below are provided after this section:

(i) Cover Letter and Security Bond

(ii) Acknowledgement of responsiveness to this request for proposal (in cover letter), including the following.
   a. The Proposer has reviewed and fully understands the scope of work, sequencing of work, and timing for the project.
   b. The proposer has provided the requested information relative to qualifications and experience.

(iii) Qualifications and Experience

(iv) General Requirements

(v) Proposal Forms

(vi) Evidence of Proposer's ability to obtain the required insurance, if selected.

(vii) All comments, if any, to the draft Agreement, included with this RFP, if any

(viii) Evidence of Proposer's ability to obtain the required Labor and Material Bond, if selected.

(ix) A certificate of good standing or authority from the New York State Secretary of State to do business in New York in accordance with Article 13 of the New York Business Corporation Law.

The Proposal Cover Letter is the proposer's official letter transmitting the complete proposal to Rockland Green. The format required for the Proposal Cover Letter is provided in Table 10-1 below. The letter is to be written in text form and is not to exceed three (3) pages, typed, and double-spaced. Since the Proposal Cover Letter introduces the proposer to Rockland Green, it should clearly and concisely summarize the proposal. This letter is to be typed on the proposer's letterhead and is to be signed by the Proposer's Chief Executive Officer ("CEO") and attested by another officer of the proposer. If the proposer is a joint venture, the CEO of the lead or sponsoring proposer is to sign the letter.

Table 10-1

FORMAT OF PROPOSAL COVER LETTER

A. Addressee	Dee Louis, Engineer II Rockland Green 172 Main Street Nanuet, New York 10954
B. Content of Letter	First Paragraph:
	• Name of Proposer (or Proposers, if joint venture) submitting the Proposal. • If a joint venture, the name of the lead or sponsoring Proposer. • Confirm that the signatory is authorized to make the Proposal. Second Paragraph:
	• Response to the requirement for a Security Bond, which must be enclosed. Third Paragraph:
	• A brief description of the Proposer(s). • Summarize qualifications of the Proposer(s). • Commitment of the Proposer(s) to deliver the services required in the Request for Proposals and described in the attached Proposal and at the prices quoted in the Proposal. Fourth Paragraph:
	• Commitment of the Proposer to enter into an Agreement with Rockland Green at the prices stated in the Proposal. Fifth Paragraph:
	• Acknowledgement of responsiveness to the Request For Proposals Very truly yours, President/CEO Attachment: Security Bond or certified check Certificates of Insurance Surety Statement for Labor & Material Bond Certificate New York Secretary of State

(i) Scope of Services

Proposers must address all aspects of the scope of services described in this RFP. The proposer must acknowledge an understanding of and a commitment to meeting all the responsibilities and obligations stated in this RFP, including obligations under the USACOE Nationwide Permit No. 3 included as Appendix G.

(ii) Qualifications and Experience

a. Qualifications.

The proposer must demonstrate qualifications consistent with the minimum qualifications described in Section X of this RFP.

b. Experience.

The proposer must demonstrate experience consistent with the requirements described in Section X of this RFP.

(iii) Proposal Forms

All proposals must include at least one (1) complete set of Business, Price, and Technical Proposal Forms, as applicable, completed by the proposer.

XIII. PROPOSAL EVALUATION

This section describes Rockland Green's proposal evaluation process and criteria. Rockland Green will evaluate the net total and net present value costs of each proposal and the proposer's ability and willingness to meet all the proposer's responsibilities. Each section of a proposal will be evaluated in terms of the commitments made, the completeness and the reliability of the approach taken, and conformance with the requirements and the instructions provided in this RFP. A proposer's failure to adequately respond to all the technical and pricing requirements in this RFP, to accurately complete the Proposal Forms, to disclose violations of applicable laws, codes or regulations, or to provide other business-related information required in the RFP, shall be grounds to deem a proposal as non-responsive.

Selection will not be solely based on the lowest cost, although cost will be a factor in the evaluation process.

After evaluating the proposals, Rockland Green may short-list proposers for interviews and enter into contract negotiations with one (1) or more proposers who meet(s) Rockland Green's evaluation criteria and whose proposals are regarded as most advantageous to Rockland Green.

a. Evaluation Team

The proposal evaluation and selection process described in this Section will be conducted by an evaluation team led by Rockland Green. The team may consist of personnel from Rockland Green and its technical, legal, and financial consultants. The team will review and evaluate proposals and select one (1) or more proposers with whom Rockland Green will conduct negotiations.

b. Cost Evaluation

The Price Proposal will be evaluated based on the fees proposed by the proposer in all Proposal Forms. Proposers are strongly advised to submit pricing wholly consistent with the RFP, then to clearly delineate any caveats or exceptions to baseline pricing.

c. Requests for Clarification

Once proposals have been reviewed, Rockland Green may request that the proposer submit additional information or clarify certain aspects of the proposal.

d. Proposal Interviews

After proposals have been evaluated according to the process described above, the evaluation team may choose to meet with and interview the proposers who submitted the most advantageous proposal(s). Following the interviews, Rockland Green may select the proposer(s) with whom to conduct contract negotiations.

APPENDIX A

PROPOSAL FORMS

BUSINESS PROPOSAL FORM 1

SIGNATURE PAGE

To Rockland Green:

The Proposer, in compliance with your Request for Proposals for [_____ _____], having examined the Request for Proposals and being familiar with all conditions surrounding the project , hereby proposes to furnish all labor, equipment, materials and supplies necessary to meet the obligations of the proposal in accordance with the solicitation, within the time and prices set forth therein.

Proposer understands that Rockland Green reserves the right to reject any or all proposals and to accept any item or items in any one proposal and to waive any informalities in the RFP process.

Respectfully Submitted:

_____
Printed Name / Signature

_____
Date

_____
Title

_____
Business Address

(Seal, if corporation)

BUSINESS PROPOSAL FORM 2

ADDENDA ACKNOWLEDGEMENT FORM

The undersigned hereby acknowledges receipt of the following Addenda (if any) to the Request for Proposals for **the Replacement of an Existing Steam Culvert, Mulch Processing Area, West Nyack Transfer Station, RFP-2024-02:**

Addendum No.	Date
_____	_____
_____	_____
_____	_____
_____	_____

Person, firm, or corporation submitting this Proposal:

_____
Contractor

_____
Signature

_____
Title

_____
Date

BUSINESS PROPOSAL FORM 3

EXCEPTIONS TAKEN TO THIS REQUEST FOR PROPOSALS

____ No exceptions taken.

____ Exceptions taken (please provide cross references, as shown below):

Request for Proposal Page _____, Section _____

Exception taken: _____

_____

_____

_____
Printed Name / Signature

_____
Title

_____
Date

BUSINESS PROPOSAL FORM 4

FORM OF SECURITY BOND

KNOW ALL MEN BY THESE PRESENT, that we [NAME OF PROPOSER], as Principal (hereinafter the "Proposer") and [NAME OF SURETY], a [Corporation],[Partnership] duly organized under the laws of the State of _____, as Surety, are held and firmly bound unto Rockland Green ("RG"), as Obligee, in the sum of [_____] ($[ ]) lawful money of the United States of America to be paid to Rockland Green, its successors or assigns, for which payment, well and truly to be made, we bind ourselves, our successors and assigns, jointly and severally, firmly by these present, and

WHEREAS, the above-named Proposer has submitted or is about to submit to Rockland Green a proposal to provide [_____] as described in the Request for Proposals (RFP [ ]), dated [_____](the "RFP"), issued by Rockland Green and covered by the Proposal submitted by the Proposer in response thereto, which Proposal is made a part hereof.

NOW THEREFORE, the Surety hereby understands that if the above-referenced Proposer is selected by Rockland Green as the most advantageous Proposer, then the Proposer will enter into an Agreement based on its proposal within the time specified in the RFP or any extension thereof agreed to in writing by Rockland Green. Surety hereby agrees that if the Proposer shall fail to do so, Surety will pay to Rockland Green, as liquidated damages, the full amount of this Bond within thirty (30) calendar days after receipt by the Proposer and Surety of written notice of such failure from Rockland Green, which notice shall be given with reasonable promptness, identifying this Bond, and including a statement of the amount due. Upon execution of the Agreement, this Bond shall thereafter become null and void, otherwise to remain in full force and effect unless terminated as hereinafter provided.

It is agreed that this Bond shall become effective on the date the Proposal is submitted and will continue in full force and effect for three hundred sixty-five (365) days from such date of submittal (unless extended for up to an additional three hundred sixty-five (365)) or until terminated, as hereinafter provided.

If the Proposal is not accepted within the time specified in the RFP, or any extension thereof agreed to in writing by Rockland Green, then after written notice by Rockland Green of such non-acceptance, this Bond may be terminated by the Surety or Proposer upon written notice to each other and to Rockland Green by registered mail at least ten (10) days prior to the termination date specified in such notice. Upon the giving of such notice, Surety shall be discharged from all liability under this Bond for any act or omission of the Proposer occurring after the date of the notice of non-acceptance.

Any suit or action under this bond shall be commenced only in a court of competent jurisdiction located in the State of New York.

IN WITNESS WHEREOF, Surety and Proposer, intending to be legally bound hereby, do each cause this Security bond to be duly executed on its behalf by its authorized officers, agent or representative.

Signed and sealed this _____day of _____, _____.

SURETY	PROPOSER
[NAME OF SURETY]	[NAME OF CONTRACTOR]
Name:_____	Name:_____
Signature:_____	Signature:_____
Title:_____	Title:_____

BUSINESS PROPOSAL FORM 5

FORM OF

LABOR AND MATERIALS PAYMENT BOND

Bond No. _____

KNOW ALL MEN BY THESE PRESENT, that we [ ] with a place of business at as principal (the "Principal"), and [ ], a [ ] qualified to do business in the State of New York, with a place of business at [ ] as Surety (the "Surety"), are held and firmly bound unto Rockland Green as Obligee (the "Obligee"), in the sum of [Dollars ($)] lawful money of the United States of America, to be paid to the Obligee, for which payment, well and truly to be made, we bind ourselves, our respective heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these present.

WHEREAS, the Principal has assumed and made a contract with the Obligee, bearing the date of [ ], and entitled the [ ] (the "Contract").

NOW, THE CONDITIONS of this obligation are such that if the Principal and all Subcontractors under said Contract shall promptly pay for all labor performed or furnished and for all materials used or employed in said Contract and in any and all duly authorized modifications, alterations, extensions of time, changes or additions to said Contract that may hereafter be made, notice to the Surety of such modifications, alterations, extensions of time, changes or additions being hereby waived, then this obligation shall become null and void; otherwise, it shall remain in full force and virtue.

The Surety's obligation to the Obligee under this Bond shall arise after the Obligee provides notice to the Principal and Surety of claims, demands, liens or suits against the Obligee or the Obligee's property by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Contract.

The Surety shall promptly and at the Surety's expense defend, indemnify and hold harmless the Obligee against any duly tendered claim, demand, lien or suit against the Obligee or the Obligee's property.

IN WITNESS WHEREFORE, the Principal and Surety have hereto set their hands and seals this _____ day of _____, 2024.

PRINCIPAL	SURETY
_____	_____
_____	_____
[Name and Seal]	[Name and Seal]
_____	_____
[Title]	[Title]
_____	_____
[Address]	[Address]
_____	_____
[Phone]	[Phone]
Attest:_____	Attest:_____

The rate of the Bond is _____% of the first $_____ and _____% for the next $_____. The total premium for this Bond is $_____.

BUSINESS PROPOSAL FORM 6

CONTRACTOR QUALIFICATIONS

This form must be completed by each member of Proposer team.

(Section C must be signed before a Notary Public)

A. General Information

1. *****Firm: _____

2. Address: _____

3. Telephone: _____

4. Contact Person: _____

5. Type of Organization (e.g., a corporation; joint venture; partnership; and individual):

_____

6. Name of Parent Company, if any: _____

7. Name of Affiliate Companies, if any: _____

8. *****Identity of Joint Venture Partners, if any: _____

9. Financial References: _____

10. New York Surety: _____

11. Signature of person duly authorized to submit on behalf of the Proposer

_____
Signature

_____
Title

***** Referred to in Proposal Forms individually and collectively as "Proposer." Information requested must be provided with respect to each party to the Proposal.

BUSINESS PROPOSAL FORM 6 (Continued)

CONTRACTOR QUALIFICATIONS

B. Business Information

1. Brief history of Proposer(s) involved in the Proposal (attach additional sheets as necessary):

_____

_____

2. Name and address of all partners, key shareholders, principals and/or owners:

_____

_____

3. Has Proposer ever failed to complete any contract awarded to it? _____

4. If so, where and why: _____

_____

5. Has any officer or partner of Proposer ever been an officer or partner of some other organization that failed to complete a contract? _____

_____

6. If yes to #5, state name of individual, other organization, reason, and bonding company: _____

_____

7. In what other lines of business is Proposer directly or indirectly involved? _____

_____

8. With what individual or entities have you been associated as partner or otherwise during the past five (5) years?

_____

BUSINESS PROPOSAL FORM 6 (Continued)

CONTRACTOR QUALIFICATIONS

9. Describe the principal and any secondary nature of your current business: _____

_____

_____

10. State the length of time you have been in that business under your present name and identify all other names under which you have done business: _____

_____

11. Has any individual, partner, shareholder, principal, owner or affiliate of your firm been the subject of administrative or judicial action for an alleged violation of environmental or public health laws or regulations? If so state the details and disposition. _____

_____

_____

12. Are you, your partners, joint venturers, parent corporation or subsidiaries a party to any legal actions that may affect your ability to perform the obligations described in your Proposal? If so, identify these actions: _____

_____

13. Have you, any partner, key shareholder, principal, owner or affiliate of your firm been the subject of any criminal conviction(s) indictment(s) or investigation(s)? If so, state the details:

_____

_____

14. Are you, your partners, joint venturers, parent company or subsidiaries a party to or subject to any threatened or pending litigation, either civil or criminal? If so state the details: _____

_____

BUSINESS PROPOSAL FORM 6 (Continued)

CONTRACTOR QUALIFICATIONS

15. List any and all civil penalties, judgments, consent decrees or other sanctions within the last five (5) years, as a result of a violation of any law, rule, regulation or ordinance in connection with its business activities, by the Proposer, any affiliate of the Proposer, or any key shareholder, officer or director of the Proposer or any affiliate thereof.

_____

_____

16. List any and all current investigations, indictments or pending litigation by any Federal, State or local jurisdiction of the Proposer, any affiliate of the Proposer or any key shareholder, officer or director of the Proposer or any affiliate thereof.

_____

_____

17. List any and all actions occurring within the last five (5) years which have resulted in revocation or suspension of any permit or authority to do business in any Federal, State or local jurisdiction, by the Proposer, any affiliate of the Proposer, or any key shareholder, officer or director of the Proposer or any affiliate thereof.

_____

_____

18. List any and all actions occurring in the past five (5) years that have resulted in the barring from public bidding by the Proposer, any affiliate of the Proposer, or any key shareholder, officer or director of the Proposer or any affiliate thereof.

_____

_____

19. List any bankruptcy proceedings in the past five (5) years by the Proposer, any affiliate of the Proposer, or any shareholder, officer or director of the Proposer or any affiliate thereof. _____

_____

20. List the names, addresses, and telephone numbers, and contact name of municipalities or other organizations, which have utilized your services:

_____

_____

21. List the names, addresses and telephone numbers, and contact name of municipalities for whom you have provided services of the same nature as those contemplated in this RFP:

_____

_____

22. Please attach a description of the services you provide(d) for each reference municipality, including the term of your agreement with each such municipality:

_____

23. For the past three (3) years, have any of the reference projects in this RFP been the subject of administrative or judicial action for an alleged violation of environmental or public health laws or regulations? If so, state the details and disposition: _____

_____

C. <u>Financial Information</u> (To be signed before a Notary Public)

Attach financial statements, prepared on an accrual basis, in a form which clearly indicates the Proposer's assets, liabilities and net worth over the most recent three (3) year period or as many years as your firm has been in business if less than three (3) years.

Dates of financial statements: _____

Name(s) of firms(s) preparing statements: _____

Dated this ___ day of _____, 20___

_____

(Print or Type Name of Proposer)

(Seal, if corporation)

By:_____

Title:_____

_____ being duly sworn, deposes and says that the financial statement(s) referenced above are a true and accurate statement of Proposer's financial condition as of the date hereof; and all of the foregoing qualification information is true, complete and accurate.

Sworn to before me this ____ day of _____, _____

_____
Notary Public

BUSINESS PROPOSAL FORM 7

STATEMENT OF NON-COLLUSION

In accordance with applicable law, all proposals and contracts awarded or accepted by a municipality must contain a Statement of Non-collusion. By submission of this Proposal, the Proposer certifies that:

Each Proposer and each person signing on behalf of any Proposer certifies, and in the case of a joint Proposal, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of his knowledge and belief:

(a) The prices in this Proposal have been independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition as to any matter relating to such prices with any other proposer or with any competitor.

(b) Unless otherwise required by law, the prices which have been quoted in this Proposal have not been knowingly disclosed by the Proposer and will not knowingly be disclosed by the Proposer prior to opening, directly or indirectly, to any other proposer or to any competitor.

(c) No attempt has been or will be made by the Proposer to induce any other person, partnership or corporation to submit or not to submit a proposal for the purpose of restricting competition.

(d) The person signing this Proposal certifies that he has fully informed himself regarding the accuracy of the statements contained in this certification under the penalties of perjury, affirms the truth thereof such penalties being applicable to the Proposer, as well as to the person signing on its behalf.

(e) If a corporation, the attached hereto is a certified copy of the resolution authorizing the execution of this certificate by the signature of this Proposal on behalf of the corporate Proposer.

BUSINESS PROPOSAL FORM 7 (Continued)
STATEMENT OF NON-COLLUSION

Resolved that _____ (**Name of Individual**) be authorized to sign and submit the Proposal of _____for the _____ _____ and to certify as to non-collusion required by applicable law as the act and deed of such corporation and for any inaccuracies or misstatements in such certificates this corporate Proposer shall be liable under the penalties of perjury.

_____
Signature and Title

Sworn to before me this _____day of _____, _____

_____
Notary Public

BUSINESS PROPOSAL FORM 8
DISCLOSURE STATEMENT

(Proposer must sign this form before a Notary Public)

STATE OF NEW YORK)
) ss
COUNTY OF _____)

I, _____, _____
(NAME) (TITLE - Officer of Corporation, Partner or Principal)

being duly sworn depose and swear under the penalties of perjury:

1. That, in connection with the above Proposal or Agreement for the _____ _____ , no other person will have any direct or indirect interest in this Proposal except:

_____
(In case of corporations, all officers of the corporation and stockholders owning more than 5% of the corporation stock must be listed. Use attached sheet if necessary.)

2. That _____ related to any officer
(I am not) (none of the officers or stockholders are)

or employee of Rockland Green except_____

_____

3. There is not any state or local officer or employee or a member of Rockland Green interested in such application.

_____
Signature and Title

Sworn to before me this _____ day of _____, _

_____
Notary Public

BUSINESS PROPOSAL FORM 9

AFFIRMATIVE ACTION PLAN

(Proposer Must Sign This Form Before a Notary Public)

STATE OF NEW YORK)
) ss:
COUNTY OF ROCKLAND)

_____ being duly sworn, deposes and says that he/she is the _____ of _____. That *I do (do not) employ fifteen (15) employees and *I do (do not do) a minimum of $50,000 per annum business with Rockland Green.

Based on the above information, attached hereto is an Affirmative Action Plan or, because of the above, no Affirmative Action Plan is necessary.

Sworn to before me this ___ day of _____, ____.

_____
Notary Public

* strike out non-applicable information.

BUSINESS PROPOSAL FORM 10
FOIL ACKNOWLEDGEMENT FORM

The Proposer hereby acknowledges and recognizes that the New York State Freedom of Information Law, Public Officers Law, Article 6, Sections 84-90 provides for public access to government records. However, Proposals may contain trade secrets and other technical, financial, or administrative data whose public disclosure could cause substantial injury to the Proposer's competitive position.

Please indicate whether your Proposal contains trade secrets and other technical, financial or administrative data whose public disclosure could cause substantial injury to your competitive position by marking the applicable below.

_____ The Proposal DOES contain trade secrets and other technical, financial or administrative data whose public disclosure could cause substantial injury to our competitive position, and we have clearly marked pages in our Proposal containing such information in accordance with Section 1.6 of the RFP.

_____ The Proposal DOES NOT contain trade secrets and other technical, financial or administrative data whose public disclosure could cause substantial injury to your competitive position.

Person, firm or corporation making this Proposal:

_____
Proposer

_____
Signature

_____
Title

_____
Date

BUSINESS PROPOSAL FORM 11
PROPOSER QUESTIONS

(All questions pertaining to this solicitation must be submitted in writing.)

Please use this form and fax it (845.753.2281) or email it (dlouis@rocklandgreen.com) **to the attention of Dee Louis**. Rockland Green will respond to all questions submitted prior to the cut-off date indicated in the RFP.

Date:_____

Proposer Name:_____

Proposer Company:_____

Phone:_____ Fax:_____

Question(s):_____

BUSINESS PROPOSAL FORM 12

DISCLOSURE OF CONTRACTOR RESPONSIBILITY STATEMENT

(This form must be completed by each member of the Proposer team)

1. List any criminal investigations, indictments, or convictions of any person, subsidiary or affiliate of the Proposer arising out of obtaining or attempting to obtain a public or private contract or subcontract, or in the performance of such contract or subcontract.

2. List any indictments, convictions or ongoing investigations of any person, subsidiary, or affiliate of this Proposer for offenses such as embezzlement, theft, fraudulent schemes, etc. or any other offense indicating a lack of business integrity or business honesty which affect the responsibility of the Proposer.

3. List any convictions or civil judgments under state or federal antitrust statutes.

4. List any violations of contract provisions such as knowingly (without good cause) to perform, or unsatisfactory performance, in accordance with the specification of a contract.

5. List any prior suspensions or debarments by any government agency.

6. List any contracts not completed on time.

7. List any documented violations of federal or state labor laws, regulations or standards, or occupational safety and health rules.

I, _____, as _____,
(Name of Individual) (Title and Authority)
of _____, declare under oath that the
(Proposer Name)

above statements, including any supplemental responses attached hereto, are true.

_____
Signature

Subscribed and sworn to before me on this ___ day of _____, _____ ,

by_____, representing him/herself to be _____ of the Proposer.

_____
Notary Public

PRICE PROPOSAL FORM

PRICE PROPOSAL FORM

RFP-2024-02 – Replacement of an Existing Stream Culvert, Mulch Processing Area, West Nyack Transfer Station

Proposer shall perform the Work in accordance with the Contract Documents for the prices shown in the Price Proposal Summary shown below.

Proposer acknowledges that Proposer's price(s) constitute Proposer's sole compensation for performing all Work required by the Contract Documents, and if a particular part of the Work is not listed specifically in the Price Proposal Summary set forth below in Schedule A of this section, Proposer shall include that part of the Work in the Cost Item Description under Proposal Item A-1.

Schedule A: Lump Sum Cost Items:

Lump sum items include all Work in the Contract Documents, except items specifically identified as Unit Price Work or as work provided by others.

Measurement and payment of Lump Sum Cost Items is defined in Section 01026, Lump Sum Items, of the Technical Specifications (if applicable) and Rockland Green's Contract Terms and Conditions.

Lump Sum Cost Items Table:

Item No.	Estimated Quantity	Units	Description	Total Item Price (Figures in Dollars and Cents)
A-1	1	LS	**Furnish and Install New 84-inch Multi-Plate Round Culvert, including Removal of the Old Culvert, Temporary Controls, Embankment Protection, New Concrete Block Walls, Placement of Asphalt Millings Driving Surface, Site Restoration, and All Miscellaneous Work Associated with the Installation of the New Culvert, Complete.**	

(Continued on Next Page)

Schedule B: Total Proposal Price:

Determination of the Total Proposal Price will be determined as follows.

a. In case of discrepancy between the correct sum of individual bid items and the (incorrectly) calculated sum, the correct sum of individual cost items will govern.

Proposer shall complete the shaded Total Proposed Price section in Schedule B. The shaded areas are used to delineate the total proposed price, which is the summation of all total prices shown in Schedule A.

Schedule	Total Proposed Price – Summation of All Total Price Items Identified in Schedule A (Figures in Dollars and Cents)
TOTAL PROPOSAL PRICE: (Sum of Schedule A)	

Total Proposal Price (In Words):

_____

_____

Material Lead Time: Identify and provide expected lead time for the purchase of critical materials under Bid Item A-1. As a minimum indicate lead time for new 84-inch Multi-Plate Steel Culvert Pipe

_____

_____

_____

APPENDIX B
INSURANCE REQUIREMENTS

Prior to the start of the Agreement and throughout the term thereof, the Contractor will obtain and pay for will, independent of any insurance the Contractor may possess for other projects, file and maintain with the insurance coverage listed below.

Commercial General Liability (Occurrence Form

General Aggregate (other than Prod/Comp Ops Liability)	$2,000,000
Products/Completed Operations Aggregate	$2,000,000
Personal & Advertising Injury Liability	$1,000,000
Each Occurrence	$1,000,000
Damages to Premises Rented to You (Any one fire)	
$1,000,000 Medical Expense (Any one person)	
$15,000	

- ROCKLAND GREEN, named as Additional Insured using ISO form CG2026 04/13 and including Completed Operations using form CG2037 04/13 or copies of the equivalent.
- Additional Insured Status must be on a primary and non-contributory basis.
- The General Aggregate must apply on a per project basis.
- Broad Form Blanket Contractual Liability for liability assumed under the executed contract attached and all other Contracts relative to the project.
- Waiver of Subrogation in favor of ROCKLAND GREEN, Form # CG2404 or equivalent.
- 30-day notice of cancellation applies per policy provisions and 10-days for non-payment of premium to ROCKLAND GREEN in the event of cancellation or change of coverage.
- Please provide copy of policies or the declaration pages including forms for review and approval.

Auto Liability

- Commercial Auto Liability Insurance covering the use of all Owned, Non-Owned, and Hired Vehicles with combined Bodily Injury and Property Damage Limit of at least $1,000,000. Include No Fault Liability as required by statute.

Workers Compensation and Employer's Liability

Workers' Compensation	$1,000,000 Limits
Employer's Liability	
Bodily Injury by Accident	$1,000,000 each accident
Bodily Injury by Disease	$1,000,000 policy limit
Bodily Injury by Disease	$1,000,000 each employee

- All States Endorsement

Disability

In accordance with provisions and requirements of the NYS Disability Law

Umbrella

Each Occurrence and Aggregate $10,000,000

**The Umbrella must be excess over the General Liability, Automobile and Employers Liability.

Professional Liability

Each Occurrence and Aggregate $1,000,000

Pollution

Each Claim $5,000,000

The above coverages must be placed with an insurance company with an A.M. Best Rating of A-, VII or better.

APPENDIX C
PREVAILING WAGES

PRC# 2024004382

APPENDIX D

TECHNICAL SPECIFICATIONS

Contract Documents
For
Rockland Green
RFP 2024-02: Replacement of an Existing Stream Culvert
Clarkstown Transfer Station
West Nyack, New York

PREPARED BY:

Environmental Design & Research, Landscape Architecture,
Engineering & Environmental Services, D.P.C.
217 Montgomery Street, Suite 1100
Syracuse, New York 13202

2024

TABLE OF CONTENTS

TECHNICAL PROVISIONS

CONTRACT DRAWINGS

SECTION 01010

SUMMARY OF WORK

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Project - Work covered by Contract Documents.

B. Limits of work area.

C. Construction permits and easements.

D. Work sequence.

E. Quality assurance.

F. Preconstruction conference.

G. Progress meetings.

H. Coordination with ongoing operations.

1.02 RELATED SECTIONS

A. Agreement – Contract for Replacement of an Existing Stream Culvert

B. Section 01019 – Contract Considerations

C. Section 01026 – Lump Sum Items

D. Section 01400 – Quality Control

E. Section 03105 – Geotextiles for Earthwork

F. Section 311000 – Site Clearing

G. Section 312305 – Subgrade Preparation

H. Section 312310 – Excavation

I. Section 312325 – Backfill

J. Section 312330 – Compaction

K. Section 312500 – Erosion and Sediment Controls

L. Section 329200 – Turf and Grasses

M. Section 330527 – Multi-Plate Steel Culvert

1.03 WORK INCLUDED

A. The Proposer shall furnish and install materials, equipment, and labor for the following items, all in accordance with the drawings, specifications, and requirements of RFP-2024-02.

1. Furnish all equipment, materials, and labor to work within the limits of an active stream in accordance with US Army Corps of Engineers (USACOE) regulations and guidelines as described in Nationwide Permit No. 3 for “Maintenance Activities”. A copy of which is included as Appendix G of this RFP.
2. Furnish and install all temporary and permanent excavation and embankment protection as necessary to complete the work, including Best Management Practices for temporary flow diversion, erosion minimization, and downstream sediment controls per New York State Guidelines.
3. Coordinate with Rockland Green and the operator (WeCare/Denali) of the Mulch Processing Area to establish daily work zones, vehicular patterns, temporary traffic barriers, removal of materials, delivery of materials, temporary stockpile locations, and other coordination efforts to minimize disruption to ongoing mulching operations.
4. Remove the existing 56-inch concrete culvert, all culvert repair pipe, the existing block wall and jersey barrier retaining walls, existing dumped rip rap (for reuse), miscellaneous debris (for disposal), and fill to the limits shown on the drawings.
5. Furnish and install a new 84-inch multi-plate round culvert in accordance with the enclosed plans and specifications, including foundation, stream bed reestablishment, backfill, slope protection and armoring, gravel roadway subbase surface over culvert, installation of an asphalt millings driving surface over roadway subbase (Rockland Green will provide asphalt millings), removal of existing concrete block walls and jersey barriers (both to be salvaged and stored on site),furnish and install new (2’x2’x6’) interlocking concrete blocks along access roadway over culvert (as shown on drawings), repair/replacement of existing asphalt millings that were disturbed, and all site restoration (to establish new vegetation as necessary).

1.04 LIMITS OF WORK AREA

A. Confine construction operations within the Contract Limits shown on the Drawings. Storage of equipment and materials, or erection and use of sheds outside of the Contract Limits, if such areas are the property of Rockland Green, shall be used only with Rockland Green’s approval. Such storage or temporary structures, even within the Contract Limits, shall be confined to Rockland Green’s property and shall not be placed on properties designated as easements or rights-of-way. All roadways and access to the transfer station shall remain open and clear from obstruction while operations are active.

B. It is Rockland Green’s intent to maintain ongoing operations at in the mulch processing area (prior to the culvert crossing) during the active construction period and access to this area will be shared.

C. Proposer shall always maintain clear and free vehicular access to the adjacent mulch processing area and asphalt and concrete processing area unless specifically approved by Rockland Green with 48-hour notification.

1.05 CONSTRUCTION PERMITS AND EASEMENTS

A. The Proposer shall obtain and pay for necessary construction permits from those authorities or agencies having jurisdiction over land areas, utilities or structures which are located within the Contract Limits, and which will be occupied, encountered, used, or

temporarily interrupted by Proposer's operations. The work will be completed under a USACOE Nationwide Permit #3 for maintenance activities.

B. When construction permits are accompanied by regulations or requirements issued by a particular authority or agency, it shall be Proposer's responsibility to familiarize himself and comply with such regulations or requirements as they apply to his operations on this project.

1.06 WORK SEQUENCE

A. Time is of the essence for completion of construction activities.

B. Construction activities shall not begin until Proposer has completed or received the following:

1. A fully executed Purchase Order, including all required forms and proof of insurance.

2. Submittal of a written Schedule to indicate sequencing of work.

3. Written receipt of all shop drawing approvals from the Authority's Engineer.

4. Delivery of all equipment and other temporary facilities associated with mobilization of work crews.

5. Authorization to proceed with work from Rockland Green.

1.07 QUALITY ASSURANCE

A. The entire Contract work shall be completed in strict accordance with all applicable federal, state and local regulations and ordinances and the best standards of practice.

1.08 PRECONSTRUCTION CONFERENCE

A. Engineer will schedule a conference after the Effective Contract Date.

B. Attendance Required - Rockland Green, Engineer, Proposer, and each major subcontractor (if applicable).

C. Agenda

1. Distribution of extra sets of Contract Documents.

2. Submission of list of Subcontractors, list of products, Schedule of Values, and progress schedule.

3. Designation of personnel representing the parties in Contract and the Engineer.

4. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders and Contract closeout procedures.

5. Scheduling.

6. Scheduling activities of concrete testing laboratory (third-party testing by Rockland Green).

7. Requirements of regulatory agencies.

8. Use of premises by Rockland Green and Proposer.

9. Temporary facilities to be provided by Rockland Green and by Proposer.

10. Procedures for testing.

11. Procedures for maintaining record documents.

12. Periodic cleanup of site.

13. Notification of utilities' Owners, as applicable.

1.11 COORDINATION WITH ONGOING OPERATIONS

A. Rockland Green's facility must remain in continuous operation during the work under this Contract.

B. The Proposer is advised of the following work that may present interferences or require significant coordination and interfacing. This list is provided for information only and may not be complete.

1. Mulch processing operations.

2. Asphalt and Concrete Recycling Operations.

3. Routine Transfer Station Operations.

C. The costs associated with the interferences, coordination, and interfacing with the mulch processing operator as well as Rockland Green shall be included in the Contract Price.

PART 2 PRODUCTS

Recommended product data sheets and manufacturers information are included in the applicable specification section.

PART 3 EXECUTION

1. All procedures shall be in accordance with the manufacturer's recommendations for the specified product, federal and state regulations, and Best Management Practices for stream disturbance.

2. Existing dumped rip rap shall be excavated and reused, along with furnishing and installation of supplemental light stone fill.

3. Stream flow shall be diverted and maintained continuously during all work activities within the limits of the existing stream.

4. Proposer shall provide a container for storage and transport of all waste debris removed from the stream and embankments for disposal at the Transfer Station. The waste debris shall be weighed at Rockland Green's exterior weigh scale on site (Clarkstown TS) prior to disposal. The cost for disposal of the waste debris will be covered by Rockland Green. The Proposer will be responsible for all costs associated with providing the roll off container, trucking, operations to load and unload the container

and any other costs associated with this work. The Authority's weigh scale is open between the hours of 7am – 4pm Monday thru Friday, and 7am thru 12pm on Saturdays.

5. Existing concrete blocks shall be removed and stored on site as directed by Rockland Green. New 2'x2'x6' interlocking concrete blocks shall be furnished and installed to the limits shown on the contract drawings.

6. Saw cut existing paved areas as required to avoid feather edging of repair material and to provide a neat, finished appearance.

END OF SECTION

SECTION 01019

CONTRACT CONSIDERATIONS

PART 1 GENERAL

A. **The contract considerations described under all Division 1 specifications are intended to serve as "Supplementary Conditions" to Rockland Green's Standard Terms and Conditions described in the Contract as executed between Rockland Green and Proposer. In all cases, Rockland Green's Standard Terms and Conditions shall have precedence over all other terms and conditions described in these Division 1 specifications.**

1.02 DESCRIPTION OF WORK

A. Schedule of Values.

B. Applications for Payment.

C. Change procedures.

D. Alternates.

1.03 RELATED SECTIONS

A. Agreement – Contract for Replacement of an Existing Stream Culvert

B. RFP 2024-02 - Summary of Work

C. Specification Section 01010 – Summary of Work

D. Specification Section 01300 – Submittals

E. Specification Section 01400 – Quality Control

1.04 DEFINITIONS

A. Mobilization - Mobilization includes, but is not limited to, performance of preparatory construction operations, including the movement of personnel and equipment to the project site; the cost of insurance and other securities (if required); application, fee payment, and acquisition of all required permits (i.e., erosion and sediment control plans, temporary and permanent building and trade permits, utility connections, etc.); and the establishment of Proposer's temporary facilities required at the site in order to begin work.

1.05 SCHEDULE OF VALUES

Proposer shall provide a Schedule of Values only if requested by Rockland Green or if the duration of the Work exceeds one month.

A. Submit one electronic copy in Microsoft Excel of the Schedule of Valves prior to beginning construction activities.

B. Line items shall be subdivided into the Price Proposal Summary Items shown on the Price

Proposal Form.

C. The sum of all line items in the Schedule of Values shall equal the Total Proposal Price included on the Price Proposal Form plus authorized Additive Alternatives (if any) as listed in the Agreement.

D. Each line item shall include a directly proportional amount of the Proposer's overhead and profit.

E. Schedule of Values shall serve as a breakdown of Work used to establish progress payments. Progress payments for lump sum items will be made based on the percentages of completion of the work items included in the Schedule of Values for each lump sum item. Progress payments for Unit Price Work will be based on actual quantities of work performed. Progress payments for Contingent Unit Price work will only be made if work is authorized by Rockland Green and Engineer.

F. For Lump Sum Proposal Items, the following format shall be followed when developing the Schedule of Values.

1. If Mobilization is not identified in the Price Proposal Form as a separate Proposed Price Item, Proposer shall include in the Schedule of Values a line item for Mobilization as part of a Lump Sum Proposal Price Item.

a. Lump sum line item shall include all work described in the definition of mobilization included herein.

b. Costs for bonds and insurance shall be included in the lump sum mobilization line item.

c. Mobilization cost shall not be greater than five percent of the Total Proposal Price.

2. Include separate line items for demobilization and contract closeout.

3. Format - Show cost breakdown for each lump sum item. Include, as a minimum, mobilization and demobilization and cost for materials.

G. Revise Schedule of Values to include executed Change Orders with each Application for Payment.

1.06 APPLICATIONS FOR PAYMENT

A. **Refer to Rockland Green's Terms and Conditions**

1.07 CHANGE PROCEDURES

B. **Refer to Rockland Green's Terms and Conditions**

1.08 ALTERNATES – Not Used.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF SECTION

SECTION 01026

LUMP SUM ITEMS (BID ITEM DESCRIPTIONS)

PART 1 GENERAL

1.01. SECTION INCLUDES

A. Price basis.

B. Elements of Bid Item Description page.

C. Lump sum item list.

D. Bid Item Descriptions.

1.02. PRICE BASIS

A. Lump sum prices bid by Contractor are deemed to be full compensation for all required labor, products, tools, equipment, plant, transportation, testing, inspection, services, incidentals, administrative, procedures, applicable taxes, permit fees, overhead, profit, and other miscellaneous expenses.

1.03. ELEMENTS OF BID ITEM DESCRIPTION PAGE

A. Identification of lump sum item, as set forth in the Bid Form.

B. Statement of work involved in the item.

C. Listing of components of work which make up the item including reference to the section(s) covering each component.

D. Cross-references to associated work not included in the item.

1.04. LUMP SUM ITEMS - CONTRACT 1

Bid Item No.	Bid Item Description
A-1	Furnish and Install New 84-inch Multi-Plate Round Culvert, including Removal of the Old Culvert, Temporary Controls, Embankment Protection, New Concrete Block Wall, Placement of Asphalt Millings Driving Surface, Site Restoration, and All Miscellaneous Work Associated with the Installation of the New Culvert, Complete.

1.06 BID ITEM DESCRIPTIONS

A. Bid Item Description pages identified above are attached at the end of this section.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

(continued)

BID ITEM DESCRIPTION A-1

FURNISH AND INSTALL PRECASTE CONCRETE PIT & FOUNDATION FOR AXLE TRUCK SCALE, COMPLETE

A. DESCRIPTION

Under this item, Contractor shall provide all labor, materials, and equipment (rented and owned) necessary to remove an existing culvert and replace with a new 84-inch multi plate round culvert within an active stream in accordance with this RFP and the US Army Corps of Engineers Nationwide Permit No. 3. Work under this RFP shall include mobilization/demobilization, site preparation, temporary stream diversion, erosion and sediment controls, excavation and removal of the existing (60-inch) concrete culvert, protection of existing retaining walls, embankment protection, stream bed embankment restoration, removal of existing block barrier walls and jersey barriers used as vehicular guides and retaining walls, furnish and installation of (new) concrete blocks (double course), all backfill and granular materials, rip rap restoration, permanent erosion control measures to support vegetation growth, gravel subbase, installation of asphalt millings driving surface, and site restoration within the limits shown on the Contract Drawings. All work shall be performed in accordance with the Terms and Conditions of the Agreement with Rockland Green and as shown in the Contract Drawings.

B. WORK INCLUDED UNDER THIS ITEM

- Mobilization
- Demobilization
- All materials to be used as part of this RFP must be submitted and approved prior to installation.
- All specifications included as part of RFP 2024-02
- All work as shown on the Drawings

C. ASSOCIATED WORK NOT INCLUDED UNDER THIS ITEM

Supply of Asphalt Millings for Roadway Surface above culvert will be provided by Rockland Green (damages caused by the Proposer outside the limits of work shall be repaired at Proposer's sole cost)

D. METHOD OF PAYMENT

Measurement shall be based on the percent completion of all activities including labor, equipment, and materials necessary to complete specified construction work. Payment for stored materials shall include backup for proof of purchase and must have been delivered to the site.

END OF SECTION

SECTION 01300

SUBMITTALS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Submittal procedures.

B. Construction progress schedule

C. Proposed products list.

D. Shop drawings.

E. Substitutions

F. Manufacturers' instructions.

1.02 RELATED SECTIONS

A. Agreement – Replacement of an Existing Stream Culvert

B. Section 03105 – Geotextiles for Earthwork
Section 312325 – Backfill
Section 312500 – Erosion and Sediment Controls
Section 329200 – Turf and Grasses
Section 330527 – Multi-Plate Steel Culvert

1.03 SUBMITTAL PROCEDURES

A. Transmit each required submittal using Rockland Green and Engineer accepted form.

B. Sequentially number the transmittal forms. Resubmittals shall have original numbers with an alphabetic suffix.

C. Identify project, Proposer, subcontractor, or supplier; pertinent Drawing sheet and detail number(s), and specification section number, as appropriate.

D. Apply Proposer's stamp, signed or initialed certifying that review, verification of products required, field dimensions, adjacent construction work, and coordination of information, is in accordance with the requirements of the work and Contract Documents. Stamp shall show the following information:

1. Shop Submittal Number: _____

2. Deviations: None_____; As Listed_____

3. Reference Specification Number: _____

4. Reference Drawing Number: _____

5. Space Requirement: As Designed _____ Different, As Listed _____

6. Representation is made to Rockland Green and Engineer that the Proposer has determined and verified all field measurements and quantities, field construction criteria, materials, catalog numbers and similar data, that he has reviewed and coordinated the information in each shop drawing with the requirements of the work and the Contract Documents, and hereby approves this submittal.

   Proposer_____

   Signature_____

   Date_____

E. All submittals shall be submitted through electronic submission system. All submittals shall be in PDF format. All files shall be combined into a single bookmarked file for easier review.

F. Schedule submittals to expedite the Project and deliver to Engineer via email (jheath@edrdpc.com). Coordinate submission of related items. Proposer shall anticipate that submittals will be reviewed within 7 calendar days. Proposer shall take into account the submittal review time in their schedule and plan accordingly. **No work shall proceed under this RFP 2024-02 until all shop drawings have been approved and equipment and have been delivered to the site.**

G. Identify deviations from Contract Documents and Product or system limitations which may be detrimental to successful performance of the completed work.

H. Identify space requirements which differ from those designed or shown on the Contract Documents.

I. Revise and resubmit shop drawings as required until accepted by Engineer. Identify all changes made since previous submittal in a cover letter or memorandum. **Rockland Green reserves the right to recover cost for engineering review time from the Proposer if there are more than one resubmittal for any given shop drawing.**

J. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.

K. Submittals not requested will not be recognized or processed.

1.04 CONSTRUCTION PROGRESS SCHEDULE

A. Submit preliminary progress schedule in duplicate within 10 days after effective date of Rockland Green and Proposer Agreement for Engineer review.

B. Submit finalized progress schedule at least 10 days before submission of the first Application for Payment.

C. Submit revised schedules at each progress meeting, identifying changes since previous version.

D. Prepare horizontal bar chart with separate entry for each major section of work. Include work sequence requirements, if any. Identify first workday of each week.

E. Show complete sequence of construction by activity, identifying work of separate stages and other logically grouped activities. Indicate the early and late start, early and late finish, float dates, and duration.

F. Indicate estimated percentage of completion for each item of work at each progress meeting.

1.05 PROPOSED PRODUCTS LIST

A. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

1.06 SHOP DRAWINGS

A. Electronic copies of shop drawings are allowed but **must contain a complete submittal**. Multiple email submissions for the same submittal will be returned as “not reviewed”.

B. After review and approval by Engineer, distribute and preserve copies for record documents purposes.

1.07 SUBSTITUTIONS

A. Rockland Green and Engineer will consider requests for substitute or "or equal" items after the Effective Date of Rockland Green - Proposer Agreement.

B. Substitutions may be considered when a product becomes unavailable through no fault of the Proposer. Furnish evidence that product is unavailable.

C. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.

D. A request constitutes a representation that the Proposer:

1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.

2. Will provide the same warranty for the substitution as for the specified product.

3. Will coordinate installation and make changes to other work which may be required for the work to be complete with no additional cost to Rockland Green.

4. Waives claims for additional costs or time extension which may subsequently become apparent.
5. Will reimburse Rockland Green the costs incurred by Rockland Green for review and any subsequent redesign services by Engineer, including Engineer's revisions to the Contract Documents, and Engineer's assistance in connection with review by authorities when re-approval is required, if Engineer determines that the item of material or equipment proposed by Proposer is a substitute item.

E. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.

F. Submittal Procedures

1. Submit to Engineer three copies of request for substitution for consideration, limiting each request to one proposed substitution.

2. Each request shall basically conform to the procedures outlined in Article 1.03 of this section.

3. Include shop drawings, product data, and certified test results attesting to the proposed product equivalence.

4. The Engineer will notify Proposer, in writing, of decision to accept or reject request.

1.08 MANUFACTURER'S INSTRUCTIONS

A. When specified in individual specification sections or on the drawings, submit manufacturers' printed instructions for delivery, storage, assembly, installation, startup, adjusting, and finishing, in quantities specified for product data.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF SECTION

SECTION 01400

QUALITY CONTROL

PART 1 GENERAL

1.01. SECTION INCLUDES

A. Quality assurance and control of installation.

B. References and standards.

C. Tolerances.

D. Tests and inspections.

E. Manufacturers' field services.

1.02. QUALITY ASSURANCE AND CONTROL OF INSTALLATION

A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.

B. Comply fully with manufacturers' instructions.

C. If manufacturers' instructions conflict with Contract Documents, request clarification from Engineer before proceeding.

D. Comply with specified standards as a minimum quality for the work except when code requirements or equipment manufacturer requires more stringent standards.

E. Perform work by persons qualified to produce workmanship of specified quality.

F. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion and disfigurement.

G. Employ skilled and experienced installer to perform cutting and patching.

H. Submit written request in advance of cutting or altering elements which may affect:

1. Structural integrity of element.

2. Integrity of weather-exposed or moisture-resistant elements.

3. Efficiency, maintenance, or safety of element.

4. Visual qualities of sight-exposed elements.

5. Work of Rockland Green or separate contractor.

I. Execute cutting, fitting, and patching, including excavation and fill, to complete work and to:

1. Fit the several parts together, to integrate with other work.

2. Uncover work to install or correct ill-timed work.

3. Remove and replace defective and non-conforming work.

J. Execute work by methods which will avoid damage to other work and provide proper surfaces to receive patching and finishing.

K. Cut rigid materials using masonry saw or core drill.

L. Restore work with new products in accordance with requirements of Contract Documents.

M. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for an assembly, refinish entire unit.

N. Identify any hazardous substance or condition exposed during the work to Rockland Green and Engineer in writing for decision or remedy. Refer to the Contract Drawings and specifications for work associated with potentially contaminated soil.

1.03. REFERENCES AND STANDARDS

A. For products and workmanship specified by association, trade, or other consensus standards, comply with requirements of the standard, except when more rigid requirements are specified and/or are required by applicable codes.

B. Obtain copies of standards where required by individual specification sections.

C. If specified reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.

1.04. TOLERANCES

A. Monitor fabrication and installation tolerance control to produce acceptable work. Do not permit tolerances to accumulate.

B. Comply with manufacturers' tolerances. If manufacturers' tolerances conflict with Contract Documents, request clarification from Engineer before proceeding.

C. Adjust products to appropriate dimensions; position before securing products in place.

1.05. TESTS AND INSPECTIONS

A. Rockland Green (Owner) shall employ and pay for the services of an independent testing laboratory to obtain granular materials samples and perform soil compaction tests.

B. Independent testing laboratory will:

1. Perform inspections, soil compaction and concrete tests, and other services specified in the individual specification sections and as required by Engineer and Rockland Green.

2. Prepare and submit reports to the Engineer indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents. Engineer will forward copy of report(s) to Contractor.

C. Contractor shall:

1. Cooperate with independent firm; furnish samples of materials; equipment, tools, storage, and assistance as requested.

2. Notify Engineer and Rockland Green 24 hours prior to expected time for operations requiring services.

3. Provide weekly look-ahead schedules for testing needs.

D. Retesting required because of non-conformance to specified requirements shall be performed by the same independent firm which performed the initial tests and inspections as instructed by the Engineer.

E. Costs for retesting and re-inspection will be deducted from Contractor’s progress payments.

1.06. MANUFACTURERS’ FIELD SERVICES

A. When specified in individual specification sections, material or product suppliers or manufacturers shall provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment, equipment demonstration, and training as applicable, and to initiate instructions when necessary.

B. Staff person to report observations, site conditions, or instructions given to applicators or installers, which are supplemental or contrary to manufacturers' written instructions

C. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF SECTION

SECTION 03105

GEOTEXTILES FOR EARTHWORK

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Separation geotextile.

2. Reinforcement geotextile.

1.2 REFERENCES

A. Quality Control Testing Standards

B. ASTM D4491 - Standard Test Methods for Water Permeability of Geotextiles by Permittivity.

C. ASTM D4533 - Standard Test Method for Trapezoid Tearing Strength of Geotextiles

D. ASTM D4595 - Standard Test Method for Tensile Properties of Geotextiles by the Wide-Width Strip Method

E. ASTM D4632 - Standard Test Method for Grab Breaking Load and Elongation of Geotextiles.

F. ASTM D4751 - Standard Test Method for Determining Apparent Opening Size of a Geotextile.

G. ASTM D6241 - Standard Test Method for Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products.

H. ASTM D4873 - Standard Guide for Identification, Storage, and Handling of Geosynthetic Rolls and Samples.

I. ASTM D-5261 - Standard Test Method for Measuring Mass Per Unit Area of Geotextiles.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.4 SUBMITTALS

A. Product Data:

1. Submit product data sheet for each geotextile proposed for use on this project.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Geotextiles labeling, shipment, and storage shall follow ASTM D4873. Product labels shall clearly show the manufacturer or supplier name, style name, and roll number.

B. Each geotextile roll shall be wrapped with a material that will protect the geotextile from damage due to shipment, water, sunlight, and contaminants.

C. During storage, geotextile rolls shall be elevated off the ground and adequately covered to protect them from the following: site construction damage, precipitation, extended ultraviolet radiation including sunlight, chemicals that are strong acids or strong bases, flames including welding sparks, excess temperatures, and any other environmental conditions that may damage the physical property values of the geotextile.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Separation Geotextile

1. Shall be needle-punched, nonwoven geotextile specifically designed for drainage and separation applications.

2. Shall be composed of polyester and/or polypropylene polymers.

3. Shall meet the criteria listed in Table 03105-1.

B. Reinforcement Geotextile

1. Shall be a woven geotextile specifically designed for reinforcement applications.

2. Shall be composed of polyester and/or polypropylene polymers.

C. Shall meet the criteria listed in Table 03105-1.

TABLE 03105-1

MINIMUM ACCEPTANCE CRITERIA GEOTEXTILE

Test Description	Test Method	Criteria
Separation		
Mass per unit area	ASTM D5261	≥8 oz/SY
Apparent opening size	ASTM D4751	≤No. 70 sieve
Puncture resistance	ASTM D6241	≥110 lb.*
Tensile strength	ASTM D4632	≥160 lb.*
Trapezoid tearing strength	ASTM D4533	≥80 lb*
Permittivity	ASTM D4491	≥1.1 cm/sec
Reinforcement		
Mass per unit area	ASTM D5261	≥8 oz/SY
Puncture resistance	ASTM D4833	≥150 lb.
Tensile strength	ASTM D4595	≥160 lb.*
Trapezoid tearing strength	ASTM D4533	≥120 lb.*
Apparent opening size	ASTM D4751	≤40 sieve

*Minimum acceptance criteria shall apply to both the machine direction (MD) and the cross machine direction (XMD).

2.2 PRODUCTS

A. Separation Geotextile - The following is a list of materials that meet the specifications in this section:

1. Carthage Mills FX-80 HS.

2. Propex Geotex 861.

3. Skaps GE 180.

4. Or equal.

B. Reinforcement Geotextile - The following is a list of materials that meet the specifications in this section:

1. TenCate Mirafi FW 403.

2. Propex Geotex 4x4.

3. Carthage Mills FX-400MF.

4. Or equal.

PART 3 - EXECUTION

3.1 INSPECTION

A. The Contractor shall inspect all geotextile upon delivery and verify that the proper materials and quantities have been supplied.

B. The Contractor shall inspect the subgrade for protrusions or other unacceptable conditions prior to installation of geotextiles.

C. The Contractor shall continuously inspect needle-punched geotextiles during deployment for broken needles remaining from needle-punching operations.

3.2 PREPARATION

A. Subgrade shall be prepared as indicated in the specifications.

3.3 PROTECTION

A. Protect all geotextile materials from damage due to exposure to sunlight, dirt, dust and other hazards.

B. Maintain the protective wrapping on geotextile rolls at all times.

C. The geotextiles shall be covered after installation within a 10-day period.

D. During spreading operations of backfill, a minimum depth of 12 inches of aggregate shall be maintained over the geotextiles when possible. Construction equipment shall not operate directly on the geotextile.

3.4 INSTALLATION

A. Geotextile rolls shall be positioned as required and unrolled.

B. When placed on prepared subgrades, geotextile shall be overlapped a minimum of 1.0 feet on all edges.

C. When geotextile is placed in trenches, the material shall be overlapped a minimum of 1 foot over the top of the trench. Longitudinal seams between adjacent rolls of material shall be overlapped a minimum of 2 feet.

D. Geotextile rolls shall be cut and laid flat such that buckling of the roll does not occur.

E. If geotextiles are damaged during any phase of construction or installation, a new piece of the same type shall be cut and placed over the damaged area with a 2-foot minimum overlap and sewn.

F. Aggregate shall be spread in the direction of overlap wherever possible.

3.5 MAINTENANCE

3.6 Maintain geotextile rolls until backfilling operations have completed one lift.

END OF SECTION

SECTION 31 1000

SITE CLEARING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
1. Removing existing vegetation.
2. Clearing and grubbing.
3. Stripping and stockpiling topsoil.
4. Stripping and stockpiling rock.
5. Removing above- and below-grade site improvements.
6. Disconnecting, capping or sealing, removing site utilities, and abandoning site utilities in place.
7. Temporary erosion and sedimentation control.

B. Related Requirements:

1. Section 31 2500 Erosion and Sedimentation Controls

1.2 DEFINITIONS

A. Subsoil: Soil beneath the level of subgrade; soil beneath the topsoil layers of a naturally occurring soil profile, typified by less than 1 percent organic matter and few soil organisms.

B. Surface Soil: Soil that is present at the top layer of the existing soil profile. In undisturbed areas, surface soil is typically called "topsoil," but in disturbed areas such as urban environments, the surface soil can be subsoil.

C. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing in-place surface soil; the zone where plant roots grow.

D. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.3 PREINSTALLATION MEETINGS

A. Preconstruction Conference: Conduct conference at Project site.

1.4 MATERIAL OWNERSHIP

A. Except for materials indicated to be stockpiled or otherwise remain Rockland Green's property, cleared materials shall become Proposer's property and shall be removed from Project site.

1.5 INFORMATIONAL SUBMITTALS

A. Existing Conditions: Documentation of existing trees and plantings, adjoining construction, and site improvements that establishes preconstruction conditions that might be misconstrued as damage caused by site clearing.

1. Use sufficiently detailed photographs or video recordings.
2. Include plans and notations to indicate specific wounds and damage conditions of each tree or other plant designated to remain.

B. Record Drawings: Identifying and accurately showing locations of capped utilities and other subsurface structural, electrical, and mechanical conditions.

1.6 FIELD CONDITIONS

A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.

1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Rockland Green and authorities having jurisdiction.
2. Provide alternate routes around closed or obstructed trafficways if required by Rockland Green or authorities having jurisdiction.

B. Salvageable Improvements: Carefully remove items indicated to be salvaged and stored on Rockland Green's premises. Coordinate with Rockland Green for actual location on the property.

C. Utility Locator Service: Notify Dig Safe System for area where Project is located before site clearing.

D. Do not commence site clearing operations until temporary stream diversion- erosion- and sedimentation-control are in place.

E. Soil Stripping, Handling, and Stockpiling: Perform only when the soil is dry or slightly moist.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Satisfactory Soil Material: Requirements for satisfactory soil material are specified in Section 31 2325 "Backfill."

1. Obtain approved borrow soil material off-site when satisfactory soil material is not available on-site.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect and maintain benchmarks and survey control points from disturbance during construction.

B. Protect existing site improvements to remain from damage during construction.

1. Restore damaged improvements to their original condition, as acceptable to Rockland Green.

3.2 EXISTING UTILITIES

A. Locate, identify, disconnect, and seal or cap utilities indicated to be removed or abandoned in place, as applicable.

1. Arrange with utility companies to shut off indicated utilities.

B. Interrupting Existing Utilities: Do not interrupt utilities serving facilities occupied by Rockland Green or others, unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:

1. Notify Engineer not less than seven days in advance of proposed utility interruptions.
2. Do not proceed with utility interruptions without Engineer's written permission.

C. Excavate for and remove underground utilities indicated to be removed.

3.3 CLEARING AND GRUBBING

A. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.

1. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.
2. Remove roots larger than 2 inches in diameter, obstructions, and debris to a depth of 18 inches below exposed subgrade.
3. Use only hand methods or air spade for grubbing within protection zones.
4. Deliver removed tree branches to the mulch processing area if approved by Rockland Green.

B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.

1. Place fill material in horizontal layers not exceeding a loose depth of 8 inches and compact each layer to a density equal to adjacent original ground.

3.4 TOPSOIL STRIPPING

A. Remove sod and grass before stripping topsoil.

B. Strip topsoil to depth in a manner to prevent intermingling with underlying subsoil or other waste materials.

1. Remove subsoil and non-soil materials from topsoil, including clay lumps, gravel, and other objects larger than 1 inch in diameter; trash, debris, weeds, roots, and other waste materials.

C. Stockpile topsoil away from edge of excavations without intermixing with subsoil or other materials. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust and erosion by water.

1. Limit height of topsoil stockpiles to 72 inches.
2. Do not stockpile topsoil within protection zones.
3. Dispose of surplus topsoil. Surplus topsoil is that which exceeds quantity required for planting and turf areas shown on plans.

3.5 STOCKPILING ROCK

A. Remove from construction area naturally formed rocks that measure more than 8 inches across in least dimension. Do not include excavated or crushed rock.

1. Separate or wash off non-rock materials from rocks, including soil, clay lumps, gravel, and other objects larger than 1 inch in diameter; trash, debris, weeds, roots, and other waste materials.

B. Stockpile rock away from edge of excavations without intermixing with other materials. Cover to prevent windblown debris from accumulating among rocks.

1. Limit height of rock stockpiles to 36 inches.
2. Do not stockpile rock within protection zones.
3. Dispose of surplus rock. Surplus rock is that which exceeds quantity indicated to be stockpiled or reused.

3.6 SITE IMPROVEMENTS

A. Remove existing above- and below-grade improvements as indicated and necessary to facilitate new construction.

B. Remove slabs, paving, curbs, gutters, and aggregate base as indicated.

1. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut along line of existing pavement to remain before removing adjacent existing pavement. Saw-cut faces vertically.

3.7 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off site, or at Rockland Green’s transfer station if material is approved for disposal by Rockland Green.

B. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities. Do not interfere with other Project work.

END OF SECTION

SECTION 31 2305

SUBGRADE PREPARATION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Subgrade preparation, below either pavement system or gravel access roads.
2. Furnishing natural soils.
3. Furnishing select borrow material.
4. Temporary drainage.
5. Compaction.
6. Proof rolling.
7. Removal and replacement of unacceptable materials.
8. Grading.
9. Install geotextile fabric.

1.2 REFERENCES

A. ASTM D698 - Moisture/Density Relations of Soil/Aggregate Mixtures Using 5.5-Lb. Rammer and 12-Inch Drop

B. ASTM D1557 - Moisture/Density Relations of Soils and Soil/Aggregate Mixtures Using 10-Lb. Rammer and 18-Inch Drop

C. NYSDOT - Manual of Uniform Traffic Control Devices

1.3 DEFINITIONS

A. “Subgrade” shall be defined as the foundation layer of natural soils or select material that supports the pavement or gravel access road layers.

1.4 PERFORMANCE AND TESTING REQUIREMENTS

A. Compaction of subgrade shall meet the requirements for compaction as stated in Table 1 of Section 312330 - Compaction.

1. Compaction curves shall be developed for each type of subgrade material when “in-place density” tests are required by the Engineer.

2. The cost of failed compaction tests will be reimbursed by the Proposer to Rockland Green.

B. Proof-rolling with 8- to 10-ton pneumatic tire compactors to locate areas of inadequate compaction or soft or rutting areas or other defects in the subgrade surface.

1.5 SUBMITTALS

A. Submit under Provisions of Section 01300 – Submittal Procedures.

B. Granular Materials - Refer to Section 312325 - Backfilling.

1.6 REGULATORY REQUIREMENTS

A. Conform to regulatory agencies having jurisdiction over the work.

B. Occupational Safety and Health Administration Act (OSHA) of 1970 and its amendments and regulations or to the New York State Industrial Code Rule 23 entitled, “Protection in Construction, Demolition and Excavation Operations” as issued by New York State Department of Labor, Board of Standards and Appeals.

1.7 ENVIRONMENTAL REQUIREMENTS

A. Provide erosion and sediment controls in accordance with NY State Guidance and the Erosion and Sediment Control Drawing to prevent debris, stones, and silt from entering drainage systems.

1.8 FIELD MEASUREMENTS

A. Prior to start of construction, verify by field measurements that existing conditions are as shown on Drawings, notify Engineer of specific differences.

B. Prior to start of construction, where required, verify by exploratory excavations that existing underground utility locations and elevations are as shown on the Drawings or to confirm marked location and elevation of underground utilities by the Underground Utility Protection Organization applicable to the project location and protect utilities in accordance with requirements of RFP 2024-02.

1.9 COORDINATION

A. Coordinate field work under provisions of Section 01010 – Summary of Work and the terms and conditions of RFP-2024-02.

B. Coordinate work with local utility companies (private and municipal), as applicable.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Natural on-site soil, if suitable, shall be utilized if approved by the Engineer.

B. Granular materials, if required, shall be as specified in Section 312325 – Backfill or shown on the drawings. The type, size and quantity of granular material shall be that required to prepare a compacted subgrade approved by the Engineer.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine spaces to be filled beforehand and remove all unsuitable materials and debris including sheeting, forms, trash, stumps, plant life, etc.

B. Inspect backfill and fill materials beforehand and remove all roots, vegetation, organic matter, or other foreign debris.

C. No backfill or fill material shall be placed on frozen ground nor shall the material itself be frozen or contain frozen soil fragments.

D. Spaces to be filled shall be free from standing water so that placement and compaction of the fill materials can be accomplished in “dry” conditions.

E. All underground utility installations, including culverts, shall be completed, backfilled and compacted prior to completion of subgrade.

F. Verify that traffic controls and erosion and sediment controls are in place.

3.2 PREPARATION

A. Temporary erosion and sediment controls and temporary stream diversion controls shall be installed prior to start of construction.

B. Temporary drains and ditches shall be constructed as necessary to remove water from the subgrade area.

1. Proposer to prevent the entrance of debris, stones, and silt from entering drainage systems, including the use of filter socks, screens, and other desilting methods as shown on the Erosion and Sedimentation Control Plan details.

C. Backfilled areas shall be retested at the discretion of the Engineer.

3.3 INSTALLATION

A. Construct the subgrade by cutting or filling with material as required.

1. The final subgrade surface below the roadway surface shall be fine graded, rolled and compacted to form a smooth, even surface.

B. The subgrade in fill section shall be placed in maximum 12-inch layers before compaction and compacted before the next layer is spread.

C. The subgrade surface shall drain to the road edges, be free from holes, bumps, wheel ruts and of standing water, snow, frozen material and organic materials prior to the placement of the next course.

1. Soft or otherwise unacceptable subgrade materials shall be removed and replaced with select on-site material acceptable to the Engineer.

2. Where no suitable on-site is available, granular materials shall be installed and compacted at no cost to the Rockland Green.

3.4 FIELD QUALITY CONTROL

A. For compaction requirements, refer to Section 312330, Table 1.

B. Tolerances - The final subgrade surface shall not vary more than +1/2 inch from the design grade elevation at any location, parallel to the final road surface as defined by the total roadway thickness.

C. Proof Rolled - Prior to the placement of the next pavement course, the subgrade surface shall be proof rolled to locate areas of inadequate compaction or defections or soft or rutting areas requiring undercutting, with 8- to 10-ton pneumatic tire compactors.

1. Areas of inadequate compaction to be re-compacted.

2. If additional rolling does not correct an area of unstable condition, then this area and soft or rutted areas shall be removed and replaced with select material and compacted.

3. Where no suitable on-site material is available, granular materials shall be installed and compacted; areas inaccessible to rollers to be compacted by mechanical methods.

3.5 DUST CONTROL

A. Dust control shall be accomplished by using water, brooming, and cleaning methods.

1. Dust control shall be carried out daily.

END OF SECTION

SECTION 31 2310

EXCAVATION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Excavation for site structures.
2. Excavating trenches for utilities.
3. Pipe foundations and bedding.

1.2 FIELD MEASUREMENTS

A. Verify that survey benchmark and intended elevations for the work are as indicated.

PART 2 - PRODUCTS

2.1 NOT USED

PART 3 - EXECUTION

3.1 EXECUTION

A. Identify required lines, levels, contours, and datum.

B. Identify known underground, above ground, and aerial utilities. Stake and flag locations.

C. Notify utility companies.

D. Protect above- and below-grade utilities which are to remain.

E. Protect plant life, lawns, rock outcropping and other features remaining as a portion of final landscaping.

F. Protect benchmarks, existing structures, fences, sidewalks, paving, and curbs from excavation equipment and vehicular traffic.

G. Excavations shall be in completed in accordance with all details of applicable codes, rules, and regulations including all local, state, and federal regulations including the Occupational Safety and Health

Administration (OSHA) Title 29 Code of Federal Regulations Part 1926, Subpart P - Excavations and Trenching Standards.

3.2 CLASSIFICATION OF EXCAVATED MATERIALS

A. Classifications of excavated materials are as follows:

1. Unclassified Excavation - “Unclassified excavation” shall include all material excavated within the authorized lines and grades prescribed in the Drawings. Unclassified excavation shall include “rock excavation” as well as “common excavation” as defined herein.

2. Common Excavation - “Common excavation” shall include all excavation except “rock excavation.” All unconsolidated and non-indurated material, rippable rock, loose rock, soft mineral matter, weathered rock or saprolite, and soft or friable shale which is removable with normal earth excavation equipment shall be considered “common excavation.” All boulders and detached pieces of solid rock or concrete or masonry less than 1 cubic yard in volume shall be classified as “common excavation.”

3. Rock Excavation - “Rock excavation” shall include all sound solid masses, layers and ledges of consolidated and indurated rock or mineral matter of such hardness, durability and/or texture that it is not rippable or cannot be excavated with normal earth excavation equipment.

3.3 EXCAVATING

A. Underpin adjacent structures which may be damaged by excavation work, including utilities and pipe chases.

B. Excavate subsoil required to accommodate building foundations, slabs-on-grade, paving, and site structures.

C. Machine-slope banks to angle of repose or less, until shored.

D. Excavation cut not to interfere with normal 45-degree bearing splay of foundation. Undercutting of excavation faces will not be permitted.

E. Grade top perimeter of excavation to prevent surface water from draining into excavation.

F. Hand trim excavation to required undisturbed subgrade. Remove loose matter.

G. Remove lumped subsoil, boulders, and rock under 1 cubic yard, measured by volume. Refill voids with Mix “C” concrete or compacted gravel/crushed stone.

H. Notify Engineer of unexpected subsurface conditions, or of questionable soils encountered at required subgrade elevations, and discontinue work in area until notified to resume operations.

I. Should the Proposer, through negligence or otherwise carry his excavation below the designated subgrade, granular material used for backfilling shall be spread and compacted in conformance with the

requirements of Sections 312325 - Backfilling and 312330 - Compaction. The cost of this refilling operation, including any tests associated therewith, shall be borne by Proposer.

J. Stockpile excavated material to be re-used in area designated by Rockland Green on site and remove excess material not being reused from site.

3.4 DISPOSAL OF MATERIAL

A. All excavated material except reusable topsoil or reusable fill shall be classified as surplus material and disposed of off-site unless Rockland Green designates an on-site location.

B. Reuse of excavated material as on-site fill shall conform with Section 31 2325 - Backfilling.

3.5 FIELD QUALITY CONTROL

A. Field inspection will be performed under provisions of Section 01400 - Quality Requirements.

B. Provide for visual inspection of bearing surfaces.

3.6 PROTECTION

A. Protect excavations by methods required to prevent cave-in or loose soil from falling into excavation.

B. Protect bottom of excavations and soil adjacent to and beneath foundation from freezing.

C. Exposed subgrade surfaces shall remain undisturbed, drained, and maintained as uniform, plane areas, shaped to receive the foundation components of the building, structure or new underground pipe.

END OF SECTION

SECTION 31 2319

DEWATERING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Construction dewatering and temporary stream diversion.

B. Related Requirements:

1. Section 31 2500 Erosion and Sediment Controls.
2. New York State Standards and Specifications for Erosion and Sediment Control
3. New York State Stormwater Management Design Manual

1.2 PREINSTALLATION MEETINGS

A. Preconstruction Conference: Conduct conference at Project site.

1. Verify availability of Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
2. Review condition of site to be dewatered, including coordination with temporary erosion-control measures and temporary controls and protections.
3. Review proposed site clearing and excavations.
4. Review observation and monitoring of temporary stream diversion system.

1.3 ACTION SUBMITTALS

A. Delegated Design Submittals: For dewatering and stream diversion systems, prepared by and signed and sealed by a qualified professional engineer licensed in the state of New York.

1. Include plans, elevations, sections, and details.
2. Show arrangement, locations, and details of coffer dams, wells and well points; locations of risers, headers, filters, pumps, power units, and discharge lines; and means of discharge, control of sediment, and disposal of water, as applicable.
3. Include written plan for control procedures to be adopted if dewatering problems or stream diversion problems arise.

1.4 INFORMATIONAL SUBMITTALS

A. Field Quality-Control Submittals:

1. Field quality-control reports.

B. Existing Conditions: Using photographs or video recordings, show existing conditions of adjacent construction and site improvements that might be misconstrued as damage caused by dewatering operations. Submit before Work begins.

C. Record Drawings: Identify locations and depths of capped wells and well points and other abandoned-in-place dewatering equipment, if applicable.

1.5 QUALITY ASSURANCE

A. Qualifications:

1. Installer: An experienced installer that has specialized with the installation of dewatering systems and temporary stream diversion work.
2. Delegated Design Engineer: A professional engineer who is legally qualified to practice in the state where Project is located and who is experienced in providing engineering services of the type indicated.

1.6 FIELD CONDITIONS

A. Survey Work: Engage a qualified land surveyor or professional engineer to survey adjacent existing buildings, structures, and site improvements; establish exact elevations at fixed points to act as benchmarks. Clearly identify benchmarks and record existing elevations.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Delegated Design: Engage a qualified professional engineer, as defined in Section 01 4000 "Quality Requirements," to design dewatering system and temporary stream diversion system.

B. Dewatering Performance: Design, furnish, install, test, operate, monitor, and maintain dewatering and stream diversion systems of sufficient scope, size, and capacity to control hydrostatic pressures and to lower, control, remove, and dispose of groundwater and surface water to permit excavation and construction to proceed on dry, stable subgrades.
1. Continuously monitor and maintain dewatering operations to ensure erosion control, stability of excavations and constructed slopes, prevention of flooding in excavation, and prevention of damage to subgrades and permanent structures.
2. Prevent surface water from entering excavations by grading, dikes, or other means.
3. Accomplish dewatering without damaging existing buildings, structures, and site improvements adjacent to excavation.
4. Remove dewatering system when no longer required for construction.

C. Regulatory Requirements: Comply with governing EPA and USACOE regulations before beginning dewatering and temporary stream diversion. Comply with water- and debris-disposal regulations of authorities having jurisdiction.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect structures, retaining walls, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by dewatering operations.

1. Prevent surface water and subsurface or groundwater from entering excavations, from ponding on prepared subgrades, and from flooding site or surrounding area.
2. Protect subgrades and foundation soils from softening and damage by rain or water accumulation.

B. Install dewatering system to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities.

1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Rockland Green and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.

C. Provide temporary grading to facilitate dewatering and control of surface water.

D. Protect and maintain temporary erosion and sedimentation controls, which are specified in Section 31 2500.

3.2 INSTALLATION

A. Install dewatering system utilizing wells, well points, or similar methods complete with pump equipment, standby power and pumps, filter material gradation, valves, appurtenances, water disposal, and surface-water controls.

1. Space well points or wells at intervals required to provide sufficient dewatering.
2. Use filters or other means to prevent pumping of fine sands or silts from the subsurface.

B. Place dewatering system into operation to lower water to specified levels before excavating below groundwater level.

C. Provide sumps, sedimentation tanks, and other flow-control devices as required by authorities having jurisdiction.

D. Provide standby equipment on-site, installed, and available for immediate operation, to maintain dewatering on continuous basis if any part of system becomes inadequate or fails.

3.3 OPERATION

A. Operate system continuously until drains, buried utilities, and structures have been constructed and fill materials have been placed or until dewatering is no longer required.

B. Operate system to lower and control surface and groundwater to permit excavation, construction of structures, installation of utilities, and placement of fill materials on dry subgrades. Drain water-bearing strata above and below bottom of foundations, drains, pipes, culverts, and other excavations.

1. Do not permit open-sump pumping that leads to loss of fines, soil piping, subgrade softening, and slope instability.
2. Reduce hydrostatic head in water-bearing strata below subgrade elevations of foundations, drains, sewers, and other excavations.
3. Maintain piezometric water level a minimum of 24 inches below bottom of excavation.

C. Dispose of water removed by dewatering in a manner that avoids endangering public health, property, and portions of work under construction or completed. Dispose of water and sediment in a manner that avoids inconvenience to others.

D. Remove dewatering system from Project site on completion of dewatering. Plug or fill well holes with sand or cut off and cap wells a minimum of 36 inches below overlying construction.

3.4 FIELD QUALITY CONTROL

A. Survey-Work Benchmarks: Resurvey benchmarks regularly during dewatering and maintain an accurate log of surveyed elevations for comparison with original elevations. Promptly notify Engineer if changes in elevations occur or if cracks, sags, or other damage is evident in adjacent construction.

B. Provide continual observation to ensure that subsurface soils are not being removed by the dewatering operation.

C. Prepare reports of observations.

3.5 PROTECTION

A. Protect and maintain dewatering system during dewatering operations.

B. Promptly repair damages to adjacent facilities caused by dewatering.

END OF SECTION

SECTION 31 2325

BACKFILL

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Granular materials for backfilling.

2. Classification of materials.

3. Backfilling trenches for utilities.

4. Consolidation and compaction.

1.2 REFERENCES

A. ASTM C136 - Method for Sieve Analysis of Fine and Coarse Aggregates

B. ASTM D1556 - Density of Soil in Place by Sand-Cone Method

C. ASTM D1557 - Laboratory Compaction of Soil Using Modified Effort

D. ASTM D2922 - Density of Soil in Place by Nuclear Methods

E. ASTM D3017 - Water Content of Soil in Place by Nuclear Methods

1.3 SUBMITTALS

A. Granular Materials

1. Granular materials required for filling, backfilling, subbase, and other purposes shall be as shown on the Drawings. Prior to bidding, prospective Proposers shall familiarize themselves with the available quantities of approved on-site and off-site materials.

2. For each on-site and off-site material proposed, notify the Engineer of the source of the material and furnish to the Engineer for approval a certified gradation analysis (ASTM C136) and a Modified Compaction Test (ASTM D1557) at least 15 days prior to date of anticipated use of such material that has been tested within the last 6 months.

3. The Engineer reserves the right to inspect proposed source of off-site granular material and to order such tests of the materials as he deems necessary to ascertain its quality and graduation of particle size. The Proposer shall, at his own expense, engage an approved testing laboratory to perform such test, and submit certified test results to the Engineer. If similar tests of the material

from a particular source were performed previously (within 6 months), submit results of these tests to the Engineer for consideration.

4. No granular materials shall be used on this project for fill, backfill, subbase, or other purpose until approval is obtained from the Engineer, and only material from approved sources shall be used.

PART 2 - PRODUCTS

2.1 GENERAL

A. Approvals- All materials to be utilized on the project shall be subject to testing, examination, and the approval of the Engineer. The Engineer and Rockland Green shall determine whether a material is suitable or unsuitable for the use intended. It is the intent of these Specifications that use shall be made of existing material excavated during the construction work, provided it meets the requirements for backfill included in this section, or unless otherwise specified or indicated on the Contract Drawings. Rockland Green makes no guarantee that the existing material will meet the requirements of the specifications for use as backfill. Only when sufficient on-site suitable material does not exist, shall the Proposer import suitable material from off-site. Costs of importing off-site material for normal backfilling purposes shall be the responsibility of the Proposer.

B. Suitable Material- In general, mineral (inorganic) soil, blasted or broken rock (if it meets backfill specifications) and similar materials of natural or manmade origin, including mixtures thereof, are considered as suitable materials, as determined by the Engineer to be suitable for filling, backfilling, as a base for placement of pipe, structures, or fill, or other uses.

C. Unsuitable Material- Any material containing chunks of cinders, earth or clay, vegetable or organic matter, such as muck, peat, organic silt, roots, stumps, topsoil or sod, shale or other soft, poor durability particles that is not satisfactory for the use intended, as determined by the Engineer, is designated as an unsuitable material.

2.2 ON-SITE MATERIALS

A. Type A, Excavated Material - Material under this classification shall be derived solely from excavations necessary to construct the project to the lines and grades specified. If the excavated material on-site is approved for reuse and is suitable, it shall be used for filling or backfilling purposes. If the Proposer so elects, the Proposer may, at their own expense, substitute other types of material in place of Type A material, provided such substitution is approved in advance by the Engineer. All replaced or surplus material shall be disposed of per Specification Section 31 2310.

B. Type A material shall not have any larger aggregate larger than 4-inches in any dimension and shall meet the specified compaction requirement per Specification 31 2330. The material shall be screened to meet these requirements and any remaining material which does not shall be removed and disposed of off-site at the Proposer's expense. In no case the top 12-inches nearest the final subgrade below the topsoil layer or pavement in local roads shall contain any aggregate larger than 2-inches.

2.3 OFF-SITE MATERIALS

A. Within the following specifications where grain size distribution requires a maximum of 10 percent or less material capable of passing the #200 mesh sieve, the percentage of material finer (than the #200 sieve) by weight shall be determined by wet screening in accordance with ASTM D1140. It is the intent of the specifications to allow the use of granular materials from local suppliers. Material specifications shall conform to the requirements of the New York State Department of Transportation, (NYSDOT) and shall conform to the latest NYSDOT Standard Specification.

B. No crushed stone or run-of-crusher material shall be used for this project until approval is obtained from the Engineer, and only material from approved sources shall be used. A certified sieve analysis from the supplier shall be submitted for the Engineer's approval prior to the use of any materials specified in this specification section.

C. Required Materials

1. Trench backfill (Green Areas Only) Above Pipe Backfill Material– Type A

2. Pavement subbase - NYSDOT subbase course 733-0402, Type 2.

3. Trench special bedding - NYSDOT 733-0201, Type 3A stone.

4. Pipe Bedding - NYSDOT subbase course 733-0402, Type 2.

5. Backfill adjacent to, and under, structures - NYSDOT subbase course 733-0402, Type 2.

6. Impervious Fill: Naturally occurring or manufactured mixture of clayey gravel and sand capable of compacting to a dense state.

a. Maximum Particle Size: 1 inch

Sieve Size	Percent Passing by Weight
¾ inch	50-100
No. 4	40-90
No. 40	30-85
No. 200	25-75

b. Plasticity index of portion finer than #200 sieve greater than 15 and less than 20.

PART 3 - EXECUTION

3.1 PIPE FOUNDATIONS

A. All pipes, fittings, or specials which are to be installed in the open trench excavation shall be properly bedded in, and uniformly supported on pipe foundations of the various types as specified and shown on the Drawings. Flat-bottom trenches of required width shall be excavated to the necessary depth shown on the Drawings and maintained in accordance with this section prior to installing the foundation. Trenches shall be dewatered and all work performed in a dry trench and free of rocks.

B. Bedding material shall be spread in maximum of 8-inch layers to the midpoint (spring line) of the pipe and each layer shall be compacted until the required total depth of the bedding has been built up. The

Proposer shall perform his bedding operations with care to maintain line and grade. Compaction shall achieve a modified proctor value of 95%.

C. The pipe foundation above the midpoint of the pipe shall be spread and then compacted after foundation is 24-inches above the top of the pipe.

D. Type I - Normal Soil Conditions - Unless shown otherwise in the Drawings, all pipe shall be supported on Type I foundation. The trench shall be excavated 4 inches deeper than the bottom of the pipe. Acceptable bedding as described in the Contract Specifications shall be furnished, placed and compacted in the trench for its full width such that, after the pipe has been uniformly bedded in this material, the required minimum depth of material remains between pipe and undisturbed trench bottom. Suitable depressions shall be provided in the trench bottom to permit adequate bedding of bells, couplings, or similar projections. The bedding shall extend upward to be 24-inches over the top of the pipe. Minimum width of pipe foundation shall be outside diameter of pipe plus 2 feet 0 inches. The pipe centerline shall be longitudinally centered within the pipe bedding per the detail.

E. Type II - Moderately Unstable Soil Conditions - When specifically called for on the Drawings, or when ordered by the Engineer as existing conditions dictate, and as approved by the Engineer, the pipe shall be supported on Type II foundation. The foundation shall be installed where a suitable supporting soil or rock stratum occurs within 2 feet, more or less of the bottom of the pipe. The trench shall be excavated to the depth necessary to reach the suitable supporting stratum. Install a reinforcing geotextile in accordance with Section 02420 - Backfilling, followed by trench special bedding which is then furnished and placed in the trench for its full width. The material shall be spread in 12-inch layers and each layer shall be compacted to achieve a modified proctor value of 95%. Trench special bedding shall extend from the supporting stratum up to the bottom of the Type I pipe foundation.

F. Type III – Unstable Soil Conditions – As conditions dictate, and as determined by the Engineer, the pipe bedding shall be supported on a Type III foundation. The trench shall be excavated to the depth necessary to reach the suitable supporting stratum. Backfilling with a loosely compacted NYSDOT 703-0201 Type 3A stone bedding material shall be provided. This shall be followed by the bedding material as shown in the Type II and Type I pipe foundations.

3.2 GENERAL BACKFILLING REQUIREMENTS

A. Follow requirements of 31 2330 - Compaction.

B. Backfilling shall be started as soon as practicable and after structures or pipe installations have been completed and inspected, and concrete has acquired a suitable degree of strength. Backfilling shall be carried on expeditiously thereafter. Backfill shall be started at the lowest section of the area to be backfilled. Natural drainage shall not be obstructed at any time.

C. Backfill spaces shall be inspected prior to backfilling operations and all unsuitable materials, including sheeting, bracing forms and debris, shall be removed. No backfill shall be placed against foundation walls on structural members unless they are properly shored and braced or of sufficient strengths to withstand lateral soil pressures.

D. No backfill material shall be placed on frozen ground nor shall the material itself be frozen or contain frozen soil fragments when placed. No calcium chloride or other chemicals shall be added to prevent freezing. Material incorporated in the backfilling operation which is not in satisfactory condition shall be subject to rejection and removal at the Proposer’s expense.

E. If the Proposer fails to stockpile and protect on-site excavated material acceptable for backfill, then the Proposer shall provide an equal quantity of acceptable off-site material at no expense to Rockland Green.

F. Remove surplus backfill material from site.

G. Backfill areas to contours, grades, and elevations shown on the drawings, using unfrozen materials.

H. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, frozen, or spongy subgrade surfaces.

I. Backfill material shall be inspected prior to placement and all roots, vegetation, organic matter, or other foreign debris shall be removed.

J. Backfill material shall not be placed when moisture content is more than two percent above optimum or is otherwise too high to allow proper compaction. When material is too dry for adequate compaction, water shall be added to the extent necessary.

K. Hydraulic compaction by ponding or jetting is not permitted.

L. Employ a placement and compaction method consistent with Section 31 2330 - Compaction, that does not disturb or damage adjacent walls, drainage systems, damp proofing, waterproofing, protective coverings, utilities in trenches, underground conduits, or tanks.

M. Maintain optimum moisture content of backfill materials to attain required compaction density.

N. Rough grade all backfilled and filled areas to meet subsequent topsoiling or paving requirements. Make grade changes gradually. Blend slopes into level areas.

O. Remove surplus backfill materials from site.

3.3 PERIODIC CLEAN-UP AND BASIC RESTORATION

A. Perform clean-up work on a regular basis and as frequently as required. Basic site restoration in a particular area shall be accomplished immediately following the installation or completion of the required facilities in that area. Furthermore, such work shall also be accomplished if partially completed facilities must remain incomplete for some time due to unforeseen circumstances.

B. Upon failure of the Proposer to perform periodic clean-up and basic restoration of the site, Rockland Green may, upon five days prior written notice to the Proposer, without prejudice to any other rights to remedies of the Rockland Green, cause such work for which the Proposer is responsible to be accomplished to the extent deemed necessary by the Contract Documents, and all costs resulting therefrom shall be charged to the Proposer and deducted from the amounts of money that may be due him.

3.4 EXAMINATION

A. Verify fill materials to be used are acceptable.

B. Verify that all subsurface installations for the project have been inspected and are ready for backfilling.

3.5 PREPARATION

A. Generally, compact subgrade to density requirements for subsequent backfill materials.

B. Cut out soft areas of subgrade not capable of in situ compaction. Compact soil to a density equal to or greater than the requirements for subsequent backfill material.

3.6 TOLERANCES

A. Top Surface of Backfilling Under Pavement Subgrade - ±1 inch from required elevations.

B. Top Surface of Backfilling Under Paved Areas- ±1/2 inch from required elevations.

C. Top Surface of General Backfilling - ±1 inch from required elevations.

3.7 FIELD QUALITY CONTROL

A. Field inspection and testing will be performed under provisions of Section 01400 - Quality Requirements.

B. Tests and analysis of fill material will be performed in accordance with ASTM D1557 and with Section 31 2330 - Compaction.

C. Compaction testing will be performed in accordance with ASTM D1556, ASTM D2922, and with Section 01400 - Quality Requirements.

D. If tests indicate work does not meet specified requirements, remove work, replace, and retest at no cost to Rockland Green.

3.8 PROTECTION OF FINISHED WORK

A. Protect finished work under provisions of Section 01 5000 - Temporary Facilities and Controls.

B. Regrade and re-compact fills subjected to vehicular traffic.

END OF SECTION

SECTION 31 2230

COMPACTION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Compaction requirements and test methods.

2. Compact all subgrades, foundations, embankments, trench backfills, filled and backfilled material as specified.

1.2 REFERENCES

A. ASTM D698 - Laboratory Compaction of Soil Using Standard Effort

B. ASTM D1556 - Density of Soil in Place by the Sand-Cone Method

C. ASTM D1557 - Laboratory Compaction of Soil Using Modified Effort

D. ASTM D2922 - Density of Soil in Place by Nuclear Methods

E. ASTM D3017 - Water Content of Soil in Place by Nuclear Methods

1.3 SUBMITTAL

A. Submit compaction plan including the specific equipment and detailed methods proposed to be used for compaction in accordance with Section 01300- Submittals.

B. Rockland Green will use an independent testing firm for compaction tests.

1.4 QUALITY ASSURANCE

A. The Proposer shall adopt compaction methods which will produce the degree of compaction specified herein, prevent subsequent settlement, and provide adequate support for the surface treatment, pavement, structure, and piping to be placed thereon, or therein, without damage to the new or existing facilities.

B. The natural subgrade for all footing, mats, slabs-on-grade for structures or pipes shall consist of firm undisturbed natural soil, at the grades shown on the Drawings.

C. After excavation to subgrade is completed, the subgrade shall be compacted if it consists of loose granular soil or if its surface is disturbed by the teeth of excavating equipment.

D. This compaction shall be limited to that required to compact loose surface material and shall be terminated if it causes disturbance to underlying fine-grained soils, as revealed by weaving or deflection of the subgrade under the compaction equipment.

E. If the subgrade soils consist of saturated fine or silty sands, silts, or clay or varved clays, no compaction shall be applied.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Materials to be compacted shall be as specified in Section 31 2325 - Backfilling.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine spaces to be filled beforehand and remove all unsuitable materials and debris including sheeting, forms, trash, stumps, plant life, etc.

B. Inspect backfill and fill materials beforehand and remove all roots, vegetation, organic matter, or other foreign debris.

C. No backfill or fill material shall be placed on frozen ground nor shall the material itself be frozen or contain frozen soil fragments.

D. Spaces to be filled shall be free from standing water so that placement and compaction of the fill materials can be accomplished in “dry” conditions.

3.2 PREPARATION

A. Brace walls and slabs of structures to support surcharge loads and construction loads imposed by compaction operations.

B. Proof-roll all subgrade surfaces to accept fill material.

C. Each layer of fill shall be compacted to the specified density the same day it is placed.

1. The moisture content of backfill or fill material shall be adjusted, if necessary, to achieve the required degree of compaction.

D. Compact each lift in accordance with Table 1.

E. Match compaction equipment and methods to the material and location being compacted to obtain specified compaction, with consideration of the following guidelines:

1. Rubber-tired rollers are preferred for most areas to prevent bridging of softer materials.

2. Double smooth drum rollers may be used provided that careful inspection can prevent bridging.

3. Compaction roller should be lighter in weight than proof-rolling equipment, with a minimum compaction force of 350 lbs. per linear inch (PLI).

4. Vibratory compaction is preferred for dry, granular materials.

5. Hand compaction equipment such as impact rammers, plate or small drum vibrators, or pneumatic buttonhead compactors should be used in confined areas.

6. Hydraulic compaction by ponding or jetting will not be permitted.

7. Backhoe-mounted hydraulic or vibratory tampers are preferred for compaction of backfill in trenches under pavements over 4 feet in depth. The upper 4 feet shall be compacted as detailed above or with hand-guided or self-propelled vibratory compactors or static roller.

TABLE 1
COMPACTION REQUIREMENTS

Construction Element	Maximum Compaction Layer Thickness (Inches)	ASTM	Minimum Compaction
I. STRUCTURES*			
a. Fill beneath foundation elements and under slabs-on-grade - hand-guided compaction	6	D1557	95%
b. Fill beneath foundation elements and under slabs-on-grade - self-propelled or tractor-drawn compaction	8	D1557	95%
c. Fill around structures and above footings	12	D1557	95%
II. TRENCHES**			
a. Fill under pipelines and pipe bedding	8	D1557	95%
b. Pipe sidefills and top 4 feet of pipe backfill under pavements	12	D1557	95%
c. Backfill below 4 feet under pavement	12	D1557	90%
d. Backfill under lawns, gardens and cultivated fields	12	D1557	90%
III. EMBANKMENTS AND FILLS			
a. Fill under streets, parking lots, and other paved areas	12	D1557	95%
b. Embankments not supporting pavement or structures	12	D1557	90%
c. Rough site grading	12	D698	85%
IV. TRENCH PLUGS	6	D1557	93% or 95%

*Where structural loads are carried by piles, caissons or other deep foundations, minimum compaction may be reduced to 92 percent.

**The first foot above non-plastic pipelines shall have a compacted thickness of 12 inches.

*** Compact impervious soil to at least 95% of standard Proctor maximum density. If more than 50% passes the 200 sieve, compact to at least 93% of the modified Proctor density if less than 50% passes the #200 sieve.

3.3 FIELD QUALITY CONTROL

A. Material Testing
1. The Engineer reserves the right to order testing of materials at any time during the work. The Proposer shall provide testing at no additional cost to Rockland Green.
2. Testing will be done by a qualified, independent testing laboratory in accordance with this section and Section 01 4000 - Quality Requirements.
3. The Proposer shall aid the Engineer in obtaining representative material samples to be used in testing.
4. For each material which does not meet specifications, the Proposer shall reimburse Rockland Green for the cost of the test and shall supply an equal quantity of acceptable material, at no additional compensation.
5. The Proposer shall anticipate these tests and incorporate the time and effort into procedure.

B. Compaction Testing

1. The Engineer reserves the right to order the qualified independent testing laboratory to conduct in-place density tests of compacted lifts.

2. Testing shall be conducted for every 200 cubic yards of fill or backfill, or every 100 linear feet of trench backfill is placed, whichever is less. Tests are required for each lift of fill or backfill placed.

3. The Proposer shall dig test holes and provide access to all backfill areas at no additional compensation when requested by the Engineer.

4. For each test which does not meet specifications, the Proposer shall retest at his cost. If the retest does not meet specifications, the Proposer shall replace and recompact material to the specifications at no additional cost to Rockland Green.

5. The Proposer shall anticipate these tests and incorporate the time and effort into procedures.

6. Nuclear moisture density testing by “probe” methods will be acceptable for compacted layers not exceeding 12 inches in thickness.

a. Nuclear “backscatter” methods will be acceptable only for testing asphalt paving layers not less than 3 inches in thickness.

b. Only certified personnel will conduct nuclear testing.

c. If the nuclear method is utilized, the results shall be checked by at least one in-place density test method described above.

C. Unacceptable Stockpiled Material - Stockpiled material may be tested according to material testing materials.

D. Alternate Methods of Compaction - The Proposer may employ alternate methods of compaction if the desired degree of compaction can be successfully demonstrated to the Engineer’s satisfaction.

E. Select Material - On-Site

1. Any on-site material may be used for select fill material provided it meets all the requirements of the equivalent off-site material.

2. No on-site material shall be used without prior review and approval of the Engineer.

F. Systematic Compaction - Compaction shall be done systematically, and no consideration shall be given to incidental coverage due to construction vehicle traffic.

3.4 PROTECTION

A. Prior to terminating work for the day, the final layer of compacted fill, after compaction, shall be rolled with a smooth-wheel roller if necessary to eliminate ridges of soil left by tractors or equipment used for compaction or installing the material.

B. As backfill progresses, the surface shall be graded to drain off during incidence of rain such that no ponding of water shall occur on the surface of the fill.

C. The Proposer shall not place a layer of fill on snow, ice or soil that was permitted to freeze prior to compaction. These unsatisfactory materials shall be removed prior to fill placement.

END OF SECTION

SECTION 31 2500

EROSION AND SEDIMENT CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes;
1. Temporary filter fabric, as required
2. Temporary silt fence as shown on the drawings
3. Temporary compost filter sock
4. Temporary drainage inlet protection
5. Temporary stabilized construction entrance, as applicable
6. Temporary dust control
7. Submittals as required
8. Cleanup and repair

B. Related Requirements:
1. Section 31 1000 “Site Clearing”
2. Section 32 9200 “Turf and Grasses”.

1.2 DEFINITIONS

A. Temporary erosion and sediment control practices shall be understood to mean temporary structures and practices designed to minimize the changes in the quality and quantity of water discharged from a location during construction activities.

1.3 PREINSTALLATION MEETINGS

A. Preconstruction Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.
1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for all items listed in the section 1.2 SUMMARY above .

1.5 QUALITY ASSURANCE

A. All construction materials specified with NYSDOT Item numbers shall appear on the current NYSDOT approved List.

B. Comply with all applicable local, state, and federal requirements regarding materials, methods of work, and disposal of excess and waste materials.

C. Obtain and pay for all required inspections, permits, and fees. Provide timely notices required by governing authorities.

D. Codes and standards: This work shall conform to all rules, regulations, specifications, and requirements that pertain to soil and water conservation practices of all agencies of government having jurisdiction.

E. Perform excavation work in compliance with applicable requirements of authorities having jurisdiction, and in accordance with the current Occupational Safety and Health Administration (OSHA) Standards of Excavation.

F. Erosion and sediment control practices as may be required must meet the requirements of the New York State Standards and Specifications for Erosion and Sediment Control and the New York State Stormwater Management Design Manual, and the Contract Documents.

G. The Proposer shall be required to maintain public and private roadways adjacent to the project site in a clean condition.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Store materials properly to prevent damage, deterioration, and contamination.

B. Aggregates shall be stockpiled in well-drained locations.

C. Packaged materials shall be delivered in their original unopened containers that identify the material name and type and stored in a weatherproof enclosure.

D. Aggregates, earth fill, and topsoil that are muddy or frozen shall not be handled, delivered to the site, stockpiled, or spread.

1.7 FIELD CONDITIONS

A. Utility Locator Service: Notify Dig Safely New York at **1-800-962-7962** for area where Project is located before site clearing.

B. Prior to performing any topsoil stripping or other earthwork activities on the site, the Proposer shall mark out with surveyor's flagging the limits of all areas to be disturbed and install all required temporary erosion and sediment control measures.
   1. The Proposer shall adhere to all erosion and sediment control policies of the agencies of government having jurisdiction.

C. Discrepancies: Prior to the start of any construction work, immediately report to Rockland Green's Representative any discrepancies found on the site between actual conditions and those indicated on the Contract Drawings and confirm in writing. Where applicable, provide field information specific to the discrepancy to expedite resolution.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Temporary filter fabric: Non-woven, continuous-filament fibers of polypropylene with apparent opening size meeting ASTM D4751; Mirafi 140N as manufactured by TenCate Geosynthetics of Pendergrass, GA, or equal. Material shall have a needle-punched non-woven structure, appear on the current NYSDOT Approved List, Geosynthetics for Highway Construction, and be approved for drainage, separation, and turbidity curtain applications.

B. Temporary silt fence:
1. Silt fence fabric and posts: NYSDOT 209-2.08 Silt Fence, Item No. 209.13.
2. Fabric shall meet the following requirements.

a.	Grab tensile strength	110 lbs.
b.	Elongation at failure	20%
c.	Mullen Burst Strength	300 PSI
d.	Puncture Strength	60 lbs
e.	Slurry Flow Rate	8 gal/min/sf
f.	Trapezoidal Tear Strength	50 lbs
g.	Equivalent opening size	40-80
h.	Ultraviolet radiation stability	70%

3. Prefabricated units may be used providing the units are installed in accordance with New York Guidelines for Urban Erosion and Sediment Control; Mirafi® Envirofence by TenCate Geosynthetics of Pendergrass, GA, BioFence by ERC/Biomass Farms of Lakeville, MA, Geofab or equal.
4. Fence posts for prefabricated units. Size as recommended by manufacturer of units. If no recommendation, furnish material and size as necessary to support the units for the duration of project construction.
5. Fence Posts for fabricated units. Wood posts shall be of sound quality hardwood with a minimum cross sectional area of 3.0 square inches. The length of the posts shall be a minimum of 36” long.
6. Wire fence for fabricated units. Wire fencing shall be a minimum of 14 gage with a maximum of 6 inch mesh opening.

C. Temporary Compost Filter Sock

1. Fabric
   a. Multi-filament polypropylene
   b. Photodegradable
   c. 12” Diameter
   d. Mesh opening = 3/8”
   e. Tensile strength = 44 psi
   f. Ultraviolet stability% original strength (ASTM G-155)= 100% at 1,000 Hr.
   g. Minimum functional longevity= 1 year

2. Compost filter media
   a. Organic matter content = 25%-100% Dry weight
   b. Organic portion= Fibrous and elongated
   c. PH=6.0-8.0
   d. Moisture content= 30%-60%
   e. Particle size= 100% passing a 1” screen and 10-15% passing a 3/8” screen.

f. Soluble salt concentration= 5.0 ds/m (mmhos/cm) Maximum

3. Compost infill.
   a. The compost infill shall be well decomposed (matured at least 3 months), weed-free, organic matter. it shall be aerobically composted, possess no objectionable odors, and contain less than 1%, by dry weight, of man-made foreign matter. the physical parameters of the compost shall meet the standards listed above. note all biosolids compost produced in new york state (or approved for importation) must meet NYS dec's 6 nycrr part 360 (solids waste management facilities) requirements. the part 360 requirements are equal to or more stringent than 40 cfr part 503 which ensure safe standards for pathogen reduction and heavy metals content. when using compost filter socks adjacent to surface water, the compost should have a low nutrient level.

D. Temporary drainage inlet protection:
   1. Paved areas
      a. Snake Bag manufactured by Sacramento Bag Manufacturing Company of Sacramento, California, or equal.
      b. Fiber roll – field constructed rolled tube of erosion control blanket, or BioD-Watl™ coir wattle as manufactured by RoLanka International, Inc. 55 Andrew Drive, Stockbridge, GA 30281, (800) 760-3215, or equal.
      c. Ultra DrainGuard™ oil and sediment model – Part No. 9217, as manufactured by P.E.P. Products, Branchburg, NJ, 1 (800) 407-3726, or equal.
   2. Non paved areas
      a. Silt fence as indicated in “Temporary Silt Fence” above.
      b. Stake material shall be standard 2 x 4 pressure treated wood or equivalent metal with a minimum length of 3 feet.

E. Temporary stabilized construction entrance:
   1. Geotextile fabric: Fabric woven from monofilaments of polypropylene: Mirafi 600X as manufactured by TenCate Geosynthetics, Pendergrass, GA, or equal. Material shall have a woven structure, appear on the current NYSDOT Approved List, Geosynthetics for Highway Construction, and be approved for stabilization and separation applications.
   2. Crushed stone: Clean 1” and/or 2” crushed stone.
      a. Crushed stone meeting NYSDOT 703-0201, #2 stone and or #1 stone.

F. Dust control
   1. Non-driving areas
      a. Vegetative cover see section 32 9200 TURF AND GRASSES
      b. Mulch
         1) Wood mulch, see section 32 9300 PLANTS
         2) Gravel mulch, Clean 2” crushed stone, meeting NYSDOT 703-0201, #2 stone
      c. Spray adhesives
         1) Earthbind™ 100, manufactured by Enviroad http://www.enviroad.com/index.shtml or equal.
   2. Driving areas
      a. Water
      b. Polymer additives.
         1) Earthbind™, Stabilizer, manufactured by Enviroad http://www.enviroad.com/index.shtml or equal.
      c. Barriers

1) Woven geotextiles - see Temporary stabilized construction area in this section
2) Stone - see Temporary stabilized construction area in this section

d. Wind breaks - see temporary silt fence in this section.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Prepare written report, endorsed by Installer, listing conditions detrimental to performance.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. The Proposer shall contact Rockland Green's Representative immediately if clarification or interpretation of the Contract Documents, or any other aspect of the project, is required.

B. Before commencing with other site operations including demolition, site clearing and earthwork –related activities, the Proposer shall erect site perimeter erosion control measures as required.

3.3 GENERAL INSTALLATION

A. In the event of conflict between these specification requirements and regulations by governmental agencies having jurisdiction, the more restrictive laws, rules, or regulations apply.

B. The Proposer's schedules and methods shall be consistent with the project erosion and sediment control plan as shown in the Contract Documents or as reviewed by Rockland Green's Representative.

C. To control erosion and sedimentation on the project site and to protect adjoining sites and watercourses, the Proposer shall take all necessary precautions including, but not limited to, the following:
1. The Proposer shall erect the site perimeter erosion control measures before commencing the demolition operation, site clearing or earthwork.
2. The Proposer shall limit the area of clearing and grubbing, excavation, borrow and embankment operations commensurate with their capability and progress in keeping the finish grading, mulching, seeding and other temporary and/or permanent control measures installed and maintained to the satisfaction of the Rockland Green's Representative.
3. In areas where soil disturbance has been temporarily or permanently ceased, temporary and/or permanent soil stabilization measures shall be installed and/or implemented within 7 days from the date the soil disturbance ceased.
4. Control dust by standard water spray methods. Road dust shall be controlled using water or other allowed materials.
5. Keep paved roads adjacent to the project site clean. Sweep frequently and do not allow soil and debris to accumulate.

6. Refer to the Erosion and Sediment Control Plan(s) and/or the project Stormwater Pollution Prevention Plan (SWPPP) for additional requirements.
7. All mulch placed atop permanent seeding on slopes steeper than 3:1 (run:rise) shall be anchored with a biodegradable rolled erosion control product installed according to manufacturer's directions.

3.4 INSTALLATION

A. Install all temporary sediment control practices per the current edition of the New York State Department of Environmental Conservation, New York State Standards and Specifications for Erosion and Sediment Control.

3.5 FIELD QUALITY CONTROL

A. Refer to section 01400 – QUALITY CONTROL

3.6 MAINTENANCE SERVICE

A. Maintenance Service: Beginning at start of construction, maintenance service shall include full maintenance by skilled employees of erosion and sediment controls Installer. Include weekly preventive maintenance, repair or replacement of worn or defective components, as required for proper operation.

B. Always maintain all temporary erosion control measures in proper working order during the construction period. They shall remain in place until the permanent surface treatments have been sufficiently established to prevent soil erosion and Rockland Green's Representative has authorized removal.
1. Check all erosion and sediment control practices for stability and operation following every ½ inch rainfall but in all cases at least once every week. Immediately make repairs as needed.
2. The Proposer shall be responsible for maintenance and inspection of erosion and sediment control and stormwater quality facilities for the duration of the project, including winter or other shutdowns.
3. Remove sediment from behind silt fences when the capacity has been reduced by 50%. Repair silt fences as necessary to maintain an effective barrier.
4. Clean out sediment traps when the capacity has been reduced by 50%.
5. Inspect check dams for stability and operation following every ½ inch rainfall, but in all cases at least once every week, remove accumulated sediment when capacity has been reduced by 50%.
    a. If erosion has occurred between structures, install a temporary layer of a rolled erosion control product, stone or other suitable material to stabilize that portion of the channel until permanent surface treatments are established and the stormwater collection system is in place.
6. Remove sediment from inlet protection devices when the storage capacity is reduced to 50% of the inlet protection device capacity.

3.7 CLEANUP & RESTORATION

A. Promptly remove soil and debris created by work described in this Section.

B. At the completion of the site work described in this Section, the site shall be left in a neat and orderly condition. Remove all resultant miscellaneous materials and debris from the site.

C. Turf areas, pavements and all other site amenities that were damaged during the work described in this Section shall be restored to their original condition prior to this construction at the Proposer's expense, and to Rockland Green's satisfaction.

D. When temporary erosion and sediment control practices are no longer needed as determined by Rockland Green's Representative and the agency of government having jurisdiction, the Proposer shall remove and return the area to a condition similar to that which existed before construction. Areas where temporary erosion and sediment control practices were located shall be graded with no obstruction to natural surface water flows or the proper functioning and access to the works of improvement installed. The Proposer shall exercise extreme care during the removal stages to minimize the loss of soil sediment and debris that was trapped during construction.

END OF SECTION

SECTION 32 9200

TURF AND GRASSES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
1. Hydroseeding.

1.2 DEFINITIONS

A. Finish Grade: Elevation of finished surface of planting soil.

B. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. Pesticides include insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. They also include substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.

C. Pests: Living organisms that occur where they are not desired or that cause damage to plants, animals, or people. Pests include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.

D. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth. See Section 32 9113 "Soil Preparation" and drawing designations for planting soils.

E. Subgrade: The surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil/reinforced turf soil is placed.

1.3 PREINSTALLATION MEETINGS

A. None

1.4 INFORMATIONAL SUBMITTALS

A. Certification of Grass Seed: From seed vendor for each grass-seed monostand or mixture, stating the botanical and common name, percentage by weight of each species and variety, and percentage of purity, germination, and weed seed. Include the year of production and date of packaging.

1. Certification of each seed mixture for turfgrass sod. Include identification of source and name and telephone number of supplier.

B. Product Certificates: For fertilizers, from manufacturer.

C. Pesticides and Herbicides: Product label and manufacturer's application instructions specific to Project.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Seed and Other Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of compliance with state and Federal laws, as applicable.

B. Bulk Materials:

1. Do not dump or store bulk materials near structures, utilities, walkways, and pavements, or on existing turf areas or plants.
2. Provide erosion-control measures to prevent erosion or displacement of bulk materials; discharge of soil-bearing water runoff; and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
3. Accompany each delivery of bulk materials with appropriate certificates.

1.6 FIELD CONDITIONS

A. Planting Restrictions: Plant during one of the following periods, unless authorized by Rockland Green. Coordinate planting periods with initial maintenance periods to provide required maintenance from date of planting completion.

1. Spring Planting: April 1 – May 30.
2. Fall Planting: August 16 – October 15.

B. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions.

PART 2 - PRODUCTS

2.1 SEED

A. Grass Seed: Fresh, clean, dry, new-crop seed complying with AOSA's "Rules for Testing Seeds" for purity and germination tolerances.

B. Seed Species:

1. Quality, State Certified: State-certified seed of grass species as listed below.
2. Sun and Partial Shade, Cool-Season Grass: Proportioned by weight as follows:

a. 50 percent Kentucky bluegrass (Poa pratensis).
b. 30 percent chewings red fescue (Festuca rubra variety).
c. 10 percent perennial ryegrass (Lolium perenne).
d. 10 percent redtop (Agrostis alba).

2.2 FERTILIZERS

A. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:

1. Composition:

a. 1 lb/1000 sq. ft. of actual nitrogen, 4 percent phosphorous, and 2 percent potassium, by weight.
b. Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing laboratory.

B. Slow-Release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:

1. Composition:

a. 20 percent nitrogen, 10 percent phosphorous, and 10 percent potassium, by weight.
b. Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing laboratory.

2.3 MULCHES

A. Nonasphaltic Tackifier: Colloidal tackifier recommended by fiber-mulch manufacturer for slurry application; nontoxic and free of plant-growth or germination inhibitors.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas to be planted for compliance with requirements and other conditions affecting installation and performance of the Work.

1. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.
2. Suspend planting operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.
3. Uniformly moisten excessively dry soil that is not workable, or which is dusty.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Protect structures; utilities; sidewalks; pavements; and other facilities, trees, shrubs, and plantings from damage caused by planting operations.

1. Protect adjacent and adjoining areas from hydroseeding and hydromulching overspray.
2. Protect grade stakes set by others until directed to remove them.

B. Install erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

3.3 HYDROSEEDING

A. Hydroseeding: Mix specified seed, commercial fertilizer, and fiber mulch in water, using equipment specifically designed for hydroseed application. Continue mixing until uniformly blended into homogeneous slurry suitable for hydraulic application.

1. Mix slurry with fiber-mulch manufacturer's recommended tackifier.
2. Spray-apply slurry uniformly to all areas to be seeded in a one-step process. Apply slurry at a rate so that mulch component is deposited at not less than 1500-lb/acre dry weight, and seed component is deposited at not less than the specified seed-sowing rate.
3. Spray-apply slurry uniformly to all areas to be seeded in a two-step process. Apply first slurry coat at a rate so that mulch component is deposited at not less than dry weight, and seed component is deposited at not less than the specified seed-sowing rate. Apply slurry cover coat of fiber mulch (hydromulching) at a rate of 1000 lb/acre.

3.4 CLEANUP AND PROTECTION

A. Promptly remove soil and debris created by work from paved areas.

B. Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of them off Rockland Green's property.

C. Erect temporary fencing or barricades and warning signs as required to protect newly planted areas from traffic. Maintain fencing and barricades throughout initial maintenance period and remove after plantings are established.

D. Remove nondegradable erosion-control measures after grass establishment period.

3.5 MAINTENANCE SERVICE

A. New Grass Maintenance Service: Provide full maintenance by skilled employees of landscape Installer. Begin maintenance immediately after seed and mulch is placed and continue until acceptable turf is established, but for not less than the following periods:

1. Seeded Turf: 60 days from date of planting completion.
2. When initial maintenance period has not elapsed before end of planting season, or if turf is not fully established, continue maintenance during next planting season.

END OF SECTION

SECTION 33 0527

MULTI-PLATE STEEL CULVERT

PART 1 - GENERAL

1.1 SUMMARY

A. This specification covers the design, manufacturing and installation of the Multi-Plate Steel Round Culvert structure detailed in the construction drawings.

B. Related Requirements:
1. Section 31 2310 Excavation
2. Section 31 2319 Dewatering
3. Section 31 2325 Backfill
4. Section 31 2500 Erosion and Sediment Controls

1.2 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

A. Shop Drawings: Include plans, elevations, sections, steel layout, design calculations and details. The Proposer shall be responsible for verification of all field dimensions prior to fabrication. Shop drawings showing layout of sections and steel reinforcement and design calculations shall be submitted to the engineer. Shop drawings and design calculations shall be stamped by a NY State Licensed Professional Engineer.

B. Manufacturers:

1. Contech Engineered Solutions LLC
2. U.S. Steel
3. Wheatland Tube; Zekelman Industries
4. Or approved equivalent

1.4 QUALITY ASSURANCE

A. All manufacturing processes shall be performed in the United States of America at a common location.

B. All raw materials shall be domestic and certification of origin in the United States of America.

C. All raw materials shall be traceable and certified by the mill for material composition and physical properties.

D. Manufacturers must have at least fifteen (15) years of experience fabricating equal or larger type structures.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Support units during shipment on nonstaining shock-absorbing material in same position as during storage.

B. Store units with adequate bracing and protect units to prevent contact with soil, to prevent staining, and to prevent cracking, distortion, warping or other physical damage.

1. Store units with dunnage across full width of each bearing point unless otherwise indicated.
2. Place adequate dunnage of even thickness between each unit.
3. Place stored units so identification marks are clearly visible, and units can be inspected.

C. Handle and transport units in a manner that avoids excessive stresses that cause cracking or damage.

D. Lift and support units only at designated points indicated on Shop Drawings.

E. Manufacturers:

1. Contech Engineered Solutions LLC
2. U.S. Steel
3. Wheatland Tube; Zekelman Industries

PART 2 - PRODUCTS

A. Multi-Plate round culvert to be a circular 10 Gauge pipe with open ends. The Multi-Plate galvanized structural plate shall have 6 in x 2 in annular corrugations Multi-Plate galvanized steel structural plate shall consist of plate and appurtenant items as shown on the plans and shall conform to the requirement of the current edition of AASHTO M167 or ASTM A761 and Table 1

Table 1 – MULTI-PLATE – 6 x 2 Corrugated Structural Plate Section Properties

Gauge	Nominal Thickness (in)	Uncoated Thickness (in)	Moment of Inertia (in^4/in)	Section Modulus (in^3/in)	Radius of Gyration (in)	Area of Section (in^2/ft)
10	0.138	0.1345	0.0782	0.0733	0.684	2.003

1. Hot Dip Galvanizing: Galvanizing shall conform to AASHTO M111 or ASTM A123
2. Fasteners: Nuts and bolts shall conform to AASHTO M232 and M291 or ASTM A449, Type 1 (bolts) and A563, Grade C (nuts)., Galvanized per ASTM A153
3. Bituminous (Asphalt) Coating: If specified, bituminous coating shall conform to ASTM A849 or AASHTO M243.

B. Internal Dimensions:

1. Diameter: 7 feet.
2. Length: 56.5 feet.

C. Thickness to be determined by manufacturer.

D. Codes and Standards:
   1. The Culvert System shall meet the following codes and standards:
      a. AASHTO Load Factor Design Method and ASTM A796 Standard Practice for Structural Design of Corrugated Steel Pipe, Pipe-Arches and Arches for Storm and Sanitary Sewers and Other Buried Applications.
      b. Loading Data:
         1) Truck Axle Load: HS25.
         2) Earth Cover: Minimum 2 feet; Maximum 15 feet
         3) Depth of Water in Box Section: Equal to inside height of box.

PART 3 - INSTALLATION

A. The structure shall be assembled in accordance with the shop drawings and plate layout provided by the manufacturer. Bolts shall be tightened to an applied torque between 100 and 300 ft-lbs

B. Installation: The structure shall be installed in accordance with AASHTO Standard Specifications for Highway Bridges Section 26 or ASTM A807, the project plans and specifications, and the manufacturer's recommendations.

C. The structure shall be assembled in accordance with the shop drawings and plate layout provided by the manufacturer. Bolts shall be tightened to an applied torque between 100 and 300 ft-lbs.

D. Installation: The structure shall be installed in accordance with AASHTO Standard Specifications for Highway Bridges Section 26 or ASTM A807, the project plans and specifications, and the manufacturer's recommendations.

E. The Proposer shall provide footings as required per the project plans and specifications.

F. The Proposer shall provide proper bedding and backfill to avoid distortion that may create undesirable stresses in the structure and/or settlement of the roadway. The bedding shall be free of rock formations, protrusions, frozen material, or organic material.

END OF SECTION

APPENDIX E

DRAWINGS

J:\20098 Rockland Green\Cad\Working Drawings\West Nyack\Yard Waste Survey\Culvert Replacement\C-001_Overall Site Plan (Demo).dwg Date Printed: 4/15/2024 5:42:41 PM

Rockland Green
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Recycle
Recover

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PROJECT TITLE: **RFP 2024-02: REPLACEMENT OF AN EXISTING STREAM CULVERT**				EDR JOB#: **20098**
DRAWING TITLE: **LOCATION MAP**				DRAWING NUMBER: **C-000**
SCALE: **1"=600'**	DRAWN BY: **JR**	CHECKED BY: **JC**	DATE: **APRIL 15, 2024**	

GENERAL NOTES

1. THE CONTRACTOR SHALL CONTACT OWNER'S REPRESENTATIVE IMMEDIATELY IF CLARIFICATION OR INTERPRETATION OF THE CONTRACT DOCUMENTS, OR ANY OTHER ASPECTS OF THE PROJECT, IS REQUIRED.
2. THE CONTRACTOR SHALL APPLY FOR ALL REQUIRED PERMITS AND PAY ALL FEES REQUIRED BY GOVERNING AGENCIES HAVING JURISDICTION OVER THE FACILITIES AND NATURAL FEATURES FOUND ON SITE.
3. SITE ACCESS IS RESTRICTED TO THE LOCATIONS SPECIFICALLY DESIGNATED ON PLAN.
4. THE CONTRACTOR SHALL ADHERE TO ALL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), STATE AND LOCAL SAFETY REGULATIONS.
5. PROMPTLY REPORT TO THE OWNER'S REPRESENTATIVE ANY DISCREPANCIES FOUND ON THE SITE OR IN THE CONTRACT DOCUMENTS FOR REVIEW AND RESOLUTION BEFORE PROCEEDING WITH THE WORK IN THE AREA IN QUESTION. PROVIDE FIELD INFORMATION SPECIFIC TO THE DISCREPANCY TO EXPEDITE RESOLUTION.
6. AVOID ANY DISTURBANCE OF EXISTING VEGETATION ON THE SITE EXCEPT THE VEGETATION SPECIFICALLY DESIGNATED TO BE REMOVED.
7. TAKE ALL PRECAUTIONS NECESSARY TO PREVENT EROSION AND CONTROL SEDIMENTATION AS REQUIRED BY THE AGENCIES OF GOVERNMENT HAVING JURISDICTION.
8. THIS PROJECT DOES NOT REQUIRE COVERAGE UNDER THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES, PERMIT NO. GP-0-20-001 (GENERAL PERMIT).
9. THE BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION SHOWN ON THIS PLAN WAS PREPARED BY ATZL, NASHER & ZIGLER P.C AND DATED APRIL 18, 2020.
10. NO SUBSURFACE SOIL INFORMATION WAS OBTAINED ON THIS SITE FOR THIS CONSTRUCTION.
11. THE START OF ANY ON-SITE CONSTRUCTION INCLUDING STRIPPING TOPSOIL, REMOVING CUT OR PLACING FILL MATERIAL ESTABLISHES THAT THE CONTRACTOR ACCEPTS THE CONTRACT DOCUMENTS AS ACCURATELY REPRESENTING THE EXISTING SITE CONDITIONS.
12. ALL FACILITIES TO BE CONSTRUCTED OR INSTALLED SHALL COMPLY WITH ALL SECTIONS AND LATEST REVISIONS OF THE REQUIREMENTS OF ALL AGENCIES OF GOVERNMENT HAVING JURISDICTION.
13. EXISTING UTILITIES (LOCATIONS, SIZES AND INVERT ELEVATIONS) SHOWN ON THE PLANS HAVE BEEN PLOTTED FROM FIELD SURVEYS AND RECORDED MAPS AND SHALL BE INTERPRETED AS APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE EXISTING INFORMATION AT LOCATIONS IN CLOSE PROXIMITY TO UTILITIES UNDER CONSTRUCTION.
14. LONG LEAD AND SCARCE MATERIALS SHALL BE ORDERED IN A TIMELY MANNER TO PREVENT AVOIDABLE CONSTRUCTION DELAYS.
15. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE CAUSED BY CONSTRUCTION TO EXISTING UTILITIES AND FACILITIES WHICH ARE NOT INCLUDED AS PART OF THE INTENDED WORK. THE CONTRACTOR SHALL REPAIR, RESTORE AND/OR REPLACE ALL DAMAGE TO THE SATISFACTION OF OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST TO THE OWNER.
16. THE CONTRACTOR SHALL RESTORE ALL DISTURBED SURFACES TO ORIGINAL OR BETTER CONDITION INCLUDING 6 INCHES OF TOPSOIL, SEED, FERTILIZER, AND MULCH. OTHER SURFACES SHALL BE RESTORED AS SHOWN ON THE DETAILS.
17. THE OWNER'S REPRESENTATIVE SHALL REVIEW THE LAYOUT OF ALL PAVEMENTS, UTILITIES, AND PLANTINGS IN THE FIELD BEFORE INSTALLATION. THE CONTRACTOR SHALL SCHEDULE ADVANCED NOTIFICATION TO THE OWNER'S REPRESENTATIVE TO FACILITATE TIMELY REVIEW.
18. TOP DRESS, SEED AND MULCH ALL LAWN AREAS DISTURBED BY THE CONSTRUCTION AS SOON AS THE FINISHED GRADING OPERATION IS COMPLETED.
19. ADJUST THE RIM ELEVATIONS OF EXISTING UTILITY STRUCTURES SCHEDULED TO REMAIN TO BE FLUSH WITH THE FINISHED GRADE ELEVATIONS.
20. THE CONTRACTOR IS RESPONSIBLE FOR HANDLING, CUTTING AND DISPOSAL OF ALL ASBESTOS CEMENT (AC) PIPE TO BE REMOVED OR CUT IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
21. MAINTAIN AN ADEQUATE SUPPLY OF EROSION AND SEDIMENT CONTROL MATERIALS AT THE CONSTRUCTION SITE AT ALL TIMES TO BE USED FOR URGENT SITUATIONS, SUCH AS UNEXPECTED HEAVY RAINFALL.
22. MAINTENANCE AND REPAIR OF ALL EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM AND FUEL TANK DRAIN DOWN, DEGREASING OPERATIONS AND OTHER ACTIVITIES THAT MAY RESULT IN THE ACCIDENTAL RELEASE OF CONTAMINANTS MUST BE CONDUCTED OFF-SITE. ACCIDENTAL SPILLS MUST BE CLEANED UP IMMEDIATELY AND CONTAMINANTS DISPOSED OF PROPERLY.
23. THE CONTRACTOR SHALL ULTIMATELY BE RESPONSIBLE FOR LOCATING SOIL AND EXCESS EXCAVATED EARTH STOCK PILES AT A STABLE LOCATION. STOCK PILES SHALL BE STABILIZED PER THE DETAIL.
24. CONSTRUCTION ROUTES SHALL BE STABILIZED PER THE NYS STANDARDS FOR EROSION AND SEDIMENT CONTROL, AS NECESSARY BASED ON SITE CONDITIONS.
25. THE CONTRACTOR IS RESPONSIBLE FOR THE PLACEMENT, DESIGN, APPROVAL, AND OPERATION OF THE CONCRETE WASHOUTS. THE CONCRETE WASHOUTS SHALL BE INSTALLED A MINIMUM OF 50' FROM STORM DRAINAGE OR SURFACE WATER. CONCRETE WASTE MATERIAL SHALL NOT BE ALLOWED TO ESCAPE FROM THE CONCRETE WASHOUT.
26. SOLID WASTE SHALL BE STORED IN COVERED DUMPSTERS OR OTHER APPROPRIATE CONTAINERS. WASTE IS TO BE DISPOSED OF REGULARLY AND PROPERLY IN ACCORDANCE WITH LOCAL, STATE, AND/OR FEDERAL REGULATIONS.
27. THE EROSION AND SEDIMENT CONTROLS ARE SHOWN FOR A CONDITION WHEN ALL WORK IS OCCURRING SIMULTANEOUSLY. ACTUAL INSTALLATIONS SHALL BE ADJUSTED BASED ON CURRENT CONSTRUCTION ACTIVITY AND SITE CONDITIONS.

EROSION & SEDIMENT CONTROL PLAN NOTES

1. DISTURBED AREAS SHALL BE AS SMALL AS PRACTICAL, AND SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED .
2. EROSION CONTROL MEASURES INCLUDING BUT NOT LIMITED TO A STABILIZED CONSTRUCTION ENTRANCE, STABILIZED CONSTRUCTION STAGING AREA AND SILT FENCE SHALL BE THE FIRST ITEMS CONSTRUCTED WHEN SITE WORK BEGINS, AND MUST BE COMPLETELY FUNCTIONAL BEFORE DOWN SLOPE LAND DISTURBANCE BEGINS.
3. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND OPERATED IN ACCORDANCE WITH THEIR DESIGN. ANY NEED FOR REPAIRS OR MAINTENANCE SHALL BE ADDRESSED IMMEDIATELY TO ASSURE THE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION THROUGHOUT THE CONSTRUCTION PROCESS.
4. THE CONTRACTOR SHALL TAKE THE NECESSARY MEASURES, INCLUDING WATER SPRINKLING TO PROVIDE DUST CONTROL DURING CONSTRUCTION.
5. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL PRACTICES, AS SHOWN ON THE DETAIL SHEETS, AS NECESSARY DURING THE COURSE OF CONSTRUCTION AT NO COST TO THE OWNER.
6. THE CONTRACTOR SHALL INSTALL AND MAINTAIN THE STABILIZED CONSTRUCTION ENTRANCE TO PREVENT THE TRANSPORT OF SEDIMENT ONTO PUBLIC ROADS AND AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
7. IF SEDIMENT IS TRANSPORTED ONTO ROADS, IT MUST BE REMOVED FROM THE ROAD SURFACE ON A DAILY BASIS AND PRIOR TO RAIN EVENTS. SEDIMENT SHALL BE DISPOSED OF IN A MANNER THAT PREVENTS CONTAMINATION OF STORMWATER AND SURFACE WATER.
8. VEGETATION SHALL BE PROTECTED OUTSIDE OF THE LIMITS OF DISTURBANCE.
9. ALL EXISTING TOPSOIL SHALL BE STOCKPILED TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS FOR THE ESTABLISHMENT OF VEGETATION.
10. FOR INSTALLED SEDIMENT CONTROL PRACTICES, REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS WHEN THE ACCUMULATION HAS REACHED A DEPTH OF 25% OF THE HEIGHT AND/OR VOLUME OF THE PRACTICE'S CAPACITY, OR MORE FREQUENTLY AS REQUIRED BY THE DETAILS.
11. THE CONTRACTOR SHALL PROVIDE PORTABLE HANDWASHING AND SANITARY FACILITIES, THESE FACILITIES SHALL BE SERVICED REGULARLY BY AN APPROVED SERVICE PROVIDER.

DEMOLITION PLAN NOTES

1. UNLESS INDICATED "REMOVE AND SALVAGE" OR "REMOVE AND REUSE," ALL ITEMS INDICATED "REMOVE" SHALL BE DEMOLISHED, HAULED OFF-SITE AND DISPOSED OF IN STRICT COMPLIANCE WITH THE REQUIREMENTS OF ALL AGENCIES OF GOVERNMENT HAVING JURISDICTION.
2. EXERCISE ALL REASONABLE CARE IN REMOVING AND HANDLING EXISTING ON-SITE MATERIALS INDICATED FOR SALVAGE TO THE OWNER OR FOR REUSE ON THE SITE.
3. PERFORM WORK AND PROVIDE ALL MATERIALS NECESSARY TO DISCONNECT OR RELOCATE EXISTING UTILITIES. COORDINATE WITH THE RESPECTIVE UTILITY COMPANIES FOR SHUTOFF AND RECONNECTION OF ACTIVE SERVICES. RECORD EXISTING UTILITY TERMINATION POINTS BEFORE DISCONNECTION.
4. WHERE EXISTING PAVEMENT IS TO BE REMOVED, SAW CUT THE PAVEMENT EDGE TO PROVIDE A TRUE, NEAT AND CLEAN EDGE AGAINST WHICH TO ABUT WORK OF THIS CONTRACT.
5. ALL ABANDONED PIPES THAT ARE NOT REMOVED ARE TO BE FILLED WITH CONTROLLED LOW STRENGTH CONCRETE.
6. THE CONTRACTOR IS PERMITTED TO SALVAGE ALL MATERIALS AND EQUIPMENT FROM THE DEMOLITION WORK EXCEPT FOR MATERIALS AND EQUIPMENT SHOWN OR SPECIFIED TO BE REMOVED AND DELIVERED TO A LOCATION TO BE NAMED BY THE OWNER'S REPRESENTATIVE.
7. ALL SALVAGED MATERIALS AND EQUIPMENT SHALL BE TAKEN OFF-SITE IMMEDIATELY UPON REMOVAL. NO ON-SITE STORAGE IS ALLOWED. NO RE-USE OF SALVAGED MATERIALS IS ALLOWED IN THIS CONTRACT. NO SALE OF SALVAGED ITEMS IS ALLOWED ON THE PROJECT SITE.

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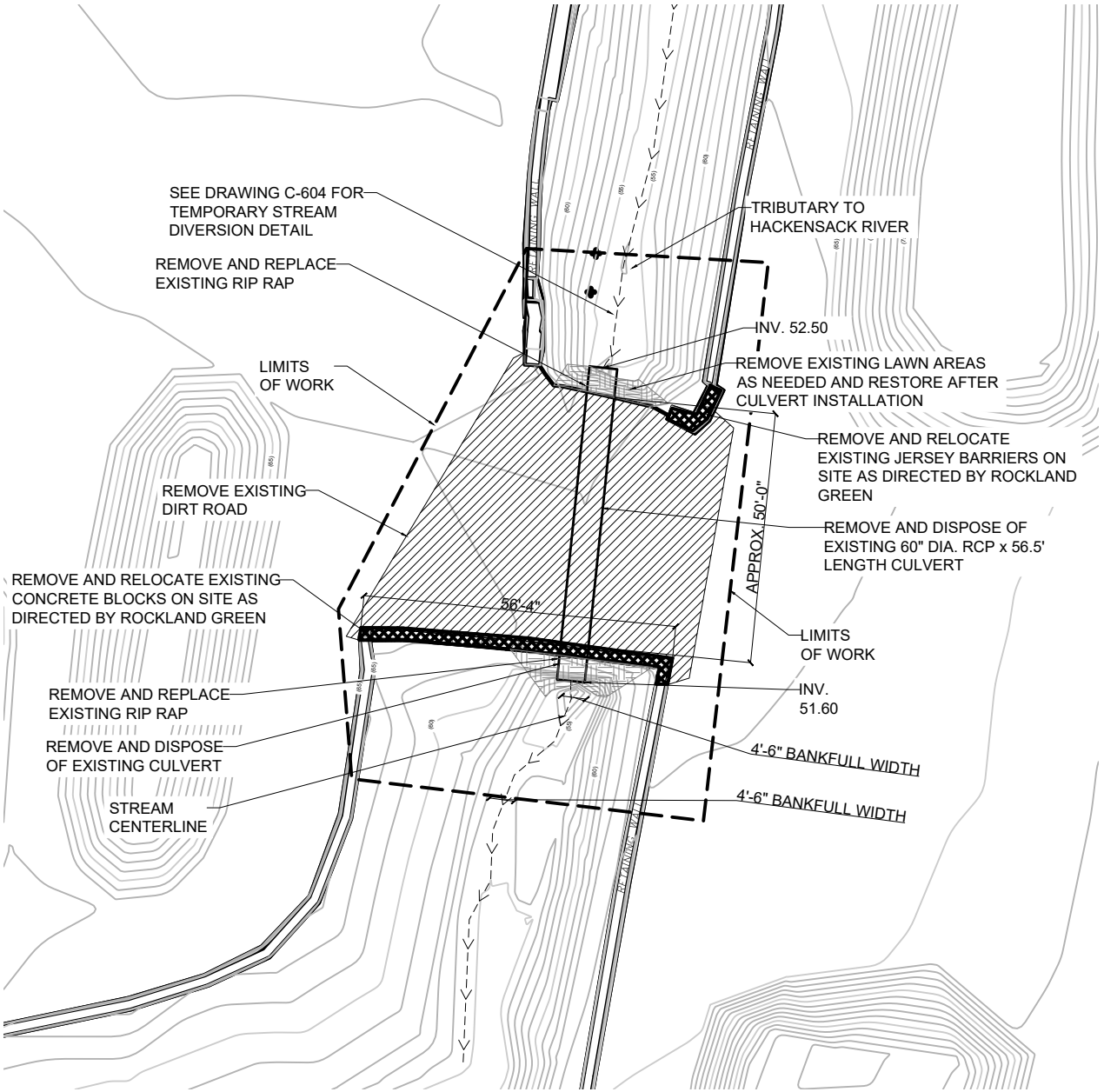
PROJECT TITLE: **RFP 2024-02: REPLACEMENT OF AN EXISTING STREAM CULVERT**				EDR JOB#: **20098**
DRAWING TITLE: **NOTES**				DRAWING NUMBER: **C-001**
SCALE: **1"=30'**	DRAWN BY: **GJ**	CHECKED BY: **JC**	DATE: **APRIL 15, 2024**	

J:\20098 Rockland Green\Cad\Working Drawings\West Nyack\Yard Waste Survey\Culvert Replacement\C-001_Overall Site Plan (Demo).dwg Date Printed: 4/15/2024 5:42:54 PM



DEMOLITION PLAN LEGEND

SYMBOL	ITEM
	STREAM CENTERLINE
	REMOVE AND RELOCATE EXISTING CONCRETE BLOCKS
	REMOVE EXISTING DIRT ROAD
	REMOVE EXISTING LAWN AREA
	REMOVE AND REPLACE EXISTING RIP RAP

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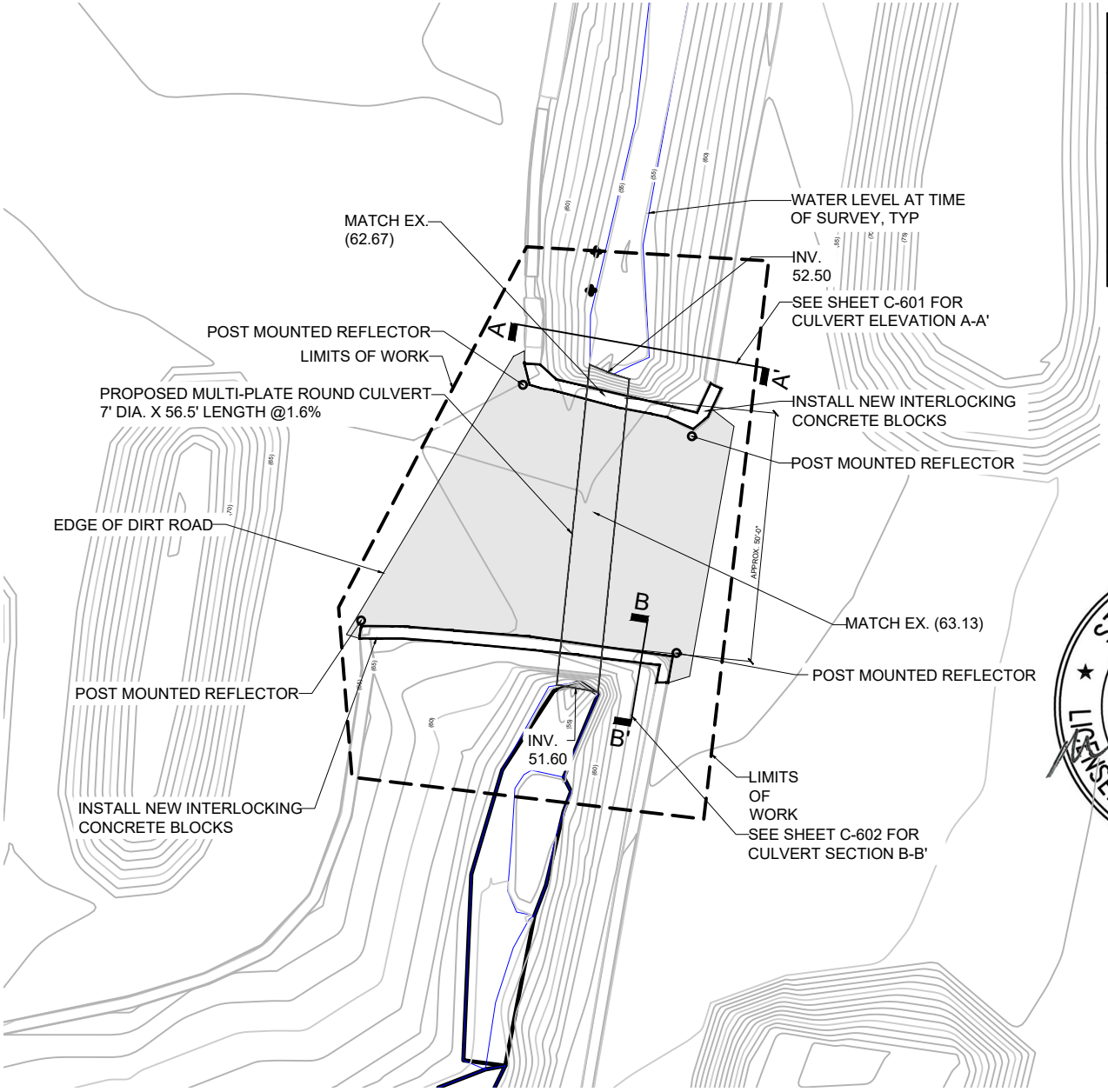
PROJECT TITLE: **RFP 2024-02: REPLACEMENT OF AN EXISTING STREAM CULVERT**				EDR JOB#: **20098**
DRAWING TITLE: **EXISTING CONDITIONS & DEMOLITION PLAN**				DRAWING NUMBER: **C-002**
SCALE: **1"=30'**	DRAWN BY: **JR**	CHECKED BY: **JC**	DATE: **APRIL 15, 2024**	



LAYOUT LINE LEGEND

SYMBOL	ITEM
	EDGE OF DIRT ROAD
	INSTALL NEW INTERLOCKING CONCRETE BLOCKS
	INSTALL AGGREGATE DRIVE
	PROPOSED CULVERT

NOTES:

1. PROPOSED CULVERT SIZED TO MEET 1.25 X BANKFULL WIDTH AND PASS THE 50-YEAR, 24-HOUR STORM EVENT.
2. SEE C-601 FOR CULVERT EMBEDMENT DETAILS.
3. PROVIDE TEMPORARY STREAM DIVERSION DURING CONSTRUCTION.

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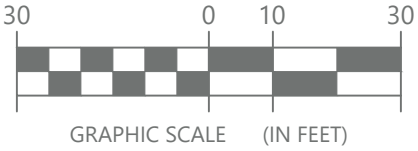

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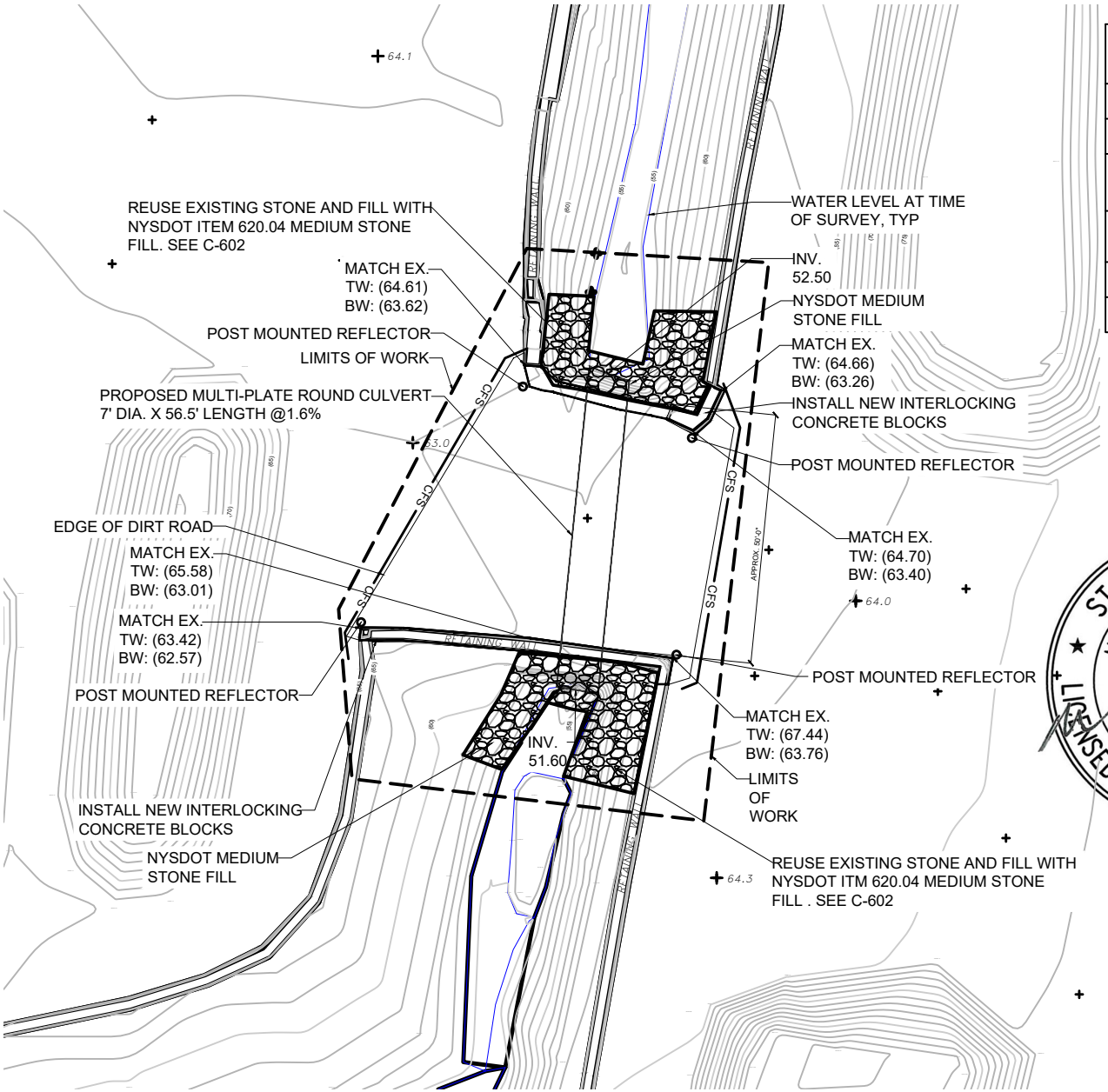
PROJECT TITLE: **RFP 2024-02: REPLACEMENT OF AN EXISTING STREAM CULVERT**				EDR JOB#: **20098**
DRAWING TITLE: **LAYOUT PLAN**				DRAWING NUMBER: **C-101**
SCALE: **1"=30'**	DRAWN BY: **JR**	CHECKED BY: **JC**	DATE: **APRIL 15, 2024**	



EROSION & SEDIMENT CONTROL PLAN LEGEND

SYMBOL	ITEM
	EDGE OF DIRT ROAD
	INSTALL NEW INTERLOCKING CONCRETE BLOCKS
	DUMPED RIP RAP
	PROPOSED CULVERT
CFS	COMPOSTE FILTER SOCK

NOTES:

1. SEE C-601 FOR CULVERT EMBEDMENT DETAILS.
2. PROVIDE TEMPORARY STREAM DIVERSION DURING CONSTRUCTION.

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GRAPHIC SCALE (IN FEET)

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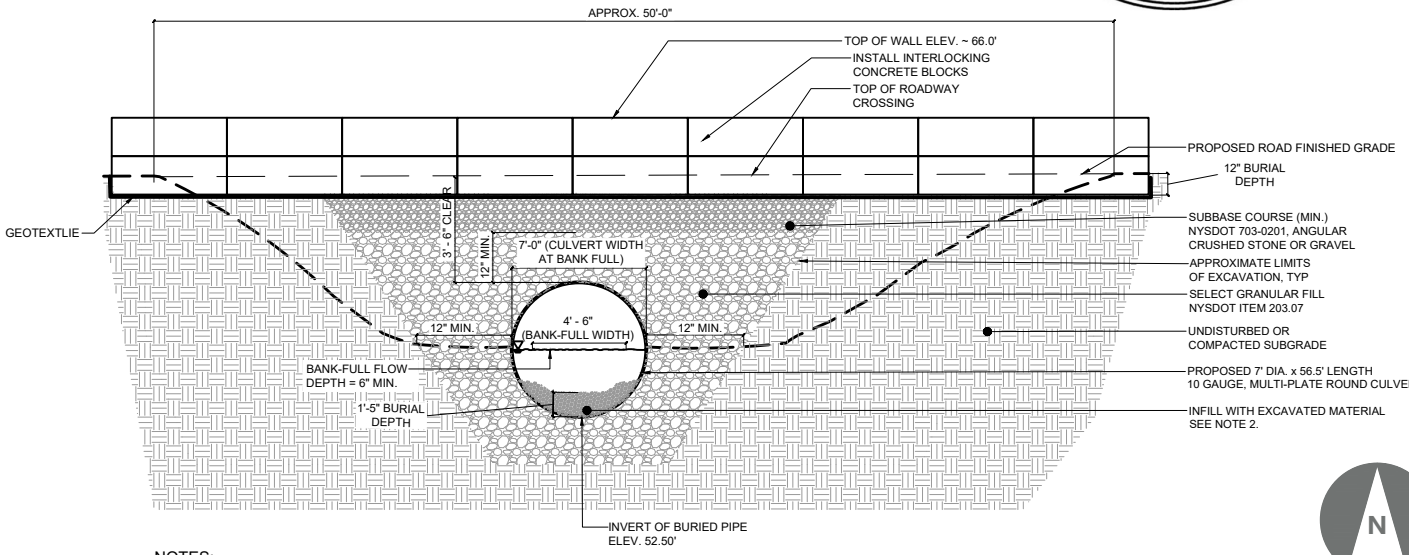
PROJECT TITLE: **RFP 2024-02: REPLACEMENT OF AN EXISTING STREAM CULVERT**				EDR JOB#: **20098**
DRAWING TITLE: **ERIOSION & SEDIMENT CONTROL PLAN**				DRAWING NUMBER: **C-102**
SCALE: **1"=30'**	DRAWN BY: **JR**	CHECKED BY: **JC**	DATE: **APRIL 15, 2024**	

EXISTING CULVERT
UPSTREAM RIP-RAP

EXISTING CULVERT
DOWNSTREAM RIP-RAP



NOTES:

1. CULVERT TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
2. CONTRACTOR SHALL INFILL PIPE TO A DEPTH OF 1'-5" WITH EXCAVATED SOIL FROM THE EXISTING CHANNEL PER UNITED STATES ARMY CORPS OF ENGINEERS (USACE) REQUIREMENTS.
3. EXCAVATION OF SIDE SLOPES SHALL BE IN ACCORDANCE WITH OSHA GUIDEILINES. IF THERE IS INTERFERENCE WITH A (OSHA) SAFE SLOPE, THEN THE CONTRACTOR SHALL PROVIDE AN OSHA APPROVED EXCAVATION SUPPORT SYSTEM.

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GRAPHIC SCALE (IN FEET)

CROSS SECTION A-A'

Scale: 1" = 10'-0"

SEE SHEET C-101 FOR LOCATION

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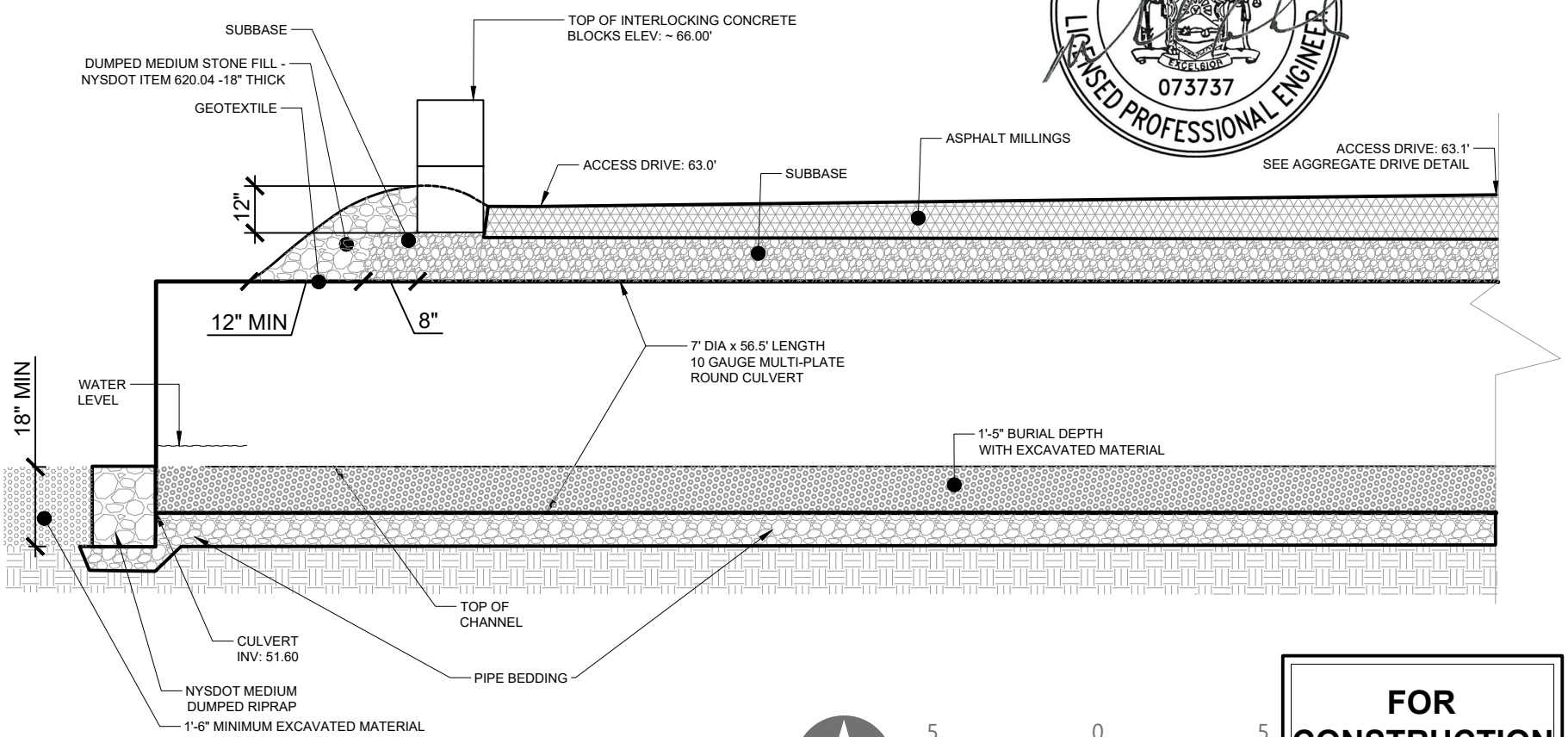
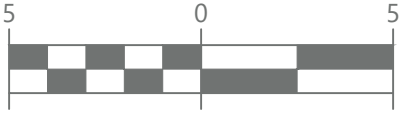
DRAWING TITLE: **CROSS SECTION DETIAL**				DRAWING NUMBER: **C-601**
SCALE: **1"=10'**	DRAWN BY: **JR**	CHECKED BY: **JC**	DATE: **APRIL 15, 2024**	





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CROSS SECTION B-B'

Scale: 1" = 5'-0"

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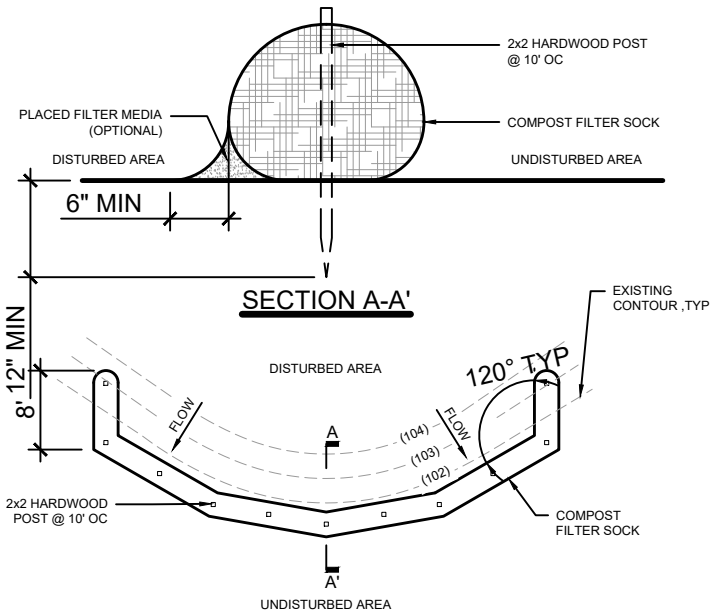
PROJECT TITLE: **RFP 2024-02: REPLACEMENT OF AN EXISTING STREAM CULVERT**				EDR JOB#: **20098**
DRAWING TITLE: **LONGITUDINAL SECTION DETAIL**				DRAWING NUMBER: **C-602**
SCALE: **1"=5'**	DRAWN BY: **JR**	CHECKED BY: **JC**	DATE: **APRIL 15, 2024**	



PLAN

NOTE:

1. COMPOST FILTER SOCKS SHALL BE PLACED ON THE CONTOUR WITH BOTH TERMINAL ENDS OF THE SOCK EXTENDED 8 FEET UPSLOPE AT A 45° ANGLE TO PREVENT BYPASS FLOW.
2. DIAMETERS DESIGNED FOR USE SHALL BE 12"-32".
3. THE FLAT DIMENSION OF THE SOCK SHALL BE AT LEAST 1.5 TIMES THE NOMINAL DIAMETER.
4. THE MAXIMUM SLOPE LENGTH (IN FEET) ABOVE A COMPOST FILTER SOCK SHALL NOT EXCEED THE FOLLOWING LIMITS:
5. THE COMPOST INFILL SHALL BE WELL DECOMPOSED (MATURED AT LEAST 3 MONTHS), WEED-FREE, ORGANIC MATTER. IT SHALL BE AEROBICALLY COMPOSTED, POSSESS NO OBJECTIONABLE ODORS, AND CONTAIN LESS THAN 1%, BY DRY WEIGHT, OF MAN-MADE FOREIGN MATTER. THE PHYSICAL PARAMETERS OF THE COMPOST SHALL MEET THE STANDARDS LISTED IN TABLE 5.2-COMPOST FILTER MEDIA STANDARDS TABLE*. NOTE ALL BIOSOLIDS COMPOST PRODUCED IN NEW YORK STATE (OR APPROVED FOR IMPORTATION) MUST MEET NYS DEC'S 6 NYCRR PART 360 (SOLIDS WASTE MANAGEMENT FACILITIES) REQUIREMENTS. THE PART 360 REQUIREMENTS ARE EQUAL TO OR MORE STRINGENT THAN 40 CFR PART 503 WHICH ENSURE SAFE STANDARDS FOR PATHOGEN REDUCTION AND HEAVY METALS CONTENT. WHEN USING COMPOST FILTER SOCKS ADJACENT TO SURFACE WATER, THE COMPOST SHOULD HAVE A LOW NUTRIENT VALUE.
6. THE COMPOST FILTER SOCK FABRIC MATERIAL SHALL MEET THE MINIMUM SPECIFICATIONS GIVEN IN TABLE 5.3-COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS TABLE*.
7. COMPOST FILTER SOCKS SHALL BE ANCHORED IN EARTH WITH 2x2 WOODEN STAKES DRIVEN 12" INTO THE SOIL ON 10 FOOT CENTER ON THE CENTERLINE OF THE SOCK. ON UNEVEN TERRAIN, EFFECTIVE GROUND CONTACT CAN BE ENHANCED BY THE PLACEMENT OF A FILLET OR FILTER MEDIA ON THE DISTURBED AREA SIDE OF THE COMPOST SOCK.
8. ALL SPECIFIC CONSTRUCTION DETAILS AND MATERIAL SPECIFICATIONS SHALL APPEAR ON THE EROSION AND SEDIMENT CONTROL CONSTRUCTIONS DRAWINGS WHEN COMPOST FILTER SOCKS ARE INCLUDED IN THE PLAN.

*TABLE FROM THE 2016 NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.

TABLE 1 - MAXIMUM SLOPE LENGTH ABOVE COMPOST FILTER SOCK (FEET)

DIA (IN)	SLOPE %						
	2	5	10	20	25	33	50
8	225	200	100	5	20	-	-
12	250	225	125	65	50	40	25
18	275	250	150	70	55	45	30
24	350	275	200	130	100	60	35
32	450	325	275	150	120	75	50

TABLE 2 - COMPOST FILTER MEDIA STANDARDS

ORGANIC MATTER CONTENT	25% - 100% DRY WEIGHT
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	6.0 - 8.0
MOISTURE CONTENT	30% - 60%
PARTICLE SIZE	100% PASSING A 1" SCREEN AND 10-50% PASSING A 3/8" SCREEN
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) MAXIMUM

TABLE 3 - COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS

MATERIAL TYPE	3 MIL HDPE	5 MIL HDPE	5 MIL HDPE	MILTI-FILAMENT POLYPROPYLENE	HEAVY DUTY MILTI-FILAMENT POLYPROPYLENE
MATERIAL CHARACTERISTICS	PHOTODEGRAD-ABLE	PHOTODEGRAD-ABLE	BIODEGRAD-ABLE	PHOTODEGRAD-ABLE	PHOTODEGRAD-ABLE
SOCK DIAMETERS	12", 18"	12", 18", 24", 32"	12", 18", 24", 32"	12", 18", 24", 32"	12", 18", 24", 32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	1/8"
TENSILE STRENGTH		26 PSI	26 PSI	44 PSI	202 PSI
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 HR.	23% AT 1000 HR.		100% AT 1000 HR.	100% AT 1000 HR.
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS

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1 C-603 **COMPOST FILTER SOCK**

Scale: NTS

TEMPORARY

EDR a better environment
Environmental Design & Research,
Landscape Architecture, Engineering & Environmental Services, D.P.C.
217 Montgomery Street, Suite 1100
Syracuse, New York 13202
P. 315.471.0688

PROJECT TITLE: **RFP 2024-02: REPLACEMENT OF AN EXISTING STREAM CULVERT**

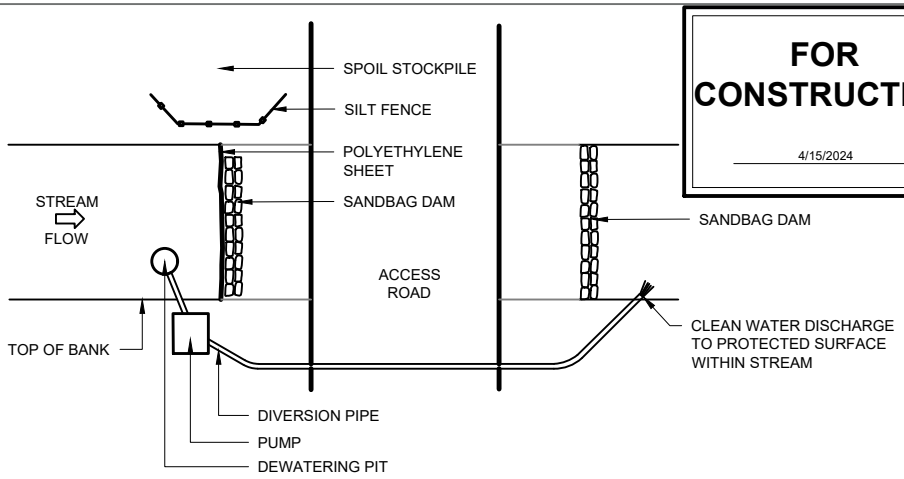
EDR JOB#: **20098**

DRAWING TITLE: **DETAILS**

DRAWING NUMBER: **C-603**

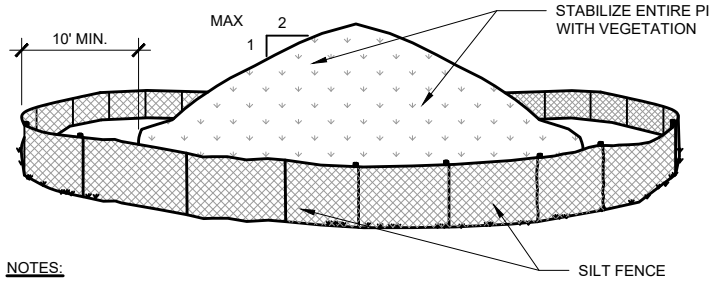
SCALE: **1"=5'** | DRAWN BY: **JR** | CHECKED BY: **JC** | DATE: **APRIL 15, 2024**

FOR CONSTRUCTION
4/15/2024



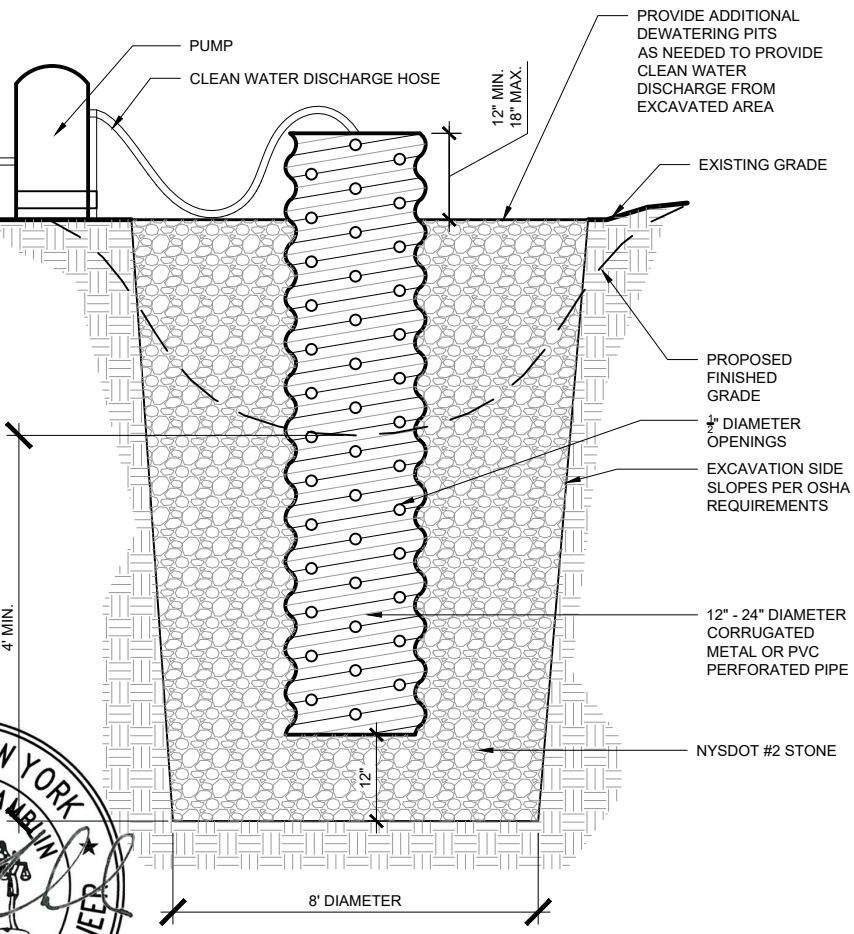
NOTES:
1. IF PUMPING IS REQUIRED FROM THE WORK AREA, THE PUMP OUTLET HOSE SHALL DISCHARGE TO AN APPROVED SEDIMENT TRAPPING DEVICE.
2. CONTRACTOR SHALL SUBMIT DETAILS OF THE TEMPORARY STREAM DIVERSION IN ACCORDANCE WITH THE DELEGATED DESIGN REQUIREMENTS FOR DEWATERING, INCLUDING LAYOUT, DESIGN CRITERIA, DIMENSIONS, PUMP SIZING, CONTAINMENT SIZES, SEDIMENT TRAP, AND ALL RELATED DIVERSION CONTROL DEVICES AND MATERIALS.

1 TEMPORARY STREAM DIVERSION
C-604 Scale: NTS



NOTES:
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1. MAXIMUM HEIGHT SHALL BE 12 FEET.
3. EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, INSTALLED PER CORRESPONDING DETAIL, THEN STABILIZED WITH ANNUAL GRAIN (SEED & MULCH) WITHIN 3 DAYS.
4. A PERIMETER DIKE/SWALE SHALL BE LOCATED UP-SLOPE OF THE TOPSOIL STOCKPILE TO DIVERT STORMWATER AROUND THE STOCKPILE.
5. LOCATION OF STOCKPILES SHALL BE COORDINATED WITH ROCKLAND GREEN

2 STABILIZED SOIL STOCKPILE
C-604 Scale: NTS TEMPORARY



SECTION
NTS

NOTES:
1. PIT DIMENSIONS ARE VARIABLE.
2. THE STANDPIPE SHOULD BE CONSTRUCTED BY PERFORATING A 12-24" DIAMETER CORRUGATED OR PVC PIPE.
3. A BASE OF NYSDOT NO. 2 OR EQUIVALENT AGGREGATE SHOULD BE PLACED IN THE PIT TO A DEPTH OF 12". AFTER INSTALLATION THE STANDPIPE, THE PIT SURROUNDING THE STANDPIPE SHOULD BE BACKFILLED WITH NYSDOT NO. 2 OR EQUIVALENT AGGREGATE.
4. THE STANDPIPE SHOULD EXTEND 12-18" ABOVE THE LIP OF THE PIT.
5. IF DISCHARGE WILL BE PUMPED DIRECTLY TO A STORM DRAINAGE SYSTEM, THE STANDPIPE SHOULD BE WRAPPED WITH FILTERCLOTH BEFORE INSTALLATION. IT IS RECOMMENDED THAT 1/4"-1/2" HARDWARE CLOTH MAY BE PLACED AROUND THE STANDPIPE, PRIOR TO ATTACHING THE FILTERCLOTH.

3 DEWATERING PIT
C-604 NTS

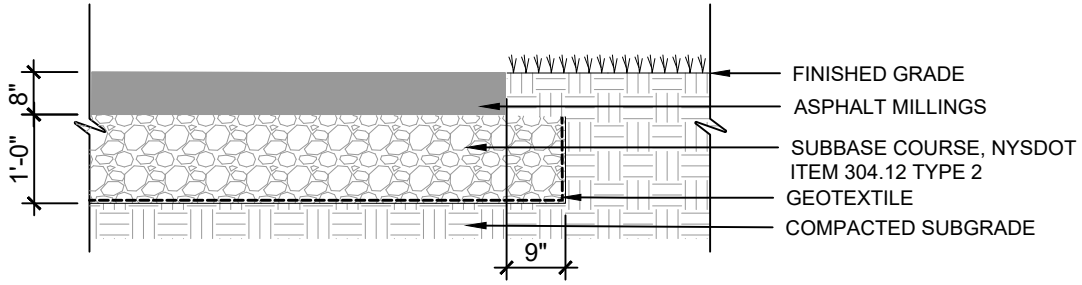
STATE OF NEW YORK · MICHAEL E. TAMBLIN · LICENSED PROFESSIONAL ENGINEER · EXCELSIOR · 073737

EDR a better environment — Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. 217 Montgomery Street, Suite 1100 Syracuse, New York 13202 P. 315.471.0688	PROJECT TITLE: **RFP 2024-02: REPLACEMENT OF AN EXISTING STREAM CULVERT**			EDR JOB#: **20098**
	DRAWING TITLE: **DETAILS**			DRAWING NUMBER: **C-604**
	SCALE: **1"=5'**	DRAWN BY: **JR**	CHECKED BY: **JC**	DATE: **APRIL 15, 2024**

FOR CONSTRUCTION

4/15/2024

STATE OF NEW YORK
MICHAEL E. TAMBLYN
073737
LICENSED PROFESSIONAL ENGINEER

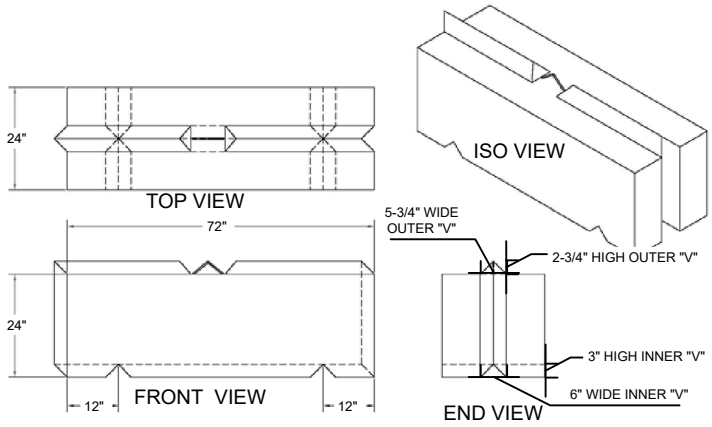


1 C-605 AGGREGATE - DRIVE

Scale: NTS — TEMPORARY

NOTES:

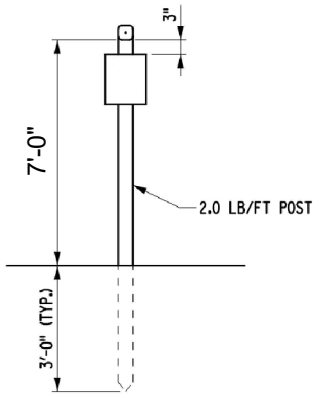
1. ASPHALT MILLINGS WILL BE FURNISHED BY ROCKLAND GREEN AND INSTALLED AND COMPACTED BY THE PROPOSER



2 C-605 INTERLOCKING CONCRETE BLOCKS

Scale: NTS

NORMAL SECTION



MOUNTING WITH 3" X 3" DELINEATOR

3 C-605 POST MOUNTED REFLECTOR

Scale: NTS

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PROJECT TITLE: **RFP 2024-02: REPLACEMENT OF AN EXISTING STREAM CULVERT**				EDR JOB#: **20098**
DRAWING TITLE: **DETAILS**				DRAWING NUMBER: **C-605**
SCALE: **1"=5'**	DRAWN BY: **JR**	CHECKED BY: **JC**	DATE: **APRIL 15, 2024**	

APPENDIX F

DRAFT CONTRACT

REPLACEMENT AGREEMENT

OF AN EXISTING STREAM CULVERT

MULCH PROCESSING AREA

WEST NYACK TRANSFER STATION

(RFP 2024-02)

between

ROCKLAND GREEN

and

_____

THIS AGREEMENT made the __ day, of _____ 2024, by and between Rockland Green**,** a municipal corporation of the State of New York, having its principal office at 172 Main Street, Nanuet, New York 10954, and _____., with a mailing address at _____ hereinafter referred to as "Contractor," in the following manner;

WITNESSETH:

WHEREAS, Rockland Green wishes to enter into an agreement with the Contractor for the Replacement of an Existing Stream Culvert Mulch Processing Area West Nyack Transfer Station, as defined in the proposal RFP 2024-02 as attached hereto, as requested by the Rockland Green, and

NOW THEREFORE, the parties hereto, in consideration of the covenants, agreements, terms and conditions herein contained, do agree as follows:

1. SERVICES: The Contractor shall render and perform services for and to Rockland Green in accordance with specifications and conditions as proposed in RFP 2024-02. The Contractor represents and warrants to Rockland Green that it, and its employees, agents and servants possess all the licenses, skills, experience, expertise, and independence to render these services to Rockland Green. The proposal provided by the Contractor in response to RFP 2024-02, is incorporated as additional terms and conditions to this contract.

2. TERM: This Agreement shall become effective on the date that both parties sign the Agreement and shall remain in full force and effect until final acceptance by Rockland Green of Contractor's work. Contractor shall perform the services under this Agreement the Contractor's proposal, as annexed hereto and made a part of this Agreement**.**

3. PAYMENT: Rockland Green agrees to pay Contractor and Contractor agrees to accept a maximum sum not to exceed _____ dollars ($____.00), in accordance with the terms and at the times specified in herein. Payment will not be issued without Certified Payroll**.**

4. PREVAILING WAGE: The Contractor acknowledges that all work performed pursuant to this contract requires the payment of prevailing wages to the Contractor's employees. Rockland Green has been issued PRC# _____ and requires the Contractor must submit certified payrolls on weekly basis.

5. INDEPENDENT CONTRACTOR: The Contractor**,** as an independent contractor, covenants and agrees that it, its employees, servants and/or agents, will neither hold itself or themselves out as, nor claim to be an employee, servant or agent of Rockland Green**,** and that it, its employees, servants and/or agents will not make claim, demand or application to or for any right or privilege applicable to an officer or employee of Rockland Green including, but not limited to, Worker's Compensation coverage, Unemployment Insurance benefits, Social Security coverage or retirement membership or credit.

6. SUBCONTRACTORS: All subcontractors are subject to the same terms and conditions for services required under this Agreement and any amendment thereto.

7. QUALITY ASSURANCE: For products and/or workmanship specified by association, trade, Federal Standards, comply with requirements of the standard, except when more ridged requirements are specified or are required by applicable codes.

8. **WARRANTY:** The Contractor shall guarantee/warranty both the workmanship and all products installed**.** Contractor warrants to Rockland Green that all construction,

installation, and related services provided hereunder shall be performed in a good and workmanlike manner, by workers who are appropriately trained and experienced in the work being performed, and in accordance with all requirements of the contract documents.

9. INSURANCE REQUIREMENTS: The Contractor or subcontractor shall, at its own cost and expense, procure and maintain insurance to cover its work, services, employees, servants and/or agents under the terms of this Agreement as specified in Contractor's Proposal. When the Contractor signs and returns this Agreement, Contractor shall provide Rockland Green with a policy endorsement showing the required insurance as detailed in RFP 2024-02. It is expressly agreed that Rockland Green shall be named as an additional insured on any general liability insurance policies and policy endorsements, and the policies and policy endorsements shall provide that the insurance shall not be cancelled or terminated without thirty (30) days prior written notice to Rockland Green**.** Unless and until Contractor obtains such insurance and provides a policy endorsement to Rockland Green, this Agreement shall not be effective, and no monies shall be paid or given to Contractor**.** The Contractor shall also ensure that each of its subcontractors provides Rockland Green with the same insurance as specified in this Section.

10. INJURY. PROPERTY DAMAGE: The Contractor shall be responsible for all damages and/or injury to life and property due to, or resulting from, the activities or omissions of Contractor**,** its employees, agents, subcontractors and/or employees in connection with its work, activities or services under this Agreement. The Contractor represents and warrants that its employees, servants, and or employees possess the skills, experience, expertise and independence necessary for the work and/or services to be performed in connection with this Agreement.

11. INDEMNIFY AND HOLD HARMLESS: The Contractor agrees to defend, indemnify and hold harmless Rockland Green and its respective officers, employees and agents from and against all claims, actions and suits and will defend Rockland Green and its respective officers, employees and agents, at its own cost and at no cost to Rockland Green, in any suit, action or claim, including appeals, for personal injury to, or death of,

any person, or loss or damage to property arising out of, or resulting from, the Contractor's failure, or the failure of any of its subcontractors, to perform services as required under this Agreement**.** These indemnification provisions are for the protection of Rockland Green and its respective officers, employees and agents only and shall not establish, of themselves, any liability to third parties. The provisions of this section shall survive the termination of this Agreement.

12. FINANCIAL RECORDS/AUDIT: The Contractor shall maintain records of all its financial transactions, including all expenses and disbursements, which relate to this Agreement. Such records shall be kept in accordance with GAAP (Generally Accepted Accounting Practices) and/or Rockland Green record-keeping requirements, and each transaction shall be documented. Such records shall be made available to Rockland Green for inspection or audit upon request. No compensation or fee for services will be due Contractor unless or until financial statements have been filed with Rockland Green.

13. FUNDING/RESERVATION OF RIGHTS: Rockland Green monies provided to Contractor pursuant to this Agreement, may be based upon and/or subject to funding statements, or actual funds provided to Rockland Green, from New York State or the Federal Government, either directly or by reimbursement; in such case Rockland Green retains the right and discretion to adjust payments of Rockland Green funds to Contractor**,** based on the actual amounts Rockland Green receives or is to receive from New York State or Federal Government.

14. NO ASSIGNMENT: The Contractor shall not assign, sublet or transfer or otherwise dispose of its interest in this Agreement without the prior written consent of Rockland Green.

15. LAWS OF THE STATE OF NEW YORK: This Agreement shall be governed by the Laws of the State of New York and the venue of any litigation shall be Rockland County.

16. LABOR LAW AND EXECUTIVE LAW: The Contractor shall comply with all of the provisions of the Labor Law of the State of New York including, but not limited to,

prevailing wage provisions, if required by law, and with Article 15 of the Executive Law of the State of New York relating to unlawful discriminatory practices insofar as the provisions are applicable to the work and/or services to be performed under this Agreement.

17. LOCAL LAWS AND RESOLUTIONS: The Contractor shall comply with all local laws and resolutions of Rockland Green, including but not limited to, filing of Disclosure Statements and Affirmative Action Plans, if required by law or resolution.

18. APPROVAL OF FEDERAL. STATE AND LOCAL AGENCY: Notwithstanding any other provisions of this Agreement, Rockland Green shall not be liable for any payment or compensation to Contractor until the services rendered by Contractor under this Agreement meet the approval and standards of any other Federal, State or local agency, Rockland Green, commission or body, which has jurisdiction over the services to be rendered under this Agreement which provides funding in whole or in part for the services provided under this Agreement.

19. COMPLIANCE WITH AMERICANS WITH DISABILITIES ACT OF 1990: The **CONTRACTOR** agrees to comply with the provisions of the Americans with Disabilities Act of 1990 (ADA) prohibiting discrimination on the basis of disability with regard to employment policies and procedures, structural and program accessibility, transportation and telecommunications.

20. NO DISCRIMINATION: Contractor shall not discriminate nor permit discrimination by any of its officers, agents and/or representatives against any person because of age, race, color, religion, gender, national origin, sexual orientation, or, with respect to otherwise qualified individuals, handicap. Contractor agrees to take all actions reasonably necessary to ensure that quality applicants are employed, and that employees are treated consistently and fairly during employment, without regard to their age, race, color, gender, religion, sexual orientation, national origin or, with respect to otherwise qualified individuals, handicap. The contractor shall impose the non-discriminatory provisions of this Section by contract on all subcontractors hired to perform services related to the

project and shall take all reasonable actions necessary to enforce such provisions.

21. ENTIRE AGREEMENT/SEVERABILITY: This Agreement constitutes the entire Agreement between the parties and supersedes all prior negotiations, representations or agreements either oral or written. If any clause, provision or section of this Agreement shall be deemed to be invalid by any court of competent jurisdiction or administrative agency, such action shall not affect any of the remaining provisions hereof, and this Agreement shall be construed and enforced as if such invalid portion did not exist.

22. MODIFICATION: This Agreement may not be modified except by mutual consent in writing signed by the parties.

23. WAIVER: No waiver by Rockland Green or the Contractor of any of the terms or conditions of this Agreement or any of their respective rights under this Agreement shall be effective unless such waiver is in writing and signed by the party charged with the waiver.

24. COUNTERPARTS: This Agreement may be executed in counterparts.

(The remainder of this page is left intentionally blank)

25. NOTICE: Any notice or communication required or permitted hereunder shall be in writing and sufficiently given if delivered in person or sent by certified or registered mail, postage prepaid, as follows:

If to Rockland Green:
Gerard M. Damiani Jr., Executive Director
Rockland Green
172 Main Street
Nanuet, New York 10954
(845)753-2200
gdamiani@rocklandgreen.com

If to Contractor:

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized officers or representatives as of the day and year executed by each.

Date: _____ **Date:** _____

ROCKLAND GREEN
By: Gerard M. Damiani Jr., ED

APPENDIX G

US ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT NO. 3

Nationwide Permit 3 - Maintenance

Effective Date: February 25, 2022; Expiration Date: March 14, 2026
(NWP Final Notice, 86 FR 73522)

Nationwide Permit 3 - Maintenance. (a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. This NWP also authorizes the removal of previously authorized structures or fills. Any stream channel modification is limited to the minimum necessary for the repair, rehabilitation, or replacement of the structure or fill; such modifications, including the removal of material from the stream channel, must be immediately adjacent to the project. This NWP also authorizes the removal of accumulated sediment and debris within, and in the immediate vicinity of, the structure or fill. This NWP also authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

(b) This NWP also authorizes the removal of accumulated sediments and debris outside the immediate vicinity of existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.). The removal of sediment is limited to the minimum necessary to restore the waterway in the vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend farther than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an area that has no waters of the United States unless otherwise specifically approved by the district engineer under separate authorization.

(c) This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows.

After conducting the maintenance activity, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

(d) This NWP does not authorize maintenance dredging for the primary purpose of navigation. This NWP does not authorize beach restoration. This NWP does not authorize new stream channelization or stream relocation projects.

Notification: For activities authorized by paragraph (b) of this NWP, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 32). The pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Authorities: Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (Sections 10 and 404))

Note: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act Section 404(f) exemption for maintenance.

2021 Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. **Navigation.** (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from

the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. **Aquatic Life Movements.** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. **Spawning Areas.** Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. **Migratory Bird Breeding Areas.** Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. **Shellfish Beds.** No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. **Suitable Material.** No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. **Water Supply Intakes.** No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. **Adverse Effects From Impoundments.** If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. **Management of Water Flows.** To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-

construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. **Fills Within 100-Year Floodplains.** The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. **Equipment.** Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. **Soil Erosion and Sediment Controls.** Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. **Removal of Temporary Structures and Fills.** Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. **Proper Maintenance.** Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. **Single and Complete Project.** The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. **Wild and Scenic Rivers.** (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.

17. **Tribal Rights.** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. **Endangered Species.** (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and

designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

(e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world

wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa/ respectively.

19. **Migratory Birds and Bald and Golden Eagles.** The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. **Historic Properties.** (a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the

historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. **Discovery of Previously Unknown Remains and Artifacts.** Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. **Designated Critical Resource Waters.** Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. **Mitigation.** The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental

effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual

and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine

credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. **Safety of Impoundment Structures.** To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. **Water Quality.** (a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. **Coastal Zone Management.** In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual

coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. **Regional and Case-By-Case Conditions.** The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. **Use of Multiple Nationwide Permits.** The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1⁄3-acre.

(b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

29. **Transfer of Nationwide Permit Verifications.** If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

_____
(Transferee)

_____
(Date)

30. **Compliance Certification.** Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. **Activities Affecting Structures or Works Built by the United States.** If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. **Pre-Construction Notification.** (a) *Timing*. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete.

The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) *Contents of Pre-Construction Notification*: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse

environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the

name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification*: The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) *Agency Coordination*: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

2021 District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the single and complete crossings of waters of the United States that require PCNs to determine whether they individually

satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings of waters of the United States authorized by an NWP. If an applicant requests a waiver of an applicable limit, as provided for in NWPs 13, 36, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by an NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters. The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed

mitigation would ensure that the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

2021 Further Information

1. District engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

2021 Nationwide Permit Definitions

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term "discharge" means any discharge of dredged or fill material into waters of the United States.

Ecological reference: A model used to plan and design an aquatic habitat and riparian area restoration, enhancement, or establishment activity under NWP 27. An ecological reference may be based on the structure, functions, and dynamics of an aquatic habitat type or a riparian area type that currently exists in the region where the proposed NWP 27 activity is located. Alternatively, an ecological reference may be based on a conceptual model for the aquatic habitat type or riparian area type to be restored, enhanced, or established as a result of the proposed NWP 27 activity. An ecological reference takes into account the range of variation of the aquatic habitat type or riparian area type in the region.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm

surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps Regulatory Program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. The loss of stream bed includes the acres of stream bed that are permanently adversely affected by filling or excavation because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters or wetlands for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States.

Navigable waters: Waters subject to section 10 of the Rivers and Harbors Act of 1899. These waters are defined at 33 CFR part 329.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of “open waters” include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Perennial stream: A perennial stream has surface water flowing continuously year-round during a typical year.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a course substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands next to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term “single and complete project” is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term “single and complete project” is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of “independent utility”). Single and complete non-linear projects may not be “piecemealed” to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized jurisdictional stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line.

Tribal lands: Any lands title to which is either: 1) held in trust by the United States for the benefit of any Indian tribe or individual; or 2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.

Tribal rights: Those rights legally accruing to a tribe or tribes by virtue of inherent sovereign authority, unextinguished aboriginal title, treaty, statute, judicial decisions, executive order or agreement, and that give rise to legally enforceable remedies.

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWPs, a waterbody is a “water of the United States.” If a wetland is adjacent to a waterbody determined to be a water of the United States, that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)).

ADDITIONAL INFORMATION

Information about the U.S. Army Corps of Engineers Regulatory Program, including nationwide permits, may also be accessed at http://www.swt.usace.army.mil/Missions/Regulatory.aspx or http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits.aspx