

**STATE OF VERMONT**  
**AGENCY OF NATURAL RESOURCES**  
**DEPARTMENT OF FISH & WILDLIFE**



***REQUEST FOR PROPOSALS***

**Seymour Fishing Access Lake Dredging**

**Morgan, Vermont**

**March 2024**

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**INVITATION TO BID  
DEPARTMENT OF BUILDINGS AND GENERAL SERVICES  
STATE OF VERMONT**

Contractors are invited to bid on the Seymour Fishing Access Lake Dredging Project for Buildings and General Services on behalf of the Agency of Natural Resources – Fish and Wildlife at 6481 VT Route 111 in Morgan, Vermont.

This project consists of, but is not limited to:

Installing a geo-textile filter curtain to enclose the work area for building temporary haul roads for the removal of accumulated lake bottom sediment to improve the boat ramp's approach areas, provisions for de-watering of dredged materials and transport to a disposal site chosen by the contractor and approved by the Engineer.

Bids will be accepted via email submission to [BGS.VTBids@vermont.gov](mailto:BGS.VTBids@vermont.gov) accompanied by proper Bid Security to the Department of Buildings and General Services, until **April 24, 2024, at 4:30 PM**.

Documents may be obtained from **Blueprints Etc**, 20 Farrell Street, South Burlington VT 05403, by phone at 802-865-4503, by fax at 802-865-0027 or email to: [orders@blueprintsetc.com](mailto:orders@blueprintsetc.com). Project Manuals and Plans are available for preview at: <http://www.blueprintsetc.com> in the Public Plan Room. Any and all notifications, releases and addendums associated with this project will be posted at <http://www.blueprintsetc.com>. There is a non-refundable fee for each set of documents purchased.

**Fee to Include one (1) Hard Copy & one (1) Digital CD-ROM Copy: \$TBD**

- 1. Please be advised that all notifications, releases, and addendums associated with this RFP will be posted on-line in the plan room where the original solicitation resides unless otherwise determined that a hard copy is necessary. The state will make no attempt to contact contractors with updated information. It is the responsibility of each contractor to periodically check the posting site for any and all notifications, releases and addendums associated with the RFP.**
- 2. NOTE:** On occasion hard copy addendums may be required due to size or type of media/requirements. If applicable and as determined by the Department of Buildings and General Services, addendums that require hard copy distribution, a copy of such addenda will be mailed or delivered for each set of plans and specifications issued to the bidders, prior to the bid date. However, it is the responsibility of the bidder to be sure they have received all addenda, and must so state the number of addenda they have received on the proposal.
- 3. If Bidders choose to pull information from other third-party sites, Bidders do so at their own risk as there is one official source of information for documents as indicated above.**

A non-mandatory pre-bid meeting will be held virtually via Microsoft Teams, on April 3, 2024 at 10:00 AM. Interested individuals need to RSVP, by 3:00 PM on March 29, 2024. RSVP must be made to [BGS.OPCVendorDocs@vermont.gov](mailto:BGS.OPCVendorDocs@vermont.gov). A link to the pre-bid meeting will be sent on Monday, April 1, 2024.

**QUESTION AND ANSWER PERIOD:** Any vendor requiring clarification of any section of this RFP or wishing to comment or take exception to any requirements of the RFP must submit specific questions in writing to [BGS.OPCVendorDocs@vermont.gov](mailto:BGS.OPCVendorDocs@vermont.gov) no later than **4:30 PM on April 10, 2024**. All questions should include **Seymour Fishing Access Lake Dredging Project** in the subject line. Any comments, questions, or exceptions not raised in writing on or before the last day of the question period are waived. At the close of the question period a copy of all questions or comments and the State's responses will be posted at

<http://www.blueprintsetc.com>. Every effort will be made to post this information as soon as possible after the question period ends, contingent on the number and complexity of the questions.  
Bidder's attention is directed to:

1. General Conditions for Construction Contracts. It is the Bidder's responsibility to thoroughly read and comply with all requirements. Please pay close attention due to the changes that have been made.
2. Funding Source:  
This project is being funded, in whole or in part, through FEMA and the State of Vermont.
3. **NOTICE TO BIDDERS – PROHIBITION OF RUSSIAN GOODS:** The Contractor is hereby notified that, pursuant to Vermont Executive Order No. 02-22, dated March 3, 2022, the purchase of Russian-sourced goods and goods produced by Russian entities (defined as institutions or companies that are headquartered in Russia or have their principal place of business in Russia) is prohibited. The awarded Contractor must fill out and sign the Executive Order 02-22 Vendor Certification as part of the Contract awarding process. This certification is required for all subcontracts for work performed solely for the State of Vermont and subcontracts for work performed in the State of Vermont.
4. **BID SUBMISSION INSTRUCTIONS:**
  - a. **CLOSING DATE:** Bids must be received by the State by the due date specified on the front page of this RFP. Late bids will not be considered.
    - i. The State may, for cause, issue an addendum to change the date and/or time when bids are due. If a change is made, the State will inform all bidders by posting it on the webpage indicated on the front page of this RFP.
    - ii. There will not be a public bid opening. However, the State will record the name, city and state for any and all bids received by the due date.
  - b. **STATE SECURITY PROCEDURES: Please be advised extra time will be needed when visiting and/or delivering information to State of Vermont offices. All individuals visiting State offices must present a valid government issued photo ID when entering the facility.**
    - i. State office buildings may be locked or otherwise closed to the public. If this RFP permits hand delivery of bids, delivery instructions will be posted at the entrance to the State facility. **Any delay caused by State Security Procedures will be at the bidder's own risk.**
  - c. **BID DELIVERY INSTRUCTIONS:**
    - i. ELECTRONIC: Electronic bids will be accepted.
    - ii. E-MAIL BIDS. Emailed bids will be accepted. Bids will be accepted via email submission to [BGS.VTBids@vermont.gov](mailto:BGS.VTBids@vermont.gov). Bids must consist of a single email with a single, digitally searchable PDF attachment containing all components of the bid. Multiple emails and/or multiple attachments will not be accepted. There is an attachment size limit of 40 MB. It is the Bidder's responsibility to compress the PDF file containing its bid, if necessary, in order to meet this size limitation.
    - iii. FAX BIDS: Faxed bids **will not** be accepted.
    - iv. PAPER BIDS: Paper format bids **will not** be accepted.

5. **CONSTRUCTION CONTRACTOR EVALUATION FORM:** The Department of Buildings and General Services (BGS) may require contractor evaluations on construction projects over \$100,000 or at the discretion of the BGS Director. Evaluations will be used to compile contractor's performance on BGS projects to provide a history and assessment of the contractor's performance.
6. It is the Bidder's responsibility to thoroughly read and comply with all instructions and requirements of this bid solicitation.

Sincerely

Jennifer Fitch, Commissioner

## INSTRUCTIONS TO BIDDERS – MODIFIED BOND

### STATE OF VERMONT DEPARTMENT OF BUILDINGS AND GENERAL SERVICES MONTPELIER, VERMONT

To be considered, Proposals must be made in accord with these Instructions to Bidders:

1. **DOCUMENTS:** Bona fide Bidders may obtain drawings and specifications from the Department of Buildings and General Services.
2. **PLAN SECURITY CERTIFICATION:** Contractor acknowledges that the plans pertaining to this project have been declared exempt from public record inspection for security reasons and have been disclosed to Contractor as per 1 V.S.A. §317(c)(32) for the performance of the Work specified herein. Contractor hereby expressly acknowledges and agrees to disclose plans *only to a licensed architect, engineer, or Contractor who is bidding on or performing work on or related to buildings, facilities, infrastructures, systems, or other structures owned, operated, or leased by the state.*

Furthermore, Contractor agrees to abide by BGS Administrative Policy # 35 and any existing or future directives set forth by the State concerning the copying or distribution of the plans. Fraud, misrepresentation, falsification, or concealing or covering up material facts relating to compliance with these directives may result in one or more of the following actions: termination of the contract(s), suspension of bidding privileges, withholding, deducts, forfeiture of security bonds, and criminal prosecution punishable by imprisonment of up to five years and/or up to a \$10,000 fine as per 13 V.S.A. §3016.

3. **WORKER CLASSIFICATION COMPLIANCE REQUIREMENT:** The Department of Buildings and General Services in accordance with Act 54, Section 32 of the Acts of 2009 and for total projects costs exceeding \$250,000.00, requires bidders comply with the following provisions and requirements.
  - (1) Bidder is required to self report detailed information including information relating to past violations, convictions, suspensions, and any other information related to past performance and likely compliance with proper coding and classification of employees requested by the applicable agency.

The bidder is required to report information on any violations that occurred in the previous 12 months. The Self Reporting requirements are identified and included as part of the Bid Proposal Form.
  - (2) Bidder is required to provide a list of subcontractors on the job along with lists of subcontractor's subcontractors and by whom those subcontractors are insured for workers' compensation purposes. Include additional pages if necessary. This is not a requirement for subcontractors providing supplies only and no labor to the overall contract or project.

The Subcontractor Reporting requirements shall be required upon award of contract, and prior to contract execution. Failure to adhere to Act 54, Section 32 of the Acts of 2009 and submit Subcontractor Reporting: Worker Classification Compliance Requirement will constitute non-compliance and may result in cancellation of contract and/or forfeiture of future bidding privileges until resolved.
  - (3) For construction and transportation projects over \$250,000.00, a payroll process by which during every pay period the contractor collects from the subcontractors or independent contractors a list of all workers who were on the jobsite during the pay period, the work performed by those workers on the jobsite, and a daily census of the jobsite. This information, including confirmation that contractors, subcontractors, and independent contractors have the appropriate workers' compensation coverage for all workers at the jobsite, and similar information for the subcontractors regarding their subcontractors shall also be provided to the department of labor and to the department of banking, insurance, securities, and health care administration, upon request, and shall be available to the public.
4. **EXAMINATION:** Bidders shall carefully examine the documents and the construction site to obtain first-hand knowledge of existing conditions. Contractors will not be given extra payment for conditions, which can be determined by examining the site and documents.
5. **INTERPRETATION:** All requests for interpretation shall be directed to the Department of Buildings and General Services. Any interpretation of documents will be made by Addendum only. Addendums shall be posted on-line in the Plan Room where the original solicitation resides. **PLEASE BE ADVISED THAT ALL NOTIFICATIONS, RELEASES, AND ADDENDUMS ASSOCIATED WITH THIS RFP WILL BE POSTED ON-LINE IN THE PLAN ROOM WHERE THE ORIGINAL SOLICITATION RESIDES UNLESS OTHERWISE DETERMINED THAT A HARD COPY IS NECESSARY. THE STATE WILL MAKE NO ATTEMPT TO CONTACT CONTRACTORS WITH UPDATED INFORMATION. IT IS THE RESPONSIBILITY OF EACH CONTRACTOR TO PERIODICALLY CHECK THE POSTING SITE FOR ANY AND ALL NOTIFICATIONS, RELEASES AND ADDENDUMS ASSOCIATED WITH THE RFP.**

**NOTE:** On occasion hard copy addendums may be required due to size or type of media/requirements. If applicable and as determined by the Department of Buildings and General Services, Addendums that require hard copy distribution, a copy of such addenda will be mailed or delivered for each set of plans and specifications issued to the bidders, prior to the bid date. However, it is the responsibility of the bidder to be sure they have received all addenda and must so state the number of addenda they have received on the proposal. All addenda will become part of the Contract Documents.

6. **CONFLICTING INFORMATION:** If any part of the plans or specifications conflict with any other part and no clarification is made by the Department of Buildings and General Services in an addendum, the most expensive method or materials as described or suggested will be used.
7. **SUBSTITUTIONS:** To obtain approval to use unspecified products, bidders shall submit written requests at least 7 days before bid date. Requests shall clearly describe the product for which approval is asked, including all data necessary to demonstrate acceptability. If the product is acceptable, the approval will be issued in Addendum to all prime bidders on record in a manner consistent with 5. **INTERPRETATION** identified above.
8. **PROPOSALS:** Proposals shall be made on unaltered Proposal forms furnished by the State of Vermont, Department of Buildings and General Services. Fill in all blank spaces. **One (1)** copy is requested. Proposal shall be signed with name typed or printed below signature. Where bidder is a corporation, Proposal must be signed with legal name of the corporation followed by the name of the State of incorporation and the legal signatures of an officer authorized to bind the corporation to a contract.
9. **BID SECURITY:** Bid Security shall be made payable to the Treasurer, State of Vermont, in the amount of five (5) percent of the Proposal sum. Security shall be bid bond issued by surety licensed to conduct business in the State of Vermont or other security as specified herein. The successful bidder's security will be retained until he has signed the Contract and furnished the required security. The Owner reserves the right to retain the security of the next three lowest bidders until the low bidder enters into contract or until 60 days after bid opening, whichever is the shorter. All other bid security will be returned as soon as practicable. If any bidder refuses to enter into a Contract, the Owner will retain his Bid Security as liquidated damages, but not as a penalty.
10. **BONDS:** The Contractor will furnish the following bonds and the obtaining of these bonds is a condition precedent to the effectuation of the contract between Owner and Contractor.

Bid Bond in the amount of 5% of bid.  
 Guaranty Bond in the amount of 100% of the contract price.  
 Performance Bond in the amount of 100% of the contract price.  
 Payment Bond - Labor & Materials - 100% of the contract price.

All bonds are to be executed according to instructions. The Department of Buildings and General Services will furnish Bond forms.

**Alternate Security:**

1. In lieu of the bid bond the following security will be acceptable to the Department:  
 Certified check or Bank check in the amount of 5% of bid. Make checks payable to the Treasurer, State of Vermont.
2. In lieu of the Performance, Payment and Guaranty Bond, the following security will be acceptable to the Department:
  - a. Certified check or Bank check for 125% of bid. Make checks payable to the Treasurer, State of Vermont.
  - Or**
  - b. Irrevocable Letter of Credit from a financial institution for 125% of bid. Security to extend 60 days beyond the project completion date.

11. **MINORITY/WOMEN BUSINESS ENTERPRISES (M/WBE):** It is the policy of the State of Vermont that M/WBE's shall have the maximum opportunity to participate in the performance of contracts financed with state funds. All Bidders are encouraged to contact M/WBE's in an effort to recruit them to submit proposals for the work or portions thereof. The contractor shall not discriminate on the basis of race, color, national origin or sexual orientation in the award and performance of subcontracts.

The Department of Buildings and General Services shall, in accordance with Executive Order #15-91, and for publicly funded capital construction projects exceeding \$50,000.00, comply with the following provisions and requirements. Upon receipt of letter of intent to award contract, the successful bidder shall submit a M/WBE Reporting Form along with certificates of insurance and other pre- contract information. The form includes space to report the name, address and phone number of the M/WBE's contacted, the trade, if their price was included in the bid proposal, and if not, the reason for rejection of their bid. The contract will not be executed until the M/WBE Form is received.

Failure to contact M/WBE's on or when projects require sub-contract work may constitute non-compliance and may result in forfeiture of future bidding privileges until resolved.

12. **MODIFICATION AND WITHDRAWAL:** Proposals may not be modified after they are received and recorded by the Department of Buildings and General Services. Bidders may withdraw Proposals at any time before bid opening but **may not** resubmit a bid. No proposal may be withdrawn or modified after the bid opening except where the award of Contract has been delayed for beyond 60 days.
13. **DISQUALIFICATION:** The Commissioner of Buildings and General Services reserves the right to disqualify Proposals, before or after opening, upon evidence of collusion with intent to defraud or other illegal practices upon the part of the bidder. Furthermore, failure to substantively comply with bidding requirements may constitute non-compliance and may result in forfeiture of future bidding privileges until resolved.



14. **SUBMITTAL**: Submit Proposal in sealed envelope. Identify the envelope with: (1) project name, (2) name of bidder. Submit Proposals in accordance with Invitation to Bid.

15. **OPENING**: Proposals will be opened as announced in the Invitation to Bid.

16. **BASIS OF BID AWARD**: Method of award will be based on Title 29, Chapter 5 § 161. Requirements on state construction projects.

The contract shall be awarded to one of the three lowest responsible bidders, conforming to the plans and specifications, with consideration being given to quantities involved, time required for delivery, purpose for which required, competency and responsibility of bidder, and his or her ability to render satisfactory service, but the commissioner of buildings and general services with the approval of the secretary of administration, shall have the right to reject any and all bids and to invite other bids.

No segregated proposals or assignments will be considered. The Contract will be awarded on the basis of the Maximum Limiting Amount, including full consideration of unit prices and alternates in the order in which they appear on Proposal form.

17. **EXECUTION OF CONTRACT**: The Contract or Contracts will be signed for the State of Vermont by the Commissioner of Buildings and General Services.

18. **TAXES**: The State is exempt from all sales and federal excise taxes. Contractors will be responsible for the payment of any sales, consumer, use and other similar taxes for the Work or portions thereof provided by the Contractor which are legally enacted at the time bids are received, whether or not yet effective. Federal excise tax registration number covering taxable items will be furnished upon request. Quote less these taxes.

As required by law (32 V. S. A. §3113) the Contractor hereby certifies, under the pains and penalties of perjury, that he/she is in good standing with respect to, or in full compliance with a plan to pay, any and all taxes due the State of Vermont as of the date the Contractor signs this contract.

19. **CONSTRUCTION CONTRACTOR EVALUATION FORM**: The Department of Buildings and General Services (BGS) may require contractor evaluations on construction projects greater than \$100,000 or at the discretion of the BGS Director. Evaluations will be used to compile the contractor's performance on BGS projects to provide a history and assessment of the contractor's performance.

**PROJECT NAME: Seymour Fishing Access Lake Dredging**  
**PROJECT LOCATION: 6481 VT Route 111, Morgan, VT 05853**

**State of Vermont**  
**Department of Buildings and General Services**

**BID PROPOSAL**

TO: STATE OF VERMONT  
Agency of Administration  
Department of Buildings and General Services  
109 State Street  
Montpelier, Vermont 05609-3001

DATE: \_\_\_\_\_

Ladies and Gentlemen:

The undersigned proposes to provide labor, materials, and equipment to complete the Boat Ramp Approach Dredging Project located at 6481 VT Route 111, Morgan, Vermont. Construction shall be in accordance with the Project Documents prepared by the Department of Fish & Wildlife dated March 2024.

**A. The undersigned acknowledges the following:**

1. Basis of award shall be as specified in the "Instructions to Bidders".
2. The right of the Owner to accept or reject any and all bids, in whole or in part, with or without cause, and to waive technicalities in submissions.
3. They are familiar with the contents of this Proposal and that they have examined the site and accept the existing conditions as those under which the work will be done.

**B. The undersigned further agrees:**

1. To hold their bid open for sixty (60) days after this day of Bid Opening.
2. To accept the provisions of the "Instructions to Bidders" and the "General Conditions".
3. To enter into and execute a contract, if awarded on the basis of this proposal within ten (10) calendar days of notification of award.
4. To accomplish the work in accordance with the Bid Documents.

**C. Acknowledge receipt of the following Addenda:**

Addendum No.: \_\_\_\_\_ Dated: \_\_\_\_\_

Addendum No.: \_\_\_\_\_ Dated: \_\_\_\_\_

Addendum No.: \_\_\_\_\_ Dated: \_\_\_\_\_

**D. It is the Bidder's responsibility to thoroughly read and comply with all instructions and requirements of this bid solicitation.**

**E. Bid Security in the amount of 5% is enclosed herewith.**

**PROJECT NAME: Seymour Fishing Access Lake Dredging**  
**PROJECT LOCATION: 6481 VT Route 111, Morgan, VT 05853**

**F. Self-Reporting: Worker Classification Compliance Requirement:**

The Department of Buildings and General Services in accordance with Act 54, Section 32 of the Acts of 2009 and for total project costs exceeding \$250,000.00, requires bidders to comply with the following provisions and requirements.

Bidder is required to self-report the following information relating to past violations, convictions, suspensions, and any other information related to past performance relative to coding and classification of workers. The State is requiring information on any violations that occurred in the previous 12 months.

Bidder hereby certifies that the company/individual is in compliance with the requirements as detailed in Act 54, Section 32 of the Acts of 2009.

Summary of Detailed Information	Date of Notification	Outcome

**G. Subcontractor Reporting: Worker Classification Compliance Requirement:**

**Prior to contract execution**, the successful bidder agrees to comply with Subcontractor Reporting requirements in accordance with Act 54, Section 32 of the Acts of 2009 and for total projects costs exceeding \$250,000.00 as follows:

1. Provide a list of subcontractors to be used on the job along with lists of subcontractor's subcontractors and by whom those subcontractors are insured for workers' compensation purposes. This is not a requirement for subcontractor's providing supplies only and no labor to the overall contract or project. This list **MUST** be updated and provided to the State as additional subcontractors are hired. A sample form is included in the bid package.
2. Failure to adhere to Act 54, Section 32 of the Acts of 2009 and submit Subcontractor Reporting: Worker Classification Compliance Requirement will constitute non-compliance and may result in cancellation of contract and/or forfeiture of future bidding privileges until resolved.

**PROJECT NAME: Seymour Fishing Access Lake Dredging**  
**PROJECT LOCATION: 6481 VT Route 111, Morgan, VT 05853**

**STATE OF VERMONT**  
**CONTRACTOR'S PROPOSAL**

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

**1. Maximum Limiting Amount:**

The undersigned proposes to provide labor, material, and equipment in Morgan, Vermont in accordance with the Project Documents for the **Maximum Limiting Amount of:**

MAXIMUM LIMITING AMOUNT: \_\_\_\_\_  
 (Written)  
 (\$ \_\_\_\_\_)  
 (Figures)

**2. Unit Pricing:** Each Unit Price or Lump Sum stated shall constitute full compensation for all materials, labor, tools, equipment, and incidentals.

Item	Description	Qty.	Unit	Unit Price	Total
1	Mobilization / Demobilization	1	l.s.		
2	Filter Curtain	1	l.s.		
3	Haul Road	500	c.y.		
4	Unclassified Excavation	3,400	c.y.		
	MAXIMUM LIMITING AMOUNT				

**1. Alternates:**

**a. Add Alternates:**

The following **Add Alternate(s)**, if accepted, will be taken in the sequence listed.

**STRUCTURAL COFFERDAM:** This Item includes all labor, materials, equipment, and services necessary to design, certify and confirm Engineer's approval, obtain, erect, and maintain, and at conclusion of use the breakdown of a Structural Cofferdam (earthen, sandbag or block type not acceptable). Cost should include equipment, materials, and labor to initially and subsequently dewater and filter lake water from enclosed area. The use of a structural cofferdam cannot encompass or cross the inflow of Sucker Brook where that extended portion of prescribed dredging would still occur in wet conditions.

LUMP SUM AMOUNT: \_\_\_\_\_  
 (Written)  
 (\$ \_\_\_\_\_)  
 (Figures)

**b. Deduct Alternates:**

The following **Deduct Alternate(s)**, if accepted, will be taken in the sequence listed.

**HAUL ROAD REDUCTION:** With use of a Structural Cofferdam and associated dewatering of the area to be dredged, providing excavation in dryer conditions, the quantity of aggregate material to provide haul road access would be reduced. This reduced cost item includes that volume of material, associated reduced trucking, placement, compaction, and removal, per C.Y. unit cost at par as presented above in the base bid Item #3. Bidder is reminded to maintain any volume of Haul Road material necessary to access and remove lake bottom sediments at the inflow area of Sucker Brook where that extended portion/limits of prescribed dredging would still occur in wet conditions.

**PROJECT NAME: Seymour Fishing Access Lake Dredging**  
**PROJECT LOCATION: 6481 VT Route 111, Morgan, VT 05853**

UNIT QUANTITY (C.Y) \_\_\_\_\_ x Unit Cost (Base Bid Item #3) \_\_\_\_\_  
= DEDUCT ALTERNATE AMOUNT: \_\_\_\_\_  
(Written)  
(\$ \_\_\_\_\_)  
(Figures)

The Contractor shall hold the Add Alternate and Deduct Alternate Prices until 60 days or sooner as determined by the Owner, from the Contract execution date. It is understood that there will be no extension of time for the inclusion of any of the Alternates (provided a Change Order is authorized within the specified time) from the Contract execution date.

**The undersigned further agrees:**

1. The amount of compensation paid to the undersigned for extra work and change orders in one of the following manners as directed by the Owner.
  - a) A price agreed upon between the Owner and the Contractor.
  - b) A price determined by adding 15% for overhead and profit to the total direct cost of any extra work excluding unit pricing.
  - c) A price determined by extending unit price work above.

**The undersigned further agrees:**

1. The period of Contractor's performance shall begin on **July 8, 2024**, with Substantial Completion required by **September 13, 2024**, and Contract End Date of **September 13, 2025**, to allow for a one (1) year Warranty Period.
2. The amount of compensation paid to the undersigned for extra work and change orders in one of the following manners as directed by the Owner.
  - a) A price agreed upon between the Owner and the Contractor.
  - b) A price is determined by adding 15% for overhead and profit to the total direct cost of any extra work excluding unit pricing.
  - c) A price determined by extending unit price work above.

Corporate Seal (If Bidder is a Corporation)

Contractor Name: \_\_\_\_\_ Contact Name: \_\_\_\_\_  
State of Corporation: \_\_\_\_\_ VT Business Account #: \_\_\_\_\_  
Address: \_\_\_\_\_ Fax Number: \_\_\_\_\_  
\_\_\_\_\_  
Telephone: \_\_\_\_\_  
\_\_\_\_\_  
E-Mail: \_\_\_\_\_  
By: \_\_\_\_\_ Name: \_\_\_\_\_  
Signature (**Bid Not Valid Unless Signed**) (Type or Print)

NOTE: If Bidder is a Partnership, give full names of all Partners.

**END OF PROPOSAL**

**State of Vermont  
Department of Buildings and General Services**

**MINORITY/WOMEN BUSINESS ENTERPRISES (M/WBE) REPORTING FORM**

It is the policy of the State of Vermont that M/WBE's shall have the maximum opportunity to participate in the performance of contracts financed with state funds. All Bidders are encouraged to contact M/WBE's in an effort to recruit them to submit proposals for the work or portions thereof. The contractor shall not discriminate on the basis of race, color, national origin or sexual orientation in the award and performance of subcontracts.

Company Name: \_\_\_\_\_ Contact Person: \_\_\_\_\_

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

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Federal ID: \_\_\_\_\_

The Department of Buildings and General Services shall, in accordance with Executive Order #15-91, and for publicly funded capital construction projects exceeding \$50,000.00, comply with the following provisions and requirements. Upon receipt of letter of intent to award contract, the successful bidder shall submit a MWBE Reporting Form along with certificates of insurance and other pre-contract information. The form includes space to report the name, address and phone number of the MWBE's contacted, the trade, if their price was included in the bid proposal, and if not, the reason for rejection of their bid. The contract will not be executed until the MWBE Form is received.

Failure to contact MWBE's on or when projects require sub-contract work may constitute non-compliance and may result in forfeiture of future bidding privileges until resolved.

MWBE Company Contacted	Trade	Was Quote Received? YES/NO	Did you do business with them? YES/NO	If no, reason	MWBE Contact Name and Phone Number

**See Back of Sheet for Additional Contact Information**

The undersigned certifies that the above information is a complete and accurate summary of the recruiting effort put forth to encourage the participation of M/WBE's in the performance of work financed by State funds.

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



**STATE OF VERMONT**  
**AGENCY OF ADMINISTRATION**  
**DEPARTMENT OF BUILDINGS AND GENERAL SERVICES**  
**MONTPELIER, VERMONT**

**INSTRUCTIONS**

**BID•PERFORMANCE•PAYMENT•GUARANTY BONDS**

1. This form shall be used whenever a bond is required. There shall be no deviation from this form except as authorized by the Department Commissioner.
2. The bond shall be procured from an insurance company authorized to do business in the State of Vermont.
3. The name, including full legal name and residence of each individual party to the bond, shall be inserted in the body thereof, and each such party shall sign the bond with their usual signature on the line opposite the scroll seal.
4. If the principals are partners, their individual names shall appear in the body of the bond, with the recital that they are partners composing a firm, naming it, and all the members of the firm shall execute the bond as individuals.
5. The signature of a witness shall appear in the appropriate place, attesting the signature of each individual party to the bond.
6. If the principal or surety is a corporation, the name of the state in which incorporated shall be inserted in the appropriate place in the body of the bond, and said instrument shall be executed and attested under the corporate seal as indicated in the form.
7. The official character and authority of the person or persons executing the bond for the principal if a corporation, shall be certified by the secretary or assistant secretary, according to the form attached thereto. In lieu of such certificate there may be attached to the bond copies of as much of the records of the corporation as required to show the official character and authority of the officer signing, duly certified by the secretary or assistant secretary, under the corporate seal, to be true copies.
8. The date of the performance and payment bonds must be no later than the date of the instrument for which it is given.
9. The guaranty bond is for a period of one year and begins on the date of substantial completion established by the architect or project manager and approved by the Department Commissioner.



STATE OF VERMONT  
DEPARTMENT OF BUILDINGS AND GENERAL SERVICES  
PURCHASING AND CONTRACT ADMINISTRATION DIVISION  
MONTPELIER VT 05633

**BID BOND**

Know All Men By These Presents, that we, ..... as principal, and  
..... as surety,  
are held and firmly bound unto the State of Vermont, hereinafter called the State, in the penal sum of .....  
..... Dollars  
Lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors,  
administrators, and successors, jointly and severally, firmly by these presents.

The condition of this obligation is such, that whereas the principal has submitted the accompanying bid, dated  
....., 2024 for .....

Now, therefore, if the principal shall not withdraw said bid within the period specified therein after the opening of the same, or, if no  
period be specified, within sixty (60) days after said opening, and shall within the period specified therefore, or if no period be specified, within ten  
(10) days after the prescribed forms are presented to him for signature, enter into a written contract with the State, in accordance with the bid as  
accepted, and give bond with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such  
contract, or in the event of the withdrawal of said bid within the period specified, or the failure to enter into such contract and give such bond  
within the time specified, if the principal shall pay the State the difference between the amount specified in said bid and the amount for which the  
State may procure the required work and/or supplies, if the later amount be in excess of the former, then the above obligation shall be void and of  
no effect, otherwise to remain in full force and virtue.

In witness whereof, the above-bounden parties have executed this instrument under their several seals this  
..... day of ....., 2024 the name and corporate seal of each corporate party being hereto  
affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

in presence of-

.....	..... (Seal)
	(Individual Principal)
.....	.....
(Address)	(Business Address)
.....	..... (Seal)
	(Individual Principal)
.....	.....
(Address)	(Business Address)
.....	.....
(Address)	(Business Address)

Attest:

.....  
..... (Corporate Principal)  
.....  
..... (Business Address)

..... By ..... (Affix)  
Corporate Seal

Attest:

.....  
..... (Corporate Surety)  
.....  
..... (Business Address)

..... By ..... (Affix)  
Corporate Seal

STATE OF VERMONT  
DEPARTMENT OF BUILDINGS AND GENERAL SERVICES  
PURCHASING AND CONTRACT ADMINISTRATION  
MONTPELIER VT 05633

**PERFORMANCE BOND**

Know All Men By These Presents, that we, ..... as principal,  
and .....  
..... as surety,  
are held and firmly bound unto the State of Vermont, hereinafter called the State, in the penal sum of .....  
..... Dollars  
for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors,  
jointly and severally, firmly by these presents.

The condition of this obligation is such, that whereas the principal entered into a certain contract, which contract is by  
reference made a part hereof, with the State, dated ....., 2024 for

Now, therefore, if the principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions,  
and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the  
State, with or without notice to the surety, and during the life of any guaranty required under the contract, and shall also well and  
truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of any and all duly authorized  
modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then,  
this obligation to be void; otherwise to remain in full force and virtue.

In witness whereof, the above-bounden parties have executed this instrument under their several seals  
this ..... day of ....., 2024 the name and corporate seal of each corporate  
party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its  
governing body.

in presence of-

.....	..... (Seal)
	(Individual Principal)
.....	.....
(Address)	(Business Address)
.....	..... (Seal)
	(Individual Principal)
.....	.....
(Address)	(Business Address)
.....	.....
(Address)	(Business Address)

Attest:

.....	.....
	(Corporate Principal)
.....	.....
	(Business Address)
.....	.....(Affix)
	Corporate Seal)

Attest:

.....	.....
	(Corporate Surety)
.....	.....
	(Business Address)
.....	.....(Affix)
	Corporate Seal)

STATE OF VERMONT  
DEPARTMENT OF BUILDINGS AND GENERAL SERVICES  
PURCHASING AND CONTRACT ADMINISTRATION DIVISION  
MONTPELIER VT 05633

**PAYMENT BOND**

(Labor and Material)

Know All Men By These Presents, that we, ..... as principal, and  
.....  
..... as surety,  
are held and firmly bound unto the State of Vermont, hereinafter called the State, in the penal sum of .....  
..... Dollars  
for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly  
and severally, firmly by these presents.

The condition of this obligation is such, that whereas the principal entered into a certain contract, which contract is by  
reference made a part hereof, with the State, dated ....., 2024 for

Now, therefore, if the principal shall promptly make payment to all persons supplying labor and material in the prosecution of  
the work provided for in said contract, and any and all duly authorized modifications of said contract that may hereafter be made, notice  
of such modifications to the surety being hereby waived, then this obligation to be void; otherwise to remain in full force and virtue.

In witness whereof, the above-bounden parties have executed this instrument under their several seals this  
..... day of ....., 2024 the name and corporate seal of each corporate party being  
hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

in presence of-

	(Seal)
	(Individual Principal)
(Address)	(Business Address)
	(Seal)
	(Individual Principal)
(Address)	(Business Address)
(Address)	(Business Address)

Attest:

	(Corporate Principal)
	(Business Address)
	(Affix)
	Corporate Seal)

Attest:

	(Corporate Surety)
	(Business Address)
	(Affix)
	Corporate Seal)

STATE OF VERMONT  
DEPARTMENT OF BUILDINGS AND GENERAL SERVICES  
PURCHASING AND CONTRACT ADMINISTRATION  
MONTPELIER VT 05633

**GUARANTY BOND**

Know All Men By These Presents, that we, ..... as principal, and  
.....  
..... as surety,  
are held and firmly bound unto the State of Vermont, hereinafter called the State, in the penal sum of .....  
..... Dollars  
for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and  
severally, firmly by these presents.

The condition of this obligation is such, that whereas the principal entered into a certain contract, which contract is by reference made  
a part hereof, with the State, dated ....., 2024 for

Now, therefore, the condition of the above obligation is such, that if the said principal will make good any faults or defects in the  
work, arising from improper or defective workmanship or materials, undertaken in said contract and discovered on or before  
....., then this obligation shall be null and void; otherwise it shall remain in  
full force and effect.

In witness whereof, the above-bounden parties have executed this instrument under their several seals this  
..... day of ....., 2024 the name and corporate seal of each corporate party being hereto  
affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

in presence of-

..... (Seal)  
(Individual Principal)

..... (Address) ..... (Business Address)

..... (Seal)  
(Individual Principal)

..... (Address) ..... (Business Address)

..... (Address) ..... (Business Address)

Attest:

.....  
(Corporate Principal)

.....  
(Business Address)

..... By .....(Affix)  
Corporate Seal

Attest:

.....  
(Corporate Surety)

.....  
(Business Address)

..... By .....(Affix)  
Corporate Seal

STATE OF VERMONT  
AGENCY OF ADMINISTRATION  
BUILDINGS AND GENERAL SERVICES  
MONTPELIER, VERMONT

**CERTIFICATE AS TO CORPORATE PRINCIPAL**

I,....., certify that I am  
the.....secretary of the Corporation  
named as principal in the within bond, that.....  
who signed the said bond on behalf of the principals was the.....of said  
corporation; that I know his signature, and his signature, and his signature thereto is genuine; and that said bond was  
duly signed, sealed, and attested for and in behalf of said corporation by authority of its governing body.

(Corporate)  
(Seal

## BGS CONTRACT FORM FOR CONSTRUCTION

1. **Parties.** This is a contract for services between the State of Vermont, Department of Buildings and General Services (hereafter called “State”), and **XXX**, with principal place of business in **XXX**, (hereafter called “Contractor”). Contractor’s form of business organization is **incorporated, limited liability company, sole proprietor, etc.** It is the contractor’s responsibility to determine if, by law, the contractor is required to be registered with the Vermont Department of Taxes for the purposes of filing required Vermont taxes.
2. **Subject Matter.** The subject matter of this contract is generally on the subject of construction services. Services to be provided by the contractor are described in Attachment A.
3. **Maximum Amount.** In consideration of the services to be performed by Contractor, the State agrees to pay Contractor, in accordance with the payment provisions specified in Attachment B, a sum not to exceed **\$XXX**.
4. **Contract Term.** The period of contractor’s performance shall begin on **XXX**, and end on **XXX**, with a Substantial Completion date of **XXX**, a Project Completion date of **XXX**, and a Contract Completion date of **XXXX** which includes a one-year warranty period.
5. **Prior Approvals.** If approval by the Attorney General’s Office or the Secretary of Administration is required, (under current law, bulletins, and interpretations), neither this contract nor any amendment to it is binding until it has been approved by either or both such persons.
  - Approval by the Attorney General’s Office is required.
  - Approval by the Secretary of Administration **is not** required. **(IS REQUIRED IF OVER \$500,000)**
  - Approval by the CIO/Secretary of ADS is not required.
6. **Amendment.** This agreement represents the entire agreement between the parties; No changes, modifications, or amendments in the terms and conditions of this contract shall be effective unless reduced to writing, numbered and signed by the duly authorized representative of the State and Contractor.
7. **Cancellation.** Cancellation of this contract shall be done in a manner consistent with Article 14 of Attachment D.
8. **Attachments.** This contract consists of **XXX** pages including the following attachments which are incorporated herein:
  - ATTACHMENT A: Scope of Work
  - ATTACHMENT B: Payment Provisions
  - ATTACHMENT C: Standard State Provisions for Contracts and Grants, a preprinted form (revision dated 12/07/2023), except that the following numbered paragraphs are hereby deleted in their entirety: 8. Insurance
  - ATTACHMENT D: General Conditions for Construction Contracts
  - ATTACHMENT E: Project Manual Technical Specifications
    - You will need to list the various specs from the INDEX**
    - ETC.**
    - Addendum No. 1 dated XXX**
    - Addendum No. 2 dated XXX**
    - ETC.**
  - ATTACHMENT F: PLANS
    - You will need to list the various plans from the INDEX**
    - ETC.**

ETC.

ATTACHMENT G: Supplementary General Conditions REMOVE IF NOT APPLICABLE

9. **Order of Precedence.** Any ambiguity, conflict or inconsistency in the Contract Documents shall be resolved according to the following order of precedence:
- 1) Standard Contract
  - 2) Attachment C (Standard Contract Provisions for Contracts and Grants)
  - 3) Attachment D (General Terms and Conditions for Construction Contracts)
  - 4) Attachment E
  - 5) Attachment G Supplementary General Conditions REMOVE IF NOT APPLICABLE
  - 6) Attachment F
  - 7) Attachment A
  - 8) Attachment B
10. **Plan Security Certification.** Contractor acknowledges that the plans pertaining to this project have been declared exempt from public record inspection for security reasons and have been disclosed to Contractor as per 1 V.S.A. §317(c)(32) for the performance of the Work specified herein. Contractor hereby expressly acknowledges and agrees to disclose plans only to a licensed architect, engineer, or Contractor who is bidding to work on, or actually performing work on, buildings, facilities, infrastructures, systems, or other structures owned, operated, or leased by the state and specifically related to this project. Furthermore, Contractor agrees to abide by BGS Administrative Policy # 35 and any existing or future directives set forth by the State concerning the copying or distribution of the plans. Fraud, misrepresentation, falsification, or concealing or covering up material facts relating to compliance with these directives may result in one or more of the following actions: termination of the contract(s), suspension of bidding privileges, withholding, deducts, forfeiture of security bonds, and criminal prosecution punishable by imprisonment of up to five years and/or up to a \$10,000 fine as per 13 V.S.A. §3016.
11. **Laws.** Contractor shall comply with all public laws, ordinances, and requirements respecting the work, obtain and pay for all required permits and comply with regulations of any insurance company which issues a policy on any part of the work or site.
- The Contractor agrees to comply with all of the requirements of Title 21 V.S.A., Chapter 5, Subchapter 6 relating to fair employment practices, to the extent applicable, and agrees further to include a similar provision in any and all subcontracts.
- Contractor shall acquaint himself with limits of the property or right-of-way of the State and shall not trespass on other property. All work shall be done in such a manner as not to interfere with the State's operating functions. Contractor and his employees shall familiarize themselves and comply with all posted rules.
12. **Non-Collusion.** The State of Vermont is conscious of and concerned about collusion. It should therefore be understood by all that in signing bid and contract documents they agree that the prices quoted have been arrived at without collusion and that no prior information concerning these prices has been received from or given to a competitive company. If there is sufficient evidence to warrant investigation of the bid/contract process by the Office of the Attorney General, all bidders should understand that this paragraph might be used as a basis for litigation. We reserve the right to cancel the contract if we suspect collusion.
13. **Assignment.** Contractor shall not have the right to transfer, or assign this Contract or any part thereof, without the prior written consent of the State and such consent shall not relieve the Contractor of any liability or responsibility hereunder. The failure of the State to assert any of its rights hereunder shall not be construed as a waiver thereof.

14. ***Employment of Women and Minorities.*** The State of Vermont encourages an increase in work force participation rates for women and minorities in all aspects of publicly funded capital construction projects. The contractor is encouraged to seek out and employ qualified women and minorities for work covered under this contract. The following provisions and requirements shall apply when the total contract exceeds \$50,000, and the general contractor shall require all first-tier subcontractors to comply with these requirements when their contract exceeds \$50,000.
- a. At the conclusion of the project, the affected contractors must complete the Construction Employment Report and submit it to the Department of Buildings and General Services for recording. A complete description and dollar value of the work or supplies provided, and percentage value of the overall construction contract for each such M/WBE transaction must be included. Final payment will not be made until this requirement has been satisfied.
15. ***Minority and Women Business Enterprises (M/WBE).*** It is the policy of the State of Vermont that M/WBE's shall have the maximum opportunity to participate in the performance of contracts financed with state funds. All Bidders are encouraged to contact M/WBE's in an effort to recruit them to submit proposals for the work or portions thereof. The contractor shall not discriminate on the basis of race, color, national origin or sexual orientation in the award and performance of subcontracts. The Department of Buildings and General Services shall, in accordance with Executive Order #15-91, and for publicly funded capital construction projects exceeding \$50,000.00, comply with the following provisions and requirements. Upon receipt of letter of intent to award contract, the successful bidder shall submit an M/WBE Reporting Form along with certificates of insurance and other pre-contract information. The form includes space to report the name, address and phone number of the M/WBE's contacted, the trade, if their price was included in the bid proposal, and if not, the reason for rejection of their bid. The contract will not be executed until the M/WBE Form is received. Failure to contact M/WBE's on or when projects require sub-contract work may constitute non-compliance and may result in forfeiture of future bidding privileges until resolved.
16. ***Worker Classification.*** State Contracts Compliance Requirements: The Department of Buildings and General Services in accordance with Act 54, Section 32 of the Acts of 2009 and for total projects costs exceeding \$250,000.00 requires bidders comply with the following provisions and requirements.  
((a) (3) For construction and transportation projects over \$250,000.00, a payroll process by which during every pay period the contractor collects from the subcontractors or independent contractors a list of all workers who were on the jobsite during the pay period, the work performed by those workers on the jobsite, and a daily census of the jobsite. This information, including confirmation that contractors, subcontractors, and independent contractors have the appropriate workers' compensation coverage for all workers at the jobsite, and similar information for the subcontractors regarding their subcontractors shall also be provided to the department of labor and to the department of banking, insurance, securities, and health care administration, upon request, and shall be available to the public.
17. ***Debarment by the Department of Labor (DOL) or the Department of Financial Regulation.*** The State of Vermont reserves the right to terminate this contract with fifteen (15) day notice to contractor, upon determination that the contractor or a subcontractor to the contractor has been debarred by the Department of Labor (DOL) or the Department of Financial Regulation. Additionally, the State of Vermont reserves the right to withhold payment and / or terminate this contract if contractor fails to provide payroll records requested by the DOL and the Department of Financial Regulation within thirty (30) days of receipt of the request from DOL or the Department of Financial Regulation.
18. ***Miscellaneous.*** Paragraph headings are inserted for convenience only and are not to be relied upon for content. The Contractor is required to ensure that any and all agreements with subcontractors conform to the requirements contained herein and that subcontractors abide by all applicable provisions of this contract including, but not limited to, the requirement that Contractor has complied with and shall continue to comply with all requirements with respect to qualification to do business in Vermont and registration with the office of the Secretary of State. In the event that all or a portion of the project is to be subject to a subcontract, it shall be the responsibility of the Contractor to determine that the subcontractor has complied with the above requirements of registration and qualification as well as all other applicable



provisions of this contract.

19. **Waste Reduction Planning.** It is the intent of the State of Vermont to significantly reduce the amount of construction debris going into the total waste stream. Contractor is required to prepare and submit a Construction Site Waste Reduction Plan prior to contract execution. A sample plan is available at: <https://dec.vermont.gov/waste-management/solid/materials-mgmt/construction-waste> . Failure to comply with this provision or a failure to comply with the plan itself will result in withholding of general conditions' money from the contractor's monthly requisition until Contractor has rectified the situation and is in full compliance with these provisions.

MASTER COPY DISTRIBUTED:

Contractor, Accounting, Director, PC, PM, DFM, Lavallee, others

PROJECT NAME:

Dept ID:

FUNNY WORD:

FUND SOURCE: 100 % Bond Funds

PROJECT#:

BUILDING#:

SAMPLE

**ATTACHMENT A – SCOPE OF WORK OVERVIEW**

Contractor shall provide all labor, materials and equipment necessary to satisfactorily complete the construction of the **XXX** Project located at **XXX** in **XXX**, Vermont

Construction shall be in accordance with the construction documents (drawings and specifications) prepared by the Department of Buildings and General Services **OR XXX Consultants** dated **XXX** and in accordance with the work described in **Attachments D, E, F, G, and Attachment H**. The following represents a summary description of the Project

**DESCRIPTION OF WORK:**

- A. The work consists of, but not limited to, the construction of **XXXX**. Including, but not limited to, the following major components:
- 1) **XXX**
  - 2) **XXX**
  - 3) **ETC.**
- B. ETC.

**WORK UNDER ANOTHER CONTRACT: REMOVE IF NOT APPLICABLE**

- A. State shall award separate contract for the following work. Work under this contract shall include:
1. **XXX**
- B. General: Contractor shall cooperate fully with separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying work under this Contract. Contractor shall coordinate the Work of this Contract with work performed under separate contracts.

**PRE-ORDER PRODUCTS (PURCHASE BY CONTRACTOR(S)): REMOVE IF NOT APPLICABLE**

- A. None ordered at this time; however State may place orders with suppliers for specific products, to expedite delivery and for other purposes in State's interests.
- B. A copy of each purchase order shall be required to be bound at the back of each referenced Section as an attachment for information to Supplier.
- C. On execution of State Contractor Agreement, Contractor shall execute purchase agreement with designated supplier, in accordance with terms stated in State's purchase order to supplier.
- D. Contractor responsibility for purchase, handling and installation of pre-ordered products is the same as for other Contractor furnished products.

**ELECTRONIC SUBMITTALS:**

Contractor shall obtain a license for the State to utilize Submittal Exchange for the purposes of this project. The State and its representatives will have full control of the use of Submittal Exchange by authorized users of the State.

1. Summary:

- a. Submittal Exchange® ([www.submittalexchange.com](http://www.submittalexchange.com)) shall be used to provide an on-line database and repository, which shall be used to transmit and track project-related documents. The intent for using this service is to expedite the construction process by reducing paperwork, improving information flow, and decreasing submittal review turnaround time.
- b. Project submittals (shop drawing, product data and quality assurance submittals) shall be transmitted by the Contractor in PDF to Submittal Exchange®, where it will be tracked and stored for retrieval for review. After the submittal is reviewed it shall be uploaded back to Submittal Exchange® for action and use by the Contractor.
- c. The service also tracks and stores documents related to the project such as Request for Information (RFI's), Architect's Supplemental Instructions (ASI), Information Bulletins (IB's), CAD Coordination, Commission, Construction Change Directive (CCD), Contractor's Daily Reports, Minutes, Photos, Quality Control, Shop Drawings, Testing, Closeout Documents including As-Built Drawings, Operations and Maintenance Manuals and other project related documents.
- d. The electronic submittal process shall not be used for color samples, color charts, or physical material samples.

2. Procedures:

- a. For each submittal, the Contractor shall review and apply an electronic stamp certifying that the submittal complies with the requirements of the Contract Documents, including verification of manufacturer/product, dimensions and coordination of information with other parts of the work.
- b. Contractor shall transmit each submittal to Architect/Engineer using the Submittal Exchange® website, [www.submittalexchange.com](http://www.submittalexchange.com).
- c. Architect/Engineer review comments shall be made available on the Submittal Exchange® website for downloading. Contractor shall receive email notice of completed review.
- d. Contractor's shall provide submittals in PDF. The Contractor shall use the following options:
  - 1) Subcontractors and suppliers provide electronic submittals in PDF to the Contractor through Submittal Exchange®.
  - 2) Subcontractors and suppliers provide paper submittals to the Contractor, who electronically scans and converts them to PDF.
  - 3) Contract a Scanning Service, which will allow the Contractor and the Contractor's subcontractors and suppliers to provide paper submittals to the Scanning Service, which electronically scans and converts them to PDF. It will be the Contractor's responsibility to transmit the scanned submittals to Submittal Exchange®.

- 4) Distribution of reviewed submittals to subcontractors and suppliers is the responsibility of the Contractor.
  - e. Contractor shall submit paper copies of any reviewed submittals not submitted electronically at project closeout for record purposes.
3. Image Quality:
- a. Image resolution: The PDF files shall be created at a minimum resolution of 200 dots per inch utilizing the original document size. The Contractor shall be responsible to increase the resolution of the scanned file or images being submitted as required to adequately present the information. Unreadable and poorly scanned PDF files shall be rejected.
  - b. Image Color Rendition: When information represented requires color to convey the intent and compliance, Contractor shall provide full color PDF reproduction.
4. Training:
- a. The Project Manager will coordinate the initial training between the Contractor and Submittal Exchange®.

**Attachment B - Payment Provisions**

The State shall pay the Contractor a maximum amount of \$XXXX upon satisfactory completion of the project and acceptance thereof by the State for all work identified in Attachment A, as follows:

1. **Contract Sum:** The State shall pay Contractor compensation as follows: Maximum Amount of \$XXXX.00.
  - a) Withholding shall be at 10% or unless otherwise noted in the Contract.
  - b) Payments under this Contract shall be made in a manner consistent with applicable conditions in the General Conditions.
  - c) Unit Prices contained in the bid for additions to or deductions from estimated quantities and or price are: **LIST INDIVIDUAL UNIT PRICES IF APPLICABLE - REMOVE IF NOT APPLICABLE**
    - Unit price per XXX
      - a. \$XX.00
    - Unit price per XXX
      - a. \$XX.00
    - Unit price per XXX
      - a. \$XX.00
    - Unit price per XXX
      - a. \$XX.00
    - Etc.
  - d) Alternates contained and identified on the Bid Proposal Form for additions to or deductions from, the value of which is taken at the Owner's option to adjust the Contract Sum as identified in 1. Contract Sum. **REMOVE IF NOT APPLICABLE**
    - ADD Alternate No. 1: XXX
    - DEDUCT Alternate No. 1: XXX
2. This agreement represents the entire agreement between the parties; No changes, modifications, or amendments in the terms and conditions of this contract shall be effective unless reduced to writing, numbered and signed by the duly authorized representative of the State and Contractor.
3. **LANGUAGE USED UNDER SECTION 3 IS DEPENDENT ON FUNDING SOURCE IDENTIFIED IN RFP. OPTIONS ARE:**

This contract is funded, in whole or in part, through the American Rescue Plan Act (ARPA) funds and/or Vermont Capital Construction Act funds. Wages for construction employees shall be paid no less than the Vermont Prevailing Wage and Fringe Benefit Rate requirements (reference Instructions

to Bidders, Prevailing Wage Rate Requirements). A complete list of occupations and associated wage rates are available on the internet at: <http://www.vtlni.info/lmipub.htm>

OR

This contract is funded using federal monies and shall require compliance with the Davis-Bacon Act. Wages shall be paid using rates no less than those established under the Davis-Bacon prevailing wage rates. Complete information related to Davis-Bacon and Related Acts is available at: <http://www.dol.gov/whd/contracts/dbra.htm> .

OR

This contract is funded using Vermont Capital Construction Act funds and/or American Rescue Plan Act (ARPA) funds, and federal funds that require compliance with the Davis-Bacon Act. In addition to the various requirements of the Davis-Bacon Act, wages for construction employees shall be paid using no less than the higher of either the federal (Davis-Bacon Act) or Vermont's Prevailing Wage and Fringe Benefit Rates.

OR

**REMOVE ALL IF NOT APPLICABLE.**

4. Contractor shall provide a detailed description of all work completed with each invoice.
5. The State shall not pay for any unauthorized labor, materials, equipment or expenses of Contractor.
6. Any services outside of agreement shall not be allowed.
7. The Contractor shall submit a detailed Schedule of Values for the owners review and use. Contractor shall submit invoices to the Department of Buildings and General Services on Contractor's standard billhead and shall specify the address where payment will be sent and shall include the Contract number. The State shall pay the Contractor based on the actual in-place quantity of work, as shown on the Schedule of Values.
8. The amount of compensation paid to the undersigned for work deemed outside the scope as determined by the State will be in one of the following manners as directed by the Owner.
  - a) A price agreed upon between the Owner and the Contractor.
  - b) A price determined by adding 15% for overhead and profit to the total direct cost of any extra work excluding unit pricing.
  - c) A price determined by extending unit price work above, if applicable.
9. Upon substantial completion of the work, and upon receipt of approved O&M manuals and record drawings, the State shall make payment, reflecting adjustment in retainage, if any, for work to be completed or corrected.
10. Upon certification by the State that all work has been completed, the following documentation must be received prior to final payment being made:

- a) Contractor shall keep State property free from liens arising hereunder. Prior to any progress payment, the State may require Contractor to furnish waivers of liens or such other evidence of compliance herewith. The State shall require every Contractor to furnish final lien waivers prior to final payment.
  - b) At the conclusion of the project, the affected contractors must complete the Construction Employment Report and submit it to the Dept. of Buildings and General Services for recording. A complete description and dollar value of the work or supplies provided, and percentage value of the overall construction contract for each such M/WBE transition must be included. Final payment will not be made until this requirement has been satisfied.
11. Payment Terms: Net 30. Payment of progress and final invoices shall be due from the State 30 days after delivery of an invoice free of errors in documentation and approved by the State's project representative. Retainage withheld, if any, is due from the State within 30 days after receipt of the final invoice, which may be submitted after final acceptance of the work or issuance of a Certificate of Substantial Completion less an amount, as determined by the State, to complete unfinished work.
12. Contractor shall invoice the State at:

State of Vermont  
Buildings and General Services  
Attention: **Project Manager**  
133 State Street  
Montpelier, VT 05633-5801

**ATTACHMENT C: STANDARD STATE PROVISIONS  
FOR CONTRACTS AND GRANTS  
REVISED DECEMBER 07, 2023**

**“Attachment C: Standard State Provisions for Contracts and Grants” (revision version dated December 07, 2023) constitutes part of this Agreement and is hereby incorporated by reference as if fully set forth herein and shall apply to the purchase of all goods and/or services by the State under this Agreement. A copy of this document is available online at: <https://bgs.vermont.gov/purchasing-contracting/forms>.**



**Vermont Agency of Natural Resources, Waste Management Division  
Construction Site Waste Reduction Plan**

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

Contact Person: \_\_\_\_\_

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

Telephone #: \_\_\_\_\_

Project Location:

*Project Description:*

(Demolition/renovation/new construction, square footage, commercial/residential/industrial, timeframe, etc.)

Job-site Planning Worksheet  
*Attach any extra sheets as needed*

**Waste Prevention Planning** - What steps have been taken to prevent waste from being generated during the project? This could include using designs that favor standard sizes or specifying building techniques that incorporate fewer materials. On job sites, it could include a central location for all wood cutting to facilitate use of the cut-off pieces. It could also include asking suppliers to take back excess materials, removing salvageable materials before construction/renovation/demolition or including specifications requiring subcontractors to prevent waste.

**Education Plan** - Describe how the Waste Management Program will be communicated to construction crews and subcontractors and how contractors will insure that subcontractors abide by the Plan.

**Contract specifications** - Include any subcontractor waste reduction specifications you incorporated into your contract such as requirements for reusing or recycling certain materials. The web site at: <https://dec.vermont.gov/waste-management/solid/materials-mgmt/construction-waste> has sample language for all stages of construction/demolition/renovation. Describe how these contract specifications have been enforced.

It is important for large projects to specify its waste management goals in subcontractor agreements. This assures that the expectations and procedures are communicated clearly to everyone. The following is a sample specification in a subcontractor agreement:

*"The subcontractor will make a good faith effort to reduce the amount of waste generated on the job-site and recycle material as per the contractor's Waste Reduction Plan. The subcontractor will follow the designated handling procedures for each type of waste generated on-site and provide documentation to verify material reuse, recycling, and disposal as indicated in the waste Reduction Plan."*

*Reprinted from the King County Washington, Construction Recycling Program*

**Reuse & Recycling Worksheet – page 2 of 3**

<b>Material</b>	<b>Estimated Quantity</b>	<b>End Markets</b> - For a listing of Vermont salvage and recycling markets check out the web site at: <a href="http://www.anr.state.vt.us/dec/wastediv/recycling/c&amp;d.htm">www.anr.state.vt.us/dec/wastediv/recycling/c&amp;d.htm</a> or call 802-241-3477 or 241-3481. When researching recycling options - ask the recyclers what they are doing with the wastes.	<b>Handling/Site Management</b> - how materials are to be removed, separated, stored and hauled for reuse or recycling.
<i>Sample listing: Cardboard</i>	<i>one 3 cy dumpster</i>	<i>Recycled thru ABC Hauling.</i>	<i>A covered cardboard dumpster will be placed next to the trash dumpster. Will call hauler when full.</i>
Salvageable Items or used building materials such as windows, doors, moldings, fixtures, bathroom fixtures, etc.  (Please list items separately)			
Asphalt roofing shingles			
Asphalt			
Brick			
Cardboard			

***Reuse & Recycling Worksheet page 3 of 3***

<b>Material</b>	<b>Estimated Quantity</b>	<b>End Markets</b> - For a listing of Vermont salvage and recycling markets check out the web site at: <a href="http://www.anr.state.vt.us/dec/wastediv/recycling/c&amp;d.htm">www.anr.state.vt.us/dec/wastediv/recycling/c&amp;d.htm</a> or call 802-241-3477 or 241-3481. When researching recycling options - ask the recyclers what they are doing with the wastes.	<b>Handling/Site Management</b> - how materials are to be removed, separated, stored and hauled for reuse or recycling.
"Clean" Wood			
Concrete			
Metal			
Plaster/Drywall			
"Treated/Painted" Wood			
Other			

STATE OF VERMONT  
CONTRACT AMENDMENT

It is hereby agreed by and between the State of Vermont, **AGENCY/DEPARTMENT** (the "State") and **CONTRACTOR NAME**, with a principal place of business in **CITY, STATE** (the "Contractor") that the contract between them originally dated as of **CONTRACT START DATE**, Contract # **NUMBER**, as amended to date, (the "Contract") is hereby amended as follows:

**REMOVE/EXPAND/REVISE THE BELOW AMENDMENT ITEMS, AS APPLICABLE**

- I. **Maximum Amount.** The maximum amount payable under the Contract, wherever such reference appears in the Contract, shall be changed from \$ \_\_\_\_\_ to \$ \_\_\_\_\_, representing an increase / a decrease of \$ \_\_\_\_\_.
- II. **Contract Term.** The Contract end date, wherever such reference appears in the Contract, shall be changed from **OLD END DATE** to **NEW END DATE**. **[REMOVE/REVISE FOLLOWING SENTENCE AS APPLICABLE]** The Contract Term may be renewed for one additional one-year period at the discretion of the State.
- III. **Attachment A, Scope of Services.** The scope of services is amended as follows:  
**EXAMPLE:** Section \_\_ of Attachment A [is amended by the addition of the following requirements] [OR] [is hereby deleted in its entirety and replaced as set forth below /or/ in the attachment to this Amendment].
- IV. **Attachment B, Payment Provisions.** The payment provisions are amended as follows:  
**EXAMPLE:** Section \_\_ of Attachment B [is amended by the addition of the following requirements] [OR] [is hereby deleted in its entirety and replaced as set forth below /or/ in the attachment to this Amendment].
- V. **Attachment C, Standard State Provisions for Contracts and Grants.** Attachment C is hereby deleted in its entirety and replaced by the Attachment C **EFFECTIVE DATE** attached to this Amendment.

**Taxes Due to the State.** Contractor certifies under the pains and penalties of perjury that, as of the date this contract amendment is signed, the Contractor is in good standing with respect to, or in full compliance with a plan to pay, any and all taxes due the State of Vermont.

**Child Support (Applicable to natural persons only; not applicable to corporations, partnerships or LLCs).** Contractor is under no obligation to pay child support or is in good standing with respect to or in full compliance with a plan to pay any and all child support payable under a support order as of the date of this amendment.

**Certification Regarding Suspension or Debarment.** Contractor certifies under the pains and penalties of perjury that, as of the date this contract amendment is signed, neither Contractor nor Contractor's principals (officers, directors, owners, or partners) are presently debarred,

Contract # \_\_\_\_\_

Amendment # \_\_\_\_\_

suspended, proposed for debarment, declared ineligible or excluded from participation in federal programs, or programs supported in whole or in part by federal funds.

Contractor further certifies under pains and penalties of perjury that, as of the date this contract amendment is signed, Contractor is not presently debarred, suspended, nor named on the State's debarment list at: <http://bgs.vermont.gov/purchasing-contracting/debarment>

**Sole Source Contract for Services.** This Contract results from a "sole source" procurement under State of Vermont Administrative Bulletin 3.5 process and Contractor hereby certifies that it is and will remain in compliance with the campaign contribution restrictions under 17 V.S.A. § 2950.

**Cybersecurity Standard Update 2023-01:** Contractor confirms that all products and services provided to or for the use of the State under this Agreement shall be in compliance with *State of Vermont Cybersecurity Standard Update 2023-01*, which prohibits the use of certain branded products in State information systems or any vendor system that is supporting State information systems, and is available on-line at: <https://digitalservices.vermont.gov/cybersecurity/cybersecurity-standards-and-directives>.

**State and Federal Terms for Products and Services.** Contractor agrees that "STATE OF VERMONT- FEDERAL TERMS SUPPLEMENT (Non-Construction) Revision date: July 19, 2023)" which is attached as Attachment \_\_\_\_\_ to this amendment, applies to any products or services provided to the State, at any time, when using federal funds.

This document consists of \_\_\_\_\_ pages. Except as modified by this Amendment No. \_\_\_\_\_, all provisions of the Contract remain in full force and effect.

*[Remainder of Page Intentionally Left Blank]*

The signatures of the undersigned indicate that each has read and agrees to be bound by this Amendment to the Contract.

**STATE OF VERMONT**

**CONTRACTOR NAME**

**By:** \_\_\_\_\_

**By:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Date:** \_\_\_\_\_

SAMPLE

**MINORITY/WOMEN BUSINESS ENTERPRISES (M/WBE)**

**CONSTRUCTION CONTRACT REPORT**

**Project Name:** \_\_\_\_\_

**Contract No.:** \_\_\_\_\_ **Contract Amount:** \_\_\_\_\_ **Contract Date:** \_\_\_\_\_

**Contractor's Name, Address, Telephone and Facsimile Numbers:**

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

**Telephone Number:** \_\_\_\_\_

**FAX Number:** \_\_\_\_\_

The following information on Minority and Women Business Enterprises subcontracted on this project is provided to the Vermont Department of Buildings and General Services in accordance with Paragraph 15, Minority and Women Business Enterprises (M/WBE), of the Contract between the State of Vermont and the General Contractor for the above-mentioned project.

<b>Minority/Women Business Enterprises Name, Address &amp; Telephone Number</b>	<b>Trade or Materials Supplied</b>	<b>Subcontract Value</b>	<b>Percentage of Total Project</b>

**Signature:** \_\_\_\_\_

**Name (please print):** \_\_\_\_\_

**Title:** \_\_\_\_\_



Construction Employment Report

01/06/2011

FOR BGS USE ONLY: CONTRACT NO.: \_\_\_\_\_

DEPARTMENT OF BUILDINGS AND GENERAL SERVICES  
TWO GOVERNOR AIKEN AVENUE  
MONTPELIER, VERMONT

PROJECT TITLE: \_\_\_\_\_

NAME/ADDRESS/TELEPHONE & FAX NUMBER OF CONTRACTOR:

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

TELEPHONE NO.: ( ) \_\_\_\_\_

FAX NO.: ( ) \_\_\_\_\_

CHECK ONE:

General Contractor

First-tier Subcontractor

The following information is provided to the Vermont Department of Buildings and General Services in accordance with Paragraph 14, Employment of Women and Minorities, of the Contract between the State and the General Contractor for the above-referenced project.

<u>Applicant's Name, Address &amp; Phone Number</u>	<u>Employee Group *1</u>	<u>Trade *2</u>	<u>Action Taken</u>

\*1. Employee Group – Please select from the following three groups:

- MM – Minority Male
- WF – White Female
- MF – Minority Female

\*2. Trade – Specify type of trade, i.e., electrical, mechanical, carpentry, masonry, etc.

Return to:  
Name of individual sending  
Individual email address

Contractor: \_\_\_\_\_  
Address 1 \_\_\_\_\_  
City, State, Postal \_\_\_\_\_  
Contractor's SOV Contract Number: \_\_\_\_\_  
Contract Subject Matter: \_\_\_\_\_

This communication is sent to your company as you currently hold the State of Vermont (SOV) Contract referenced above. On March 3, 2022, Governor Phil Scott issued Executive Order No. 02-22, which in part requires a review of all contracts for Russian-sourced goods and goods produced by Russian entities. The Executive Order can be found here: <https://governor.vermont.gov/content/executive-order-02-22-solidarity-ukrainian-people>

The State is required to secure your response to this certification request. You should (1) either check Box A below, or check Box B and complete the associated table accordingly, and (2) sign below certifying that the form is accurate on behalf of your organization with respect to whether Russian-sourced goods and goods produced by Russian entities are being provided to the State of Vermont under the Contract.

Response to this letter must be submitted on or before **XXX**, 2022 by email to the SOV "Return to" contact stated above. If convenient for you, an electronic version of the template used for this letter is available at the web address link [Forms | Buildings and General Services \(vermont.gov\)](#) above.

- A.  Contractor hereby certifies that in connection with the Contract, **none** of the applicable goods are Russian-sourced goods and/or produced by Russian entities.
  
- B.  If the non-use box is not checked in Section A above, Contractor hereby indicates that certain products provided under this contract with the State of Vermont are Russian-sourced goods and/or produced by Russian entities, as described in the table below.

In addition, identify where indicated in the table, which goods are Russian-sourced and/or produced by Russian entities. An additional column is provided for any note or comment that you may have.

SOV Contract #	Provided Equipment, Product or Goods	Contractor Note or Comment

Identify the point of contact for your company, along with their email address and phone number who the State can reach out to with follow-up questions or information associated with Executive Order No. 02-22.

Contact Name: \_\_\_\_\_  
E-mail: \_\_\_\_\_  
Phone: \_\_\_\_\_

The person signing this form states that the person is authorized to sign on behalf of the Contractor, and that upon reasonable inquiry and investigation, the certification and information provided above is true and correct for the Contractor and for its vendors whose products are being used to support performance of the Contract.

**Contractor Name:** \_\_\_\_\_

**By:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Date:** \_\_\_\_\_

Sample

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# STATE OF VERMONT STANDARD FORM

## GENERAL CONDITIONS FOR CONSTRUCTION CONTRACTS (May 22, 2019)

The following general conditions are for use with all construction contracts with the State of Vermont, administered through the Department of Buildings and General Services.

These general conditions will be attached to, and become part of, the Contract Documents.

If there is a conflict between the terms and conditions stated in these general conditions and the terms and conditions contained in the State-Contractor Agreement; the terms of the State-Contractor Agreement control.

### ARTICLE 1

#### CONTRACT DOCUMENTS

##### 1.1 DEFINITIONS

The term “State-Contractor Agreement” refers to the specific agreement between the State of Vermont and a particular contractor whereby the State and the contractor identify, explain and agree to the specific contractual obligations of each party and identify the nature and scope of a particular project. The “State-Contractor Agreement” will utilize one of the following construction delivery methods: (i) A general contractor hired by the State to provide all services necessary for the construction of the particular project. The general contractor is responsible for completing the particular project for a fixed price; (ii) a construction manager hired by the State to provide professional services and act as a consultant to the State in the design development and construction phases and to deliver the particular project for a Guaranteed Maximum Price; or (iii) a design-build contractor hired by the State to provide both design and construction services, under a single contract, for a particular project.

##### 1.1.1 THE CONTRACT DOCUMENTS

The Contract Documents consist of the State-Contractor Agreement, the Conditions of the Contract (General, Supplementary and other Conditions), the Drawings, the Specifications, and all Addenda issued prior to bid opening and any Change Orders after execution of the Contract.-

##### 1.1.2 THE CONTRACT

The Contract Documents form the contract for construction. This contract represents the entire and integrated agreement between the parties and supersedes all prior negotiations, representations, or agreements, either written or oral. The contract may only be amended by Change Order. The Contract Documents shall not be construed to create any contractual relationship of any kind between the Architect and the Contractor, but the Architect shall be entitled to performance of obligations intended for his benefit, and to enforcement thereof. Nothing contained in the Contract Documents shall create any contractual relationship between the State or the Architect and any Subcontractor or Sub-subcontractor.

### **1.1.3 THE WORK**

The Work comprises the completed construction required by the Contract Documents and includes all labor necessary to produce such construction, and all materials and equipment incorporated or to be incorporated in such construction.

### **1.1.4 THE PROJECT**

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part.

### **1.1.5 PROJECT MANAGER**

**The term “Project Manager” refers to the employee of the State who has been assigned responsibility for overseeing and managing the proper and timely implementation of the project.**

## **1.2 EXECUTION & INTENT**

**1.2.1** Upon request, the State-Contractor Agreement will be signed in duplicate by the State and Contractor.

**1.2.2** By executing the Contract, the Contractor represents that he or she has visited and examined the site; is fully informed as to the extent and character of the Project; familiarized himself or herself with the local conditions under which the Work is to be performed, and correlated his / her observations with the requirements of the Contract Documents and understands that no consideration will be given for any alleged misunderstanding of same.

**1.2.3** The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work. The Contract Documents are complementary, and what is required by any one shall be as binding as, if required by all. Work not covered in the Contract Documents will not be required unless it is consistent with the Contract Documents and is reasonably inferable from the Contract Documents as being necessary to produce the intended results. Words and abbreviations which have well-known technical or trade meanings are used in the Contract Documents in accordance with such recognized meanings.

**1.2.4** The organization of the Specifications into divisions, sections and articles, and the arrangement of Drawings shall not control the Contractor in dividing the Work among

Subcontractors or in establishing the extent of Work to be performed by any trade.

### **1.3 OWNERSHIP AND USE OF DOCUMENTS**

**1.3.1** All drawings, specifications, estimates, and all other documents, including shop drawings and calculations, prepared at any time in connection with the Project, shall, upon payment for services in connection therewith, become the sole property of the State.

## **ARTICLE 2**

### **ARCHITECT**

#### **2.1 DEFINITION**

The term Architect, as used in this document, means a person, or entity, lawfully licensed to practice architecture or a person or entity lawfully licensed to provide professional engineering services and has been identified as such in the State-Contractor Agreement. The term Architect means the Architect or his / her authorized representative. These General Conditions are applicable whether or not an Architect is utilized for a particular project. In the event that an Architect has not been utilized for the project, the Project Manager will be responsible for administration of the contract as specifically enumerated in paragraph 2.2. All other functions, duties, or obligations of the Architect, under these General Conditions, in the absence of an Architect, will be performed by the Project Manager.

#### **2.2 ADMINISTRATION OF THE CONTRACT**

**2.2.1** The Architect will provide administration of the Contract as hereinafter described.

**2.2.2** The Architect will be the State's representative during construction and until final payment is due. The Architect will advise and consult with the State. The State's instructions to the Contractor shall be forwarded through the Architect. The Architect will have authority to act on behalf of the State only to the extent provided in the Contract Documents, unless otherwise modified by written instrument in accordance with Subparagraph 2.2.10.

**2.2.3** The Architect will visit the site at intervals appropriate to the stage of construction to familiarize himself or herself generally with the progress and quality of the Work and to determine in general if the Work is proceeding in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of his or her on-site observations as an architect, he or she will keep the State informed of the progress of the Work, and will endeavor to guard the State against defects and deficiencies in the Work of the Contractor.

**2.2.4** The Architect will not be responsible for and will not have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, and he or she will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. The Architect will not be responsible for or have control or charge over the acts or omissions of the Contractor,

Subcontractors, or any of their agents or employees, or any other persons performing any of the Work.

**2.2.5** The Architect shall at all times have access to the Work wherever it is in preparation and progress. The Contractor shall provide facilities for such access so the Architect may perform his or her functions under the Contract Documents.

**2.2.6** Based on the Architect's observations of the Work and an evaluation of the Contractor's Applications for Payment, the Architect will determine the amounts owing to the Contractor and will issue Certificates for Payment in such amounts, as provided in Paragraph 9.4 of these General Conditions.

**2.2.7** The Architect will review and approve or take other appropriate action upon Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for conformance with the design concept of the Work and with the information given in the Contract Documents. Such action shall be taken with reasonable promptness so as to cause no delay.

**2.2.8** The Architect will prepare Change Orders in accordance with Article 12. The Architect has authority to order minor changes in the Work with the consent of the owner.

**2.2.9** The Architect will conduct inspections to determine the dates of Substantial Completion and final completion, will receive and forward to the State for the State's review written warranties and related documents required by the Contract and assembled by the Contractor, and will issue a final Certificate for Payment upon compliance with the requirements of Paragraph 9.9.

**2.2.10** The duties, responsibilities and limitations of authority of the Architect as the State's representative during construction as set forth in the Contract Documents will not be modified or extended without written consent of the State and the Architect. In the event that the duties, responsibilities and limitations of authority of the Architect as State's representative during construction as set forth in the Contract Documents is modified or extended, the State will immediately notify the Contractor, in writing, of the modification or extension and the date that the modified or extended authority is effective. If the change of duties, responsibilities, or limitations of authority of the Architect, causes the Contractor to incur new, additional, and unexpected expenses completing the Work, then the State and the Contractor shall agree to an equitable adjustment to be implemented by Change Order to the State-Contractor Agreement.

**2.2.11** In case of the termination of the employment of Architect, the State may appoint a subsequent architect in which case, the subsequent architect will have the same status under the Contract Documents as that of the former architect. In the event of termination of the Architect, the State will immediately notify the Contractor, in writing, of the termination and the appointment of a replacement architect, if any.

**2.2.12** The Architect will be the interpreter of the requirements of the Contract Documents and will make recommendations to the State regarding the progress and quality of the Work and whether the Work is proceeding in accordance with the Contract Documents.

**2.2.13** The Architect will render interpretations necessary for the proper execution and progress of the Work, with reasonable promptness and in accordance with any time limit agreed

upon, in writing, by the Architect, Contractor, and the State.

2.2.14 Claims, disputes and other matters in question between the Contractor and the State relating to the execution or progress of the Work or the interpretation of the Contract Documents shall be referred initially to the Architect for review. The Architect will review the nature of the claim, dispute or other matter, along with any documentation provided by the Contractor or the State, and within a reasonable time, the Architect will provide a written recommendation to the State.

### **ARTICLE 3**

#### **STATE**

##### **3.1 DEFINITION**

The State of Vermont, by and through the Department of Buildings and General Services is the entity identified as “State” in the State-Contractor Agreement and is referred to throughout the Contract Documents as the “State”.

##### **3.2 RESPONSIBILITIES OF THE STATE**

3.2.1 The State will identify a Project Manager for the Project. The Project Manager will be the sole point of contact between the Contractor and the State. The Project Manager will be the State’s representative authorized to communicate the State’s position and directions related to all contract work and to coordinate all change orders with the Commissioner of Buildings and General Services as deemed necessary.

3.2.2 If applicable, the State shall furnish all surveys describing the physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site.

3.2.3 Except as provided in Subparagraph 4.7.1, the State shall secure and pay for necessary approvals, easements, assessments and charges required for the construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

3.2.4 Information or services under the State's control shall be furnished by the State with reasonable promptness to avoid delay in the orderly progress of the Work.

3.2.5 Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, all copies of Drawings and Specifications reasonably necessary for the execution of the Work.

3.2.6 The State shall forward instructions to the Contractor through the Architect.

3.2.7 The foregoing are in addition to any other duties and responsibilities of the State enumerated in the Contract Documents including those responsibilities described in Articles 6, 9 and 11 of this agreement.



**3.2.8** The State may utilize a Clerk-of-the-Works to provide inspection and monitoring work on behalf of the State. If a Clerk-of-the-Works is utilized, it is the responsibility of the Architect and the Contractor to review and understand the Clerk's duties, responsibilities and limitations of authority. Upon request, the State shall provide a copy of the Clerk-of-the-Works contract to Architect and Contractor.

### **3.3 STATE'S RIGHT TO STOP THE WORK**

**3.3.1** If the Contractor fails to correct defective Work as required by Paragraph 13.2 or persistently fails to carry out the Work in accordance with the Contract Documents, the State, by a written order signed personally or by an agent specifically so empowered by the State in writing, may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the State to stop the Work shall not give rise to any duty on the part the State to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Subparagraph 6.1.3.

### **3.4 STATE'S RIGHT TO CARRY OUT THE WORK**

**3.4.1** If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within seven days after receipt of written notice from the State to commence and continue correction of such default or neglect with diligence and promptness, the State may, after seven days following receipt by the Contractor of an additional written notice and without prejudice to any other remedy he may have, make good such deficiencies. In such case an appropriate Change Order shall be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies, including compensation for the Architect's and the State's additional services made necessary by such default, neglect or failure. Such action by the State and the amount charged to the Contractor are both subject to review by the Architect under Paragraph 2.2.14 of these General Conditions. If the payments then or thereafter due the Contractor are not sufficient to cover the amounts paid by the State to make good such deficiencies, then the Contractor shall pay the difference to the Owner.

## **ARTICLE 4**

### **CONTRACTOR**

#### **4.1 DEFINITION**

The Contractor is the person or entity identified as such in the State Contractor Agreement and is referred to throughout the Contract Documents as Contractor. The term Contractor means the Contractor or his authorized representative.

#### **4.2 REVIEW OF CONTRACT DOCUMENTS**

**4.2.1** The Contractor shall carefully study and compare the Contract Documents and shall immediately report in writing to the Architect and the State any error, inconsistency or omission he may discover. The Contractor shall not be liable to the State or the Architect for any damage resulting from any such errors, inconsistencies or omissions in the Contract Documents. The

Contractor shall perform no portion of the Work at any time without Contract Documents or, where required, approved Shop Drawings, Product Data or Samples for such portion of the Work.

### **4.3 SUPERVISION AND CONSTRUCTION PROCEDURES**

**4.3.1** The Contractor shall supervise and direct the Work, using his / her best skill and attention. The Contractor shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract. All aspects of the Project shall be subject to the inspection and approval of the State. Contractor guarantees to repair, replace, re-execute or otherwise correct any defect in workmanship, materials, or the like that fails to conform to the requirements of this Contract or that appears during the progress of the Work or within one year of final acceptance by the State.

**4.3.2** The Contractor shall be responsible to the State for the acts and omissions of his / her employees, Subcontractors and their agents and employees, and other persons performing any of the Work under a contract with the Contractor.

**4.3.3** The Contractor shall not be relieved from his / her obligations to perform the Work in accordance with the Contract Documents either by the activities or duties of the Architect in his / her administration of the Contract, or by inspections, tests or approvals required or performed under Paragraph 7.7 by persons other than the Contractor.

**4.3.4** The Contractor shall acquaint himself (herself / itself) with the limits of the property or right-of-way of the State and shall not trespass on other property. The Contractor shall adequately protect the project, adjacent property and the public, and shall be responsible for any damage or injury due to the Contractor's act or neglect, and shall save the State harmless in respect thereto.

**4.3.5** All work shall be done in such a manner as not to interfere with the State's operating functions. Contractor and his employees shall familiarize themselves and comply with all rules and regulations applicable to the project.

**4.3.6** The Contractor shall keep the premises free from liens arising out of or from the Project. Contractor shall obtain and submit waivers of liens with a request for a progress or final payment.

### **4.4 LABOR AND MATERIALS**

**4.4.1** Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work. Contractor guarantees that materials shall be of the best quality, that work shall be completed in a neat and workmanlike manner, that equipment will be installed in a first class manner, and that all aspects of the project will be delivered in good working order complete and perfect in every respect and that all systems and materials necessary to make the project a complete operating utility as contemplated by the above description of the project is included in the Contract price.

**4.4.2** The Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the Work any unfit person or anyone not skilled in the task assigned to him.

#### **4.5 WARRANTY**

**4.5.1** The Contractor warrants to the State and the Architect that all materials and equipment furnished under this Contract will be new unless otherwise specified, and that all Work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. If requested by the Architect or the State, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. This warranty is not limited by the provisions of Paragraph 13.2 of these General Conditions.

#### **4.6 TAXES**

The State is exempt from all sales and federal excise taxes. Contractors will be responsible for the payment of any sales, consumer, use and other similar taxes for the Work or portions thereof provided by the Contractor which are legally enacted at the time bids are received, whether or not yet effective.

#### **4.7 PERMITS, FEES AND NOTICES**

**4.7.1** Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for all permits and governmental fees, licenses and inspections necessary for the proper execution and completion of the Work which are customarily secured after execution of the Contract and which are legally required at the time the bids are received. Contractor shall comply with the regulations and requirements of any insurance company which issues a policy on any part of the work or site.

**4.7.2** The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the performance of the Work.

**4.7.3** It is not the responsibility of the Contractor to make certain that the Contract Documents are in accordance with applicable laws, statutes, building codes and regulations. However, if the Contractor observes that any of the Contract Documents are at variance therewith in any respect, he / she shall promptly notify the Architect in writing, and any necessary changes shall be accomplished by appropriate modification.

**4.7.4** If the Contractor performs any Work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Architect, he / she shall assume full responsibility therefor and shall bear all costs attributable thereto.

**4.7.5** The Contractor agrees to comply with all the requirements of Title 21 V.S.A., Chapter 5, Subchapter 6 relating to fair employment practices and agrees further to include a similar provision in any and all subcontracts. A link to 21 V.S.A. Chapter 5, Subchapter 6 is provided: <http://legislature.vermont.gov/statutes/section/21/005/00495>

## **4.8 ALLOWANCES**

**4.8.1** The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by these allowances shall be supplied for such amounts and by such persons as dictated by the process contained in the Contract Documents.

**4.8.2** Unless otherwise provided in the Contract Documents:

(a) these allowances shall cover the cost to the Contractor, less any applicable trade discount, of the materials and equipment required by the allowance delivered at the site, and all applicable taxes;

(b) the Contractor's costs for unloading and handling on the site, labor, installation costs, overhead, profit and other expenses contemplated for the original allowance shall be included in the Contract Sum and not in the allowance;

(c) whenever the cost is more than or less than the allowance, the Contract Sum shall be adjusted accordingly by Change Order, the amount of which will recognize changes, if any, in handling costs on site, labor, installation costs, overhead, profit and other expenses.

## **4.9 SUPERINTENDENT**

The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during the progress of the Work. The superintendent shall represent the Contractor and all communications given to the superintendent shall be as binding as if given to the Contractor. All Communications shall be in writing when made or shall be confirmed in writing, by the Contractor, within twenty-four (24) hours of the communication.

## **4.10 PROGRESS SCHEDULE**

The Contractor, within ten (10) working days of receiving notice of the award of the contract, shall prepare and submit for the State's and Architect's information an estimated progress schedule for the Work. The progress schedule shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work.

## **4.11 DOCUMENTS AND SAMPLES AT THE SITE**

**4.11.1** The Contractor shall maintain at the site for the State one record copy of all Drawings, Specifications, Addenda, Change Orders and other modifications, in good order and marked currently to record all changes made during construction, and approved Shop Drawings, Product Data and Samples. These shall be available to the Architect and the State for monthly review prior to approval of Contractor's monthly application for payment. Prior to substantial completion of the Work, the Contractor shall ensure that one record copy of all Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to record all changes made during construction, and approved Shop Drawings, Product Data and Samples are delivered to the Architect for the State and a duplicate copy shall be delivered to the State for the State's use.

## **4.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**

**4.12.1** Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or any Subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

**4.12.2** Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate a material, product or system for some portion of the Work.

**4.12.3** Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

**4.12.4** The Contractor shall review, approve and submit, with reasonable promptness and in such sequence as to cause no delay in the Work or in the work of the State or any separate contractor, all Shop Drawings, Product Data and Samples required by the Contract Documents.

**4.12.5** By approving and submitting Shop Drawings, Product Data and Samples, the Contractor represents that he / she has determined and verified all materials, field measurements, and field construction criteria related thereto, or will do so, and that he / she has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

**4.12.6** The Contractor shall not be relieved of responsibility for any deviation from the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data or Samples under Subparagraph 2.2.7 of these General Conditions unless the Contractor has specifically informed the Architect and the State in writing of such deviation at the time of submission and the Architect and the State has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the Shop Drawings, Product Data or Samples by the Architect's approval thereof.

**4.12.7** The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data or Samples, to revisions other than those requested by the Architect on previous submittals.

**4.12.8** No portion of the Work requiring submission of a Shop Drawing, Product Data or Sample shall be commenced until the submittal has been approved by the Architect as provided in Subparagraph 2.2.7 of these General Conditions. All such portions of the Work shall be in accordance with approved submittals.

## **4.13 USE OF SITE**

**4.13.1** The Contractor shall confine operations at the site to areas permitted by law, including areas designated for operations or prohibited from operations by any applicable permit and or regulation, ordinances, permits and the Contract Documents and shall not unreasonably encumber the site with any materials or equipment.

## **4.14 CUTTING AND PATCHING OF WORK**

**4.14.1** The Contractor shall be responsible for all cutting, fitting or patching that may be required to complete the Work or to make its several parts fit together properly.

**4.14.2** The Contractor shall not damage or endanger any portion of the Work or the work of the State or any separate contractors by cutting, patching or otherwise altering any work, or by excavation. The Contractor shall not cut or otherwise alter the work of the State or any separate contractor except with the written consent of the State and of such separate contractor. The Contractor shall not unreasonably withhold from the State or any separate contractor his consent to cutting or otherwise altering the Work.

#### **4.15 CLEANING UP**

**4.15.1** Before commencement of any on-site activities, Contractor is required to prepare and submit to the Project Manager a Construction Site Waste Reduction Plan. A sample plan is available at: <http://www.anr.state.vt.us/dec/wastediv/recycling/CandD.htm> . Failure to comply with this provision or a failure to comply with the plan itself will result in withholding of general conditions' money from the contractor's monthly requisition until Contractor has rectified the situation and is in full compliance with these provisions.

**4.15.2** The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish. At the completion of the Work he shall remove all his waste materials and rubbish from and about the Project as well as all his tools, construction equipment, machinery and surplus materials and shall leave the premises in a clean and satisfactory condition.

**4.15.3** If the Contractor fails to clean up at the completion of the Work, the State may do so as provided in Paragraph 3.4 and the cost thereof shall be charged to the Contractor.

#### **4.16 COMMUNICATIONS**

**4.16.1** The Contractor shall forward all communications to the State through the Architect.

#### **4.17 ROYALTIES AND PATENTS**

The Contractor shall pay all royalties and license fees. The Contractor shall defend all suits or claims for infringement of any patent rights and shall save the State harmless from loss on account thereof, except that the State shall be responsible for all such loss when a particular design, process or the product of a particular manufacturer or manufacturers is specified, but if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, The Contractor shall be responsible for such loss unless he promptly gives such information to the Architect.

#### **4.18 INDEMNIFICATION**

**The Contractor hereby agrees and consents to indemnify and hold harmless the State under the terms and conditions specified in "Attachment C".**

## **SUBCONTRACTORS**

### **5.1 DEFINITION**

**5.1.1** A Subcontractor is a person or entity who has a direct contract with the Contractor to perform any of the Work at the site. The term Subcontractor means a Subcontractor or his / her authorized representative. The term Subcontractor does not include any separate contractor or his / her subcontractors.

**5.1.2** A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform any of the Work at the site. The term Sub-subcontractor means a Sub-subcontractor or an authorized representative thereof.

### **5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK**

Unless other procedures are specified or required by the Contract Documents or the Bidding Documents, then the following provisions are applicable:

**5.2.1** The Parties agree that it is in the best interests of both the Contractor and the State to determine and select subcontractors as soon as possible after the Contractor has been awarded the Project. Therefore, the Contractor agrees, to furnish to the State and the Architect in writing the names of the persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each of the principal portions of the Work within Ten (10) working days of award of the Project to Contractor. The State will reply within Ten (10) working days to the Contractor in writing stating whether or not the State, after due investigation, has reasonable objection to any such proposed person or entity.

**5.2.2** The Contractor shall not contract with any such proposed person or entity to whom the State has made reasonable objection under the provisions of Subparagraph 5.2.1 of these General Conditions. The Contractor shall not be required to contract with anyone to whom he has a reasonable objection.

**5.2.3** If the State has reasonable objection to any such proposed person or entity, the Contractor shall submit a substitute to whom the State has no reasonable objection, and the Contract Sum shall be increased or decreased by the difference in cost occasioned by such substitution and an appropriate Change Order shall be issued; however, no increase in the Contract Sum shall be allowed for any such substitution unless the Contractor has acted promptly and responsively in submitting names as required by Subparagraph 5.2.1. of these General Conditions.

**5.2.4** The Contractor shall make no substitution for any Subcontractor, person or entity previously selected if the State makes a reasonable objection to such substitution.

### **5.3 SUBCONTRACTUAL RELATIONS**

**5.3.1** By written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by the terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities

which the Contractor, by these Documents, assumes toward the State and the Architect. Said agreement shall preserve and protect the rights of the State and the Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that the subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the Contractor Subcontractor agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by these Documents, has against the State. The Contractor shall require each Subcontractor to enter into similar agreements with his Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the Subcontract, copies of the Contract Documents to which the Subcontractor will be bound by this Paragraph 5.3, and identify to the Subcontractor any terms and conditions of the proposed Subcontract which may be at variance with the Contract Documents. Each Subcontractor shall similarly make copies of such Documents available to his / her Sub-subcontractors.

## **ARTICLE 6**

### **WORK BY STATE OR BY SEPARATE CONTRACTORS**

#### **6.1 STATE'S RIGHT TO PERFORM WORK AND TO AWARD SEPARATE CONTRACTS**

**6.1.1** The State reserves the right to perform work related to the Project with its own forces, and to award separate contracts in connection with other portions of the Project or other work on the site under these or similar Conditions of the Contract. If the Contractor claims that delay or additional cost is involved because of such action by the State, he / she shall make such claim as provided elsewhere in the Contract Documents.

**6.1.2** When separate Contracts are awarded for different portions of the Project or other work on the site, the term Contractor in the Contract Documents in each case shall mean the Contractor who executes each separate State Contractor Agreement.

**6.1.3** The State will provide for the coordination of the work of its own forces and of each separate contractor with the Work of the Contractor, who shall cooperate therewith as provided in Paragraph 6.2.

#### **6.2 MUTUAL RESPONSIBILITY**

**6.2.1** The Contractor shall afford the State and separate contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall connect and coordinate his / her Work with the work of the State and separate contractors as required by the Contract Documents.

**6.2.2** If any part of the Contractor's Work depends for proper execution or results upon the work of the State or any separate contractor, the Contractor shall, prior to proceeding with the Work, promptly report to the Architect any apparent discrepancies or defects in such other work that render it unsuitable for such proper execution and results. Failure of the Contractor so to report shall constitute an acceptance of the State's or separate contractors work as fit and proper to receive



his Work, except as to defects which may subsequently become apparent in such work by others.

**6.2.3** Any costs caused by defective or ill-timed work shall be borne by the party responsible therefor.

**6.2.4** Should the Contractor wrongfully cause damage to the work or property of the State, or to other work on the site, the Contractor shall promptly remedy such damage as provided in Subparagraph 10.2.5 of these General Conditions.

### **6.3 STATE'S RIGHT TO CLEAN UP**

**6.3.1** If a dispute arises between the Contractor and separate contractors as to their responsibility for cleaning up as required by Paragraph 4.15 of these General Conditions, the State may clean up and charge the cost thereof to the Contractor.

## **ARTICLE 7**

### **MISCELLANEOUS PROVISIONS**

#### **7.1 GOVERNING LAW**

**7.1.1** The Contract shall be governed by the laws of the State of Vermont.

#### **7.2 SUCCESSORS AND ASSIGNS**

**7.2.1** The State and the Contractor each bind themselves, their partners, successors, assigns and legal representatives to the other party hereto and to the partners, successors, assigns and legal representatives of such other party in respect to all covenants, agreements and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract or sublet it as a whole without the written consent of the other, nor shall the Contractor assign any moneys due or to become due to him or her hereunder, without the previous written consent of the State.

#### **7.3 WRITTEN NOTICE**

**7.3.1** Written notice shall be deemed to have been duly served if delivered in person to the individual or member of the firm or entity or to an officer of the corporation for whom it was intended, or if delivered at or sent by registered or certified mail to the last business address known to him who gives the notice.

#### **7.4 CLAIMS FOR DAMAGES**

**7.4.1** Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the other party or of any of his / her employees, agents or others for whose acts he / she is legally liable, claim shall be made in writing to such other party within a reasonable time after the first observance of such injury or damage.

#### **7.5 BOND REQUIREMENTS**

The Contractor hereby agrees to comply with the State's bonding requirements as identified in the Instructions to Bidders which are included in the RFP and are attached and incorporated into the Contract Documents.

## **7.6 RIGHTS AND REMEDIES**

**7.6.1** The duties and obligations imposed by the Contract Documents and the rights and remedies available there under shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

**7.6.2** No action or failure to act by the State, Architect or Contractor shall constitute a waiver of any right or duty afforded any of them under the Contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

## **7.7 TESTS**

**7.7.1** If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any portion of the Work to be inspected, tested or approved, the Contractor shall give the Architect timely notice of its readiness so the Architect may observe such inspection, testing or approval. The Contractor shall bear all costs of such inspections, tests or approvals conducted by public authorities.

**7.7.2** If the Architect determines that any Work requires special inspection, testing, or approval which Subparagraph 7.7.1 does not include, he or she will, upon written authorization from the State, instruct the Contractor to order such special inspection, testing or approval, and the Contractor shall give notice as provided in Subparagraph 7.7.1. If such special inspection or testing reveals a failure of the Work to comply with the requirements of the Contract Documents, the Contractor shall bear all costs thereof, including compensation for the Architect's additional services made necessary by such failure; otherwise the State shall bear such costs, and an appropriate Change Order shall be issued.

**7.7.3** Required certificates of inspection, testing or approval shall be secured by the Contractor and promptly delivered by him to the Architect.

**7.7.4** If the Architect is to observe inspections, tests or approvals required by the Contract Documents, he will do so promptly.

## **7.8 INTEREST**

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at a rate of twelve percent (12 %) per annum. A payment is NOT due and payable unless and until the State has received an invoice filled out correctly and completely with all required supporting documentation.

## **7.9 DISPUTE RESOLUTION PROCESS**

Any claim, dispute or other matter in question not resolved by the process identified in Paragraph

2.2.14 of these General Conditions shall be subject to the following dispute resolution process: Contractor may seek review by the Commissioner of Buildings and General Services of the Architect's recommendation. Contractor must seek review by the Commissioner within ten (10) days of the Architect's written recommendation otherwise the recommendation shall be deemed accepted by the Contractor. Failing resolution by the Commissioner, the Contractor then may request that the parties submit the claim to non-binding mediation with a mutually agreed upon mediator utilizing the most current Construction Industry Mediation Rules of the American Arbitration Association.

## **ARTICLE 8**

### **TIME**

#### **8.1 DEFINITIONS**

**8.1.1** Unless otherwise provided, the Contract Time is the period of time allotted in the Contract Documents for Substantial Completion of the Work as defined in Subparagraph 8.1.3 of these General Conditions, including authorized adjustments thereto.

**8.1.2** The date of commencement of the Work is the date established in a notice to proceed. If there is no notice to proceed, it shall be the date indicated in State Contractor Agreement. In the absence of a notice to proceed and an express commencement date in the State Contractor Agreement, then the date of execution of the State Contractor Agreement shall be the commencement date.

**8.1.3** The Date of Substantial Completion of the Work or designated portion thereof is the Date certified by the Architect when construction is sufficiently complete, in accordance with the Contract Documents, so the State can occupy or utilize the Work or designated portion thereof for the use for which it is intended. The Work shall not be considered substantially complete prior to the receipt of approved O & M manuals and record drawings as required by paragraph 4.11 and as required elsewhere in the Contract Documents.

**8.1.3.1** Contract completion date shall be defined as: The contract work shall not be considered complete prior to the receipt of approved O & M manuals and record drawings as required by paragraph 4.11 and as required elsewhere in the contract documents.

**8.1.4** The term day as used in the Contract Documents shall mean calendar day unless otherwise specifically designated.

#### **8.2 PROGRESS AND COMPLETION**

**8.2.1** All time limits stated in the Contract Documents are material terms and time is the essence of the Contract. A failure by Contractor to do what is required by the time specified in the Contract Documents is a breach of the contract.

**8.2.2** The Contractor shall begin the Work on the date of commencement as defined in

Subparagraph 8.1.2 of these General Conditions. He or She shall carry the Work forward expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

8.2.3 If in the sole opinion of the State, the Contractor fails to commence work on the project or to complete the work of said project within the time specified above, or to prosecute the work in such a manner that it appears that the completion date can be assured, the State shall have the right to notify the Contractor by Certified Mail that the terms of the Contract have been violated, and that effective immediately the Contract is terminated and the State has the right to and in fact is taking over and attending to completion of the project without prejudice to the State's remedies for any losses sustained

### **8.3 DELAYS AND EXTENSIONS OF TIME**

**8.3.1** If the Contractor is delayed at any time in the progress of the Work by any act or failure to act by the State or the Architect, or by any employee of either, or by any separate contractor employed by the State, or by changes ordered in the Work, fire, unusual delay in transportation, adverse weather conditions not reasonably anticipatable, unavoidable casualties, or any causes beyond the Contractor's control, or by delay authorized by the State pending alternative dispute resolution proceedings, or by any other cause which may justify the delay, then the Contract Time shall be extended by Change Order for such reasonable time as recommended by the Architect and approved by the State.

**8.3.2** Any claim for extension of time shall be made in writing to the Architect not more than twenty days after the commencement of the delay; otherwise it shall be waived. In the case of a continuing delay only one claim is necessary. The Contractor shall provide an estimate of the probable effect of such delay on the progress of the Work.

**8.3.3** This Paragraph 8.3 does not exclude the recovery of damages for delay by either party under other provisions of the Contract Documents.

## **ARTICLE 9**

### **PAYMENTS AND COMPLETION**

#### **9.1 CONTRACT SUM**

**9.1.1** The Contract Sum is stated in the State-Contractor Agreement and, including authorized adjustments thereto, is the total amount payable by the State to the Contractor for the performance of the Work under the Contract Documents.

#### **9.2 SCHEDULE OF VALUES**

**9.2.1** Before the first Application for Payment, the Contractor shall submit to the Architect a schedule of values allocated to the various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used only as a basis for the Contractor's Applications for Payment.

### **9.3 APPLICATIONS FOR PAYMENT**

**9.3.1** At least ten days before the date for each progress payment established in the State-Contractor Agreement, the Contractor shall submit to the Architect an itemized Application for Payment, notarized if required, supported by such data substantiating the Contractor's right to payment as the State or the Architect may require. The application for payment must, at a minimum, reflect retainage and the required waivers of lien and any other support documentation enumerated elsewhere in the Contract Documents.

**9.3.2** Unless otherwise provided in the Contract Documents, payments will be made on account of materials or equipment not incorporated in the Work but delivered and suitably stored at the site and, if approved in advance by the State, payments may similarly be made for materials or equipment suitably stored at some other location agreed upon in writing. Payments for materials or equipment stored on or off the site shall be conditioned upon submission by the Contractor of bills of sale or such other procedures satisfactory to the State to establish the State's title to such materials or equipment or otherwise protect the State's interest, including applicable insurance and transportation to the site for those materials and equipment stored off the site.

**9.3.3** The Contractor warrants that title to all Work, materials and equipment covered by an Application for Payment will pass to the State either by incorporation in the construction or upon the receipt of payment by the Contractor, whichever occurs first, free and clear of all liens, claims, security interests or encumbrances, hereinafter referred to in this Article 9 as "liens"; and that no Work, materials or equipment covered by an Application for Payment will have been acquired by the Contractor, or by any other person performing Work at the site or furnishing materials and equipment for the Project, subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such other person.

### **9.4 CERTIFICATES FOR PAYMENT**

**9.4.1** The Architect will, within seven days after the receipt of the Contractor's completed Application for Payment, either issue a Certificate for Payment to the State, with a copy to the Contractor, for such amount as the Architect determines is properly due, or notify the Contractor in writing his or her reasons for withholding a Certificate as provided in Subparagraph 9.6.1 of these General Conditions. In case of conflict between any time requirements in this paragraph and any time requirements for action by the Architect on Contractor's Application for Payment contained in the State-Contractor Agreement, the time requirements contained in the State-Contractor Agreement shall control.

**9.4.2** The issuance of a Certificate for Payment will constitute a representation by the Architect to the State, based on his observations at the site as provided in Subparagraph 2.2.3 of these General Conditions and the data comprising the Application for Payment, that the Work has progressed to the point indicated; that, to the best of his or her knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to the results of any subsequent tests required by or performed under the Contract Documents, to minor deviations from the Contract Documents correctable prior to completion, and to any specific

qualifications stated in his Certificate); and that the Contractor is entitled to payment in the amount certified.

## **9.5 PROGRESS PAYMENTS**

**9.5.1** After the Architect has issued a Certificate for Payment, the State shall make payment in the manner and within the time provided in the Contract Documents.

**9.5.2** The Contractor shall promptly pay each Subcontractor, upon receipt of payment from the State, out of the amount paid to the Contractor on account of such Subcontractor's Work, the amount to which said Subcontractor is entitled, reflecting the percentage actually retained, if any, from payments to the Contractor on account of such Subcontractor's Work. The Contractor shall, by an appropriate agreement with each Subcontractor, require each Subcontractor to make payments to his or her Sub-subcontractors in similar manner.

**9.5.3** The Architect may, on request and at his discretion, furnish to any Subcontractor, if practicable, information regarding the percentages of completion or the amounts applied for by the Contractor and the action taken thereon by the Architect on account of Work done by such Subcontractor.

**9.5.4** Neither the State nor the Architect shall have any obligation to pay or to see to the payment of any moneys to any Subcontractor.

**9.5.5** No Certificate for a progress payment, nor any progress payment, nor any partial or entire use or occupancy of the Project by the State, shall constitute an acceptance of any Work not in accordance with the Contract Documents.

## **9.6 PAYMENTS WITHHELD**

**9.6.1** The Architect may decline to certify payment and may withhold his or her Certificate in whole or in part, to the extent necessary reasonably to protect the State, if in the Architect's opinion he or she is unable to make representations to the State as provided in Subparagraph 9.4.2 of these General Conditions. If the Architect is unable to make representations to the State as provided in the aforementioned Subparagraph 9.4.2 and to certify payment in the amount of the Application, he or she will notify the Contractor as provided in Subparagraph 9.4.1 of these General Conditions. If the Contractor and the Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which he or she is able to make such representations to the State. The Architect may also decline to certify payment or, because of subsequently discovered evidence or subsequent observations, he or she may nullify the whole or any part of any Certificate for Payment previously issued, to such extent as may be necessary in his or her opinion to protect the State from loss because of:

- (a) Defective Work not remedied,
- (b) Third party claims filed or reasonable evidence indicating probable filing of such claims,
- (c) Failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment,
- (d) Reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum,

- (e) Damage to the State or another contractor,
- (f) Reasonable evidence that the Work will not be completed within the Contract Time, or
- (g) Persistent failure to carry out the Work in accordance with the Contract Documents.

**9.6.2** When the above grounds in Subparagraph 9.6.1 are removed, payment shall be made for amounts withheld because of them.

## **9.7 FAILURE OF PAYMENT**

**9.7.1** If the Architect does not issue a Certificate for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the State does not pay the Contractor within seven days after the date established in the Contract Documents any amount certified by the Architect or awarded by alternative dispute resolution proceedings, then the Contractor may, upon seven additional days written notice to the State and the Architect, stop the Work until payment of the amount owing has been received. The Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shut-down, delay and start-up, which shall be effected by appropriate Change Order in accordance with Paragraph 12.3.

## **9.8 SUBSTANTIAL COMPLETION**

**9.8.1** When the Contractor considers that the Work, or a designated portion thereof which has been accepted in writing to by the State, is substantially complete as defined in Subparagraph 8.1.3 of these General Conditions, the Contractor shall prepare for submission to the Architect a list of items to be completed or corrected. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. When the Architect on the basis of an inspection determines that the Work or designated portion thereof is substantially complete, he will then prepare a Certificate of Substantial Completion which shall establish the Date of Substantial Completion, shall state the responsibilities of the State and the Contractor for security, maintenance, heat, utilities, damage to the Work, and insurance, and shall fix the time, which shall not exceed thirty (30) days, within which the Contractor shall complete the items listed therein. Warranties required by the Contract Documents shall commence on the Date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion. The Certificate of Substantial Completion shall be submitted to the State and the Contractor for their written acceptance of the responsibilities assigned to them in such Certificate. The Work shall not be considered substantially complete prior to the receipt of approved O & M manuals and record drawings as required by paragraph 4.11 and as required elsewhere in the Contract Documents.

**9.8.2** Upon Substantial Completion of the Work or designated portion thereof and upon application by the Contractor and certification by the Architect, the State shall make payment, reflecting adjustment in retainage, if any, for such Work or portion thereof, as provided in the Contract Documents.

## **9.9 FINAL COMPLETION AND FINAL PAYMENT**

**9.9.1** Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such

inspection and, when he or she finds the Work acceptable under the Contract Documents and the Contract fully performed, he or she will promptly issue a final Certificate for Payment stating that to the best of his / her knowledge, information and belief, and on the basis of his or her observations and inspections, the Work has been completed in accordance with the terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor, and noted in said final Certificate, is due and payable. The Architect's final Certificate for Payment will constitute a further representation that the Contractor has fulfilled the conditions entitling him or her to final payment as set forth in Subparagraph 9.9.2 of these General Conditions.

**9.9.2** Neither the final payment nor the remaining retained percentage shall become due until the Contractor submits to the Architect (1) an affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the State or its property might in any way be responsible, have been paid or otherwise satisfied; (2) consent of surety, if any, to final payment; (3) Other data establishing payment or satisfaction of all such obligations, including, but not limited to, receipts, releases, or other supporting documentation. and (4) final waivers of liens arising out of the Contract, to the extent and in such form as may be designated by the State. If any Subcontractor refuses to furnish a release or waiver required by the State, the Contractor may furnish a bond satisfactory to the State to indemnify him against any such lien. If any such lien remains unsatisfied after all payments are made, the Contractor shall refund to the State all moneys that the latter may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

**9.9.3** If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by the issuance of Change Orders affecting final completion, and the Architect so confirms, the State shall, upon application by the Contractor and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than the retainage stipulated in the Contract Documents, and if bonds have been furnished as required by the Contract Documents, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect prior to certification of such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

**9.9.4** The making of final payment shall constitute a waiver of all claims by the State except those arising from:

- (a) unsettled liens,
- (b) faulty or defective Work appearing after Substantial Completion,
- (c) failure of the Work to comply with the requirements of the Contract Documents, or
- (d) terms of any special warranties required by the Contract Documents.

**9.9.5** The acceptance of final payment shall constitute a waiver of all claims by the Contractor except those previously made in writing and identified by the Contractor as unsettled at the time of the final Application for Payment.

## ARTICLE 10



## **PROTECTION OF PERSONS AND PROPERTY**

### **10.1 SAFETY PRECAUTIONS AND PROGRAMS**

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work.

### **10.2 SAFETY OF PERSONS AND PROPERTY**

**10.2.1** The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to:

- (a) all employees on the Work and all other persons who may be affected thereby;
- (b) all the Work and all materials and equipment to be incorporated therein, whether in storage on or off-the site, under the care; custody or control of the Contractor or any of his Subcontractors or Sub-subcontractors; and
- (c) other property at the site or adjacent thereto, including trees, shrubs; lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

**10.2.2** The Contractor shall give all notices and comply with all applicable laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the safety of persons or property or their protection from damage, injury or loss.

**10.2.3** The Contractor shall erect and maintain, as required by existing conditions and progress of the Work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent utilities.

**10.2.4** When the use or storage of explosives or other hazardous materials or equipment is necessary for the execution of the Work, the Contractor shall: (1) exercise the utmost care and shall carry on such activities under the supervision of properly qualified personnel; and (2) give the State notice, in writing, seven (7) days in advance of the planned activity of the Contractor's intent to store and/ or use explosives or other hazardous materials or equipment on the project site.

**10.2.5** When the project involves the placement or replacement of roofing systems of all types on State- owned buildings, including flat, low-pitched and steep roofs, Contractor must comply with all requirements of the latest edition of VOSHA Safety and Health Standards for Construction (29 CFR 1926) including, but not limited to, Subpart M – Fall Protection. Prior to execution of a contract by BGS, contractors engaged in placement or replacement of roofing systems of all types must submit a signed certification statement attesting to their intention to comply with VOSHA Fall Protection Regulations. Such certification shall be submitted on a State-provided form along with proof of insurance.

**10.2.6** The Contractor shall promptly remedy all damage or loss (consistent with Contractor's obligations described in Attachment C) to any property referred to in Clauses 10.2.1(b) and 10.2.1(c) of these General Conditions caused in whole or in part by the Contractor, any

Subcontractor, any Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable and for which the Contractor is responsible under Clauses 10.2.1(b) and 10.2.1(c), except damage or loss attributable to the acts or omissions of the State or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to his obligations referenced under Paragraph 4.18.

**10.2.7** The Contractor shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the State and the Architect.

**10.2.8** The Contractor shall not load or permit any part of the Work to be loaded so as to endanger its safety.

### **10.3 EMERGENCIES**

**10.3.1** In any emergency affecting the safety of persons or property, the Contractor shall act to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor on account of emergency work shall be determined as provided in Article 12 for Changes in the Work.

## **ARTICLE 11**

### **INSURANCE**

**Insurance obligations of the parties to this agreement are fully set forth below:**

Attachment "C", numbered paragraph 8 has been deleted in its entirety and the following provisions are applicable:

### **11 INSURANCE – GENERAL REQUIREMENTS**

**11.1** Insurance obtained by the Contractor to cover the below-listed requirements shall be procured from an insurance company registered and licensed to do business in the State of Vermont. Before the Contract is executed, the Contractor shall file with the State a certificate of insurance, executed by an insurance company or its licensed agent(s), on form(s) satisfactory to the State, stating that with respect to the Contract awarded, the Contractor carries insurance in accordance with the following requirements:

- (a) **Workers' Compensation Insurance:** With respect to all operations performed, the Party shall carry workers' compensation insurance in accordance with the laws of the State of Vermont. Vermont will accept an out-of-state employer's workers' compensation coverage while operating in Vermont provided that the insurance carrier is licensed to write insurance in Vermont and an amendatory endorsement is added to the policy adding Vermont for coverage purposes. Otherwise, the party shall secure a Vermont workers' compensation policy, if necessary to comply with Vermont law.

- (b) Commercial General Liability (CGL) Insurance: With respect to all operations performed by the Contractor and any Subcontractors, the Contractor shall carry Commercial General Liability (CGL) Insurance affording all major divisions of coverage including, but not limited to:

Premises Operations  
Independent Contractors' Protective Products and Completed Operations  
Personal Injury Liability  
Contractual Liability  
Broad Form Property Damage  
Explosion, Collapse and Underground (XCU) Coverage  
Fire Legal Liability

State may require additional specific liability coverage(s) when applicable.

Limits of Coverage shall be not less than:

\$1,000,000 Each Occurrence  
\$2,000,000 General Aggregate Applying, In Total To This Project  
Only \$1,000,000 Products/Completed Operations Aggregate  
\$1,000,000 Personal Injury and Advertising Liability  
\$ 50,000 Fire Legal Liability  
\$ 5,000 Medical Expense

Aggregate Limits of Insurance (Per Project) Form must be included (or as excepted in f below) with the Commercial General Liability Policy.

- (c) Automobile Liability Insurance: Contractor shall carry Automobile Liability Insurance covering all motor vehicles, including owned, hired, borrowed and non-owned vehicles, used in connection with the project. Limits of Coverage shall be not less than:

\$1,000,000 Combined Single Limit

- (d) The Contractor shall require each Subcontractor, if any, to maintain the same Workers' Compensation, Commercial General Liability, and Automobile Liability coverage as specified in paragraphs (a), (b), and (c) above.
- (e) Scope of Insurance & Special Hazards: The insurance required under subparagraphs (b), (c), and (d) above shall provide protection for the Contractor and the Subcontractors, if any, against damage claims which may arise from work being performed. Special hazards, may be encountered by the insured or by any person directly or indirectly employed by the Contractor or a Subcontractor, and may be required.
- (f) If Contractor is unable to provide Aggregate Limits of Insurance (Per Project) as required in (b) above, Contractor shall purchase an Owner's Protective Liability Insurance Policy in the name of the State of Vermont to cover all exposures, including bodily injury and death, arising out of and in the course of this Contract. Limits of liability shall be the same as those required of the Contractor under paragraph (b) above.

*Additional Insured.* The General Liability and Property Damage coverages required for performance of this Agreement shall include the State of Vermont and its agencies, departments, officers and employees as Additional Insureds. If performance of this Agreement involves construction, or the transport of persons or hazardous materials, then the required Automotive Liability coverage shall include the State of Vermont and its agencies, departments, officers and employees as Additional Insureds. Coverage shall be primary and non-contributory with any other insurance and self-insurance.

*Notice of Cancellation or Change.* There shall be no cancellation, change, potential exhaustion of aggregate limits or non-renewal of insurance coverage(s) without thirty (30) days written prior written notice to the State of Vermont, Office of Purchasing & Contracting.

**11.2 Insurance Requirements for Builder's Risk Insurance.** The State of Vermont does not require Contractor to obtain Builder's Risk insurance for every construction project. The State of Vermont will evaluate each project prior to accepting bids to determine if the State will require the Contractor to obtain and maintain Builder's Risk insurance for the project.

Any project that involves NEW CONSTRUCTION will require the Contractor to obtain and maintain Builder's Risk insurance for the project.

At the discretion of the State, Contractor may not be required to obtain and maintain Builder's Risk insurance on CONSTRUCTION RENOVATION projects. Whether or not the State is going to require Contractor to obtain and maintain Builder's Risk insurance for a particular CONSTRUCTION RENOVATION project will be determined by the State prior to bidding the project and the requirement will be included in the Instructions to Bidders.

11.2.1 BUILDER'S RISK FOR NEW CONSTRUCTION PROJECTS. If the project is NEW CONSTRUCTION, then the following provisions apply:

- (1) The State will require Contractor to purchase and maintain Builder's Risk Insurance. The Contractor shall name the Contractor and the State of Vermont as their interest may occur. Other parties shall be insured as the State may reasonably require.
- (2) Contractor shall effect and maintain insurance on portions of the work stored off-site, on site and in transit. Boiler & Machinery Insurance may be used in conjunction with this coverage if it is required to meet the testing requirement.
- (3) Any deductible applicable to loss covered by insurance provided hereunder shall be borne by the Contractor.
- (4) Except as provided for in (1) above the State and Contractor waive all rights against each other and the Subcontractor, Sub-subcontractors, agents and employees of the other.

11.2.2 BUILDER'S RISK FOR CONSTRUCTION RENOVATION PROJECTS. If the project is CONSTRUCTION RENOVATION of an existing structure, and the State has already determined that Contractor will not be obligated to obtain and maintain Builder's Risk insurance, then the following provisions apply:

- (1) The State will maintain property insurance upon the construction site and will not require Contractor to purchase and maintain Builder's Risk Insurance upon the entire work at the site.
- (2) The decision of the State to waive the requirement that the Contractor maintain builder's risk coverage does not waive Contractor's liability for damage to the State's real and personal property. Contractor's liability for loss to the State's real and personal property will be limited to the first \$100,000 of each and every property loss at the work site provided such loss is covered under the State's property insurance coverage. If the Contractor elects to meet this obligation by purchase of commercial insurance, this insurance shall name the Contractor and the State of Vermont as Named Insureds and shall include the interests of the Contractor and Subcontractors. Other parties shall be insured as the State may reasonably require.
- (3) Contractor shall effect and maintain insurance on portions of the work stored off-site, on site and in transit. Boiler & Machinery Insurance may be used in conjunction with this coverage if it is required to meet the testing requirement. The cost of any deductible applicable to loss covered by insurance provided hereunder shall be borne by the Contractor.
- (4) Except as provided for in 11.2.2 (1)-(3) above the State and Contractor waive all rights against each other and the Subcontractor, Sub-subcontractors, agents and employees of the other.

### 11.2.3 Builder's Risk – additional provisions

The insurance specified shall be maintained in force until final acceptance of the project by the State.

- (5) Umbrella Excess Liability Policies may be used in conjunction with primary policies to comply with any of the limit requirements specified above.
- (6) "Claims-made" coverage forms are not acceptable without the express written prior consent of the State. Each policy furnished shall contain a rider or non-cancellation clause reading in substance as follows:

Anything herein to the contrary notwithstanding, notice of any cancellation, termination or alteration to the insurance contracts must be delivered by registered mail to the Commissioner, Department of Buildings and General Services, State of Vermont, Montpelier, Vermont, at least 60 days before effective cancellation, termination or alteration date unless all work required to be performed under the terms of the Contract is satisfactorily completed as evidenced by the formal acceptance by the State of Vermont.

- (7) No warranty is made that the coverages and limits listed herein are adequate to cover and protect the interests of the Contractor for the Contractor's operations. These are solely minimums that have been set to protect the interests of the State.

**11.3** The State shall have power to adjust and settle any loss with the insurers.

## ARTICLE 12

## CHANGES IN THE WORK

### 12.1 CHANGE ORDERS

**12.1.1** A Change Order is a written order to the Contractor signed by the State, the Architect, and the Contractor issued after execution of the Contract, authorizing a change in the Work or an adjustment in the Contract Sum or the Contract Time. The Contract Sum and the Contract Time may be changed only by Change Order. A Change Order signed by the Contractor indicates his agreement therewith, including the adjustment in the Contract Sum or the Contract Time. A Proposed Change Order (PCO) is a written request submitted to the Architect by either the Contractor or the State requesting a change to the contract price and / or schedule. A Construction Change Directive (CCD) is a written document prepared by the State and / or Architect directing the Contractor to make changes in the Work where the State and the Contractor have not reached an agreement on proposed changes in the contract sum or contract time. A Construction Change Directive becomes part of a PCO.

Payment for changes in the Work will only be made after a Change Order is signed by the Contractor and Architect and executed by the State.

**12.1.2** The State, without invalidating the Contract, may order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and the Contract Time being adjusted accordingly. All such changes in the Work REQUIRE AGREEMENT IN WRITING BY THE ARCHITECT, STATE AND CONTRACTOR AND shall be authorized by A PROPOSED Change Order (PCO), and shall be performed under the applicable conditions of the Contract Documents. The State will prescribe a Proposed Change Order form for use by the Contractor. The Contractor shall submit all requests for Proposed Change Orders on the prescribed form.

The process, by which changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, is as follows:

- (1) A Proposed Change Order (PCO) is submitted to the Architect for review. Said PCO is to be submitted on the State approved form.
- (2) If the PCO originated with the Contractor, the Architect will review the PCO and if the Architect approves the PCO, it is then presented to the State for approval.
- (3) The PCO is signed by the Project Manager.
- (4) The Project Manager shall coordinate with the Contractor through email or other written documentation every 30 days as to the merit of issuing a Change Order. If the Project Manager and Contractor agree that a Change Order should be submitted, the Architect will compile all approved PCOs and incorporate them into one (1) Change Order.
- (5) The Change Order is then submitted to the Project Manager who immediately processes the CO with OPC as required by Bulletin 3.5 and BGS' Contracting Plan.

**12.1.3** The cost or credit to the State resulting from a change in the Work shall be determined in one or more of the following ways:

- (a) by mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- (b) by unit prices stated in the Contract Documents or subsequently agreed upon;
- (c) by cost to be determined in a manner agreed upon by the parties and a mutually

acceptable fixed or percentage fee; or  
(d) by the method provided in Subparagraph 12.1.4.

**12.1.4** If none of the methods set forth in Clauses 12.1.3(a) –(d) is agreed upon, or cannot be agreed upon at the time due to the nature of the change, emergent conditions, or lack of required information, the Contractor, provided he receives a Construction Change Directive (CCD)) signed by the State, shall promptly proceed with the Work involved. Upon receipt of the CCD, the Contractor shall proceed with implementation of the CCD. The cost of such Work shall then be recommended by the Architect on the basis of the reasonable expenditures and savings of those performing the Work attributable to the change, including, in the case of an increase in the Contract Sum, a reasonable allowance for overhead and profit. In such case, and also under Clauses 12.1.3(c) and 12.1.3(d) above, the Contractor shall keep and present, in such form as the Architect may prescribe, an itemized accounting together with appropriate supporting data for inclusion in the CCD. Unless otherwise provided in the Contract Documents, cost shall be limited to the following: cost of materials, cost of delivery; cost of labor, including social security, medicare and unemployment insurance, and fringe benefits required by agreement or custom; workers' or workmen's compensation insurance; bond premiums; rental value of equipment and machinery; and the additional costs of supervision and field office personnel directly attributable to the change. Pending final determination of cost to the State, payments on account shall be made on the State's Certificate for Payment. The amount of credit to be allowed by the Contractor to the State for any deletion or change which results in a net decrease in the Contract Sum will be the amount of the actual net cost as confirmed by the Architect. When both additions and credits covering related Work or substitutions are involved in any one change, the allowance for Overhead and profit shall be figured on the basis of the net increase, if any, with respect to that change. It is the Project Manager's responsibility to ensure that All CCD's are converted / incorporated into a PCO within Thirty (30) days of completion of the changes to the Work that was the subject of the CCD. The parties agree to utilize the CCD form provided or approved by the State.

**12.1.5** If unit prices are stated in the Contract Documents or subsequently agreed upon, and if the quantities originally contemplated are so changed in a Proposed Change Order that application of the agreed unit prices to the quantities of Work proposed will cause substantial in- equity to the State or the Contractor, the applicable unit prices shall be equitably adjusted.

## **12.2 CONCEALED CONDITIONS**

**12.2.1** Should concealed conditions encountered in the performance of the Work below the surface of the ground, or should concealed or unknown conditions in an existing structure be at variance with the conditions indicated by the Contract Documents or should unknown physical conditions below the surface of the ground or should concealed or unknown conditions in an existing structure of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract, be encountered, the Contract Sum shall be equitably adjusted by Change Order upon claim by either

party made within twenty days after the first observance of the conditions.

### **12.3 CLAIMS FOR ADDITIONAL COST**

**12.3.1** If the Contractor wishes to make a claim for an increase in the Contract Sum, he shall give the Architect written notice thereof within twenty days after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor before proceeding to execute the Work, except in an emergency endangering life or property in which case the Contractor shall proceed in accordance with Paragraph 10.3 of these General Conditions. No such claim shall be valid unless so made. If the State and the Contractor cannot agree on the amount of the adjustment in the Contract Sum, it shall be determined by the Architect. Any change in the Contract Sum resulting from such claim shall be authorized by Change Order.

**12.3.2** If the Contractor claims that additional cost is involved because of, but not limited to, (1) any order by the State to stop the Work pursuant to Paragraph 3.3 of these General Conditions where the Contractor was not at fault, or (2) failure of payment by the State pursuant to Paragraph 9.7(of these General Conditions), the Contractor shall make such claim as provided in Subparagraph 12.3.1 of this agreement.

**12.3.3** The Architect will have authority to order minor changes in the Work not involving an adjustment in the Contract Sum or an extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes shall be effected by written order and shall be binding on the State and Contractor within 10 days unless the Contractor or the State objects to the change in writing.

## **ARTICLE 13**

### **UNCOVERING AND CORRECTION OF WORK**

#### **13.1 UNCOVERING OF WORK**

**13.1.1** If any portion of the Work should be covered contrary to the request of the Architect or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the Architect, be uncovered for his or her observation and shall be replaced at the Contractor's expense.

**13.1.2** If any other portion of the Work has been covered which the Architect has not specifically requested to observe prior to being covered, the Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is found in accordance with the Contract Documents, the cost of uncovering and replacement shall, by appropriate Change Order, be charged to the State. If such Work is found not to be in accordance with the Contract Documents, the Contractor shall pay such costs unless it is found that this condition was caused by the State or a separate contractor as provided in Article 6 of these General Conditions, in which event the State shall be responsible for the payment of such costs.



## **13.2 CORRECTION OF WORK**

**13.2.1** The Contractor shall be responsible for correcting all Work which the Architect has found to be defective or which fails to conform to the Contract Documents whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear all costs of correcting such rejected Work, including compensation for the Architect's and the State's additional services made necessary thereby.

The Architect, upon a finding of defect or failure to conform, shall immediately notify the State and Contractor, in writing, of the defect. The Contractor shall begin correcting the defective or non-conforming Work within ten (10) days unless the State agrees to a Change Order which reflects the reduction in Contract Sum due to the value of diminishment of the defective or nonconforming Work.

**13.2.2** If, within one year after the Date of Substantial Completion of the Work or designated portion thereof or within one year after acceptance by the State of designated equipment or within such longer period of time as may be prescribed by law or by the terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be defective or not in accordance with the Contract Documents, the Contractor shall correct it promptly after receipt of a written notice from the State to do so unless the State has previously given the Contractor a written acceptance of such condition. This obligation shall survive termination of the Contract. The State shall give such notice promptly after discovery of the condition.

**13.2.3** The Contractor shall remove from the site all portions of the Work which are defective or non-conforming and which have not been corrected under Subparagraphs 4.5.1, 13.2.1 and 13.2.2 of these General Conditions, unless removal is waived by the State.

**13.2.4** If the Contractor fails to correct defective or nonconforming Work as provided in Subparagraphs 4.5.1, 13.2.1 and 13.2.2, the State may correct it in accordance with Paragraph 3.4 of these General Conditions.

**13.2.5** If the Contractor does not proceed with the correction of such defective or non-conforming Work within a reasonable time fixed by written notice from the Architect, the State may remove it and may store the materials or equipment at the expense of the Contractor. If the Contractor does not pay the cost of such removal and storage within ten days thereafter, the State may upon ten additional days written notice sell such Work at auction or at private sale and shall account for the net proceeds thereof, after deducting all the costs that should have been borne by the Contractor, including compensation for the Architect's and the State's additional services and expenses made necessary thereby. If such proceeds of sale do not cover all costs which the Contractor should have borne, the difference shall be charged to the Contractor and an appropriate Change Order shall be issued. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the State.

**13.2.6** The Contractor shall bear the cost of making good all work of the State or separate contractors destroyed or damaged by such correction or removal.

**13.2.7** Nothing contained in this Paragraph 13.2 shall be construed to establish a period of limitation with respect to any other obligation which the Contractor might have under the

Contract Documents, including Paragraph 4.5 of these General Conditions. The establishment of the time period of one year after the Date of Substantial Completion or such longer period of time as may be prescribed by law or by the terms of any warranty required by the Contract Documents relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which his obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to his obligations other than specifically to correct the Work.

### **13.3 ACCEPTANCE OF DEFECTIVE OR NON-CONFORMING WORK**

**13.3.1** The State may accept defective or nonconforming Work pursuant to Paragraph 13.2.1 of this agreement. If the State elects to accept the defective or nonconforming Work, a Change Order will be issued to reflect a reduction in the Contract Sum. The Architect will recommend to the State the value of diminishment of the defective or nonconforming Work. Such adjustment shall be effected whether or not final payment has been made.

## **ARTICLE 14**

### **TERMINATION AND SUSPENSION OF THE CONTRACT**

#### **14.1 TERMINATION BY THE CONTRACTOR**

If the Work is stopped for a period of thirty days under an order of any court or other public authority having jurisdiction, or as a result of an act of government, such as a declaration of a national emergency making materials unavailable, through no act or fault of the Contractor or a Subcontractor or their agents or employees or any other persons performing any of the Work under a contract with the Contractor, or if the Work should be stopped for a period of thirty days by the Contractor because the Architect has not issued a Certificate for Payment as provided in Paragraph 9.7 of these General Conditions or because the State has not made payment thereon as provided in Paragraph 9.7, then the Contractor may, upon seven additional days written notice to the State and the Architect, terminate the Contract and recover from the State payment for all Work executed and for any proven loss sustained upon any materials, equipment, tools, construction equipment and machinery, including reasonable profit and damages.

#### **14.2 TERMINATION BY THE STATE FOR CAUSE**

**14.2.1** If the Contractor is adjudged a bankrupt, or if he or she makes a general assignment for the benefit of his/ her creditors, or if a receiver is appointed on account of his/ her insolvency, or if he or she persistently or repeatedly refuses or fails, except in cases for which extension of time is provided, to supply enough properly skilled workmen or proper materials, or if he or she fails to make prompt payment to Subcontractors or for materials or labor, or persistently disregards laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, or otherwise is guilty of a substantial violation of a provision of the Contract Documents, then the State, upon certification by the Architect that sufficient cause exists to justify such action, may, without prejudice to any right or remedy and after giving the Contractor and his surety, if any, seven days written notice, terminate the employment of the Contractor and take possession of the

site and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor and may finish the Work by whatever method he may deem expedient. In such case the Contractor shall not be entitled to receive any further payment until the Work is finished.

**14.2.2** If the costs of finishing the Work, including compensation for the Architect's and State's additional services and expenses made necessary thereby, exceed the unpaid balance of the Contract Sum, the Contractor shall pay the difference to the State.

If the unpaid balance of the Contract Sum exceeds the costs of finishing the Work, including compensation for the Architect's and the State's additional services and expenses made necessary thereby, such excess shall be paid to the Contractor.

The amount owed by Contractor to the State shall be certified by the Architect, upon application, in the manner provided in section 9.4 of these General Conditions, and this obligation for payment shall survive the termination of the Contract.

### **14.3 TERMINATION BY STATE FOR CONVENIENCE**

14.3.1 The State may, at any time, terminate this agreement for the State's convenience and without cause.

14.3.2 Upon receipt of written notice from the State of such termination for the State's convenience, the Contractor shall:

- (a) cease operations as directed by the State in the notice;
- (b) take actions necessary, or that the State may direct, for the protection and preservation of the Work; and
- (c) except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

14.3.3 In case of such termination for the State's convenience, the Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination, along with reasonable overhead and profit on the Work not executed.

### **14.4 SUSPENSION BY STATE FOR CONVEVIENCE**

14.4.1 The State may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work in whole or in part for such period of time as the State may determine.

14.4.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay or interruption as described in section 14.4.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent:

- (a) that performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible; or
- (b) that an equitable adjustment is made or denied under another provision of this Contract.

AGENCY OF NATURAL RESOURCES  
DEPARTMENT OF FISH & WILDLIFE



SEYMOUR LAKE ACCESS AREA  
MORGAN, VERMONT

FISHING ACCESS LAKE DREDGING

Department of Environmental Conservation

Facilities Engineering Division

David H. Webb, P.E.

March 2024

TECHNICAL SPECIFICATIONS

LAKE SEYMOUR ACCESS AREA

FISHING ACCESS LAKE DREDGING

Springfield, Vermont

March 2024

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**SECTION 00890 – PERMITS**

**PART 1.00 – GENERAL**

**1.01 GENERAL REQUIREMENTS**

- A. The Owner has obtained or will obtain and pay for the permits listed below, which are required for this project. The Contractor shall assist in obtaining certain permits, as indicated. The Contractor shall obtain and pay for all other permits required, as defined under the Permits subsection of the GENERAL CONDITIONS.

<u>Permits by Owner</u>	<u>Status</u>
1. Army Corps of Engineers Vermont General Permit	Submitted/Awaiting Approval Permit #NAE-2024-xxxxx
2. Vermont D.E.C. Stream Alteration	Submitted/Awaiting Approval Will require confirmation of Dredging Disposal Site & Dewatering Plan

- B. The Contractor shall perform the Work in accordance with the Contract Documents, including the attached permits/order of conditions, and any applicable municipal requirements.

**END OF SECTION 00890 – PERMITS**

## **SECTION 01014 – SCOPE AND SEQUENCE OF WORK**

### **PART 1.00 – GENERAL**

#### **1.01 WORK INCLUDED**

The project will include lake bottom dredging to the vertical and horizontal limits shown on the plans. A Geo textile filter curtain will be placed around the perimeter of the dredging limits within the lake to install temporary haul roads where necessary to allow sufficient access to perform excavation with use of an excavator, to remove lake bottom sediment material. An accepted design for an approved structural cofferdam may be integrated with this project providing owner's acceptance of this bid alternate item during bid proposal. Dewatering of dredged material will be performed upon the gravel parking area, upon submittal and approval of a dewatering plan before material is hauled to an approved disposal site. Best management practices, as conveyed to and approved by the Engineer, to prevent excess sedimentation from re-entering the lake area will be employed during the de-watering process. Upon completion of dredging and dewatering, all parking surfaces shall be returned to pre-dredging condition or better.

#### **1.02 RELATED WORK**

##### **A. SECTION 01110 – CONTROL OF WORK AND MATERIALS**

### **PART 2.00 – PRODUCTS**

#### **2.01 (NOT APPLICABLE)**

### **PART 3 – EXECUTION**

#### **3.01 GENERAL**

- A. The Contractor shall be responsible for scheduling its activities and the activities of any subcontractors involved, to meet the completion date, or milestones, established for the contract. Scheduling of the Work shall be coordinated with the Owner and Engineer.
- B. The Construction Sequence Requirements shall be issued by the Contractor to form a complete schedule for the project, which shall be coordinated with the Owner and Engineer. Prior to performing any work at the site, the Contractor shall submit a

detailed plan to the Engineer for review. The Plan shall describe the proposed sequence, methods, and timing of the Work.

### 3.02 CONSTRUCTION SEQUENCING REQUIREMENTS

- A. Construction shall commence on July 8, 2024.
- B. All work elements that require taking the ramp out of service for the public shall be prioritized and must proceed in an efficient and continuous manner following project start to minimize the length of time the access ramps must remain closed.
- C. Notification to the Public of Access Area closure shall be made prominent by sign posting at the access a minimum of 3 weeks prior to commencement of work.
- D. All Work to be performed shall be closely coordinated with The Fish and Wildlife Department, the Owner, and the Engineer.

**END OF SECTION 01014 – SCOPE AND SEQUENCE OF WORK**



## SECTION 01110 – CONTROL OF WORK AND MATERIALS

### PART 1.00 – GENERAL

1. Hauling, Handling, and Storage of Materials
2. Easements
3. Open Excavations
4. Maintenance of Traffic
5. Care and Protection of Property
6. Protection and Relocation of Existing Structures and Utilities
7. Maintenance of Flow
8. Rejected Materials and Defective Work
9. Sanitary Regulations
10. Safety and Health Regulations
11. Site Investigation
12. Weather Protection
13. Electric Service

#### 1. Hauling, Handling, and Storage of Materials

- A. The Contractor shall, at their expense, handle and haul all materials furnished by them and shall remove any of their surplus materials at the completion of the Work.
- B. The Contractor shall provide suitable and adequate storage for equipment and materials furnished by them that are liable to injury and shall be responsible for any loss of or damage to any equipment or materials by theft, breakage, or otherwise.
- C. All excavated materials and equipment to be incorporated in the Work shall be placed so as not to injure any part of the Work or existing facilities and so that free access can be had at all times to all parts of the Work and to all public utility installations in the vicinity of the Work. Materials and equipment shall be kept neatly piled and compactly stored in such location as will cause a minimum of inconvenience to public travel and adjoining owners, tenants, and occupants.
- D. The Contractor shall be responsible for all damages to the Work under construction during its progress and until final completion and acceptance even though partial payments have been made under the Contract.

#### 2. Easements

- A. Access to the work area is located along easements obtained by the Owner. The Contractor has no rights outside of the easements unless they are obtained from the property owner.
- B. Contractor shall schedule work so that it will cause minimum inconvenience and nuisance to abutting property owners, over the shortest possible time.

- C. Easements shall be kept clean; no rubbish or discarded construction materials shall be allowed to accumulate. Storage of excess construction materials, including soil, ledge, equipment, or machinery on easements will not be allowed.
- D. Restoration of fences, shrubs, trees and grass shall be completed promptly following completion of the work in an easement, to minimize disruption and inconvenience to property owners.
- E. Unless approved by the Engineer, the use of easements for ease of access to and egress from other areas of the project will not be permitted.

3. Open Excavations

- A. All open excavations shall be adequately safeguarded by providing temporary barricades, caution signs, lights and other means to prevent accidents to persons, and damage to property. The Contractor shall, at their expense, provide suitable and safe means for completely covering all open excavations and for accommodating travel when Work is not in progress.
- B. Bridges provided for access to private property during construction shall be removed when no longer required.
- C. The length of open trench will be controlled by the particular surrounding conditions but shall always be confined to the limits prescribed by the Engineer.
- D. If the excavation becomes a hazard, or if it excessively restricts traffic at any point, then special construction procedures shall be taken such as limiting the length of trench and prohibiting stocking excavated material in the street.
- E. All street excavations shall be completely closed at the end of each work day. Backfilling or use of steel plates of adequate strength to carry traffic shall be used.

4. Maintenance of Traffic

- A. Unless permission to close the street is received in writing from the proper authority, all excavated materials and equipment shall be placed so that vehicular and pedestrian traffic may be maintained at all times.
- B. Should the Chief of Police deem it necessary, uniformed officers will be assigned to direct traffic. The Contractor shall make all arrangements in obtaining uniformed officers required.
- C. The Contractor shall, at their expense, as directed by the Police or the Traffic Control/Safety Officer, provide and erect acceptable barricades, barrier fences, traffic signs, and all other traffic devices not specifically covered in a bid item, to protect the work from traffic, pedestrians, and animals. They shall provide sufficient temporary

- lighting such as lanterns/flashers (electric/battery operated) or other approved illuminated traffic signs and devices to afford adequate protection to the traveling public, at no additional cost to the Owner.
- D. The Contractor shall furnish all construction signs that are deemed necessary by and in accordance with Part VI of the Manual on Uniform Traffic Control Devices as published by the U.S. Department of Transportation, the Town of Springfield or VTrans. In addition, the Contractor may be required to furnish up to 128 square feet of additional special construction warning signs. Size and exact wording of signs shall be determined by the Engineer during construction.
- E. The intent of policing is to ensure public safety by direction of traffic. Police officers are not to serve as watchmen to protect the Contractor's equipment and materials.
- F. Nothing contained herein shall be construed as relieving the Contractor of any of their responsibilities for protection of persons and property under the terms of the Contract.
5. Care and Protection of Property
- A. The Contractor shall be responsible for the preservation of all public and private property, and shall use every precaution necessary to prevent damage thereto. If any direct or indirect damage is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work on the part of the Contractor, such property shall be promptly restored by the Contractor, at their expense, to a condition similar or equal to that existing before the damage was done, to the satisfaction of the Engineer.
6. Protection and Relocation of Existing Structures and Utilities
- A. All existing buildings, utilities, pipes, poles, wire fences, curbing, property line markers, and other structures which the Engineer decides must be preserved in place without being temporarily or permanently relocated, shall be carefully supported, and protected from damage by the Contractor. Should such property be damaged, it shall be restored by the Contractor, at no additional cost to the Owner.
- B. The Contractor shall determine the location of all underground structures and utilities (including existing water services, drain lines, electrical lines, and sewers). Services to buildings shall be maintained, and all costs or charges resulting from damage thereto shall be paid by Contractor.
- C. When fences interfere with the Contractor's operations, they shall remove and (unless otherwise specified) promptly restore them to the satisfaction of the Engineer.
- D. On paved surfaces the Contractor shall not use or operate tractors, bulldozers, or other power-operated equipment with treads or wheels which are shaped so as to cut or otherwise damage such surfaces.

- E. All property damaged by the Contractor's operations shall be restored to a condition at least equal to that in which it was found immediately before work was begun. Suitable materials and methods shall be used for such restoration.
- F. Restoration of existing property and structures shall be carried out as promptly as practicable and shall not be left until the end of the construction period.

7. Maintenance of Flow

- A. The Contractor shall, at their cost, provide for the flow of sewers and drains interrupted during the progress of the work, and shall immediately cart away and dispose of all offensive matter. The entire procedure of maintaining existing flow shall be fully discussed with the Engineer well in advance of the interruption of any flow.
- B. All existing drainage facilities including, but not limited to; brooks, streams, canals, channels, ditches, culverts, catch basins, and drainage piping shall be adequately safeguarded so as not to impede drainage or to cause siltation of downstream areas in any manner whatsoever. If the Contractor damages or impairs any of the aforesaid drainage facilities, they shall repair the same within the same day.
- C. At the conclusion of the Work, the Contractor shall remove all silt in drainage structures caused by their operations as described in Section 01740, CLEANING UP.

8. Rejected Materials and Defective Work

- A. Materials furnished by the Contractor and condemned by the Engineer as unsuitable or not in conformity with the specifications shall forthwith be removed from the Work by the Contractor, and shall not be made use of elsewhere in the Work.
- B. Any errors, defects, or omissions in the execution of the Work or in the materials furnished by the Contractor, even though they may have been passed or overlooked or have appeared after the completion of the work, discovered at any time before the final payment is made hereunder, shall be forthwith rectified and made good by and at the expense of the Contractor and in a manner satisfactory to the Engineer.
- C. The Contractor shall reimburse the Owner for any expense, losses, or damages incurred in consequence of any defect, error, omission, or act of the Contractor or their employees, as determined by the Engineer, occurring previous to the final payment.

9. Sanitary Regulations

- A. Sanitary conveniences for the use of all persons employed on the Work, properly screened from public observation, shall be provided in sufficient numbers in such

manner and at such locations as may be approved. The contents shall be removed and disposed of in a satisfactory manner as the occasion requires. The Contractor shall rigorously prohibit the committing of nuisances within, on or about the Work. Any employees found violating these provisions shall be discharged and not again employed on the Work without the written consent of the Engineer. The sanitary conveniences specified above shall be the obligation and responsibility of the Contractor.

10. Safety and Health Regulation

- A. This project is subject to the Safety and Health regulations of the U.S. Department of Labor set forth in 29 CFR, Part 1926, and to the Vermont Department of Labor and Industries. Contractors shall be familiar with the requirements of these regulations.

11. Site Investigation

- A. The Contractor acknowledges that they have satisfied themselves as to the conditions existing at the site of the Work, the type of equipment required to perform this Work, the quality and quantity of the materials furnished insofar as this information is reasonably ascertainable from an inspection of the site, as well as from information presented by the drawings and specifications made a part of this contract. Any failure of the Contractor to acquaint themselves with available information will not relieve them from the responsibility for estimating properly the difficulty or cost of successfully performing the Work. The Owner assumes no responsibility for any conclusion or interpretation made by the Contractor on the basis of the information made available by the Owner.

12. Weather Protection

- A. The General Contractor shall install weather protection and shall furnish adequate heat in the area so protected during the months of November through March.

13. Electric Service

- A. The Contractor shall make all necessary applications and arrangements and pay for all fees and charges for electrical energy for power and light necessary for the proper completion of this contract during its entire progress. The Contractor shall provide and pay for all temporary wiring, switches, connections, and meters.
- B. There shall be sufficient electric lighting so that all work may be done in a workmanlike manner where there is not sufficient daylight.

**END OF SECTION 01110 – CONTROL OF WORK AND MATERIALS**

## SECTION 01140 – SPECIAL PROVISIONS

### PART 1.00 – GENERAL

1. Water for Construction Purposes
2. Pipe Location
3. Dimensions of Existing Structures
4. Occupying Private Property
5. Existing Utility Locations – Contractor’s Responsibility
6. Coordination of Work
7. Time for Completion of Contract
8. Maintenance of Trench Surface
9. Design of Equipment
10. Services of Manufacturer’s Representatives
11. Wetland Protection Sign
12. Project Sign
13. Compliance with Permits
14. Cutting, Fitting, and Patching
15. Connections to Existing System
16. Protection of Aquifer
17. Contractor’s Representative
18. Visual Recording
19. Operator Training
20. Hours of Construction Activity
21. Construction Crews
22. Extension of Utilities to Site

1. Water for Construction Purposes

- A. In locations where water is in sufficient supply, the Contractor may be allowed to use water without charge for jetting backfill and other construction purposes. The express approval of the Owner shall be obtained before water is used. Waste of water by the Contractor shall be sufficient cause for withdrawing the privilege of unrestricted use.
- B. If no water is available, the Contractor shall supply water at no additional cost to the Owner.

2. Pipe Location

- A. Pipe shall be located substantially as indicated on drawings. The Owner reserves the right, acting through the Engineer, to make such modifications as may be deemed desirable to avoid interference with existing structures or for other reasons.

3. Dimensions of Existing Structures

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

4. Occupying Private Property

- A. The Contractor shall not enter upon nor occupy with employees, equipment or materials any property outside of the public highways or Owner's easements, except with the written consent of the property owner or property owner's agent.

5. Existing Utility Locations – Contractor's Responsibility

- A. The location of existing underground services and utilities shown on the drawings is based on available records. It is not warranted that all existing utilities and services are shown, or that shown locations are correct. The Contractor shall be responsible for having the utility companies locate their respective utilities on the ground prior to excavating.
- B. To satisfy the requirements of Vermont PSB Rule 3.800, the Contractor shall, at least 72 hours, exclusive of Saturdays, Sundays, and holidays, prior to excavation in the proximity of telephone, gas, cable television, and electric utilities; notify the utilities concerned by calling "DIG SAFE" at telephone number: 1-888-344-7233 (1-888-DIG-SAFE) or 811.
- C. The Contractor shall coordinate all work involving utilities and shall satisfy themselves as to the existing conditions of the areas in which they are to perform their work. The Contractor shall conduct and arrange their work so as not to impede or interfere with the work of other contractors working in the same or adjacent areas.

6. Coordination of Work

- A. The General Contractor shall be responsible for coordinating their work as well as that of any subcontractors. The Contractor shall be responsible for notification of the Engineer when each phase of Work is expected to begin and the approximate completion date.

7. Time for Completion of Contract

- A. The time for completion of this contract is stipulated in the Bid form. The Bidder shall base their bid on completing the proposed work by the completion date stipulated in the Bid section.

8. Maintenance of Trench Surface

- A. After backfilling and compacting the trench, the Contractor shall be responsible for keeping the ground surface dry and passable at all times until the surface has been restored to original conditions.

9. Design of Equipment

- A. Attention is directed to the fact that the layout of certain equipment is based on that of one manufacturer. If other equipment is submitted for approval, the Contractor shall prepare and submit for approval at their expense, detailed structural, mechanical and electrical drawings, equipment lists, maintenance requirements, and any other data required by the Engineer, showing all necessary changes and embodying all special features of the equipment he proposes to furnish. Such changes, if approved, shall be made at the expense of the Contractor.

10. Service of Manufacturer's Representative

- A. The Contractor shall arrange for a qualified service representative, at a time suitable to the Engineer, from the company manufacturing or supplying certain equipment as indicated on the detailed specifications, to perform the duties described herein.
- B. After installation of the listed equipment has been completed and the equipment is presumably ready for operation, but before it is operated by others the representative shall inspect, operate, test, and adjust the equipment. The inspection shall include, but shall not be limited to, the following points as applicable:
1. Soundness (without cracks or otherwise damaged parts); completeness in all details, as specified; correctness in setting, alignment, and relative arrangement of various parts; adequacy and correctness of packing, sealing, and lubricants.
  2. The operation, testing, and adjustment shall be as required to prove that the equipment is left in proper condition for satisfactory operation under the conditions specified. Where called for in the specifications, vibration readings shall be made and the equipment balanced accordingly.
  3. On completion of the Work, the Contractor shall submit in triplicate to the Engineer, the manufacturer's or supplier representative's complete signed report of the results of their inspection, operation, adjustments, and test. The report shall include detailed descriptions of the points inspected, tests and adjustments made, quantitative results obtained if such are specified, and suggestions for precautions to be taken to ensure proper maintenance. The report shall also include a certificate that the equipment conforms to the requirements of the contract and is



ready for permanent operation and that nothing in the installation will render the manufacturer's warranty null and void.

4. After the Engineer has reviewed the reports from the manufacturer's representative, the Contractor shall make arrangements to have the manufacturer's representative present when the field acceptance tests are made.
11. Wetlands Protection Sign
    - A. The Contractor shall provide the necessary signage. (if applicable)
  12. Project Sign
    - A. As described in Front End documents (if Applicable).
  13. Compliance with Permits
    - A. The Contractor shall perform all Work in conformance with requirements of the Permits, which appear in Section 00890 – PERMITS.
  14. Cutting, Fitting, and Patching
    - A. The Contractor shall do all cutting, fitting, or patching of work that may be required to make its several parts come together properly and fit it to receive or be received by work of other Contractors, as shown upon or reasonably implied by the drawings and the specifications for the completed structure, including all existing work.
    - B. The Contractor shall not endanger any Work by cutting, digging, or otherwise and shall not cut or alter the work of any other Contractor, save with the consent of the Engineer.
    - C. All holes or openings required to be made in new or existing work, particularly at pipe, conduit, or other penetrations not covered by escutcheons or plates shall be neatly patched. All such holes shall be made completely watertight as approved by the Engineer.
    - D. Size and locations of holes required in steel, concrete, or other structural or finish materials for piping, wiring, ducts, etc., which have not been located and detailed on the drawings shall be approved by the Engineer prior to layout and cutting thereof. All holes shall be suitably reinforced as required by the Engineer.
    - E. Workmanship and materials of patching and repair work shall match the adjacent similar work and shall conform to the applicable sections of the specification. Patches and joints with existing work shall provide, as applicable in each case, visual, structural, and waterproofing continuity.

15. Connections to Existing Systems

- A. The Owner will, upon 24-hour notice from the Contractor, assist the Contractor by locating and opening or closing any and all valves required for draining or admitting wastewater to the various sections of the force main as required to perform the proposed work. No damages shall be claimed by the Contractor for delays in dewatering pipelines nor shall any damages be claimed because of wastewater leaking through closed valves after dewatering is completed.
- B. Connections to the existing system shall be made with mains under pressure unless the lines can be temporarily taken out of service as approved by the Owner.
- C. The Contractor will be required to make test excavations to ascertain that the proposed position of the connections will be clear of joints, fittings, or other obstructions.
- D. If any failure occurs in connection to existing mains, service shall be restored in the shortest possible time, the Contractor working around the clock, if necessary. If required by Owner, the Contractor shall make connections to force mains during night hours, on Sunday or at other times of off-peak demand.

16. Protection of Aquifer

- A. The Contractor's attention is directed to the fact that the construction area is located within the watershed of the existing water supply. The Contractor shall take extra precautions to ensure that no pollutants enter the groundwater table from the construction area.
- B. The Contractor shall not store fuels or other hazardous materials or potential contaminants on the construction site. In the event of a spill, the Contractor shall immediately notify the Engineer.

17. Contractor's Representative

- A. The Contractor shall designate a representative who will be available to respond to emergency calls by the Owner at any time, day and night, and on weekends and holidays, should such a situation arise.

18. Visual Recording

- A. Before beginning construction, the Contractor shall make a color videotape (VHS format) or DVD recording along the entire work length.
- B. One complete recording, for the entire project length, shall be furnished to the Engineer prior to the start of the work. The visual recording shall be identified as applicable by station.

19. Operator Training

- A. A trained representative of the manufacturer of all equipment shall instruct the plant operating personnel on the operation and maintenance of the equipment.
- B. The Owner reserves the right to videotape all training sessions.

20. Hours of Construction Activity

- A. The Contractor shall conduct all construction activity between 7:00 a.m. and 5:00 p.m., Monday through Friday. No construction work shall be allowed on Saturdays, Sundays, or Holidays without written authorization from the Owner.
- B. The Owner will provide personnel for assistance in locating and operating valves at no cost to the Contractor during the Owner's normal working hours (Monday through Friday 7:00 a.m. to 3:30 p.m.). When this assistance is required by the Contractor outside of the Owner's normal working hours the cost will be incurred by the Contractor at the prevailing overtime rate of pay for the personnel providing the assistance. The Owner will bill the Contractor directly.

21. Construction Crews

- A. The Contractor shall not increase the number of construction crews assigned to the Work without providing one-week advance notice to the Engineer.

22. Extension of Utilities to Site

- A. The Owner will directly pay the cost of extending electric and telephone service to the site. Contractor shall be fully responsible for coordinating the work with the individual utilities.

**END OF SECTION 01140 – SPECIAL PROVISIONS**

## **SECTION 01200 – PROJECT MEETING AND COORDINATION**

### **PART 1.00 – GENERAL**

#### **1.01 WORK INCLUDED**

- A. Meetings and Coordination of the Work.

#### **1.02 PRECONSTRUCTION MEETING**

- A. The Engineer will schedule a Preconstruction Meeting within 15 days of the Notice to Proceed, but before the Contractor occupies the Site, to review responsibilities, personnel assignments, and administrative procedures.
- B. The Meeting shall be attended by the Engineer and the Contractor's Superintendent. Other attendances may include the Owner, other consultants, representatives of funding agencies, regulatory agencies, subcontractors, suppliers, and other interested parties.
- C. The Meeting Agenda shall include the following items:
1. Designation of responsible personnel and submission of emergency contact numbers.
  2. Project communications chain.
  3. Engineer's authority and responsibilities.
  4. Responsibility for Safety, Means and Methods, Security and housekeeping.
  5. Procedures for processing of applications for payment, change orders, and field orders.
  6. Distribution of Submittal List by Engineer to Contractor and procedure for submittal processing.
  7. Submission of Project Schedule and critical work sequencing by Contractor for review by Engineer and Owner.
  8. Submission of Schedule of Values by Contractor for review by Engineer and Owner.
  9. Layout of Work.
  10. Location of Temporary Facilities, use of premises, and work hours.
  11. Pay Requisition Processing.
  12. Special project conditions, circumstances, and contractual requirements.
  13. Other items as required.

#### **1.03 PROJECT MEETINGS**

- A. The Engineer shall schedule and administer Project Meetings throughout the progress of Work at regular intervals not less than once every month.

- B. The Meetings shall be attended by the Engineer and the Contractor's Superintendent. Other attendees may include the Owner, other consultants, representatives of funding agencies, regulatory agencies, subcontractors, suppliers, and other interested parties.
- C. The Meeting Agenda shall include the following items:
  - 1. Review and approval of prior meetings minutes.
  - 2. Review of Work progress.
  - 3. Submission of a current Project Schedule by Contractor and review of any adjustments since the previous submission. Contractor shall provide reasons for delays and propose a course of action to be taken so to meet the overall project schedule requirements.
  - 4. Pending changes and substitutions.
  - 5. Special project conditions, circumstances, and contractual requirements.
  - 6. Other items affecting the progress of work, as required.
- D. No later than 5 days after each project meeting, the Engineer will distribute copies of minutes for review to those in attendance. Any perceived misrepresentations of consequence, shall be brought to the immediate attention of the Engineer.

#### 1.04 COORDINATION

- A. The Contractor shall provide a full-time Superintendent, experienced in the administration and supervision of all aspects of the Work. The Superintendent shall be authorized to act as the Contractor's representative, have authority over workers and subcontractors and shall be responsible for daily operations.
- B. The Contractor shall coordinate construction activities included in the Contract Documents to assure efficient and orderly installation of the Work.
- C. Where other contractors or the Owner are occupying, or performing work activities on the project site, the Contractor shall cooperatively schedule activities and use of the site to the Owner's satisfaction.
- D. The Contractor shall coordinate scheduling and performance of required administrative procedures including:
  - 1. Preparation of Payment Requisitions,
  - 2. Preparation of Schedules,
  - 3. Preparation of Submittals,
  - 4. All other administrative procedures as necessary.

**PART 2.00 – PRODUCTS**

2.01 (NOT USED)

**PART 3 – EXECUTION**

3.01 (NOT USED)

**END OF SECTION 01200 – PROJECT MEETINGS AND COORDINATION**

## SECTION 01270 – MEASUREMENT AND PAYMENT

### PART 1.00 – GENERAL

#### 1.01 SECTION INCLUDES

- A. Methods of measurement and payment.

#### 1.02 PROCEDURES

- A. **Unit Price Items:** Contractor shall be paid for actual amount of Work accepted, in accordance with this Section, during the period of construction, less retained amount. In addition, where work is substantially complete, but lacks testing, disinfection, surface restoration, and/or clean-up, amounts will be retained per paragraph 1.06 to amply cover the cost of such testing, disinfection, surface restoration, and/or clean up. After the Work is completed and before final payment is made, Engineer shall make final measurements to determine the quantities of the various items of Work accepted as the basis for final payment. Contractor shall provide assistance to Engineer to make final measurements.
- B. **Lump Sum Items:** Contractor shall be paid in accordance with the Progress Schedule and Schedule of Values on the basis of actual work accepted, until the Work item is completed. Upon completion of the item, 100% of the lump sum price shall be paid, less retained amount.
- C. **Weekly:** Contractor's Superintendent or other authorized representative of Contractor shall meet with Engineer's Resident Project Representative (RPR) to determine the quantities of unit price and/or lump sum price work accomplished and/or completed during the period.
- D. Contractor shall prepare a Partial Payment Estimate, at agreed upon intervals, based on the quantities accomplished and/or completed, agreed upon weekly, submit one (1) copy each to RPR and Engineer's office for review. After Engineer's review, Contractor shall submit five (5) copies of Partial Payment Estimate, which will be signed by Contractor, Engineer's Project Manager, and Owner. These completed forms will provide the basis upon which payment will be made to Contractor.

### 1.03 SCOPE OF PAYMENT

A. Payments to Contractor will be made for the quantities of the contract items performed and accepted, less retained amount, in accordance with the Contract Documents. Upon completion of construction, if these quantities show either an increase or decrease from the quantities given in the Bid, the contract unit prices will still apply, except as provided in the Contract Documents.

B. Payment of any partial payment estimate or of any retained percentage except by and under the approved final invoice, in no way shall affect the obligation of Contractor to repair or renew any defective parts of the construction or to be responsible for all damage due to such defects.

### 1.04 PAYMENT FOR INCREASED OR DECREASED QUANTITIES

A. When changes in the quantities of Work on unit items are ordered and performed, Contractor shall accept payment in full at the contract price for the quantities of Work done. No allowance will be made for anticipated profits for decreased quantities.

B. Owner reserves the right to increase or decrease the cost of the Project as determined by the award, in total, by 20% without recourse by Contractor. Alternates deleted by the Owner prior to award shall not count toward this percentage.

### 1.05 ELIMINATED ITEMS

A. Should any items contained in the proposal form be found unnecessary for the completion of the Work contracted, Owner may eliminate such items from the Contract. Such action shall in no way invalidate the Contract, and no payment will be made for items so eliminated in making final payment to Contractor.

B. No allowance will be made for anticipated profits from eliminated items.

### 1.06 PARTIAL PAYMENTS

A. Partial Payments shall be made monthly as the Work progresses. All partial invoices and payments shall be subject to correction in Contractor's Final Pay Request.

B. No payment may be made when, in the judgment of the Engineer, Work is not in accordance with the Contract Documents, or when in his judgment, the total value of Work performed since the last payment amounts to less than \$1,000.



- C. Contractor shall submit updated record drawings (as-builts) with every partial payment request. Processing of the payment request shall not occur until the requested drawings are received.
- D. When itemizing the value of each item of Work on the Applications for Payment, the following limitations shall be applied to the unit prices as bid or to the approved schedule of value where no unit prices exist.

<u>Stage</u>	Maximum Value
(As applicable)	<u>Approved for Payment</u>
Any Status:	
Required submittals not made or not approved by Engineer . . . . .	0%
Upon completion of installation	
Surfaces not restored . . . . .	75%
Surfaces restored . . . . .	85%
Upon satisfactorily passing tests	
Surfaces not restored . . . . .	90%
Surfaces restored . . . . .	100%

The percentages shall be applied to the full unit price or scheduled value of the item, as a whole, and the appropriate value will be retained by Owner in the form of “additional retainage”.

No more than 75% payment will be made on equipment items which require operation and maintenance manuals, spare parts data or other similar materials but which have not yet been submitted and accepted by Engineer.

- E. Engineer may refuse to recommend approval of the whole or any part of any payment if, in their opinion, it would be incorrect to make such representations to Owner. Engineer may also refuse to recommend approval of any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously approved, to such extent as may be necessary in their opinion to protect Owner from loss because:

1. Work is defective, or completed Work has been damaged requiring correction or replacement,
2. Claims or liens have been filed or there is reasonable cause to believe such may be filed,
3. Contract Price has been reduced because of modifications,
4. Owner has been required to correct defective Work or complete the Work,
5. Unsatisfactory prosecution of the Work, including failure to furnish acceptable submittals or to clean up, or
6. Failure of Contractor to make payments properly to subcontractors for labor, material or equipment.

#### 1.07 PAYMENT FOR MATERIALS DELIVERED

- A. When requested by Contractor and at the discretion of Owner, payment may be made for all or part of the value of acceptable, non-perishable materials and equipment which are to be incorporated into the Work, have not been used and have been delivered to the construction site, or placed in storage places acceptable to Owner. Prior to payment being made, Contractor shall submit to Engineer, copies of invoices accompanied by copies of receipted bills or canceled checks as proof of payment of all the value of the material and/or equipment under consideration. Material and equipment, when so paid for by the Owner, shall become the property of Owner, and in the event of default on the part of Contractor, Owner may use, or cause to be used, these materials and equipment in the construction of the Work. The contractor shall be responsible for any damage to, or loss of, these materials and equipment. The amount thus paid by Owner shall reduce the estimated amounts due Contractor as the material is used in the Work.
- B. Contractor's insurance shall cover stored materials. Proof of insurance covering the storage location will be required.
- C. No partial payment shall be made for fuels, supplies, false work or other materials, or on temporary structures of any kind, which are not a permanent part of the Contract.

#### 1.08 FINAL PAYMENT

- A. After Work is 100% complete, Contractor shall submit a Final Pay Request to Engineer for review. After review and acceptance by the Engineer, the Final Pay Request will be submitted to Owner for payment. Owner will pay the entire amount due within thirty (30) days, after deducting all previous payments and, if applicable, Owner will also deduct the following:

1. Liquidated damages, if applicable.
  2. Charges that are specified in the General and Special Conditions.
- B. Contractor's obligation to perform the Work and complete the Project in accordance with the Contract Documents shall be absolute. Neither approval of any progress or final payment by Engineer, nor the issuance of a certificate of Substantial Completion, nor any payment by Owner to Contractor under the Contract Documents, nor any use or occupancy of the Project by Owner nor any failure to do, nor any correction of defective Work by Owner shall constitute an acceptance of Work not in accordance with the Contract Documents.

#### 1.09 REFERENCE STANDARDS

- A. Vermont Agency of Transportation 2011 Standard Specifications for Construction
- B. The Low Risk Site Handbook for Erosion Prevention and Sediment Control, Vermont Department of Environmental Conservation, August 2006.
- C. Vermont Erosion Prevention and Sediment Control Field Guide, Vermont Department of Environmental Conservation, August 2006.

### **PART 2 PRODUCTS**

**(Not Used)**

### **PART 3 EXECUTION**

3.01 The following subsections describe and define measurement of and payment for Work to be done under respective Items listed in the Bid.

Each unit price or lump sum stated in the Proposal shall constitute full compensation for all materials, labor, tools, equipment and incidentals thereto, to perform the Work in accordance with the Contract Documents. The Contractor shall comply with the conditions of all permits issued for this project.

Payment for any item of work required by the Contract Drawings and Specifications and/or normally required during the construction of the work herein specified, and not listed as a separate item in the Bid Sheet shall be considered as included in the lump sum and/or unit prices stated in the Bid Sheet and will not be paid for as a separate item. The Contractor will provide a schedule of values for major items with the bid.

**Item 1 – Mobilization /Demobilization:** This Item includes all labor, materials, equipment, and services necessary to mobilize onto and demobilize from the construction site as described and shown in Contract Documents and as follows:

a. This Item includes all Work required to mobilize onto the construction site and Contractor's equipment, materials, public notice signage, and all other facilities necessary to complete Contractor's Work; and after completion of Contractor's Work, to demobilize from the construction site including, but not necessarily limited to, all of the items listed above.

b. This Item may be paid for at the Contract Lump Sum Price and shall be full compensation for all Work included in this Item and shall be made as follows:

Contractor may submit and be paid for up to 50% of the Lump Sum Price in Contractor's first pay estimate/request; may submit and be paid for up to 40% of the Lump Sum Price in Contractor's post demobilization pay estimate/request; 10% of the Lump Sum Price, retainage, shall be paid with the final payment after acceptance of the project.

**Item 2 – Filter Curtain:** This Item includes all labor, materials, equipment and services necessary for the installation of the Geo-textile Filter Curtain as described and shown in the Contract Documents and as follows:

a. This Work includes, but is not limited to, installing, and maintaining a silt curtain around the work area as detailed on the plans or directed by the Engineer in the field. The silt curtain shall be continuously anchored (sealed) along the bottom and supported above the water level on top. The Contractor shall stop all excavation operations and make necessary repairs if the curtain is not properly controlling turbidity. All materials used to construct and maintain the curtain shall be removed at the end of the project.

b. This Item shall be paid for at the Contract Lump Sum Price. The Contractor shall install and continuously maintain a filter curtain around the work area through dredging work completion and after the area has been inundated with turbidity levels reduced to that existent outside of the curtain. The Contractor may submit a pay estimate/request and be paid the full Lump Sum Price upon the Engineer's approval to remove the curtain.

**Item 3 – Haul Road:** This Item includes all labor, materials, equipment, and services necessary for the building, and removal upon work completion, of a Temporary Construction Haul Road as described and shown in the Contract Documents and as follows:

a. This Work includes the acquisition and transport of clean aggregate material, installing and maintaining a construction access haul road within the work area, an example of which is shown on the plans, with final layout at the discretion of the Contractor with approval by the Engineer. Lakeward approaches/exits may only begin or end off of the existing concrete boat ramps. All materials used to construct this haul road shall be completely removed from the lake bottom by the end of the project.

b. This Item shall be paid for at the Contract Unit Price per Cubic Yard , validated by transport truck count and yard slips, and shall be full compensation for furnishing all labor,

material, tools, equipment, and incidentals necessary to complete the Work, as specified herein and as directed or approved by the Engineer.

**Item 4 – Unclassified Excavation:** This Item includes but is not limited to, all labor, materials, equipment, and services necessary for the complete excavation and dredging as described and shown in the Contract Documents and as follows:

a. This Work includes, but is not limited to, all labor, materials, equipment, and services necessary to complete the Work as shown on the plans and as specified herein and all other associated work for a complete excavation/dredging. The lake bottom and stream confluence area shall be excavated to the lines, grades and cross-sections shown on the plans or as ordered by the Engineer. All material shall be removed, and disposed of off-site at an upland, non-wetlands site reviewed and approved by the Engineer. All excavated lake bottom materials shall be properly dewatered as necessary to transport on public highways and to the satisfaction of the engineer. All equipment used in or near to the water shall have tight seals and shall not pollute the water. The development of a Dewatering Plan specific to treatment of staged dredged lake bottom material will be submitted by the Contractor and approved by the Engineer, citing all materials and methods to assure proper de-watering and prevention of excessive sediment drain-back to the lake, and subsequent maintenance of dewatering equipment and assembly will be considered subsidiary to this bid item.

b. This Item shall be paid for at the Contract Unit Price per Cubic Yard and shall be full compensation for furnishing all labor, material, tools, equipment, and incidentals necessary to complete the Work as shown on the plans, as specified herein and as directed by the Engineer.

#### **END OF SECTION 01270 – MEASUREMENT AND PAYMENT**

## **SECTION 01300 – SUBMITTALS AND SUBSTITUTIONS**

### **PART 1.00 – GENERAL**

#### **1.01 WORK INCLUDED**

- A. Submission of information on the equipment and materials necessary to complete the Contract, to the Engineer for review.
- B. Project Work Schedules and Schedule of Values.

#### **1.02 QUALITY ASSURANCE**

- A. All Submittals shall be clear, legible, labeled and organized so as to facilitate review.
- B. Whenever reference is made to provide and/or test materials in accordance with standards of any technical organization or society, it shall mean the latest standard code or specification at the date for Advertisement for Bids.

### **PART 2.00 – PRODUCTS**

#### **2.01 SHOP DRAWINGS**

- A. Shop Drawings shall be provided for all materials and equipment, as required in the Contract Documents, to be supplied through the duration of the project.
- B. Shop Drawings shall include material and product information, fabrication and installation drawings, schedules, dimensions, and compliance with specified standards.

#### **2.02 SAMPLES**

- A. All samples shall be of the precise material or product to be provided for the project.

#### **2.03 MANUALS**

- A. Manuals are required for all equipment to be installed as part of this project.
- B. Manuals shall include:
  - 1. Complete operation and maintenance information,
  - 2. Complete drawings and nomenclature for all replaceable parts, and part numbers,
  - 3. Name, address, telephone numbers, fax numbers, and e-mail addresses of manufacturers, technical support and the nearest authorized representatives.

#### 2.04 RECORD DRAWINGS

- A. The Contractor shall maintain one complete set of drawings on which shall be marked dimensions, ties, and measurements pertinent to the execution and completion of the Work and the formulation of Record Drawings by the Engineer. Copies of the record information shall be provided to the Engineer on a monthly basis. Prior to the substantial completion of the project, the final set of record drawings shall be furnished to the Engineer by the Contractor.

#### 2.05 INSURANCE

- A. Before the Contractor commences Work, the insurance company shall submit to the Owner a certificate indicating that the required insurance is in force and stating that the policies will not be materially changed, become non-renewable or canceled without thirty (30) day's advance notice by certified mail to the Owner and Engineer. The representative signing the certificate shall furnish evidence that they are authorized to sign as well as their address and the name of the agency or agencies through which the insurance was obtained.

#### 2.06 WARRANTIES

- A. The Contractor shall submit copies of all product warranties and guarantees with the product information.
- B. At the time of Substantial Completion, the Contractor shall submit executed warranties and guarantees, as approved by the Engineer, in bound form, for the Owner's records.
- C. Where additional warranties above and beyond the one (1) year guarantee period are required, they shall be from the manufacturer of the item and addressed to Owner. These warranties shall be provided with the Shop Drawings and go into effect upon substantial completion of the Work. All warranties longer than one (1) year in length shall be noted on the Certificate of Final Completion.
- D. All work within highway rights-of-way owned by the State of Vermont is subject to the "Vermont Agency of Transportation Special Conditions." An eighteen (18) month guarantee period for work within State highway right-of-way is required.

#### 2.07 SUBSTITUTIONS

- A. Where the words "or equal" are stated, Contractor may provide, if accepted by Engineer, an item equal to that named or described on the Drawings or in the Specifications. The naming of any commercial name, trademark, or other identification shall not be construed to exclude any item or manufacturers not mentioned by name or as limiting competition, but shall establish a standard of quality and/or performance only. In addition, wherever it may be written that an equipment

manufacturer must have a specified period of experience with the product, equipment which does not meet the specified experience period will be considered if the equipment supplier or manufacturer is willing to provide a bond or cash deposit for the duration of the specified experience time period which will guarantee replacement of that equipment in the event of failure.

- B. Where substitutions to specified products or materials are proposed, submittals shall be of the same format as for specified items and clearly indicate the item(s) to be replaced.
- C. The Contractor shall also include information on the reason for the substitution, the benefit to the Owner, and the impact the substitution would have on the schedule and cost.

## 2.08 SCHEDULES

- A. The Contractor shall prepare a fully developed, horizontal bar-type, graphic flow chart of the proposed contract schedule, subdivided by week beginning with the date of the Notice to Proceed and ending with final completion date. All phases and categories of construction shall be included; showing start and finish dates, and placed on the chart in their proper relationship to all other phases of construction. The flow chart shall indicate those phases of construction for which completion times are critical to the job completion date.
- B. The Owner and Engineer shall be notified of any changes to this flow chart during construction. Any significant deviations from the Schedule shall be documented with a revised Schedule.
- C. The Contractor shall submit at the Pre-Construction Conference, the first complete draft and an updated Project Schedule at each monthly project meeting as a condition of payment.
- D. The chart shall include a separate time bar for each significant construction activity or area of work and indicate the interrelationship between the Contractor and any subcontractors, other contractors or work/operations of the Owner. The chart shall include anticipated equipment and manpower anticipated to achieve the proposed schedule. The chart shall indicate time limitations of all highways, stream alteration, and other permits.
- E. Submittals for all long lead time items shall be identified on the schedule and the shop drawings/submittals shall be ordered no later than ten (10) days following contract award.



- F. Contract time has been based on average production rates. The Contractor's schedule shall identify any float time. Any float time between the contract completion time and the Contractor's scheduled completion date belongs to the Owner. The Owner shall own all float time. Work performed within scheduled float time shall not be justification for additional compensation or contract time.
- G. At the preconstruction conference, Contractor shall provide a complete Schedule of Values for all lump sum items in the Project in such a manner that the breakdown may be used as a basis for estimating the value of Work completed on lump sum items for Partial Payment Requests. The extent and basis of the breakdown shall be acceptable to the Owner and Engineer. As a minimum, the Schedule of Values breakdown shall include those items outlines in the Measurement and Payment section.
- H. The Contractor shall provide a Schedule of Values with the Project's estimated monthly Payment Requisitions indicating the work completed to date. In addition, where multifaceted portions of the work are paid for under a Lump Sum pay item, the Contractor shall provide a cost breakdown, by major system component, to facilitate determination of partial payment as a percentage of work complete.

## 2.09 INSPECTION AND TESTING

- A. For pipe, cement, steel reinforcement, paint, and similar materials which are normally tested in the shop by the manufacturer, Contractor shall furnish the Engineer certified records of physical, chemical, and other pertinent tests, and/or certified statements from the manufacturer that the materials have been manufactured and tested in conforming to the Specifications. Where such a small quantity of material is required as to make physical tests or chemical analyses impractical, a certificate from the manufacturer stating the results of such tests or analyses of similar materials which were concurrently produced may, at the discretion of the Engineer, be considered as the basis for the acceptance of such materials.
- B. Submittal of manufacturer's testing certificate shall be considered endorsement by the Contractor that the material certified by the manufacturer will be the material incorporated in the Work.

## **PART 3 – EXECUTION**

### 3.01 CONTRACTOR'S REVIEW

- A. Contractor shall review Submittals prior to submission to the Engineer to determine and verify measurements, construction criteria, coordination and manufacturer's product identification.

- B. Each Submittal shall be dated, signed and stamped by the Contractor to indicate compliance with the Contract Documents. Any deviations from the Contract Documents shall be clearly indicated.
- C. Each Submittal shall have the following information indicated:
  - 1. Name of Project, Owner, and Contractor.
  - 2. Name, address, and telephone number of supplier and manufacturer.
  - 3. Identification number correlating to the Engineer's List of Submittals.
  - 4. Indication of whether submission is an original or a re-submittal.
  - 5. If multiple items are shown on a manufacturer's catalog page, clearly indicate which item is being submitted for which purpose.

### 3.02 SUBMITTAL REQUIREMENTS

- A. The Contractor shall provide five (5) copies of each shop drawing, sample and color/pattern chart, with three to be retained by the Engineer and two copies returned to the Contractor upon completion of review.
- B. The Contractor shall provide three (3) copies of each manual, warranty and schedule, all copies to be retained by the Owner and Engineer, and zero copies returned to the Contractor upon completion of review.
- C. Groupings of Submittals shall be accompanied by a Letter of Transmittal clearly indicating Submittals included and the date of Submission.
- D. Timing:
  - 1. The Contractor shall make all Submittals far enough in advance of scheduled dates of installation to provide all required time for reviews, securing approvals, possible revisions and resubmittals, coordination and placing orders and securing deliveries.
  - 2. A minimum of ten (10) full working days shall be allowed for the Engineer's review, following receipt of submittal. An additional five (5) working days shall be allowed for submittals requiring review by Engineer's sub-consultants.
  - 3. Where significant or complex submittals require additional review time, adjusted scheduling requirements shall be included on the Engineer's List of Submittals provided at the Preconstruction Meeting.
  - 4. No extension of Contract time or increases in Contract costs associated with delays will be authorized due to failure to transmit submittals to the Engineer sufficiently in advance of the work to permit processing.
  - 5. All related Operation and Maintenance Manuals, record drawings, and all other related items shall have been submitted prior to the specified part of the project being considered substantially complete.

- E. The CONTRACTOR shall maintain one complete set of drawings on which shall be marked dimensions, ties, and measurements pertinent to the execution and completion of the Work and the formulation of Record Drawings by the ENGINEER. Copies of the record information shall be provided to the ENGINEER on a monthly basis. Prior to the substantial completion of the project, the final set of record drawings shall be furnished to the ENGINEER by the CONTRACTOR.

### 3.03 SUBSTITUTIONS

- A. The Engineer's approval is required for all substitutions.
- B. The Contract and the Contract price are based on the materials, equipment, and methods described in the Contract Documents.
- C. The Engineer will consider proposals for substitution of materials and equipment only when such substitutions are considered to comply with the project design requirements, be of comparable quality, performance, operation and be of benefit to the Owner.
- D. The cost of all extra component(s), material(s), structural modifications(s), excavation(s), etc. required (not included in the Contract Documents) due to the installation of equipment or materials other than that included in the Contract Documents shall be at the Contractor's expense, at no additional cost to the Owner.
- E. The Engineer shall consider proposals for substitution only when accompanied with completed technical data or other information required by the Engineer to evaluate the proposed substitution.
- F. The Owner shall charge the Contractor for all costs required by the Engineer and sub consultants to evaluate the acceptability of each proposed substitution, excluding Shop Drawing review.
- G. If any substitution creates the necessity for redesign and/or revision of the Contract Documents, the costs shall be charged to the Contractor by the Owner.
- H. The Owner's costs for Engineer's services for review of substitutions and/or redesign necessary for substitutions shall be deducted from the Contract Price.
- I. All requests for substitutions shall include written warranties and indemnifications to the Owner and the Engineer for use of the proposed alternative material and/or equipment.

### **END OF SECTION 01300 – SUBMITTALS AND SUBSTITUTIONS**

## SECTION 01570 – ENVIRONMENTAL PROTECTION

### PART 1.00 – GENERAL

1. Description
2. Notification
3. Implementation
4. Area of Construction Activity
5. Protection of Water Resources
6. Protecting and Minimizing Exposed Areas
7. Location of Storage Areas
8. Protection of Landscape
9. Clearing and Grubbing
10. Discharge of Dewatering Operations
11. Dust Control
12. Separation and Replacement Topsoil
13. Silt Fence
14. Surface Restoration of Cross Country Areas

#### 1. Description

- A. The Work covered by this Section of the specifications consists of furnishing all labor, materials, tools, and equipment and performing all Work required for the prevention of environmental pollution as a result of construction operations under this contract.
- B. The requirements set forth in this Section of the specifications apply to cross-country areas, river and stream crossings, and construction in and adjacent to wetlands, unless otherwise specifically stated.
- C. All Work under this Contract shall be in accordance with conditional requirements applied, all of which are attached to Section 00890, PERMITS.
- D. Reference Standards:
  - a. The Vermont Environmental Protection Rules.
  - b. Vermont Erosion Prevention and Sediment Control Field Guide, Vermont Department of Environmental Conservation, August 2006.
  - c. The Low Risk Site Handbook for Erosion Prevention and Sediment Control, Vermont Department of Environmental Conservation, August 2006.
  - d. The VAOT Standard Specification for Construction, Section 653 Erosion Prevention & Sediment Control, 2011.

- e. Winter Construction and the Vermont Construction General Permit: A Planner's Guide. State of Vermont, Department of Environmental Conservation.
- f. Field Manual on Sediment and Erosion Control, Best Management Practices for Contractors and Inspectors, Fifield, 2002, Forester Press.
- g. The Vermont Stormwater Management Manual, Volumes I & II, 2002.
- h. Vermont Low Impact Development Guide for Residential and Small Sites.

## 2. Notification

- A. The Engineer will notify the Contractor in writing of any non-compliance with the foregoing provisions. The Contractor shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the Contractor or their authorized representative at the site of the Work, shall be deemed sufficient for the purpose. If the Contractor fails to act promptly, the Engineer may order stoppage of all or part of the Work until satisfactory corrective action has been taken. No claim for an extension of time or for excess costs or damage incurred by the Contractor as a result of time lost due to any stop work orders shall be made unless it was later determined that the Contractor was in compliance.

## 3. Implementation

- A. Prior to commencement of Work, the Contractor shall meet with a representative of the Engineer to develop mutual understandings relative to compliance of the environmental protection program.
- B. The Contractor shall submit for approval details and literature fully describing environmental protection methods to be employed in carrying out construction activities within 50 feet of a stream, lake, pond, or wetland area.
- C. The permitted disturbance area is specified on the written authorization to discharge. Only the acreage listed on the authorization form may be exposed at any given time.
- D. Areas where there will be vehicle traffic off of the construction site will require a stabilized construction entrance.

## 4. Area of Construction Activity

- A. Insofar as possible, the Contractor shall confine their construction activities to those areas defined by the plans and specifications. All land resources within the project boundaries and outside the limits of permanent work performed under this contract shall be preserved in their present condition or be restored to a condition after completion of construction at least equal to that which existed prior to work under this contract.

- B. Marking of site boundaries shall include flagging trees, posting of signs, and/or orange safety fence. Fencing is required on any boundary within 50 feet of a stream, lake, pond, or wetland.

5. Protection of Water Resources

- A. The Contractor shall not pollute streams, lakes, or reservoirs with fuels, oils, bitumens, calcium chloride, acids, or other harmful materials. It is the Contractor's responsibility to comply with all applicable Federal, State, County, and Municipal laws regarding pollution of rivers and streams, including the neutralization of chlorinated water prior to discharge from disinfection practices.
- B. Special measures should be taken to insure against spillage of any pollutants into public waters.

6. Protecting and Minimizing Exposed Areas

- A. The Contractor shall limit the area of land which is exposed and free from vegetation during construction. In areas where the period of exposure will be greater than two (2) weeks, temporary vegetation, mulching, or other protective measures shall be provided as specified.
- B. The Contractor shall take account of the conditions of the soil where temporary cover crop will be used to ensure that materials used for temporary vegetation are adaptive to the sediment control. Materials to be used for temporary vegetation shall be approved by the Engineer.

7. Location of Storage Areas

- A. The location of the Contractor's storage areas for equipment and/or materials shall be upon cleared portions of the job site or areas to be cleared as a part of this project, and shall require written approval of the Engineer. Plans showing storage facilities for equipment and materials shall be submitted for approval of the Engineer.
- B. No excavated materials or materials used in backfill operations shall be deposited within a minimum distance of fifty (50) feet of any watercourse or any drainage facility. Adequate measures for erosion and sediment control shall be employed to protect any downstream areas from siltation.
- C. There shall be no storage of equipment or materials in areas designated as wetlands, or upon grass areas within the public access area.
- D. The Engineer may designate a particular area or areas where the Contractor may store materials used in the operations.

8. Protection of Landscape

- A. The Contractor shall not deface, injure, or destroy trees or shrubs nor remove or cut them without written authority from the Owner. No ropes, cables, or guys shall be fastened to or attached to any existing nearby trees for anchorages unless specifically authorized by the Engineer. Excavating machinery and cranes shall be of suitable type and be operated with care to prevent injury to trees which are not to be removed, particularly overhanging branches and limbs. The Contractor shall, in any event, be responsible for any damage resulting from such use.
- B. Branches, limbs, and roots shall not be cut except by permission of the Engineer. All cutting shall be smoothly and neatly done without splitting or crushing. When there is unavoidable injury to branches, limbs, and trunks of trees, the injured portions shall be neatly trimmed and covered with an application of grafting wax or tree healing paint as directed.
- C. Where, in the opinion of the Engineer, trees may possibly be defaced, bruised, injured, or otherwise damaged by the Contractor's equipment or by blasting or other operations, the Engineer may direct the Contractor to adequately protect such trees by placing boards, planks, poles, or fencing around them. Any trees or landscape feature scarred or damaged by the Contractor's equipment or operations shall be restored as nearly as possible to its original condition at the expense of the Contractor. The Engineer will decide what method of restoration shall be used, and whether damaged trees shall be treated and healed or removed and disposed of.
- D. Cultivated hedges, shrubs, and plants which could be injured by the Contractor's operations shall be protected by suitable means or shall be dug up, balled, and temporarily replanted and maintained. After construction operations have been substantially completed, they shall be replanted in their original positions and cared for until growth is re-established. If cultivated hedges, shrubs, and plants are injured to such a degree as to affect their growth or diminish their beauty or usefulness, they shall be replaced by items of a kind and quality at least equal to that existing at the start of the Work.

9. Clearing and Grubbing

- A. The Contractor shall clear and grub only on the Owner's land or the Owner's easements, and only the area required for construction operations, as approved by the Engineer. Removal of mature trees (3 inches or greater DBH) will not be allowed on temporary easements.
- B. The Contractor shall not remove trees in the Owner's temporary easements without permission of the Engineer.

10. Discharge of Dewatering Operations

- A. Any water that is pumped and discharged from the trench and/or excavation as part of the Contractor's water handling shall be filtered by an approved method prior to its discharge into a receiving water or drainage system.
- B. Under no circumstances shall the Contractor discharge unfiltered water to the areas designated as wetlands. When constructing in wetlands area, the Contractor shall discharge water from dewatering operations directly to the nearest drainage system, stream, or waterway after filtering by an approved method.
- C. The pumped water shall be filtered through filter fabric, a filter bag, a vegetative filter strip or a vegetated channel to trap sediment occurring as a result of the construction operations. The vegetated channel shall be constructed such that the discharge flow rate shall not exceed a velocity of more than 1 foot per second. Accumulated sediment shall be cleared from the channel periodically. A de-watering plan for dredged material will be a required submittal for acceptance by the Engineer prior to commencement of river bottom dredging.

11. Dust Control

- A. During the progress of the Work, the Contractor shall conduct their operations and maintain the area of those activities, including sweeping and sprinkling of streets as necessary, to minimize creation and dispersion of dust. If the Engineer decides it is necessary to use calcium chloride for more effective dust control, the Contractor shall furnish and spread the material, as directed.
- B. Calcium Chloride shall not be used for dust control within a drainage basin or in the vicinity of any source of potable water.

12. Separation and Replacement of Topsoil

- A. Topsoil shall be carefully removed from cross-country areas where excavations are to be made, and separately stored to be used again as directed.
- B. The topsoil shall be stored in an area acceptable to the Engineer and adequate measures shall be employed to prevent erosion of said material.

13. Silt Fence

- A. Where indicated on the drawings or where directed by the Engineer, the Contractor shall erect and maintain a temporary silt fence. In areas designated as wetlands, the Contractor shall line the limits of the construction easement with a silt fence. The silt fence shall be used specifically to contain sediment from runoff water and to minimize environmental damage caused by construction.



- B. The silt fence shall consist of a 3-foot wide continuous length sediment control fabric, stitched to a 22-foot wide, continuous length support netting, and stapled to preweathered oak posts installed as shown on the drawings. The oak posts shall be 1 ½-inches by 1 ½-inches (Minimum Dimension) by 48 inches and shall be tapered. The support netting shall be industrial strength polypropylene. The bottom edge of the sediment control fabric shall be buried as shown on the drawings. The sediment control fabric shall conform to the following properties:

<b>Property</b>	<b>Value</b>	<b>Test Method</b>
1. Grab Strength (lbs.)	124	ASTM D-4632
2. Elongation (%)	15%	ASTM D-4632
3. Puncture Strength (lbs.)	65	ASTM D-4833
4. Burst Strength (psi)	300	ASTM D-3786
5. Trapezoid Tear (lbs.)	60	ASTM D-4533
6. Equivalent Opening Size (U.S. Sieve)	No. 30	ASTM D-4571
7. Permittivity (sec <sup>-1</sup> )	0.10	ASTM D-4491
8. Water Flow Rate (gal/min/sf.)	10	ASTM D-4491
9. UV Resistance (%)	70	ASTM D-4355

- C. The silt fence shall be Mirafi Envirofence Manufactured by Mirafi, Inc., or approved equal.

14. Surface Restoration of Cross Country Areas

- A. While disturbance upon cross country areas is not allowed or expected, incidental disturbances shall be repaired and turf re-established at no cost to the State. A one-year guarantee of maintenance will be required on these plantings to ensure that they establish in the area.

**END OF SECTION 01570 – ENVIRONMENTAL PROTECTION**

## SECTION 01700 – PROJECT CLOSEOUT

### PART 1.00 – GENERAL

#### 1.01 WORK INCLUDED

- A. All labor, materials, equipment and services for project close-out, in accordance with the requirements of the Contract Documents, including but not limited to:
1. Providing services of manufacturer’s representatives;
  2. Final cleaning;
  3. Providing project record documents;
  4. Providing operation and maintenance data and manuals;
  5. Providing warranties and bonds;
  6. Providing spare parts and maintenance materials.

#### 1.02 REFERENCE STANDARDS

- A. Project Closeout is defined to include general requirements near the end of the contract period, in preparation for final acceptance, final payment, normal termination of contract, occupancy by Owner, and similar actions evidencing completion of the Work. Specific requirements for individual work items are specified throughout the Technical Specifications, in addition to the general requirements stated in this Section. Time of project closeout is directly related to “Substantial Completion”, and therefore may be either a single time period for the entire project or a series of time periods for individual parts of the project which have been certified as substantially complete at different dates.

#### 1.03 PREREQUISITES TO SUBSTANTIAL COMPLETION

- A. Work shall be deemed Substantially Complete by the Engineer when all components related to the specified part of the Project operate as designed so that the Owner has beneficial use of the related components.
- B. Prior to requesting Engineer’s review for determination of Substantial Completion as required by the General Conditions (for either the entire project or portions thereof), the Contractor shall complete and submit the following, as applicable:
1. Progress payment request, coincidental with, or following the first date substantial completion is claimed, showing either 100% complete, for the portion of Work claimed as “substantially complete”, or listing incomplete items, the value of incompleteness, and reasons for being incomplete. This progress payment request shall account for final changes to the Contract Sum as follows:
    - a. Original contract sum,
    - b. Additions and deductions resulting from: previous change orders; balancing change order; other adjustments; deductions for deficient work; other deductions,
    - c. Total contract sum, as adjusted,

- d. Previous payments,
  - e. Sum remaining due.
  2. Advise Owner of pending insurance change-over requirements;
  3. Local zoning or building department Certificate of Occupancy;
  4. State of Vermont Department of Labor and Industry Certificate of Occupancy;
  5. Electrical inspection certificates and energizing permits;
  6. Keys;
  7. Transfer of utilities;
  8. Troubleshooting;
  9. System start-up and “debugger”;
  10. Operator Training;
  11. Services of Manufacturer’s Representatives;
  12. O&M manuals;
  13. Record Documents;
  14. Warranties and Bonds;
  15. Spare Parts and Maintenance Materials;
  16. Evidence of Payments and Release of Liens. The Contractor shall submit the following executed documents as evidence of payments and release of liens with the final application for payments:
    - a. Contractor’s Release or Waiver of Liens,
    - b. Separate Releases of Waivers and Liens for Subcontractors, suppliers, and others with lien rights against property Owner, together with a list of those parties.
  17. Consent of Surety to Release Retainage.
- C. Substantial Completion of any portion of the Work shall not release the Contractor from the fulfillment of all his obligations under this Contract. Owner will assume all liability for damage resulting from improper operation or maintenance on the part of the Owner’s personnel.

#### 1.04 PREREQUISITES TO FINAL ACCEPTANCE

- A. Prior to requesting the Engineer’s final review for determination of Final Completion and final payment as required by General Conditions, the Contractor shall complete and submit the following, as applicable, and list known exceptions (if any) in the request:
1. Submit copy of the Engineer’s final punch list of itemized work to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance.
  2. Submit any outstanding record drawings, operation and maintenance manuals, final project photographs, specific warranties, workmanship/maintenance bonds, maintenance agreements, final certifications, and similar record documents as specified herein.
  3. Complete final clean-up requirements as specified herein.
  4. Deliver tools, spare parts, extra stocks of materials, and similar physical items to Owner.

5. Make final changeover of locks and transmit keys to the Owner.
6. Complete any outstanding start-up testing of systems, and training for Owner's operating personnel.
7. Discontinue (or change over) and remove from project site temporary facilities and services, along with construction tools and facilities, etc.
8. Any outstanding Lien Releases;
9. Consent of surety to Final Payment.
10. Final application for payment in accordance with requirements of General, Supplementary, and Special Conditions, and as specified herein.

## **PART 2.00 – PRODUCTS**

### **2.01 PROJECT RECORD DOCUMENTS**

- A. Project record documents shall be maintained in accordance with the Specifications and shall be submitted at the completion of the work. Record documents shall be submitted complete and bound in numerical order. The Contractor shall submit record documents to the Engineer with a transmittal letter indicating the project name, date, Contractor's name and address, list of documents, and the signature of the Contractor.
- B. Documents shall be kept accurate, current, clean, dry, and legible.
- C. Project record documents shall not be used for construction purposes.
- D. Documents shall be available at all times during working hours for reviews by Engineer, Owner, regulators, funding agencies, and other personnel having jurisdiction over this project.
- E. Record Drawing construction data of the following shall be recorded:
  1. Elevations of structures, footings, and floors.
  2. Location, elevation, and size of utilities and appurtenances constructed and affected by this Project, whether active or abandoned.
  3. Measured locations of internal utilities and appurtenances, referenced to permanent surface improvements.
  4. Record Drawing locations shall be obtained and recorded by measuring "swing ties," or other method acceptable to Engineer.
  5. Record Drawing elevations shall be obtained and recorded by measuring elevations relative to project benchmarks.
  6. Record Drawings mark-ups of actual installation which vary substantially from the Work as originally shown. Give particular attention to information on Work concealed, which would be difficult to identify or measure and record at a later date.
  7. When shop drawings are marked-up, mark cross-reference on contract drawings at corresponding location.

8. Mark with erasable color pencil, using separate colors where feasible to distinguish between changes for different categories of work at same general location.
  9. Note field changes, dimensions, and details.
  10. Note change order and field order numbers and similar identification.
- F. Test reports and analyses shall be submitted bound in chronological order.
- G. Each record document submitted shall be certified, by endorsement of the Contractor, that it is accurate and complete.
- H. Review or receipt of these records by the Engineer or the Owner shall not be considered acceptance of any deviation from the Contract Documents or shop drawings, or in any way relieve Contractor from their responsibility to perform the work in accordance with the Contract Documents and Shop Drawings.

## 2.02 RECORD SAMPLES

- A. Immediately prior to date(s) of substantial completion, Engineer (and Owner's personnel where desired) will meet with Contractor to determine which (if any) of submitted samples maintained by Contractor during progress of the Work is/are to be transmitted to Owner for record purposes.
- B. Contractor shall comply with Engineer's instructions for packaging, identification marking, and delivery to Owner's sample storage space.
- C. Contractor shall dispose of the samples in manner specified for disposal of surplus and waste materials, unless otherwise indicated or directed by Engineer.

## 2.03 OPERATION AND MAINTENANCE DATA

- A. Contractor shall provide operation and maintenance data for all products specified in individual specification sections.
- B. Submit bound data in three-ring "D" binders with durable plastic covers with identifying labels.
- C. Subdivide the binder contents with permanent page dividers, logically organized as described below, with tab title clearly printed under reinforced laminated plastic tags.
- D. Each volume shall include, as appropriate for the system or product included:
  1. Table of Contents.
  2. Directory listing names, addresses, telephone numbers of Contractor, Subcontractor, suppliers, and contact persons.

3. Operation and Maintenance instructions, arranged by system. For each category, provide the following:
  - a. Significant design criteria,
  - b. List of equipment, function, operating characteristics, and limiting conditions.
  - c. Parts list, illustrations, assembly drawings, and diagrams required for maintenance for each component,
  - d. Operating instructions, including start-up, control, shut-down, break-in, seasonal, emergency, and routine operating instructions and sequences.
  - e. Maintenance instructions for equipment and systems, including routine procedures, troubleshooting, disassembly, repair, reassembly, alignment, adjusting, balancing, and checking instructions.
  - f. Servicing and lubrication schedule and list of required lubricants.
  - g. Maintenance instructions for finishes, including recommended cleaning methods, schedule, materials, and special precautions identifying detrimental agents. Provide information for reordering custom finishes.
  - h. Control diagrams and instructions (customized for the specific project) including sequence of operation, original parts list, illustrations, assembly drawings, maintenance diagrams, wiring diagrams, coordination drawings with piping diagrams.
  - i. Coordination drawings, with color coded piping diagrams as installed.
  - j. Charts of valve tag numbers, keyed to flow and control diagrams.
  - k. Testing, balancing, and certification reports.
- E. Submit one draft copy of completed volumes fifteen days prior to substantial completion review, with Engineer's comments. Revise contents of all document sets as required, prior to final completion submission.
- F. Submit four sets of revised final volumes.

#### 2.04 WARRANTIES AND BONDS

- A. Provide duplicate, notarized copies.
- B. Execute and assemble transferable warranty documents from Contractor, sub-contractors, suppliers, and manufacturers. Provide table of contents and assemble in binder with durable plastic cover.
- C. Submit warranty documents prior to substantial completion review. For equipment put into use with Owner's permission during construction, submit within ten (10) days after first operation. For items of Work delayed materially beyond date of Substantial Completion, provide updated submittal within ten (10) days after acceptance, listing date of acceptance as start of warranty period.

#### 2.05 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Provide products, spare parts, tools, and maintenance materials in quantities specified, in addition to that used for construction of Work, prior to Substantial Completion.

### **PART 3 – EXECUTION**

#### **3.01 SERVICES OF MANUFACTURER’S REPRESENTATIVES, SYSTEM STARTUP, “DEBUGGING”, TROUBLESHOOTING, AND OPERATOR TRAINING**

- A. The Contractor shall arrange for each installer of work requiring continuing maintenance or operation to meet with the Owner’s personnel at project site, to provide instructions needed for proper operation and maintenance of entire work. Contractor shall provide manufacturer’s representatives to provide instructions when installers are not expert in the required procedures, or when required elsewhere in the Contract Documents.
- B. Review maintenance manuals, record documentation, tools, spare parts and materials, lubricants, fuels, identification system, control sequences, hazards, cleaning, and similar procedures and facilities.
- C. For operational equipment, demonstration of start-up, shut down, emergency operations, noise and vibration adjustments, safety, economy/efficiency adjustments, and similar operations shall be performed.
- D. Provide maintenance instructions for equipment and systems, including routine procedures, troubleshooting disassembly, repair, reassembly, alignment, adjusting, balancing and checking instructions. Provide servicing and lubrication instructions.
- E. Review maintenance and operations in relation with applicable warranties, agreements to maintain bonds, and similar continuing commitments.
- F. Coordinate schedule for start-up of various systems and equipment.
- G. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions which may cause damage.
- H. Verify that tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- I. Verify that wiring and support components for systems and equipment are complete, tested, and labeled.
- J. Execute start-up under the supervision of the applicable manufacturer’s representative, with applicable Owner’s personnel attending, in accordance with manufacturer’s instructions.

- K. When specified in individual specification sections, require manufacturer to provide authorized representative to be present at site to inspect, check and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
- L. Submit a written report that equipment or system has been properly installed, is functioning correctly, and the operator(s) have been trained.
- M. System startup, “debugging” and troubleshooting shall be completed prior to operator training. System startup, “debugging” and troubleshooting shall be completed at least ten (10) days prior to Substantial Completion, so that the system is put through a complete “shake down” trial period, under normal operating conditions, prior to being turned over to the Owner. The Contractor’s schedule shall allow for this period prior to Substantial and Final Completion.

### 3.02 FINAL CLEANING

- A. Specific requirements for individual units of work are specified in the Specification sections. Employ experienced workers, or professional cleaners, for final cleaning of the work, consisting of cleaning each surface or unit of work to normal “clean” condition expected for a first-class facility cleaning and maintenance program. Comply with manufacturer’s instructions for cleaning operations.
- B. Contractor shall execute final cleaning prior to final review.
- C. Remove labels which are not required as permanent labels.
- D. Clean transparent materials, including mirrors and window/door glass.
- E. Clean exposed exterior and interior hard surfaced finishes including metals, masonry, stone, concrete, painted surfaces, plastics, tile, wood, special coatings, and similar surfaces, to a dirt free condition, free of dust, stains, films, and similar noticeable substances.
- F. Wipe surface of all mechanical and electrical equipment clean; remove excess lubrication, and other substances.
- G. Remove debris and surface dust from all limited access space, vaults, attics, and similar spaces.
- H. Clean concrete floor in non-occupied spaces broom and mopped clean.
- I. Vacuum clean carpeted surfaces and similar soft surfaces.



- J. Clean plumbing fixtures to a sanitary condition, free of stains, including those resulting from water exposure.
- K. Clean ducts, blowers, and coils.
- L. Replace air filters if units were operated during construction.
- M. Clean light fixtures and lamps.
- N. Clean debris from roofs and drainage systems.
- O. Clean all manholes, catch basins, and drain lines.
- P. Clean project site (yard and grounds), including landscaping, of litter and foreign substances. Sweep paved areas to a broom clean condition; remove stains, petrochemical spills and other foreign deposits. Rake grounds which are neither planted nor paved, to a smooth, even-textured surface.
- Q. Restore and clean field office, storage trailer, and storage areas.
- R. No burning or disposal of rubbish at the job site will be permitted.
- S. Remove temporary and construction facilities.
- T. Clean access road and local roads leading to project site.

### 3.03 FINAL FACILITY “BAKE OUT” PROCEDURES

- A. Heat all areas of new construction to 90° for a minimum of forty-eight (48) hours.
- B. At the end of this period ventilate area with 100% outside air and exhaust air for a minimum of twenty-four (24) hours to eliminate off-gassing that occurs during bake out period.
- C. Change all air filters upon completion.

### 3.04 SUBSTANTIAL COMPLETION REVIEW PROCEDURE

- A. Within ten (10) days following receipt of Contractor’s written request for substantial completion, review, the Engineer, in consultation with the Owner, will either proceed with the review or advise the Contractor of prerequisites not fulfilled.
- B. Following the initial review, the Engineer will either prepare a Certificate of Substantial Completion or advise the Contractor of Work which must be performed prior to issuance of certificate.

- C. The Engineer will repeat the review when requested and assured that work has been substantially complete. Results of completed review will form the initial “punch list” of items to be completed or corrected for final acceptance.
- D. Should the Engineer consider that the Work is Substantially Complete, the Engineer will prepare and the Owner shall issue a Certificate of Substantial Completion, accompanied by the “punch list.”

### 3.05 FINAL ACCEPTANCE REVIEW PROCEDURES

- A. At such time as the Contractor deems that the Work is completed, the Contractor shall arrange for a Final Inspection with the Owner and the Engineer. There will be a maximum of two such inspections. At the initial Inspection, if Work is unsatisfactory or incomplete, a final “punch list” will be prepared, outlining the Owner’s requirements for final acceptance.
- B. The Contractor shall take immediate steps to remedy the stated deficiencies, and send written notice to Engineer certifying that the Work is complete, at which time the Engineer will re-review the Work.
- C. Within ten (10) days following receipt of Contractor’s written notice that the Work has been completed, including “punch list” items from earlier reviews, the Engineer will re-review the work. Upon completion of re-review, the Engineer will notify the Contractor in writing of any Work not completed or obligations not fulfilled as required for final acceptance.
- D. Should the Engineer be required to perform second review because of failure of the Work to comply with original certifications of Contractor, the Owner will compensate the Engineer for additional services, and deduct amount paid from final payment to the Contractor.
- E. Should the Engineer consider that the Work is Complete, the Engineer will prepare and the Owner shall issue a Certificate of Final Completion and approve the final application for payment, in accordance with provisions of General Conditions.
- F. The date of completion shall be the date Engineer and Owner find the Work complete. Contractor’s final payment request will not be approved until all Project work has been completed and all required documents have been received in accordance with the Contract Documents.
- G. Engineer will prepare final change order, reflecting approved adjustment to contract sum not previously made by change orders.

### **END OF SECTION 01700 – PROJECT CLOSEOUT**

## **SECTION 01740 – CLEANING UP**

### **PART 1.00 – GENERAL**

#### **1.01 WORK INCLUDED**

- A. The Contractor must employ at all times during the progress of the Work adequate cleanup measures and safety precautions to prevent injuries to persons or damage to property. The Contractor shall immediately, upon direction by the Engineer, provide adequate material, equipment and labor to cleanup, and make safe any and all areas deemed necessary by the Engineer.

#### **1.02 RELATED WORK**

- A. Not applicable.

### **PART 2.00 – PRODUCTS**

#### **2.01 MATERIALS**

- A. Not applicable.

### **PART 3 – EXECUTION**

#### **3.01 DAILY CLEANUP**

- A. The Contractor shall clean up, at least daily, all refuse, rubbish, scrap, and surplus material debris and unneeded construction equipment resulting from the construction operations and sweep the area. The site of the Work and the adjacent areas affected thereby shall at all times present a neat, orderly, and work-man-like appearance.
- B. Upon written notification by the Engineer, the Contractor shall within 24 hours clean up those areas, which in the Engineer's opinion are in violation of this section and the above references sections of the specifications.
- C. If in the opinion of the Engineer, the referenced areas are not satisfactorily cleaned up, all other work on the project shall stop until the cleanup is satisfactory.

#### **3.02 MATERIAL OR DEBRIS IN DRAINAGE FACILITIES**

- A. Where material or debris has washed or flowed into or has been placed in existing watercourses, ditches, gutters, drains, pipes, structures, such material or debris shall be entirely removed and satisfactory disposed of during progress of the Work, and the ditches, channels, drains, pipes, structures, and work shall, upon completion of the work, be left in a clean and neat condition.

**3.03 REMOVAL OF TEMPORARY BUILDINGS, STRUCTURES, AND EQUIPMENT**

- A. On or before completion of the Work, the Contractor shall, unless otherwise specifically directed or permitted in writing, tear down and remove all temporary buildings and structures built by them; shall remove all temporary works, tools, and machinery or other construction equipment furnished by them; shall remove all rubbish from any grounds which they have occupied; shall remove silt fences used for trapping sediment; and shall leave the roads and all parts of the property and adjacent property affected by their operations in a neat and satisfactory condition.

**3.04 RESTORATION OF DAMAGED PROPERTY**

- A. The Contractor shall restore or replace, when and as directed, any property damaged by their work, equipment, or employees, to a condition at least equal to that existing immediately prior to the beginning of operations. To this end the Contractor shall do as required all necessary highway or driveway, walk and landscaping work. Materials, equipment, and methods for such restoration shall be as approved by the Engineer.

**3.05 FINAL CLEANUP**

- A. Before acceptance by the Owner, the Contractor shall perform a final cleanup to bring the construction site to its original or specified condition. This cleanup shall include removing all trash and debris off of the premises. Before acceptance, the Engineer shall approve the condition of the site.

**END OF SECTION 01740 – CLEANING UP**

## **SECTION 02232 – PROTECTION AND REPAIR OF PROPERTY**

### **PART 1.00 – GENERAL**

#### **1.01 WORK INCLUDED**

- A. All labor, materials, equipment, and services necessary for protection and repair of property, as shown or specified.

#### **1.02 REFERENCE STANDARDS**

- A. (NOT USED)

#### **1.03 QUALITY ASSURANCE**

- A. (NOT USED)

#### **1.04 SUBMITTALS**

- A. (NOT USED)

### **PART 2.00 – PRODUCTS**

#### **2.01 MATERIALS**

- A. (NOT USED)

### **PART 3 – EXECUTION**

#### **3.01 NOTIFICATION**

- A. For the location of existing underground utilities, the following notifications shall be made by the Contractor prior to start of construction:
  - 1. “Dig Safe”: 1-888-344-7233 or 811.
  - 2. Other utilities not contracted with “Dig Safe” may include, but are not limited to, local water, wastewater, and storm water authorities.
  - 3. Municipality owned utilities.
- B. The Contractor is responsible for location of all utilities, including primary and secondary services.
- C. For planned interruption of existing wastewater or water services, written notification shall be given to the Owner forty-eight (48) hours prior to the interruption.

#### **3.02 PROTECTION AND REPAIR OF PROPERTY**

- A. Protection, restoration, and repair of property shall be included in the Contract price at no additional cost to the Owner.
- B. Contractor shall conduct the Work so as to interfere as little as possible with private business and public travel. The Contractor shall, at no additional cost to the Owner, wherever necessary or required, maintain fences, install shoring, provide security personnel, maintain barriers, and post danger signs warning against hazards created by the construction Work. The Contractor shall also take such other precautions as may be necessary to protect life and property and shall be responsible for all damages occasioned in any way by any act of neglect or that of the Contractor's agents, employees, or workers.
- C. The Contractor shall be fully responsible and shall take all necessary precautions to protect all personnel, property, structures, buildings, trees, shrubs, plantings, gardens, fences, signs, guy wires, lawns, buried and overhead utilities, pipes, culverts, roads, streets, driveways, curbs, swales, rip-rap, sidewalks, paths, utility poles, light poles, property markers, mailboxes, manholes and covers, catch basins and grates, retaining walls, guideposts/rails, and other features.
- D. If gravel, silt or other debris caused by the Contractor's operation is deposited into existing facilities, structures, pipes or other site features, the sediment shall be thoroughly removed and the item completely cleaned, at no additional cost to the Owner.
- E. If damage is caused to facilities or equipment, it shall be repaired or replaced at no additional cost the Owner.
- F. Items removed from construction shall be replaced in their original locations, unless directed otherwise by the Engineer, at no additional cost to the Owner.
- G. Items not specified elsewhere in these Specifications that have been damaged during or removed for construction, shall be replaced "in kind."
- H. All hazardous materials shall be stored and disposed of in accordance with Federal, State, or local codes, laws, ordinance or regulations.

### 3.03 PROTECTION AND REPAIR OF SURVEY AND BOUNDARY MARKERS

- A. Temporary benchmarks, control points, and reference points shall be maintained and preserved throughout construction. If disturbed or destroyed, they shall be reestablished by the Contractor, at no additional cost to the Owner.
- B. Boundary markers, pins, pipes or monuments shall be protected and preserved throughout construction. If disturbed or destroyed, they shall be reestablished by a Licensed Land Surveyor hired by the Contractor, at no additional cost to the Owner.

### 3.04 TREE AND SHRUB PROTECTION

- A. Any tree or shrub which will not, in the opinion of the Engineer, hinder construction or landscaping, shall be preserved and protected.
- B. The Contractor shall construct a temporary barricade at the drip line of any trees or shrubs designated to be preserved and as indicated on the Drawings, to prevent damage to any portion of the tree or shrub. The Contractor shall take special care in setting barricade posts to not damage tree or shrub roots.
- C. The Contractor shall not permit stockpiling of material or debris within the barricaded area, nor permit the earth surface to be changed in any way.
- D. The Contractor shall use necessary care to protect the roots, trunks, and branches of all trees or shrubs not designated to be removed.
- E. If necessary to avoid undermining a tree or shrub during construction, trees designated to remain shall be protected with temporary shoring or sheeting. All temporary shoring or sheeting shall be removed when no longer necessary.

### 3.05 TRIMMING OF TREES OR SHRUBS TO REMAIN

- A. If necessary to trim selected trees or shrubs to allow the construction, the Contractor shall use proper tools and skilled workmen to achieve neat severance of tree or shrub limbs with the least possible damage to the tree or shrub. Cut limbs shall be appropriately sealed.
- B. If necessary to trim roots of selected trees or shrubs to allow the construction, the Contractor shall apply wet burlap to prevent drying of the severed root. Cut roots shall be appropriately sealed.

### 3.06 PROTECTION AND REPAIR OF UTILITIES

- A. The Drawings do not depict all utilities or exact positions of all utilities that may exist on the site. The Drawings show approximate information regarding the location of known utilities. This information has been obtained from records, information provided by others, surface observation, and/or field measurements, but is not guaranteed to be entirely accurate or complete.
- B. The Contractor shall provide his own detection equipment for accurately locating buried utilities approximately shown on the Drawings. The Contractor shall locate underground utilities in the Work area by probing and/or other means as required. No

- extra payment will be allowed to the Contractor for repair of utilities shown on the Drawings, or accurately marked in the field prior to damage of the utility.
- C. If utilities are to remain, the Contractor shall provide adequate means of protection during earthwork operations.
  - D. Should unmapped piping or other utilities be encountered during excavation, the Contractor shall consult with the utility owner immediately for directions. The Contractor shall cooperate with utility companies in keeping respective service and facilities to the satisfaction of the utility owner.
  - E. The Contractor shall not intentionally interrupt utilities unless permitted in writing by the utility owner, and then only after arranging to provide temporary utility service to necessary facilities or users.
  - F. Utilities damaged during construction shall be repaired and/or replaced with equal or better quality material as directed by the impacted utility.
  - G. Repairs shall be inspected by the impacted utility prior to being backfilled. Repair of utilities and inspection by the utility shall be included in the Contract price at no additional cost to the Owner.

### 3.07 PROTECTION AND REPAIR OF UTILITY POLES AND OVERHEAD WIRES

- A. The Contractor shall coordinate, arrange, schedule, receive permission, and pay for supporting and/or temporarily or permanently relocating utility poles and/or wires that may be impacted by the project, with the appropriate utility(s), at no additional cost to the Owner.

### 3.08 REPAIR OF WASTEWATER AND STORMWATER PIPE

- A. The Owner shall be notified immediately if a wastewater or storm water pipe is damaged during construction.
- B. Wastewater or storm water pipes damaged during construction shall be immediately repaired.
- C. Wastewater or storm water pipes damaged during construction shall be replaced for a minimum distance of two feet (2') beyond either side of the damage, with a section of same size and material pipe, at no additional cost to the Owner.
- D. Wastewater or storm water pipes damaged during construction and crossing water pipes shall be repaired in accordance with the water/sewer crossing ties on the Drawings, at no additional cost to the Owner.



- E. Connections shall be made with approved couplings. Adequate pipe bedding and compaction is mandatory under pipe repairs to prevent settlement.
- F. One (1) wastewater and one (1) storm water service shall be assumed for each residence/business or building, unless shown otherwise on the Drawings.

### 3.09 REPAIR OF WATER MAINS AND SERVICES

- A. The Contractor shall become familiar with the location of water valves and curb stops, prior to the start of Work, to facilitate emergency shutdown and repairs.
- B. The Owner shall be notified immediately if a water main or service is damaged during construction.
- C. Water mains damaged during construction shall be immediately repaired or replaced for a minimum distance of two feet (2') beyond either side of the damage, with a section of same size and material pipe, with approved couplings, and at no additional cost to the Owner. Adequate pipe bedding and compaction is mandatory under pipe repairs to prevent settlement.
- D. Water services damaged during construction shall be immediately repaired or replaced for a minimum distance of two feet (2') beyond either side of the damage, with a section of same size Type K copper water pipe, with approved compression fittings, couplings and adapters, and at no additional cost to the Owner. Adequate pipe bedding and compaction is mandatory under pipe repairs to prevent settlement.
- E. One (1) water service shall be assumed for each residence/business or building, unless shown otherwise on the Drawings.

### 3.10 REPAIR OF LAWNS, GRASSES, AND OTHER PLANTINGS

- A. Lawns and other grass areas shall be restored as required in Specification Section 02920.
- B. Plantings or gardens damaged or destroyed during construction shall be replaced "in kind."

### 3.11 REPAIR OF CURB AND SIDEWALK

- A. Curb and sidewalk shall be restored as required in Specification Section 03302.
- B. Curb and sidewalk dimensions and type shall match existing, unless indicated otherwise on the Drawings.

### 3.12 REPAIR OF BITUMINOUS

- A. Bituminous concrete surfaces including roads, streets, driveways, paths, and walks shall be restored as required in Specification Section 02311.

### 3.13 FENCE, MAILBOX, SIGN REMOVAL AND RESETTING

- A. Fences, mailboxes, and signs in the way of construction shall be removed and reset in their original locations after construction in the immediate area has been complete, or prior to the end of the work day, whichever is sooner.
- B. Mailboxes shall be reset in accordance with USPS regulations. Generally, mailboxes shall be set 42” to 48” from the bottom of the mailbox to the ground and 6” to 9” from the front face of the mailbox to the curb or edge of roadway. Mailboxes shall be reset to conform to USPS regulations, even if they did not conform prior to disturbance.
- C. Mailboxes may be permanently relocated if acceptable to the property owner, and meeting USPS regulations.
- D. Mailboxes may be permanently relocated if they present a pedestrian or vehicle hazard, as determined by the Owner, and meeting USPS regulations.
- E. Fences, mailboxes, posts, and signs damaged during construction shall be replaced “in kind” at no additional cost to the Owner.

### 3.14 GUIDEPOSTS/RAILS REMOVAL AND RESETTING

- A. Guideposts/rails in the way of construction shall be removed and reset in their original locations after construction in the immediate area has been completed or prior to the end of the work day, whichever is sooner.
- B. Guideposts/rails damaged during construction shall be replaced “in kind” at no additional cost to the Owner.

### 3.15 REPAIR OF CULVERTS

- A. Culverts damaged during construction shall be immediately repaired or replaced with the same size and type of culvert.
- B. Connections shall be made with approved couplings for the size and type of pipe.
- C. Adequate pipe bedding and compaction is mandatory under pipe repairs to prevent settlement.

### 3.16 PROTECTION FROM WEATHER

- A. In the event of temporary suspension of the Project, or during inclement weather, the Contractor shall, and will cause their Subcontractors to, protect the Project, Work,

and materials against damage or injury from the weather. If, in the opinion of the Engineer, the Project, Work or materials are damaged or injured by reason of failure on the part of the Contractor to protect the Project, Work or materials, such damaged items shall be removed and replaced at the expense of the Contractor.

- B. Protection shall include all erosion prevention and sediment control measures necessary to maintain the site in compliance with State and Federal regulations and permits.

**END OF SECTION 02232 – PROTECTION AND REPAIR OF PROPERTY**

## **SECTION 02240 – DEWATERING**

### **PART 1.00 – GENERAL**

#### **1.01 WORK INCLUDED**

- A. This section specifies designing, furnishing, installing, maintaining, operating, and removing temporary dewatering systems as required to lower and control water levels and hydrostatic pressures during construction, or provide and maintain staging areas for de-watering of dredged material from lake or river bottom prior to roadway transport; disposing of pumped water; constructing, maintaining, observing, and except where indicated or required to remain in place, removing of equipment and instrumentation for control of the system.
- B. Provision for Dewatering plan development for submittal to the Engineer for approval to address dewatering of staged dredge material prior to mobilization to final approved disposal site.

#### **1.02 RELATED WORK**

- A. Section 02300, EARTHWORK

#### **1.03 SYSTEM DESCRIPTION**

- A. Dewatering includes means and methods for removing excess moisture from dredged material prior to hauling off site and associated control of water flow; lowering the water table and intercepting seepage which would otherwise emerge from the slopes or bottom of the excavation; increasing the stability of excavated slopes, preventing loss of material from beneath the slopes or bottom of the excavation; reducing lateral loads on sheeting and bracing; improving the excavation and hauling characteristics of sandy soil; preventing rupture or heaving of the bottom of any excavation; and disposing of pumped water.

#### **1.04 QUALITY ASSURANCE**

- A. The Contractor is responsible for the adequacy of the dewatering systems.
- B. The dewatering systems shall be capable of effectively reducing the hydrostatic pressure and lowering the groundwater levels to a minimum of 2 feet below excavation bottom, unless otherwise directed by the Engineer, so that all excavation bottoms are firm and dry.
- C. The dewatering system shall be capable of maintaining a dry and stable subgrade until the structures, pipes, and appurtenances to be built therein have been completed to the extent that they will not be floated or otherwise damaged.
- D. The dewatering system and excavation support shall be designed so that lowering of the groundwater level outside the excavation does not adversely affect adjacent structures, utilities, or wells.

1.05 SUBMITTALS

- A. Contractor shall submit a plan indicating how they intend to control the discharge from any dewatering operations on the project, whether it is discharge of groundwater from excavations or storm water runoff, or dewatering of staged channel excavated material during the life of the project.

**PART 2.00 – PRODUCTS**

2.01 MATERIALS

- A. (NOT USED).

**PART 3 – EXECUTION**

3.01 DEWATERING OPERATIONS

- A. All water pumped or drained from the Work shall be disposed of in a manner that will not result in undue interference with other work or damage to adjacent properties, pavements and other surfaces, buildings, structures, and utilities. Suitable temporary pipes, flumes, or channels shall be provided for water that may flow along or across the site of the work. All disposal of pumped water shall conform to the provisions of Section 01570 ENVIRONMENTAL PROTECTION and Section 00890 PERMITS.
- B. Dewatering facilities shall be located where they will not interfere with utilities and construction work to be done by others at locations shown on the contract plans.
- C. Dewatering procedures to be used shall be as described below:
1. Crushed stone shall encapsulate the suction end of the pump at each intake to aid in minimizing the amount of silt discharged. All temporary filtering stone used in this capacity shall be completely removed from the lakebed upon completion of the project.
  2. For dewatering operations with relatively minor flows, pump discharges shall be directed into sedimentation traps lined with filter fabric. Water is to be filtered through the filter fabric prior to being allowed to seep back into its natural watercourse.
  3. For dewatering operations with larger flows, pump discharges shall be into a properly sized dewatering bag.
  4. For dewatering operations of staged dredged material prior to transport, staging would take place within the designated dewatering area and methods shall be in accordance with an approved dewatering plan, which shall be designed to prevent return of silt laden water to adjacent water bodies or erosion of adjacent areas.

5. Where necessary in conditions of excess silt suspended in the discharge water, silt control bags shall be utilized in combination of dug-in catch settlement basins created with the designated dewatering area.
  6. The Contractor shall be responsible for repair of any damage caused by the dewatering operations, and the parking area designated for dewatering operations shall be restored to pre-construction condition at no additional cost to the Owner.
- D. The Contractor shall be responsible for repair of any damage caused by his dewatering operations, at no cost to the Owner.

**END OF SECTION 02240 – DEWATERING**

## **SECTION 02271 – EROSION PREVENTION AND SEDIMENT CONTROL**

### **PART 1.00 – GENERAL**

#### **1.01 WORK INCLUDED**

- A. All labor, materials, and equipment for furnishing, installing, maintaining, and inspecting of structural and non-structural erosion prevention and sediment control measures.
- B. Establishing and marking limits of soil disturbance, archaeological sensitive areas, topsoil stockpiles, construction staging areas, storage areas, refueling, and maintenance areas.
- C. Complying with the terms and conditions of the Vermont General Permit 3-9020 for Stormwater Runoff from Construction Sites.
- D. Providing an on-site coordinator to manage and oversee erosion prevention and sediment control measures.

#### **1.02 REFERENCE STANDARDS**

- A. Vermont General Permit 3-9020 (2006) for Stormwater Runoff from Construction Sites as amended February 2008.
- B. Vermont Erosion Prevention and Sediment Control Field Guide, Vermont Department of Environmental Conservation, August 2006.
- C. The Low Risk Site Handbook for Erosion Prevention and Sediment Control, Vermont Department of Environmental Conservation, August 2006.
- D. The Vermont Standards & Specifications for Erosion Prevention & Sediment Control, 2006.
- E. Winter Construction and the Vermont Construction General Permit: A Planner's Guide. State of Vermont, Department of Environmental Conservation.
- F. Field Manual on Sediment and Erosion Control, Best Management Practices for Contractors and Inspectors, Fifield, 2002, Forester Press.

#### **1.03 QUALITY ASSURANCE**

- A. The Contractor shall be thoroughly trained and experienced in the skills and equipment required for installation, monitoring, and maintenance of all Work in this Specification.
- B. The Contractor shall protect materials before, during, and after installation. In the event of damage, the Contractor shall immediately make all repairs and replacements necessary to the approval of the Engineer and at no additional cost to the Owner.
- C. The Contractor shall at all times properly operate and maintain all erosion prevention and sediment control measures which are installed. All temporary measures shall be removed upon final Contract completion or final site stabilization, whichever occurs last.

- D. The Contractor shall remove any sediment or debris collected by erosion prevention and sediment control measures. These materials shall be disposed of in a manner that will not allow for sediment or debris to enter the waters of the State.
- E. The Contractor is responsible for all means, methods, sequences, and scheduling under the terms of the Contract.
- F. Discharges of any material other than storm water, such as vehicle and equipment maintenance spills, fuels, wash water, construction debris, oil, wet concrete (including washout water from concrete batch trucks or equipment used to mix concrete), and other substances, are prohibited.
- G. In areas of concentrated flow, the Contractor shall take precautions to ensure that Work will take place in a dry channel. This may be accomplished by directing the flow through a temporary channel, through temporary culverts or by use of a cofferdam and pumps. The anticipated procedure shall ensure that erosion, sediment, and water are controlled.
- H. The Contractor is responsible for designating an On-Site Plan Coordinator to monitor erosion prevention and sediment control measures. The On-Site Plan Coordinator shall have the authority to stop and/or modify construction activities. The On-Site Plan Coordinator shall have experience working with erosion prevention and sediment control measures, and possess the ability to observe, evaluate, and synthesize information; to consider alternatives; and to propose appropriate recommendations in a clear, logical manner as related to maintaining State water quality standards. The On-Site Plan Coordinator or their designee shall be on site on a daily basis during active construction.

#### 1.04 SUBMITTALS

- A. The Contractor shall submit manufacturers' certified data for all products and materials used for erosion prevention and sediment control on the Project.
- B. The Contractor shall submit manufacturers' product literature, samples, and installation instructions for each specified material type to be used.
- C. Submit the name and day time telephone number of the individual designated as the On-Site Plan Coordinator on the form provided by the State of Vermont Department of Environmental Conservation before the start of construction to the Owner, the Engineer, and the State of Vermont Agency of Natural Resources (Agency).
- D. Contractor shall submit a general sequence of work for land disturbing activities so that the extent of disturbed soils left open to erosion at any given time is kept to a minimum.



- E. Submit to the Owner and Engineer prior to the start of construction, the location of disposal areas for excess soil and stumps, staging areas, dewatering plan for dredged lake bottom sediment, equipment storage, and refueling and maintenance areas including a location map if the area is off-site.

## **PART 2.00 – PRODUCTS**

### 2.01 SEEDING MATERIALS AND TOPSOIL

- A. Specification Section 02920 – LOAMING AND SEEDING, provides a description of the topsoil and seeding materials and application rates used on the project.

### 2.02 NON-STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES

- A. Refer to Drawings for locations and types required.
- B. Mulch Material:
  - 1. Specification Section 02920 – LOAMING AND SEEDING, provides a description of mulch materials and application rates used on the project.
- C. Rolled Erosion Control Products (RECPs):
  - 1. Short Term – For slopes steeper than 3:1 and less than 2:1 and low flow channels, erosion control blankets shall be DS75 Single Net Straw Blankets by North American Green or approved equal. Blanket matrix shall consist of 100% agricultural straw fiber stitched to a single UV accelerated, photodegradable polypropylene netting. Product shall be designed to degrade within 45 days. Netting, Topside only, shall be 1.50 lbs/1,000 ft<sup>2</sup>. Straw fiber shall be 0.5 lbs/yd<sup>2</sup>.
  - 2. Extended Term – For slopes steeper than 2:1 and less than 1:1 and moderate flow channels, erosion control blankets shall be type S150 by North American Green or approved equal. Blanket matrix shall consist of 70% agricultural straw and 30% coconut fiber stitched between two, degradable polypropylene nettings. Product shall be designed with a functional longevity of up to 24-months. Matrix: 70% straw 0.35 lbs/yd<sup>2</sup>, 30% coconut fiber 0.15 lbs/yd<sup>2</sup>. Netting: Topside, heavyweight photodegradable 3 lbs/1,000 ft<sup>2</sup>. Bottom side, lightweight photodegradable 1.5 lbs/1,000 ft<sup>2</sup>. Thread: Degradable.
  - 3. Permanent – For slopes steeper than 1:1 and high flow drainage channels, mat shall be type P300 Permanent Turf Reinforcement Mat by North American Green or approved equal. Product shall be designed to not degrade over time. Matrix: 100% UV stable polypropylene fiber 0.7 lbs/yd<sup>2</sup>. Netting: Topside, heavyweight UV stabilized 5 lbs/1,000 ft<sup>2</sup>. Thread: 100% black polypropylene.
- D. Refer to *The Vermont Standards & Specifications for Erosion Prevention & Sediment Control* for additional non-structural erosion prevention and sediment control measures.

### 2.03 STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES

- A. Refer to Drawings for locations and types required.
- B. Stone Check Dams – Refer to Section 02300 EARTHWORK for aggregate material requirements.
- C. Silt Fence – Prefabricated Silt Fence Structures shall be Mirafi Envirofence® by Mirafi Constructions Products, Inc., or approved equal. Fence shall consist of complete prefabricated system with woven fabric reinforced net backing and 1 ¼-inch hardwood posts at 8.3-foot spacing.
- D. Inlet Control (Paved Areas) – Catch basins and storm water inlet structures shall use Dandy Bag II®, woven geotextile, open topped bags designed to hang beneath storm grate, by Mirafi Construction Products, Inc., or approved equal.
- E. Inlet Control (Unpaved Areas) – Catch basins and storm water inlet structures shall use materials as specified on the Drawings and Section 02300 EARTHWORK of the specifications.
- F. Dewatering – Where required by field conditions and Contractor operations, dewatering operations shall discharge to Dandy Dewatering Bags™ by Mirafi Construction Products, Inc., or approved equal.
- G. Stabilized Construction Entrance – Refer to Section 02300 EARTHWORK for aggregate material requirements.
- H. Refer to *The Vermont Standards & Specifications for Erosion Prevention & Sediment Control* for additional structural erosion prevention and sediment control measures.

### 2.04 PRODUCT STORAGE AND HANDLING

- A. Handle and transport materials to insure they are in sound, undamaged condition and to prevent damage, in accordance with manufacturer's instructions.
- B. Examine all materials before installing. Defective or damaged materials shall be rejected.
- C. If defective or damaged materials are discovered after installation, the Contractor shall remove and replace the defective piece(s) at no additional cost to the Owner.

## **PART 3 – EXECUTION**

### 3.01 GENERAL

- A. Refer to Section 02300 – EARTHWORK, for excavating, bedding, envelope, backfilling, and compaction requirements.

- B. Refer to Section 02920 – LOAMING AND SEEDING for planting requirements.
- C. Severe weather may require additional measures be implemented by the Contractor to prevent erosion and control sediment transport. The Contractor is responsible for monitoring Erosion Prevention and Sediment Control measures. Special attention must be given by the Contractor during extreme weather events to prevent overload, breakthrough, plugging, flooding, and washouts. The Contractor may need to modify measures based on observations, field, and weather conditions.
- D. Strategies – To minimize soil erosion and the transport of sediment to surface waters, the following strategies shall be used:
1. **Minimize Impact Area** – The Contractor shall phase construction so that land disturbance at any one time is limited to five (5) acres. Unless a smaller limit is specified in the Notice of Intent or a larger disturbance amount is included in the authorization from the Secretary. As work in each phased area is completed, the disturbed areas shall be stabilized. For pipeline installation, it is intended that the area impacted by the trench will be maintained at 10 to 12-feet or less. It is in the Contractor’s best interest to minimize the area of impact, thus requiring less soil stabilization.
  2. **Minimize Impact Time** – Areas impacted by the project shall be stabilized within seven (7) days. Prior to finish grading, impacted areas may be temporarily covered with mulch or stabilization fabric. Impacted areas shall be topsoiled, fertilized, seeded, and mulched within 48-hours of final grading. In those areas where pavement is impacted, the area will be backfilled with fine crushed gravel and compacted until final paving is completed for the project. Areas of special concern (i.e. higher risk of erosion) shall be final graded, seeded, and rolled erosion control matting installed at the end of each day’s operations.
  3. **Manage Stormwater Runoff** – Prevent off-site stormwater from entering the areas of disturbed soil on-site. Control water on-site to keep low velocities so that erosion is minimized.
  4. **Trap Sediment On-Site** – Install and maintain erosion prevention and sediment control measures to trap sediment on site and prevent discharges.
  5. **Existing Drainage Preservation** – The project does not realign or relocate any existing natural or man-made drainage patterns. Natural cover shall be protected wherever possible and replaced where disturbed.
- E. Erosion prevention and sediment control measures included in this specification are guidelines and intended to be used in conjunction with the Reference Standards and sound judgment and diligence on the part of the Contractor.

3.02 INSTALLATION OF NON-STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES

A. Mulch:

1. Seedbed shall be raked, seeded, and fertilized as required by Section 02920 LOAMING AND SEEDING. Installation shall be reviewed by the Engineer prior to proceeding with mulch installation.

B. Rolled Erosion Control Products (RECPs):

1. Seedbed shall be raked, seeded, and fertilized as required by Section 02920 LOAMING AND SEEDING. Installation shall be reviewed by the Engineer prior to proceeding with the installation of RECPs.
2. Blanket edges shall be anchored by trenching and staples according to the manufacturer's recommendations.
3. Edges of parallel blankets shall overlap five (5) inches or as indicated by the manufacturer.
4. Blanket shall be in solid contact with the ground surface.

C. Supplemental Measures:

1. Refer to *The Vermont Standards & Specifications for Erosion Prevention & Sediment Control* for additional installation requirements of non-structural erosion prevention and sediment control measures.

3.03 INSTALLATION OF STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES

A. Stone Check Dams – Shall be installed as indicated on the Drawings.

B. Silt Fence:

1. Excavate a 6-inch x 6-inch trench to the desired length.
2. Place fabric material in the trench using a continuous roll of fabric in a “J” shape with the “tail” on the uphill side, and backfill with soil. When joining two silt fences refer to the detail as shown in the Drawings.
3. Install wood or steel posts “downstream” of the fabric at 5 to 8-feet apart. Posts shall extend a minimum of 12-inches into the soil. Securely fasten the fabric to the posts and compact backfill material.
4. Silt Fence shall be installed and maintained according to the manufacturer's instructions. Bottom of fence shall be “toed in” along its entire length. End sections shall overlap.

C. Inlet Control (Paved Areas):

1. Control products for stormwater inlets shall be installed and maintained according to the manufacturer's instructions.

- D. Inlet Control (Unpaved Areas):
  - 1. Inlet control for unpaved areas will only be installed where a sump condition exists.
  - 2. Refer to Details showing material and construction requirements.
  
- E. Dewatering – All dewatering operations shall be performed in such a manner so as to prevent the discharge of sediment laden stormwater from the work area. Effluent from dewatering operations shall be filtered or passed through an approved sediment trapping device, or both.
  
- F. Stabilized Construction Entrance:
  - 1. Shall be dense graded and crushed stone meeting the requirements of Specification Section 02300 EARTHWORK.
  - 2. Shall be installed as indicated on the Drawings.
  
- G. Refer to *The Vermont Standards & Specifications for Erosion Prevention & Sediment Control* for installation requirements of additional structural erosion prevention and sediment control measures.

### 3.04 WINTER EROSION AND SEDIMENT CONTROL MEASURES

- A. Soil disturbances that occur between October 15, and April 15, or any bare soil left unstabilized without seeding and mulching after September 15, shall be treated with winter erosion control measures. The following winter erosion prevention and sediment control measures shall be taken for work that occurs between October 15 and April 15.
  - 1. Silt fence shall be installed where required before the ground freezes.
  - 2. Stone check dams shall be installed where required before the ground freezes.
  - 3. Degradable erosion control blankets/matting with seed shall be used in all grassed and disturbed soil areas during this period. These areas shall be seeded and mulched as soon as possible in the spring, if necessary.
  - 4. All disturbed paved and gravel areas will be repaved as soon as practical in the spring.
  - 5. All disturbed areas shall be stabilized on a daily basis.
  - 6. Mulch used for temporary stabilization must be applied at double the standard rate, or a minimum of 3-inches with an 80-90% cover.

### 3.05 INSPECTIONS

- A. Frequency of Inspection
  - 1. Preconstruction Meeting – Before any construction begins, a meeting between the Owner, Contractor, Engineer, State of Vermont (if required) and the Contractor's

- On-Site Plan Coordinator, shall be held to discuss procedures and inspections required for this specific project.
2. Initial Sediment Controls Inspection – A review shall be done by the On-Site Plan Coordinator after the sediment controls are installed, but before any clearing or grading occurs. This review verifies that the initial sediment controls have been installed according to the plans.
  3. Routine Inspection (Construction Activities between April 15 and October 15) – All erosion prevention and sediment control structures shall be inspected by or under the direction of the On-Site Plan Coordinator, at least once every seven (7) calendar days, and as soon as possible, but no later than 24-hours after any storm event which generates a discharge of storm water runoff from the construction site.
  4. Winter Inspection (Construction Activities between October 15 and April 15) – Erosion prevention and sediment control measures shall be inspected on a daily basis during active earthwork for the Winter Construction Period from October 15 to April 15.
  5. Winter Inspection (Construction Shutdown between October 15 and April 15) – If no earthwork is performed during this period and all exposed soils and drainage channels on the entire site have been at least temporarily protected, inspections may be reduced to not less than (1) per month. The final inspection record for the season shall clearly show the status of site grading and stabilization efforts at the end of the construction season.
  6. Prior to Removing Sediment Controls – The On-Site Plan Coordinator shall verify that all upgradient drainage areas have been stabilized to a degree acceptable for removal of specific sediment controls. This will be done on a phased basis as portions of the project are completed.
  7. Final Review – Before final project completion, the On-Site Plan Coordinator shall verify that the sediment controls are acceptable, site development is complete and that well established ground cover has taken place throughout the site.

### 3.06 MAINTENANCE

- A. The Contractor shall at all times properly operate and maintain all erosion prevention and sediment control measures which are installed and required to achieve compliance with the State of Vermont Water Quality Standards and the General Permit. All temporary measures shall be removed up to final site stabilization. If erosion prevention and sediment control measures are to remain effective, they must be installed correctly, inspected in a timely manner and maintained. Repairing barriers, removing accumulated sediment from containment systems and evaluating whether vegetation is established are all the responsibility of the Contractor.
- B. Refer to *The Vermont Standards & Specifications for Erosion Prevention & Sediment Control* for additional maintenance requirements of erosion prevention and sediment control measures.

### 3.07 CORRECTIVE ACTION

- A. Any evidence of measurable amounts of sediment or sediment laden water, leaving the construction site or any visible discoloration of surface waters, shall be noted and immediate action shall be taken to inspect and maintain existing Best Management Practices (BMPs) and install supplemental BMPs as necessary until the discharge and/or the condition is corrected.
- B. Within 72-hours of first discerning a visibly discolored storm water discharge from the site to waters of the State, in the event that a discharge is observed, all existing erosion control measures shall be inspected and any maintenance/repairs shall be completed. If it has been determined that these measures are inadequate, corrective measures shall be installed to control sediment discharges from construction activities. The measures shown on the drawings are necessary under the current standard of care for average weather conditions. Severe weather may require additional measures be implemented by the Contractor to prevent erosion and control sediment transport. The Contractor is responsible for monitoring the EPSCP measures. Special attention must be given by the Contractor during extreme weather events to prevent overload, breakthrough, plugging, flooding, and washouts. The Contractor may need to modify the EPSCP based on observations, field, and weather conditions.

### 3.08 RECORD KEEPING

- A. Inspection reports prepared by the On-Site Plan Coordinator shall be kept on-site and shall be made available to the Owner, Engineer, and regulatory agencies upon request. Contractor shall provide a copy of the inspection records to the Owner and Engineer monthly with the partial payment estimate. The Owner shall retain a copy of inspection records provided by the Contractor for a minimum of three (3) years following completion of construction activities.

### 3.09 REPORTING

- A. In the event of a discharge resulting in a violation of the State of Vermont water quality standards, the Contractor shall notify the Owner and the State of Vermont immediately. A written report fully describing the violation, including the source, the cause, why the Erosion Prevention and Sediment Control measures did not prevent the problem, how the problem was addressed, and the timetable, shall be filled within seven (7) days of when the problem was first identified.

### 3.10 OFF-SITE STOCKPILES, STAGING AREAS, EQUIPMENT STORAGE AND REFUELING/MAINTENANCE AREAS, STUMP, AND EXCESS SOIL DISPOSAL AREAS

- A. No arrangements or agreements have been made with any landowners for off-site stockpiles, nor have any necessary permits been obtained for these areas.

- B. The Contractor shall receive approval from the Agency for the locations of these areas prior to commencement of work and shall be responsible for arrangements, agreements, permits, and any other measures necessary for utilizing these areas.
- C. Erosion prevention and sediment control measures, including but not limited to the items indicated in the Drawings shall be installed and maintained as necessary for site specific conditions. All provisions and requirements of the plans and this Specification apply to these areas.

**3.11 RECORDKEEPING – UPDATING THE EPSC PLAN**

- A. The On-Site Plan Coordinator shall maintain the following records on-site with the EPSC Plan:
  - 1. Inspection Reports.
  - 2. Summarizes of Releases and Corrective Action Reports.
  - 3. Any Notice of Winter Construction.
  - 4. Any reports of releases of reportable quantities of oils or hazardous substances.
  - 5. Notices of Addition or Removal of Co-Permittees submitted to the Secretary.
  - 6. Any Notices of Termination for portions of an on-going construction project.
  - 7. Any amendments to the EPSC Plan.

**END OF SECTION 02271 – EROSION PREVENTION AND SEDIMENT CONTROL**



## SECTION 02311 – BITUMINOUS CONCRETE PAVEMENT

### PART 1.00 – GENERAL

#### 1.01 WORK INCLUDED

- A. Bituminous concrete pavement for roadways, parking areas, driveways, aprons, sidewalks, pathways, curbs, overlays, replacement of disturbed pavement, and associated preparatory work.
- B. Painted and durable pavement lines and markings.

#### 1.02 REFERENCE STANDARDS

- A. Where referenced, the Contractor shall adhere to the latest version of the State of Vermont Agency of Transportation (VTTrans), “Standard Specifications for Construction.”

#### 1.03 QUALITY ASSURANCE

- A. The Contractor shall be thoroughly trained and experienced in the skills and equipment required for placement and finishing of bituminous concrete pavement.
- B. The Contractor shall protect bituminous concrete pavement materials before, during, and after installation. In the event of damage, the Contractor shall immediately make all repairs and replacements necessary to the approval of the Engineer and at no additional cost to the Owner.
- C. Testing to verify density of the compacted pavement shall be done with a nuclear density gauge according to the reference standards. Minimum density of the compacted pavement shall be as indicated in Section 406 of the reference standard.
- D. The Contractor shall keep a record at the project site showing time and location of each segment of pavement placed, together with mix delivery slips certifying the contents of each load of pavement. One copy of all such records shall be furnished to the Engineer.
- E. The surface may be tested by the Engineer using a 16 foot straight edge at selected locations parallel with the centerline. Any variations exceeding 3/16 of an inch between any two contacts shall be satisfactorily eliminated. A ten foot straight edge may be used on a vertical curve. On parking surfaces or other paved areas that have no crown, the surface shall be tested parallel to the drainage slope of the area. Under no circumstances shall standing water or puddling be allowed.
- F. Compacted pavement thickness shall be within ½ inch of the thickness specified on the Drawings.

- G. Finish surfaces of pavement shall be smooth, uniform, and free of voids, cracks, holes, loose or contaminated areas or other irregularities.
- H. Upon direction of the Engineer, the Contractor shall cut out and/or rework all surfaces which do not meet the requirements of this Section. The Contractor shall perform all remedial measures at no additional cost to the Owner.

#### 1.04 SUBMITTALS

- A. The Contractor shall submit separate project mix designs according to the reference standards for each pavement type to be used on the project, including all calculations, data, and information necessary for mix evaluation, placement review, and testing. The Contractor shall secure the Engineer's review for the mix design a minimum of 48 hours prior to the start of paving operations.
- B. The Contractor shall submit manufacturer's data and secure the Engineer's review for asphalt cement tack coat, overlay fabric, pavement paint, durable markings, and all other necessary materials prior to the start of paving operations.

### **PART 2.00 – PRODUCTS**

#### 2.01 MATERIALS

- A. Aggregate for bituminous concrete pavement shall conform to Section 704.10 of the referenced standard.
- B. Asphalt cement for bituminous concrete pavement shall be performance grade PG58-28 and shall conform to Section 702 of the referenced standard.
- C. Bituminous concrete pavement shall be of the thickness and type indicated on the Drawings. The materials shall be combined and graded to meet the compositions of Section 406 of the referenced standard, for heavy duty bituminous concrete pavement, 75 blows per side.
- D. Asphalt cement tack coat shall be emulsified asphalt type RS-1 conforming to Section 702 of the referenced standard.
- E. Bituminous joint sealer shall conform to Section 707.04 of the referenced standard.
- F. Pavement overlay fabric shall be Mirafi® “Mirapave 400” non-woven geotextile, or equal.
- G. Pavement paint shall conform to Section 708.08 of the referenced standard, of the color indicated on the Drawings.

- H. Durable pavement markings shall conform to Section 708.10 and Section 646 of the referenced standard, of the color, type, and size indicated on the Drawings.

### **PART 3 – EXECUTION**

#### **3.01 PREPARATION**

- A. The existing pavement surface shall be cleaned with power brooms and washers as necessary to allow proper adhesion of the tack coat and bituminous concrete pavement. All loose pieces, objects, and debris shall be removed.
- B. Any cracks larger than ¼ inch in an existing surface shall be thoroughly cleaned and filled with bituminous joint sealer, to the full depth of the existing pavement, in accordance with Section 417 of the reference standard.
- C. The existing bituminous concrete pavement shall be sprayed with emulsified asphalt tack coat before placement of the bituminous concrete pavement. Tack coat is required for all overlays and before placement of the top course when the top course is not immediately placed over the base course.
- D. The tack coat shall be applied under pressure at the rate of 0.01 to 0.03 gallons per square yard. The application shall be made just prior to the placement of the bituminous concrete pavement, but shall progress sufficiently ahead of the paving so that the surface to be paved will be tacky.
- E. Contact surfaces such as curbing, gutters, manhole, and catch basin rims shall be painted with a thick, uniform coat of emulsified asphalt immediately before the bituminous concrete pavement is placed against them. Precautions must be taken to protect non-contact surfaces from excess emulsion.
- F. Where bituminous concrete is used to resurface existing pavement and the existing pavement contains irregularities, depression, or waves, such deficiencies shall be eliminated by the use of bituminous concrete shim course(s) of appropriate mix for leveling to bring the existing base to uniform section and grade before placing of the required courses of bituminous concrete.
- G. Where pavement has been removed for trenching, the Contractor shall cleanly cut existing pavement back with a pavement saw in a straight line, a minimum of one foot from the top edge of the trench. Cut must be made such that remaining existing pavement is competent and sound. Cut edge of pavement shall be coated with a uniform coat of emulsified asphalt immediately before the bituminous concrete pavement is placed against it.
- H. Where a pavement overlay is required, grinding of the existing pavement is required at the termination of the overlay. Grinding shall be done with proper equipment

necessary for grinding the full width of the pavement being overlaid. Depth and length of taper shall be determined by the thickness of the overlay. Minimum depth of grind at termination end shall be equal to the thickness of the pavement overlay to be placed. The grind shall taper at a slope of one inch in twenty five feet; so that the top of the grinding is flush with the existing pavement at the appropriate distance away from the pavement overlay termination. The entire area ground shall be sprayed with emulsified asphalt tack coat before placement of the bituminous concrete pavement overlay.

- I. Where pavement overlay fabric is indicated on the Drawings, sufficient tack coat shall be used to allow saturation of the overlay fabric, while bonding with the existing pavement. Tack coat shall not be of such quantity that pools or puddles form. Install the overlay fabric with the heatset side up, without folds or wrinkles. Immediately following the fabric laydown, place the hot pavement. Only lay out fabric which can be immediately used.

### 3.02 EQUIPMENT

- A. Equipment for spreading and finishing the bituminous concrete pavement shall be a self propelled paving machine provided with an articulated and heated screed. The machine shall be capable of maintaining line, grade, and minimum thickness specified and spreading the pavement without segregation.
- B. When irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impractical, the pavement shall be spread, raked, and finished with hand tools.
- C. Equipment for compacting shall be steel tired power rollers having a minimum weight of ten tons, except that hand held vibratory compactors may be used in areas not accessible to rollers when specifically approved by the Engineer. Rollers shall be equipped with tanks and sprinkler bars for wetting the rollers.

### 3.03 WEATHER AND SITE CONDITIONS

- A. Bituminous concrete pavement shall not be placed between November 1 and May 1, unless approval is obtained from the Engineer.
- B. Bituminous concrete pavement shall not be placed when the air temperature at the paving site in the shade and away from artificial heat is below 40°F.
- C. Bituminous concrete pavement shall not be placed on a wet, frozen, or thawing surface or when weather or other conditions would prevent the proper handling, finishing, or compacting of the material.
- D. No material shall be delivered so late in the day as to prohibit the completion of spreading and compaction of the pavement during daylight hours.

### 3.04 PLACEMENT

- A. The bituminous pavement, at the time of discharge from the haul vehicle, shall be within 10°F of the midpoint of the compaction temperature for the approved mix design. In no instance shall the temperature of the pavement be less than 275°F or more than 325°F.
- B. The bituminous concrete pavement shall be placed and finished with the specified equipment and struck off in a uniform layer to the full width required and of such depth that each course, when compacted, shall have the required thickness and shall conform to the grade and elevation specified.
- C. Any pavement which becomes loose, broken, or contaminated shall be removed and replaced with fresh pavement and properly compacted and blended with the surrounding pavement. Any area showing an excess or deficiency of asphalt shall be removed and replaced. These corrections shall be done at no additional expense to the Owner.
- D. Suitable aprons to transition approaches shall be placed at side road and driveway intersections.

### 3.05 ROLLING AND COMPACTING

- A. Immediately after the bituminous concrete pavement has been spread, struck off, and surface irregularities adjusted, it shall be thoroughly and uniformly compacted by rolling.
- B. The surface shall be rolled when the pavement is in the proper condition and temperature, and when the rolling does not cause cracking or shoving.
- C. Unless otherwise directed, the longitudinal joint shall be rolled first and then rolling shall begin at the low side of the pavement and proceed toward the center or high side with lapped rolling parallel to the centerline. The speed of the roller shall be slow and uniform to avoid displacement of the pavement. The roller should be kept in as continuous operation as practical. Rolling shall continue until all roller marks and ridges have been eliminated. Stopping or sharp turning of the roller on the fresh pavement is not permitted.
- D. Breakdown rolling shall be completed before freshly placed pavement temperature drops below 250°F.
- E. Finish rolling shall be completed before freshly placed pavement temperature drops below 175°F.
- F. Traffic shall not be allowed on freshly placed pavement until it has been compacted and cooled to 140°F.

### 3.06 JOINTING

- A. Unless otherwise noted by the Engineer or on the drawings, transverse joints in pavement shall be butt type.

- B. Butt joints shall be formed by ending the new pavement in a vertical plane at right angles to the centerline. The butt joint shall be thoroughly coated with emulsified asphalt just prior to butting the adjacent course of pavement.
- C. When directed by the Engineer, tapered joints shall be formed by ramping down the last 18 to 24 inches of the course being laid to match the lower surface. Care shall be taken in raking out and discarding the coarser aggregate at the low end of the taper, and in rolling the taper. The taper shall be thoroughly coated with emulsified asphalt just prior to resumption of paving.
- D. Longitudinal joints that have become cold and joints between successive work days shall be coated with emulsified asphalt before the adjacent pavement is placed. If directed by the Engineer, they shall be cut back to clean vertical edge prior to painting with emulsion.
- E. Unless otherwise directed by the Engineer, longitudinal joints shall be offset at least six inches from any joint in the lower courses of pavement. Transverse joints shall not be constructed nearer than one foot from the transverse joints constructed in lower courses.
- F. Utility covers shall be flush with the surface of the finish course. When finish course paving will not be completed within seven days of placement of the base course, the Contractor shall leave the covers flush with the base course and raise them at the time of finish course paving at no additional cost to the Owner. The base course of pavement shall be patched after raising the covers, prior to placing the finish course of pavement. If the utility covers need to be left higher than the base course, for less than seven days, the Contractor shall provide all necessary traffic control and barricades to protect the utility covers and the public.

### 3.07 PAVEMENT MARKINGS

- A. The Contractor shall thoroughly clean the areas upon which painting or durable markings will be placed.
- B. All painting and durable markings shall be accurately placed as indicated on the Drawings.
- C. The Contractor shall apply paint and durable markings in accordance with the manufacturer's recommendations and referenced standards, using all means necessary to protect paint and durable markings until cured.
- D. Where removal of pavement markings are shown on the Drawings, grinding of the existing pavement is required. Grinding shall be done with proper equipment necessary for grinding the full width of the marking being removed. Depth shall be determined by the thickness of the marking and its penetration into the pavement.

Maximum depth of grind shall be 1/8". The grind shall taper so that the top of the grinding is flush with the existing pavement approximately one foot away from the marking limits.

**END OF SECTION 02311 – BITUMINOUS CONCRETE PAVEMENT**

## **SECTION 02920 – LOAMING AND SEEDING**

### **PART 1.00 – GENERAL**

#### **1.01 WORK INCLUDED:**

- A. This Section covers all labor, materials, and equipment necessary to do all loaming, seeding and related work as indicated on the drawings and as herein specified. All lawns disturbed by the Contractor's operations shall be repaired as herein specified.

#### **1.02 RELATED WORK:**

- A. Section 02921, SURFACE RESTORATION OF CROSS COUNTRY AREAS

#### **1.03 QUALITY ASSURANCE:**

- A. For a particular source of loam, the Engineer may require the Contractor to send approximately 10 pounds of loam to an approved testing laboratory and have the following tests conducted:
  - 1. Organic concentration
  - 2. pH
  - 3. Nitrogen concentration
  - 4. Phosphorous concentration
  - 5. Potash concentration
- B. These tests shall be at the Contractor's expense. Test results, with soil conditioning and Fertilizing recommendations, shall be forwarded to the Engineer.

#### **1.04 SUBMITTALS: IN ACCORDANCE WITH REQUIREMENTS OF GENERAL SPECIFICATIONS, SUBMIT THE FOLLOWING:**

- A. Information detailing the seed mixes, fertilizers, mulch material, slope protection material (if required) and origin of loam shall be submitted to the Engineer for review.
- B. Three sets of test results, if required, shall be submitted to the Engineer for review.

### **PART 2.00 – PRODUCTS**

#### **2.01 MATERIALS:**

- A. LOAM:
  - 1. Loam shall be a natural, fertile, friable soil, typical of productive soils in the vicinity, obtained from naturally well-drained areas, neither excessively acid nor alkaline, and containing no substances harmful to grass growth. Loam shall not be delivered to the site in frozen or muddy condition and shall be reasonably free of



stumps, roots, heavy or stiff clay, stones larger than 1 inch in diameter, lumps, coarse sand, noxious weeds, sticks, brush or other litter.

2. The loam shall contain not less than 4 percent or more than 20 percent organic matter as determined by the loss of weight by ignition of oven-dried samples. Test samples shall be oven-dried to a constant weight at a temperature of 230 degrees.

**B. LIME:**

1. Lime shall be standard commercial ground limestone containing at least 50 percent total oxides (calcium oxide and magnesium oxide), and 50 percent of the material must pass through a No. 100 mesh sieve with 98 percent passing a No.2 mesh sieve.

**C. FERTILIZER:**

1. Fertilizer shall be commercial fertilizer, 10-10-10 fertilizer mixture containing at least 40 percent of organic nitrogen. It shall be delivered to the site in the original sealed containers, each showing the manufacturer's guaranteed analysis. Fertilizer shall be stored so that when used it will be dry and free flowing. No fertilizer shall be used which has not been marketed in accordance with State and Federal Laws, relating to fertilizers.

**D. MULCH:**

1. Materials to be used in mulching shall conform to the following requirements:
  - a. Hay Mulch - Hay Mulch shall consist of mowed and properly cured grass, clover or other acceptable plants. No salt hay shall be used.
  - b. Straw Mulch - Straw Mulch shall consist of stalks or stems of grain after threshing.
  - c. Wood Fibre Mulch - Wood Fibre Mulch shall consist of wood fibre produced from clean, whole uncooked wood, formed into resilient bundles having a high degree of internal friction and shall be dry when delivered to the project.

**E. SEED:**

1. Seed shall be of an approved mixture, the previous year's crop, clean, high in germinating value, a perennial variety, and low in weed seed. Seed shall be obtained from a reliable seed company and shall be accompanied by certificates relative to mixture purity and germinating value.
2. Grass seed for lawn areas shall conform to the following requirements:

	Proportion by Weight	Germination Purity	Purity Minimum
Chewing's Fescue	30%	70%	97%
Kentucky 31 Fescue	30%	90%	98%
Kentucky Blue Grass	20%	80%	85%
Domestic Rye Grass	20%	90%	98%

Grass seed for cross-country areas, slopes and other areas not normally mowed shall conform to the following requirements:

	Proportion by Weight	Germination Minimum	Purity Minimum
Creeping Red Fescue	50%	85%	95%
Kentucky 31	30%	85%	95%
Domestic Rye	10%	90%	98%
Red Top	5%	85%	92%
Ladino Clover	5%	85%	96%

**F. SLOPE EROSION PROTECTION:**

1. Erosion control blanket shall be 100% degradable plastic mesh with 100% degradable straw or straw/coconut fill. Fill shall be held together by degradable fastening. Weight shall be 0.50 lb/sq. yd. Erosion control blankets shall be applied parallel to direction of water flow. The erosion control blankets shall be by North American Green, Evansville, IN or approved equal. For slopes 2: 1 or greater, Model SC150 shall be used. For slopes less than 2:1, Model S150 shall be used.
2. Six inch wire staples shall be placed according to manufacturers recommendations to anchor the mesh material. Staples shall be designed to decompose.

**PART 3.00 – EXECUTION**

**3.01 SURFACE PREPARATION:**

- A. After approval of rough grading, loam shall be placed on areas affected by the Contractor's operations. Loam shall be at least 6 inches compacted thickness.
- B. Lime shall be applied to bring the pH to 6.5 or, without a soil test, at the rate of 2-3 tons of lime per acre.
- C. Fertilizer shall be applied according to the soil test, or without a soil test, at the rate of 1000 pounds per acre.
- D. Loam shall be worked a minimum of 3 inches deep, thoroughly incorporating the lime and fertilizer into the soil. The loam shall then be raked until the surface is finely pulverized and smooth and compacted with rollers, weighing not over 100 pounds per linear foot of tread, to an even surface conforming to the prescribed lines and grades. Minimum depth shall be 6-inches after completion.

**3.02 SEEDING:**

- A. Seeding shall be done when weather conditions are approved as suitable, in the periods between April 1 and May 30 or August 15 to October 1, unless otherwise approved.

- B. If there is a delay in seeding, during which weeds grow or soil is washed out, the Contractor shall remove the weeds or replace the soil before sowing the seed, without additional compensation. Immediately before seeding is begun, the soil shall be lightly raked.
- C. Seed shall be sown at the approved rate, on a calm day by machine.
- D. One half the seed shall be sown in one direction and the other half at right angles. Seed shall be raked lightly into the soil to a depth of 1/4 inch and rolled with a roller weighing not more than 100 pounds per linear foot of tread.
- E. The surface shall be kept moist by a fine spray until the grass shows uniform germination over the entire area. Wherever poor germination occurs in areas larger than 3 sq. ft., the Contractor shall reseed, roll, and water as necessary to obtain proper germination at no cost to the Owner.
- F. The Contractor shall water, weed, cut and otherwise maintain and protect seeded areas as necessary to produce a dense, healthy growth of perennial lawn grass.
- G. If there is insufficient time in the planting season to complete the fertilizing and seeding, permanent seeding may be left until the following planting season, at the option of the Contractor or on order of the Engineer. In that event, a temporary cover crop shall be sown. This cover crop shall be cut and watered as necessary until the beginning of the following planting season, at which time it shall be plowed or harrowed into the soil, the area shall be fertilized and the permanent seed crop shall be sown as specified.

### 3.03 PLACING MULCH:

- A. Hay or Straw Mulch shall be loosely spread to a uniform depth over all areas designated on the plans, at the rate of 4-1/2 tons per acre, or as otherwise directed.
- B. Hay or Straw Mulch may be applied by mechanical apparatus, if in the judgment of the Engineer the apparatus spreads the mulch uniformly and forms a suitable mat to control slope erosion. The apparatus shall be capable of spreading at least 80 percent of the hay or straw in lengths of 6-inches or more, otherwise it shall be spread by hand without additional compensation.
- C. Wood Fibre Mulch shall be uniformly spread over certain selected seeded areas at the minimum rate of 1,400 pounds per acre unless otherwise directed. It shall be placed by spraying from an approved spraying machine having pressure sufficient to cover the entire area in one operation.

### 3.04 SEEDING AND MULCHING BY SPRAY MACHINE:

- A. The application of lime, fertilizer, grass seed and mulch may be accomplished in one operation by the use of an approved spraying machine. The materials shall be mixed with water in the machine and kept in an agitated state in order that the materials may be uniformly suspended in the water. The spraying equipment shall be so designed that when the solution is sprayed over an area, the resulting deposits of lime, fertilizer, grass seed and mulch shall be equal to the specified quantities.

- B. A certified statement shall be furnished, prior to start of work, to the Engineer by the Contractor as to the number of pounds of limestone, fertilizer, grass seed and mulch per 100 gallons of water.
- C. This statement should also specify the number of square yards of seeding that can be covered with the solution specified above. If the results of the spray operation are unsatisfactory, the Contractor will be required to abandon this method and to apply the lime, fertilizer, grass seed and mulch by other methods.

**3.05 INSPECTION AND ACCEPTANCE:**

- A. At the beginning of the planting season following that in which the permanent grass crop is sown, the seeded areas will be inspected. Any section not showing dense, vigorous growth at that time shall be promptly reseeded by the Contractor at their expense.
- B. The seeded areas shall be watered, weeded, cut and otherwise maintained by the Contractor until the end of that planting season, when they will be accepted if the sections show dense, vigorous growth.

**END OF SECTION 02920 – LOAMING AND SEEDING**

## **SECTION 02921 – SURFACE RESTORATION OF CROSS COUNTRY AREAS**

### **PART 1.00 – GENERAL**

#### **1.01 WORK INCLUDED:**

- A. This Section covers labor, materials, and equipment necessary to restore cross country areas affected by the Contractor's operations.

#### **1.02 RELATED WORK:**

- A. Work in cross country areas shall also be in accordance with Section 01570, ENVIRONMENTAL PROTECTION.

#### **1.03 SYSTEM DESCRIPTION:**

- A. Cross country areas shall be restored as much as possible to their original condition. A vegetative cover shall be established as soon as possible to prevent erosion.
- B. In areas within or adjacent to wetlands, surface replacement shall reuse existing materials that were temporarily removed for construction.

### **PART 2.00 – PRODUCTS**

#### **2.01 MATERIALS:**

- A. Seed mix shall be as specified in the Low Risk Site Handbook for Erosion Prevention and Sediment Control.
- B. Weed seed shall be less than 1 percent.
- C. Mulch shall consist of weed-free straw.

### **PART 3.00 – EXECUTION**

#### **3.01 SEPARATION OF SURFACE MATERIALS:**

- A. Topsoil shall be carefully removed and separately stored to be used again as directed.

#### **3.02 SURFACE PREPARATION:**

- A. After approval of rough grading, the stockpiled topsoil shall be replaced in the areas affected by the Contractor's operations.
- B. Seedbed shall be worked up to a minimum of 3 inches deep. The topsoil shall then be raked until the surface is finely pulverized and smooth and shall be compacted with rollers weighing not over 100 pounds per linear foot of tread, to an even surface to the prescribed lines and grades.

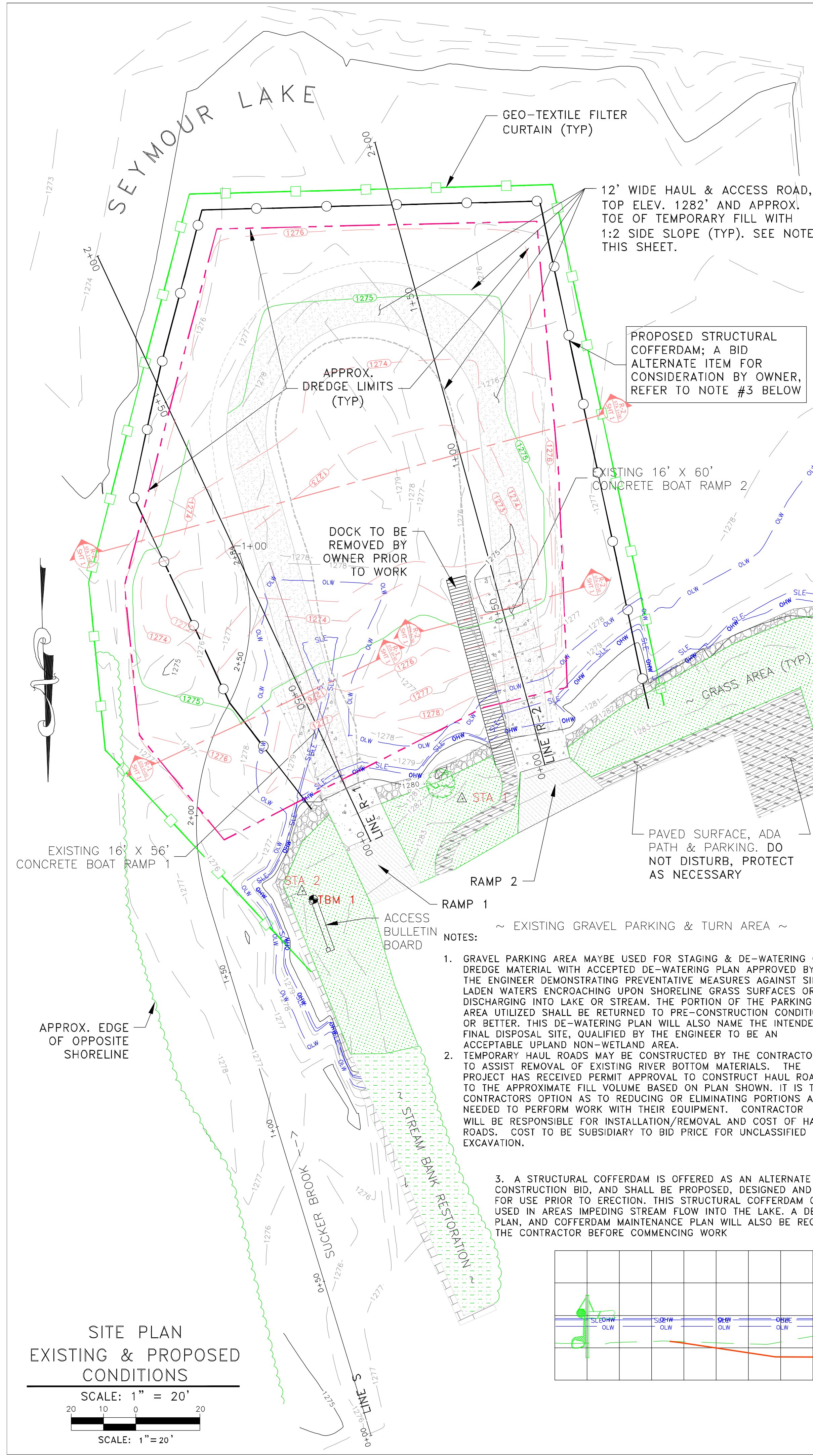
3.03 SEEDING:

- A. Seeding shall be done when weather conditions are approved as suitable, in the periods between April 15 and September 15 (summer) September 15 to April 15 (winter), unless otherwise approved.
- B. Straw mulch shall be used for summer seeding at the rate of 1-2 bales per 1,000 S.F. (1-inch deep). Straw mulch shall be used for winter seeding at the rate of 2-4 bales per 1,000 S.F. (2-inch deep).
- C. One half the seed shall be sown in one direction and the other half at right angles. Seed shall be raked lightly into the soil to a depth of  $\frac{1}{4}$  inch and rolled with a roller weighing not more than 100 pounds per linear foot of tread.
- D. Wherever poor germination occurs in areas larger than 3 square feet, the Contractor shall reseed, roll, and water as necessary to obtain proper germination at no cost to the Owner.

3.04 INSPECTION AND ACCEPTANCE:

- A. At the beginning of the planting season following that in which the seed mix is sown, the seeded areas shall be inspected. Any section not showing dense, vigorous growth at that time shall be promptly reseeded by the Contractor at their expense. If necessary, the Contractor shall furnish and apply soil conditioners and fertilizer to achieve acceptable growth.
- B. The seeded areas shall be watered, cut and otherwise maintained by the Contractor until the end of that planting season, when they will be accepted if the sections show dense, vigorous growth.

**END OF SECTION 02921 – SURFACE RESTORATION OF CROSS COUNTRY  
AREAS**



**LEGEND**

- 1174 --- 2023 LAKE/STREAM CONTOUR - 1 FT INTERVAL
- 1175 --- 2023 LAKE/STREAM CONTOUR - 5 FT INTERVAL
- - - (1174) - - - 2024 PROPOSED DREDGE CONTOUR - 1 FT
- - - (1175) - - - 2024 PROPOSED DREDGE CONTOUR - 5 FT
- △ STA 1 SURVEY STA 1 EL. 1282.59', ESTABLISHED 8/19/2011
- △ STA 2 SURVEY STA 2 EL. 1281.97', ESTABLISHED 09/21/2023
- SLE - SLE 2023 SHORELINE WATER LEVEL, ELEV. 1279.30' ON 09/21/2023
- OHW - OHW ORDINARY HIGH WATER: ELEV. 1279.50'
- OLW - OLW ORDINARY LOW WATER: ELEV. 1278.30'
- TBM-1 TEMPORARY BENCH MARK
- [Pattern] EXISTING STONE EMBANKMENT
- [Pattern] EXISTING BITUMINOUS RAMP APPROACH
- [Pattern] EXISTING BITUMINOUS ADA PATHWAY APPROACH OR PARKING



LAT/LON: N 44° 54' 38" W 71° 58' 55"

**TEMPORARY BENCH MARK TABLE**

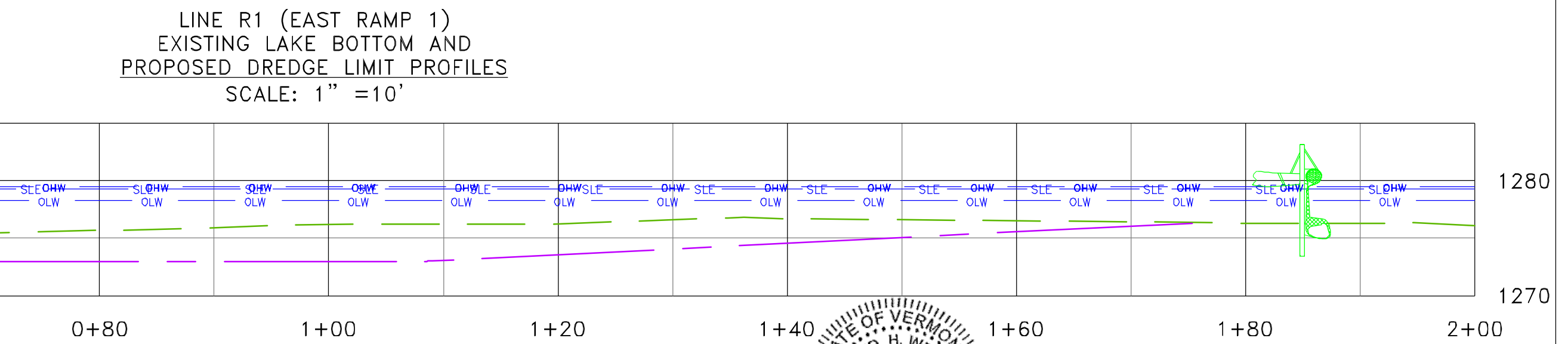
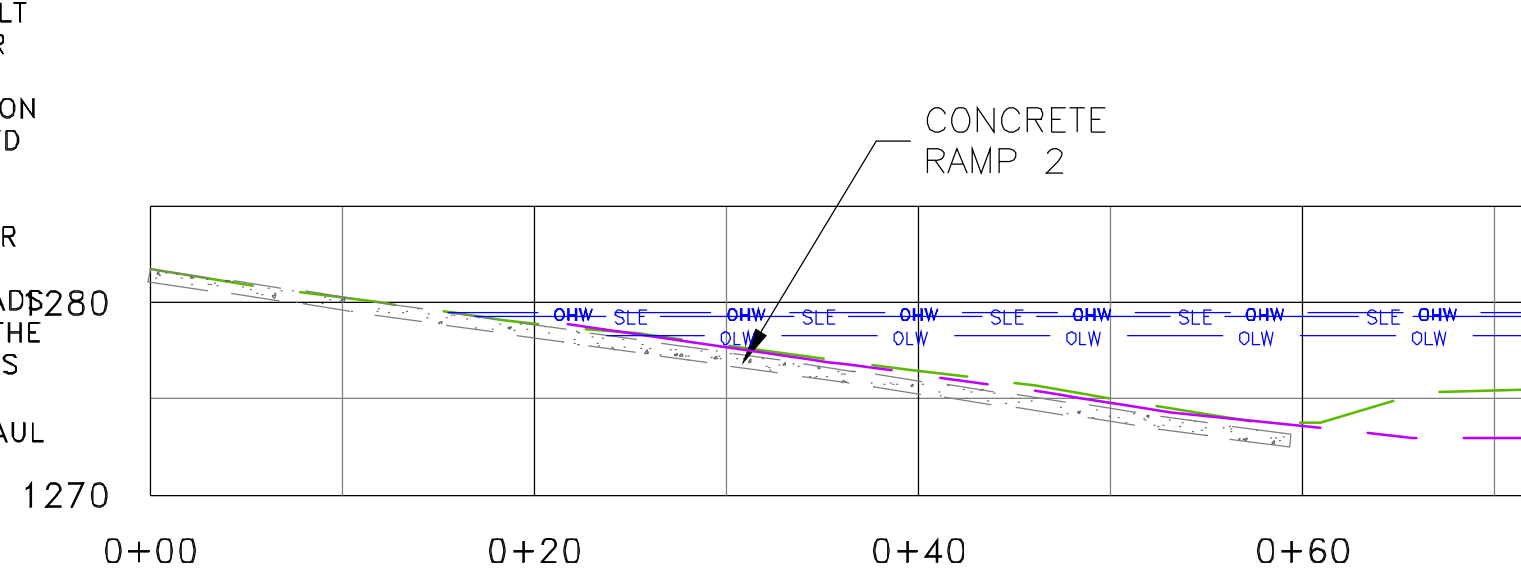
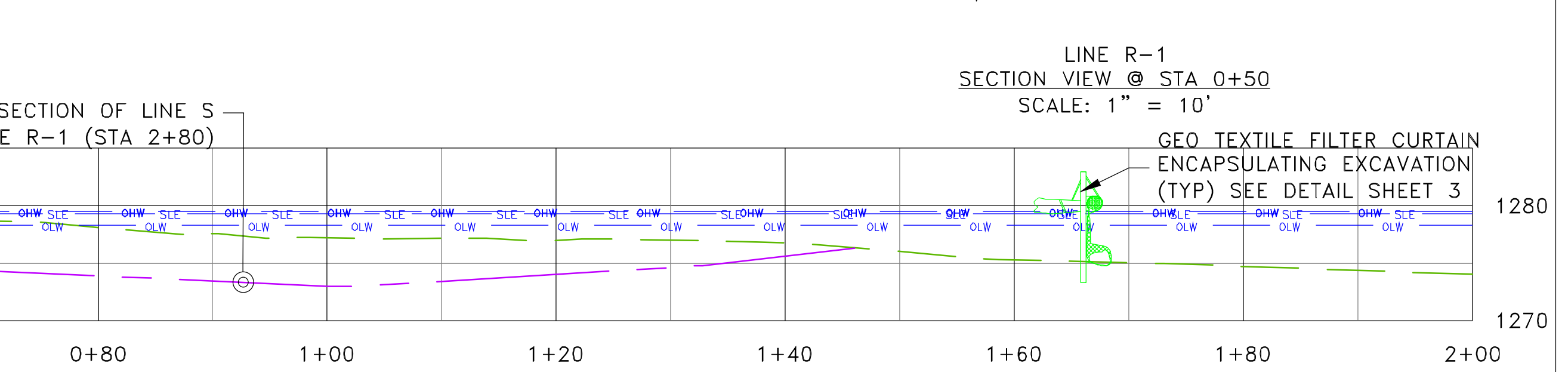
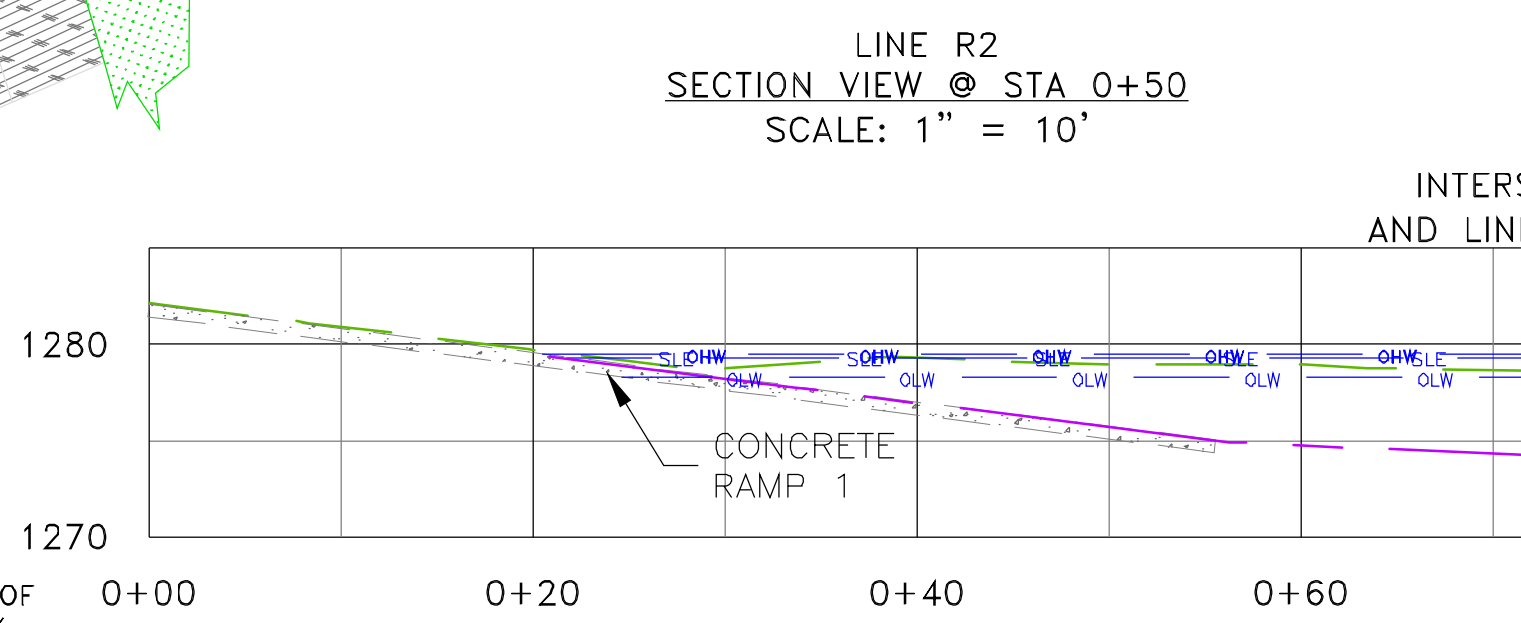
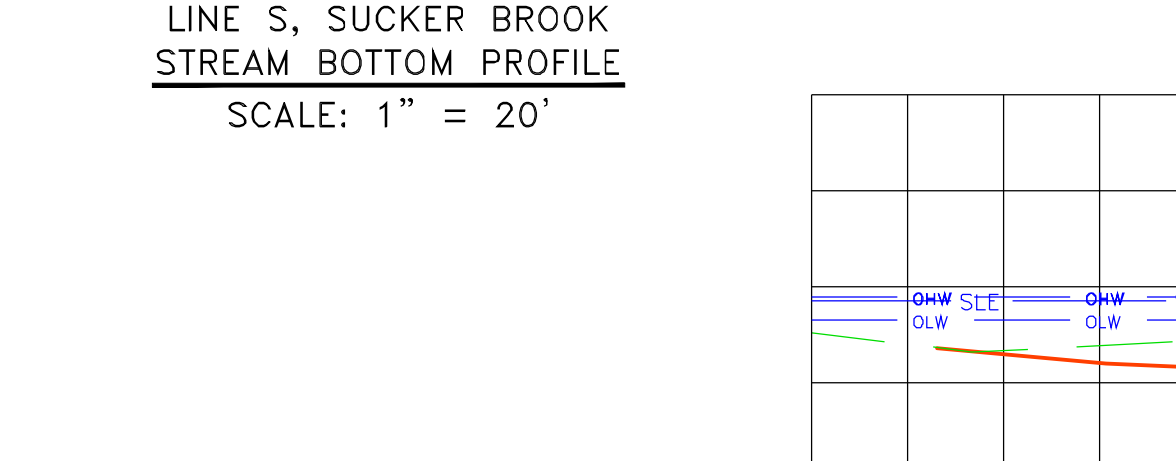
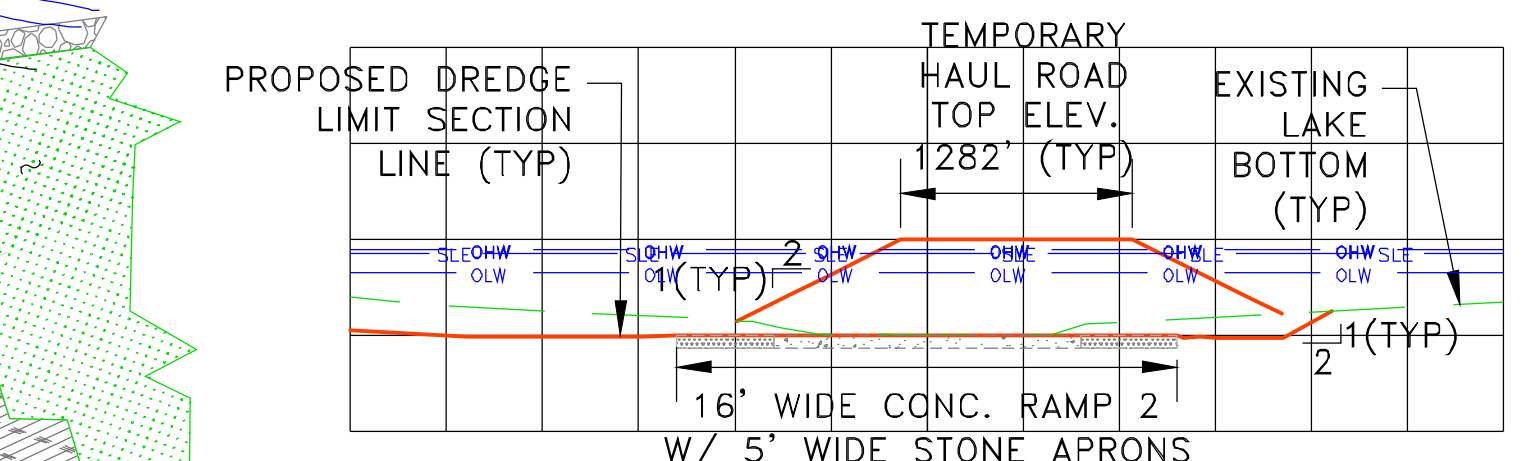
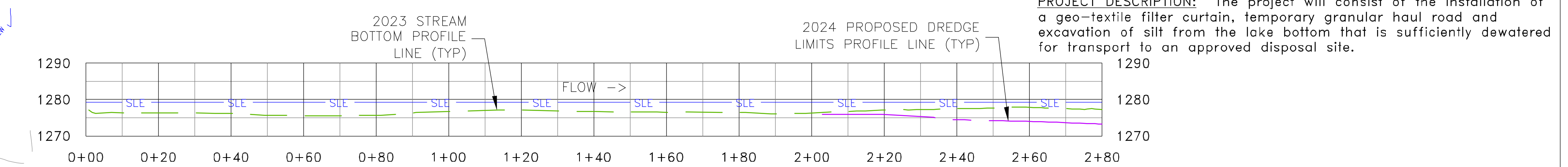
TBM#	ELEV. (FT.)	DESC.
1	1283.50'	PIN IN FW BULLETIN BOARD POST

NOTE: BASED ON AN ASSUMED DATUM



**PROJECT LOCATION:** Take Interstate 91 to exit 28 and go east on U.S. Route 5 in Derby to the intersection with VT-105/5A. Turn right or south onto VT-105/5A for approximately 1/4 mile until junction VT-111. Turn left onto VT-111 for approximately 9 miles. After passing the public beach, the access area will be a few hundred yards on the right side of the road.

**PROJECT DESCRIPTION:** The project will consist of the installation of a geo-textile filter curtain, temporary granular haul road and excavation of silt from the lake bottom that is sufficiently dewatered for transport to an approved disposal site.



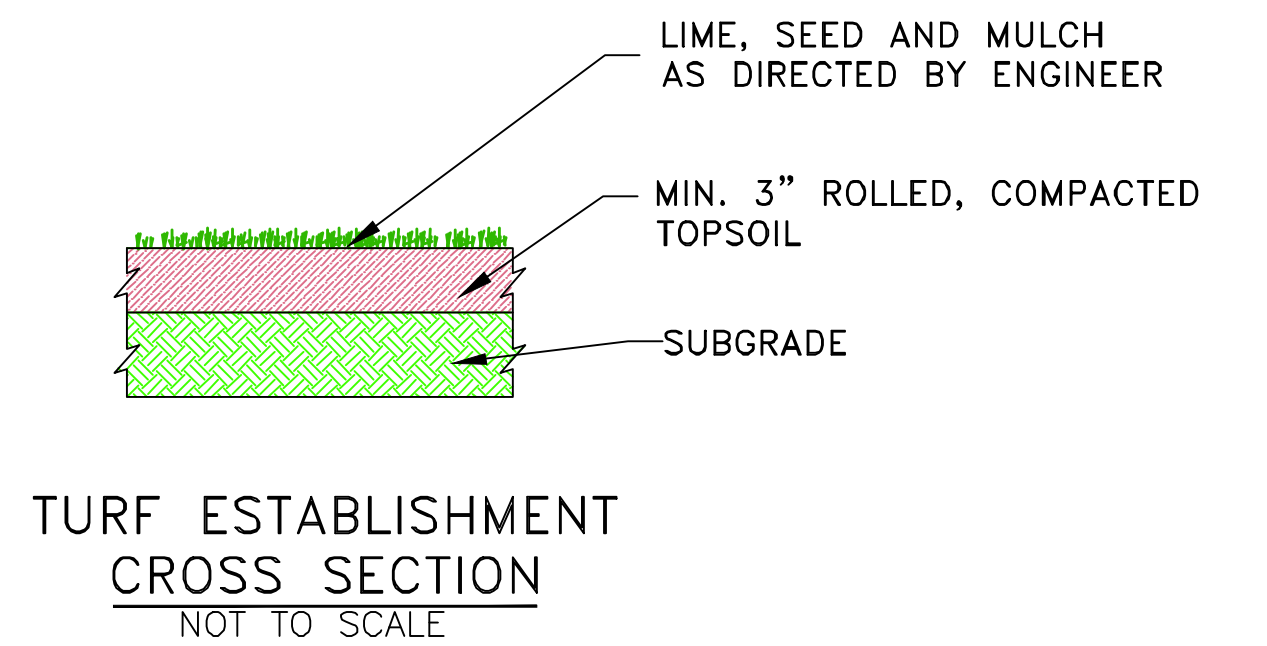
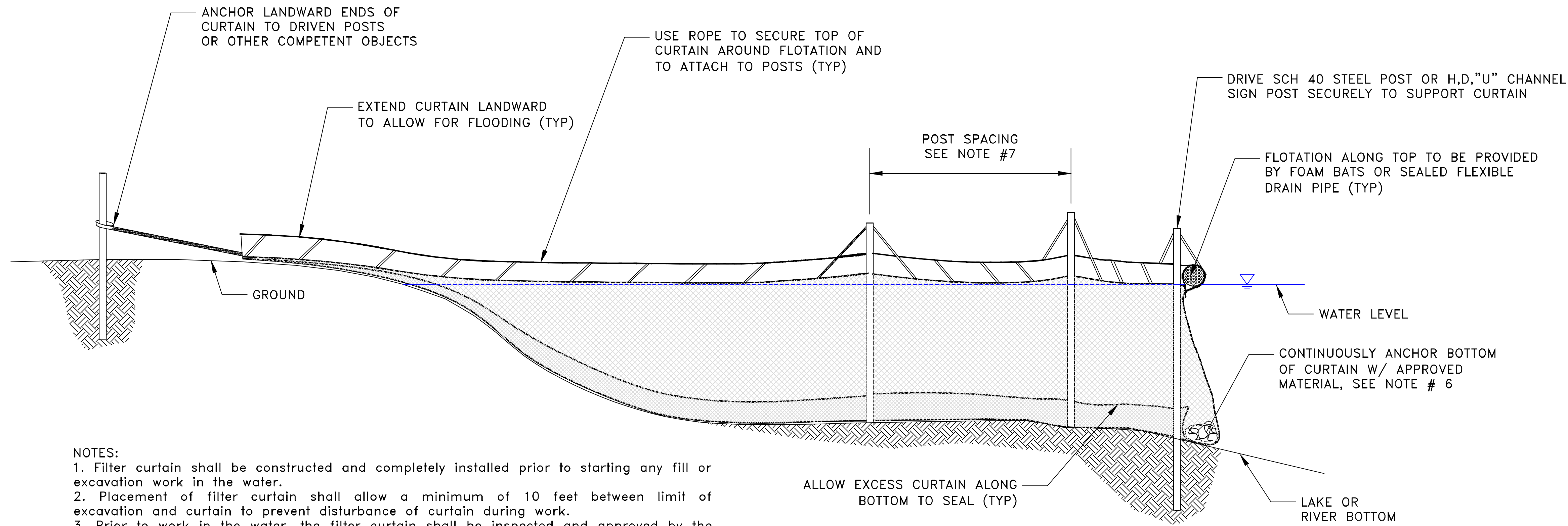
- NOTES:**
- GRAVEL PARKING AREA MAYBE USED FOR STAGING & DE-WATERING OF DREDGE MATERIAL WITH ACCEPTED DE-WATERING PLAN APPROVED BY THE ENGINEER DEMONSTRATING PREVENTATIVE MEASURES AGAINST SILT LADEN WATERS ENROACHING UPON SHORELINE GRASS SURFACES OR DISCHARGING INTO LAKE OR STREAM. THE PORTION OF THE PARKING AREA UTILIZED SHALL BE RETURNED TO PRE-CONSTRUCTION CONDITION OR BETTER. THIS DE-WATERING PLAN WILL ALSO NAME THE INTENDED FINAL DISPOSAL SITE, QUALIFIED BY THE ENGINEER TO BE AN ACCEPTABLE UPLAND NON-WETLAND AREA.
  - TEMPORARY HAUL ROADS MAY BE CONSTRUCTED BY THE CONTRACTOR TO ASSIST REMOVAL OF EXISTING RIVER BOTTOM MATERIALS. THE PROJECT HAS RECEIVED PERMIT APPROVAL TO CONSTRUCT HAUL ROADS TO THE APPROXIMATE FILL VOLUME BASED ON PLAN SHOWN. IT IS THE CONTRACTOR'S OPTION AS TO REDUCING OR ELIMINATING PORTIONS AS NEEDED TO PERFORM WORK WITH THEIR EQUIPMENT. CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLATION/REMOVAL AND COST OF HAUL ROADS. COST TO BE SUBSIDIARY TO BID PRICE FOR UNCLASSIFIED EXCAVATION.
  - A STRUCTURAL COFFERDAM IS OFFERED AS AN ALTERNATE TO THIS CONSTRUCTION BID, AND SHALL BE PROPOSED, DESIGNED AND CERTIFIED FOR USE PRIOR TO ERECTION. THIS STRUCTURAL COFFERDAM CAN NOT BE USED IN AREAS IMPEDING STREAM FLOW INTO THE LAKE. A DEWATERING PLAN, AND COFFERDAM MAINTENANCE PLAN WILL ALSO BE REQUIRED FROM THE CONTRACTOR BEFORE COMMENCING WORK.

**SITE PLAN**  
EXISTING & PROPOSED CONDITIONS  
SCALE: 1" = 20'

STATE OF VERMONT  
DAVID H. WEBB  
No. 7797  
Environmental  
LICENSED PROFESSIONAL ENGINEER  
2/20/24

STATE OF VERMONT  
AGENCY OF NATURAL RESOURCES  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
WATER INVESTMENT DIVISION - AGENCY FACILITIES  
MONTPELIER, VERMONT 05620-3510

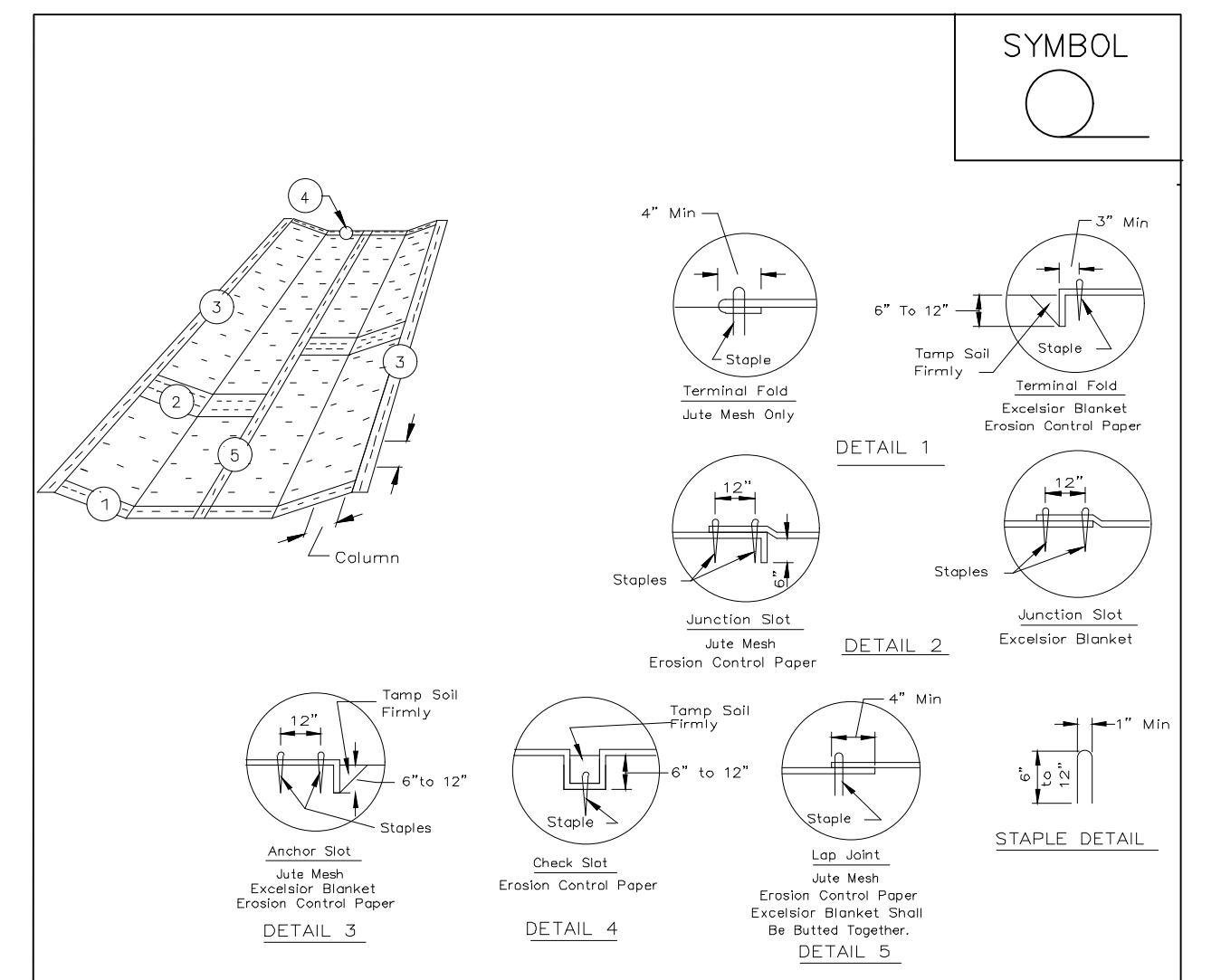
REVISIONS	DEPARTMENT	DESIGNED
◇	FISH & WILDLIFE	DW/JR
◇	PROJECT	DRAWN
◇	SEYMOUR LAKE FISHING ACCESS AREA	JCR
◇	SITE PLAN AND PROFILE VIEWS	CHECKED
◇	EXISTING LAKE & STREAM BOTTOM	DHW
◇	SURFACE W/ PROPOSED DREDGING	SHEET
◇	LIMITS	1 of 2
◇	LOCATION	DATE
◇	MORGAN, VT	2/20/24
		SCALE
		AS NOTED



**NOTES:**

1. Filter curtain shall be constructed and completely installed prior to starting any fill or excavation work in the water.
2. Placement of filter curtain shall allow a minimum of 10 feet between limit of excavation and curtain to prevent disturbance of curtain during work.
3. Prior to work in the water, the filter curtain shall be inspected and approved by the Engineer. Filter fabric shall be Mirafi 500 X or approved equal.
4. When joining two pieces of filter fabric, overlap shall be at least 6 feet. Method of splicing shall be hand stitching, double row, or approved equal.
5. Continuous flotation along the top margin shall be provided by closed cell foam bats or flexible corrugated drain pipe sealed airtight, sized to account for wave and or current action.
6. Continuous sealing along the bottom shall be achieved by leaving excess fabric to be anchored with chain, concrete blocks, bricks, steel rod, cable and native material, as shown in the drawing. All non-native materials used for anchoring shall be completely removed after completion of the work.
7. The spacing of steel posts shall account for vertical and horizontal support to the curtain and the forces of wind, waves and current.
8. After completion of the work in the water, the filter curtain shall remain in place until turbidity inside the curtain is equal to that outside.
9. Carefully remove the filter curtain to minimize disturbance of the lake or river bottom.

**GEOTEXTILE FILTER CURTAIN DETAIL**  
N.T.S.

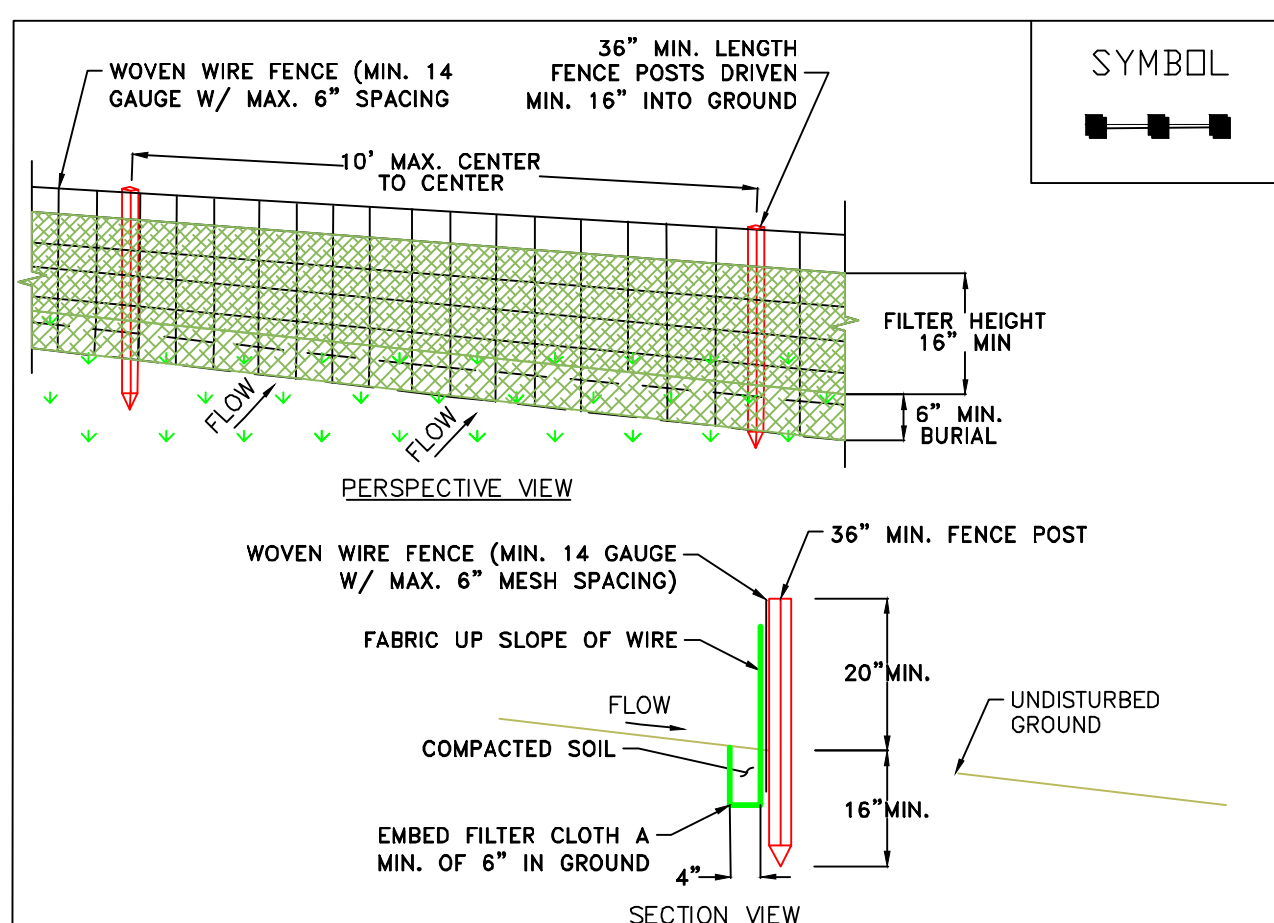


**CONSTRUCTION SPECIFICATIONS**

1. SPACING - INSTALL RECP EVERY 50' ON SLOPES MORE THAN 4% AND LESS THAN 6% ON SLOPES OF 6% OR MORE. THEY SHALL BE SPACED SO THAT ONE OCCURS WITHIN EACH 25'.
2. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4' X 225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4' X 150' ROLL OF MATERIAL.
3. DISTURBED AREA SHALL BE SMOOTHLY GRADED TO ENSURE CLOSE CONTACT BETWEEN RECP AND GROUND.
4. RECP SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC  
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**ROLLED EROSION CONTROL PRODUCT**

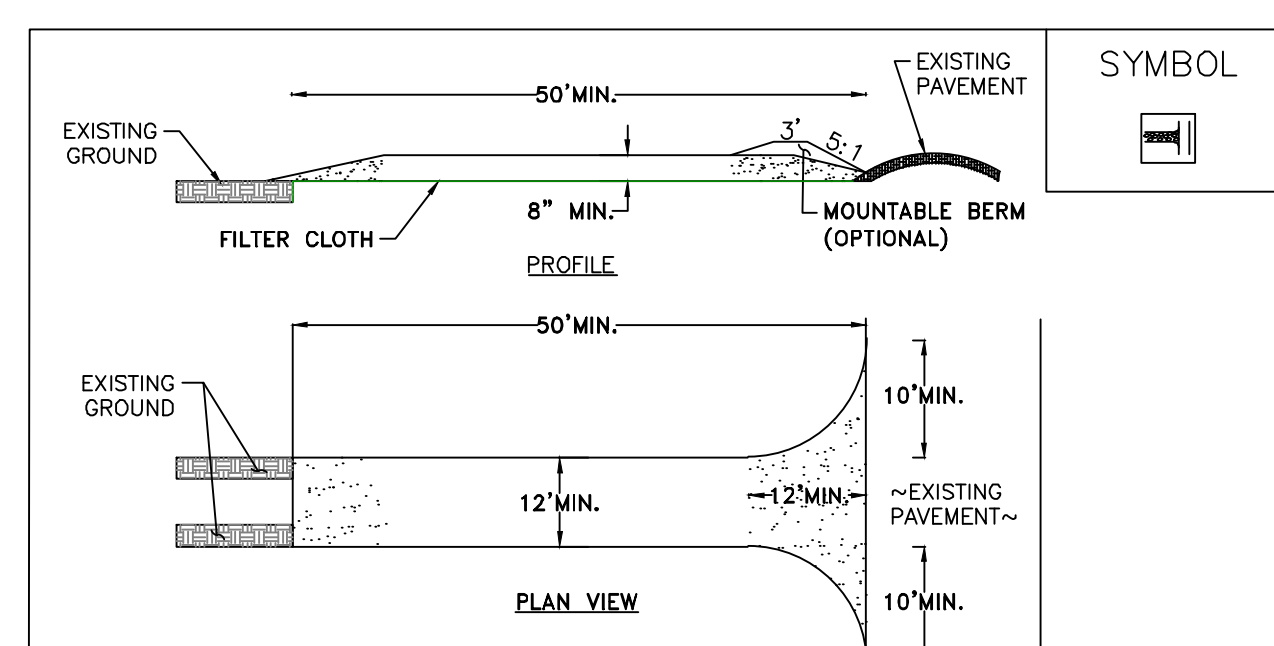


**CONSTRUCTION SPECIFICATIONS**

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

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**SILT FENCE**

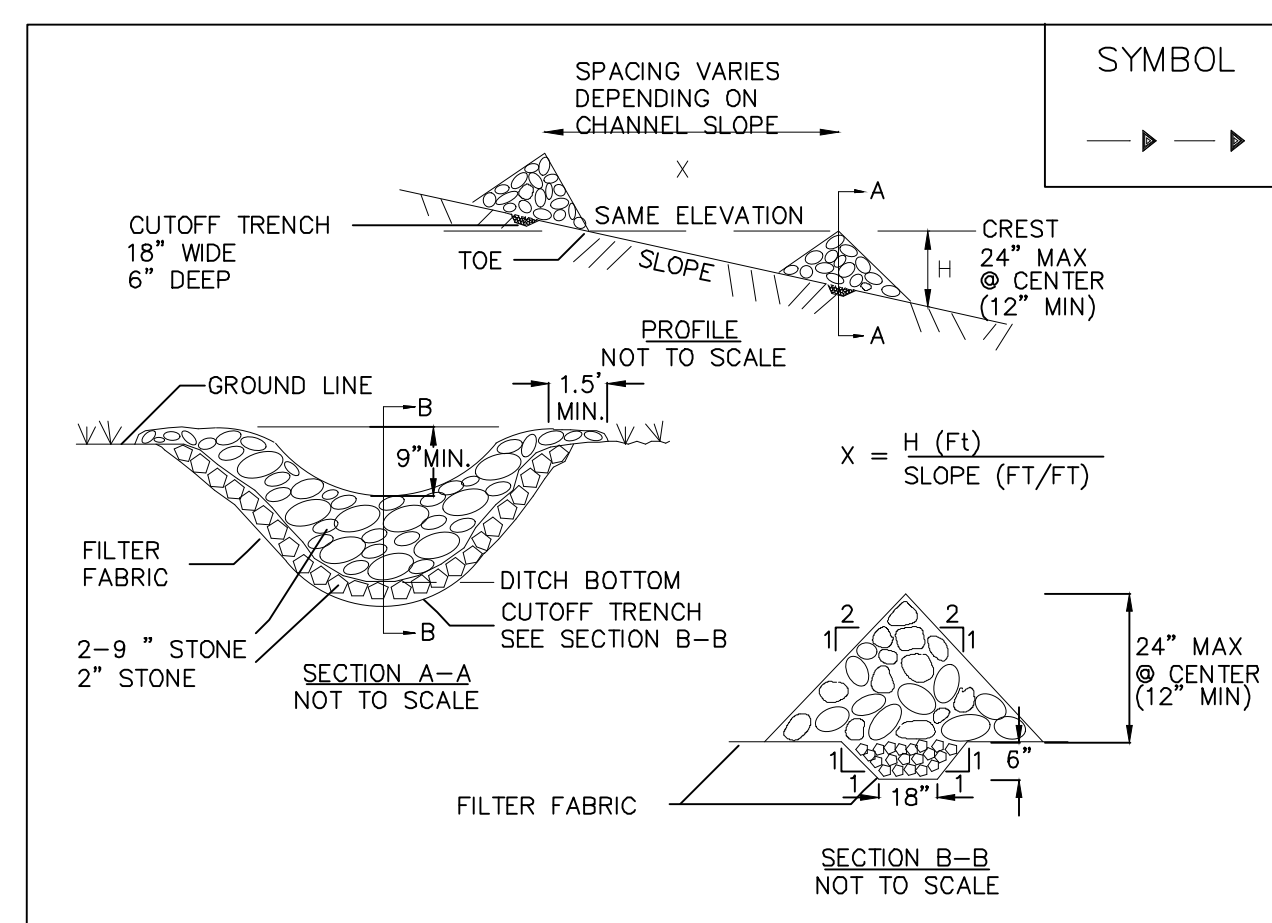


**CONSTRUCTION SPECIFICATIONS**

1. STONE SIZE - USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH APPLIES).
3. THICKNESS - NOT LESS THAN EIGHT (8) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.

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**STABILIZED CONSTRUCTION ENTRANCE**



**CONSTRUCTION SPECIFICATIONS**

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSURE THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE. MAXIMUM DRAINAGE AREA 2 ACRES.

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**CHECK DAM**

STATE OF VERMONT AGENCY OF NATURAL RESOURCES DEPARTMENT OF ENVIRONMENTAL CONSERVATION WATER INVESTMENT DIVISION - AGENCY FACILITIES MONTPELIER, VERMONT 05620-3510			
REVISIONS	DEPARTMENT	DESIGNED	DW/JR
◇	FISH & WILDLIFE	DRAWN	JCR
◇		CHECKED	DHW
◇	SEYMOUR LAKE FISHING ACCESS AREA ACCESS RAMP APPROACH DREDGING EROSION & SILTATION CONTROL DETAILS	SHEET	2 of 2
◇		DATE	2/20/24
◇		SCALE	AS NOTED
◇	LOCATION		
◇	MORGAN, VT		