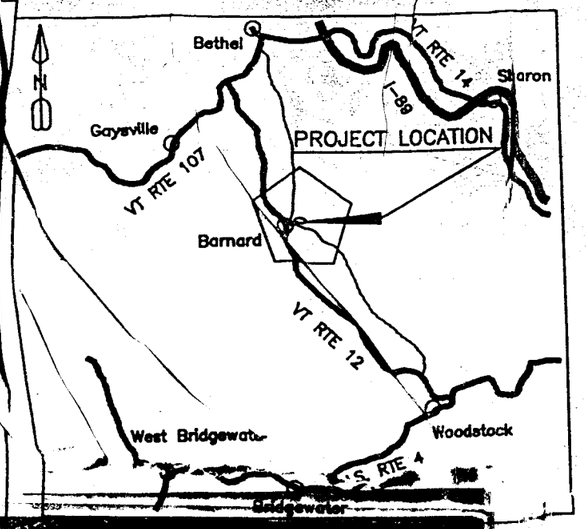
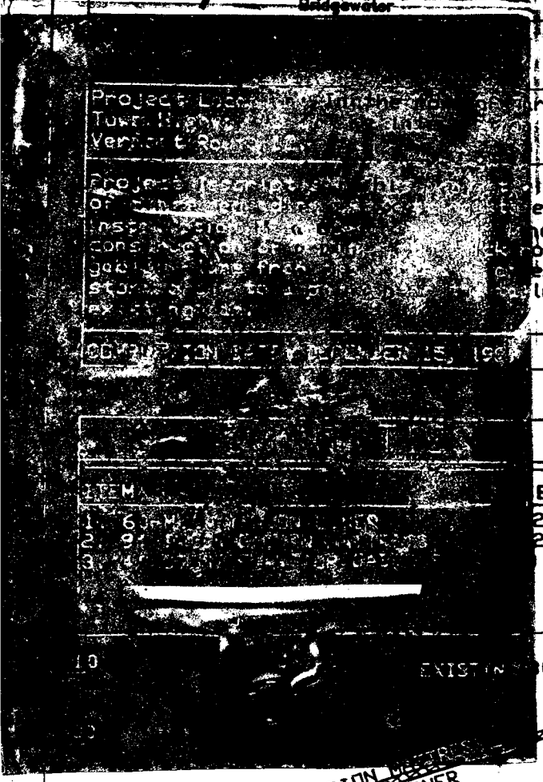




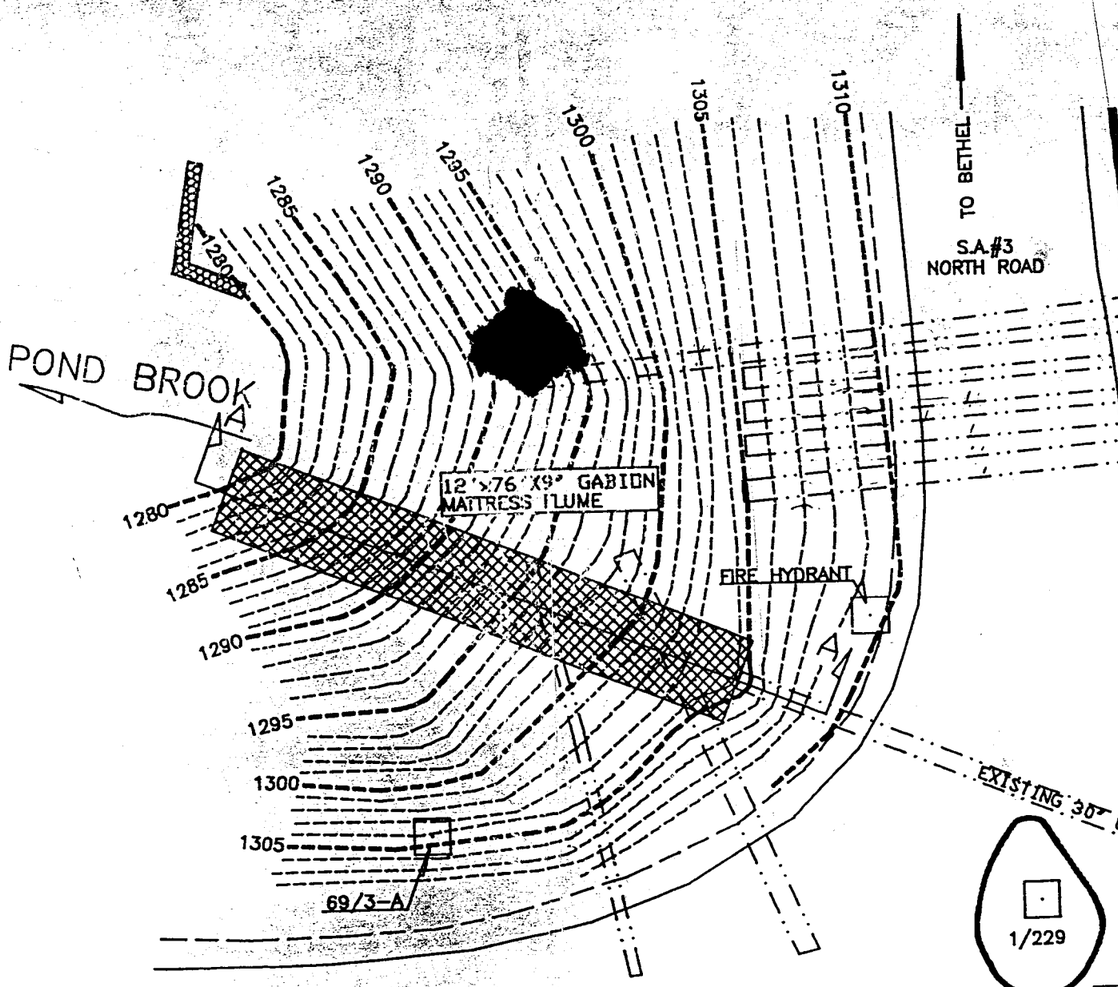
ITEM	EST	FINAL
1	S.F.	
2	S.F.	
3	C.Y.	

10 EXISTING 30" CMP

GABION MATTRESS
HYPALON LINER

1290
1280

SECTION A-A



SCALE
0 10 20 30 40 50
IN FEET

SILVER LAKE

STATE OF VERMONT
JOHN B. DUDLEY
NO. 4146
REGISTERED PROFESSIONAL ENGINEER

STATE OF VERMONT
AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AGENCY FACILITIES DIVISION
WATERBURY, VERMONT 05676

DEPARTMENT OF ENVIRONMENTAL CONSERVATION	DESIGNED JBD 9/89
PROJECT SILVER LAKE DAM – GABION FLUME FOR OUTFALL OF TOWN STORM DRAIN	DRAWN KCF 5/88
	SHEET 1 OF 1
TOWN OF BARNARD	

MACCAFERRI GABIONS INC.

MAIN OFFICE: 950 THIRD AVENUE, NEW YORK, N.Y. 10022

TELEX: 12379 CABLE ADDRESS: GABIONS NEW YORK TELEPHONE: 212-832-6780

AREA OFFICES

ENGLEWOOD, COLORADO
ST. LOUIS, MISSOURI
HAGERSTOWN, MARYLAND
MINNEAPOLIS, MINNESOTA
ATLANTA, GEORGIA

New England Office
83 Hunnewell Avenue
Brighton, Mass. 02135
(617)964-3344

DISTRIBUTION POINTS

DENVER, COLORADO
WILLIAMSPORT, MARYLAND

April 10, 1981

Mr. John Dudley
Vermont Agency for Environmental Conservation
Division of Environmental Engineering
State Office Building
Montpelier, Vt. 05602

Dear Mr. Dudley:

Thanks for your call this week requesting gabion information for your possible dam spillway work. I am sending all the applicable literature I could find , in two packets. I hope this proves helpful.

Concerning your question about the large (5m x 2m x 1') revet gabions: these are only made up in lots of at least 350 units. The price is the same per square foot as the regular 12' x 3' x 1' gabions ($42.03/unit = $1.17/sf). The cost advantage to this type of gabion is that it is easier to install on very large projects because the lacing is easier and the lids are separate.

A possible alternative, if your slope is less that 2.5:1, is the 9" thick revet mattress. These cover more area per unit than the gabions, and use smaller stone. The wire is thinner, and the openings in the mesh are smaller (see specs in red book.)

I hope that this information helps. Please let me know if I can be of any further assistance.

Sincerely,

John F. Paul
Technical Advisor

CONTRACT
INVOLVING LABOR AND MATERIAL

AGREEMENT BETWEEN
STATE OF VERMONT
DIVISION OF PURCHASING
DEPARTMENT OF GENERAL SERVICES
STATE ADMINISTRATION BUILDING
MONTPELIER, VERMONT 05602-2502
AND

CONTRACT NO.	15135C	DATE	11/20/89
REQUISITION NO.	0856	AID NO.	16387-3
VENDOR NO.	11000506010	ENC. NO.	
TERMS	Net 30	RETAINAGE	5 %

COMPLETION NOT TO EXCEED **20** WORKING DAYS

CONTRACTOR: Neil H. Daniels Inc.
P. O. Box 246
Ascutney, VT 05030

Telephone: 674-6323

INVOICE TO: VT Agency of Natural Resources
Department of Environmental Conservation
Attn: H. Ritchie
103 South Main Street, 1 South
Waterbury, VT 05676

Contractor agrees to furnish all labor, supervision, transportation, insurance, materials, tools and equipment unless otherwise specified; and to complete the project described below in accordance with the specifications and conditions set forth herein.

PROJECT LOCATION: Silver Lake Dam, Barnard on Town Highway #3 at the intersection with Vermont Route 12

SPECIFICATIONS: General Specifications entitled "Contracts Involving Labor and Material" dated November 2, 1987; Technical Specifications entitled "Gabion Flume of Town Storm Drain dated September 25, 1989 and Project Drawing (Sheet 1 of 1).

PROJECT DESCRIPTION: The project will consist of minor regrading of existing stone fill, the installation of a 60-mil hypalon liner, and the construction of a 9-inch thick rock filled gabion mattress flume from the outlet of an existing town storm drain to a point near the tailrace of the existing dam.

Prices are in accordance with the attached Bid Sheet.

Upon satisfactory completion of the project and acceptance by the State, the State shall pay contractor compensation as follows:

Total $6,966.00

This contract form is to be considered FORMAL ACCEPTANCE of Contractor's Bid dated: 11/13/89 and in accordance with State of Vermont Proposal dated: 10/19/89.

Departments and institutions are requested to advise the State Commissioner of General Services **AT ONCE** of failure on the part of the contractor to fulfill any of the term or conditions of this contract.

On all correspondence, and invoices please refer to Contract No. 15135C.

I certify that this contract is written in accordance with 29 V.S.A. 953.

Paul Ohlson

PAUL F. OHLSON
Commissioner of General Services

Purchasing Agent: Mr. Rixford
Telephone Number: 802/828-2215

SILVER LAKE DAM

GABION FLUME FOR OUTFALL OF TOWN STORM DRAIN

Item	Description	Est.	Unit	Unit Price	Total
1	60-Mil Hypalon Liner	720	s.f.	3.55	2556
2	9-Inch Thick Gabion Mattress	720	s.f.	3.00	2160
3	4-Inch stone Fill for Gabions	30	c.y.	75.00	2250
TOTAL BID					6966

TOTAL BID IN WORDS Six thousand Nine hundred Sixty Six dollars

CONTRACTOR Neil H. Daniels Inc

ADDRESS P.O. Box 296

Ascutney Vt. 05030

TELEPHONE 674-6323

AUTHORIZED SIGNATURE ~~Peter~~ Neil M. Daniels V. Pr.

AGENCY OF NATURAL RESOURCES

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SILVER LAKE DAM

GABION FLUME FOR OUTFALL OF TOWN STORM DRAIN

BARNARD, VERMONT

TECHNICAL SPECIFICATIONS

OCT 7 1989 89
EO-ANR-1

Department of Environmental Conservation

Facilities Engineering Div.

John B. Dudley, P.E.

September 25, 1989

I N D E X

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Project Description.	1
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BASIS OF PAYMENT.	9

OCT 2 1 57 PM '85
EQ-ADM

GENERAL CONDITIONS

PROJECT LOCATION

In the Town of Barnard on Town Highway #3 at the intersection with Vermont Route 12.

PROJECT DESCRIPTION

This project will consist of minor regrading of existing stone fill, the installation of an 60 mil hypalon liner, and the construction of a nine inch thick rock filled gabion flume from the outlet of an existing town storm drain to a point near the trailrace of the existing dam.

Completion Date: December 15, 1989

RECEIVED
SEP 7 - 1989

SCOPE OF WORK

1. Federal Government funds are being used on this project. The following Federal requirements apply:

   A. The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, creed, color or national origin. Such action shall include,

but not be limited to the following: employment, upgrading; demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer, setting forth the provisions of this non-discrimination clause.

B. The Contractor will, in all solicitations, or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex, or national origin.

C. The Contractor will send to each labor union or representative or workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the Agency contracting officer, advising the labor union or worker's representative of the Contractor's commitments under Section 202 of Executive Order 11246, as amended (3 CFS, Part 169 [1974]), shall post copies of notices in conspicuous places available to employees and applicants for employment.

D. The Contractor will comply with all provisions of Executive Order 11246, as amended, and the rules, regulations, and relevant orders of the Secretary of Labor.

E. The Contractor will furnish all information and reports required by Executive Order 11246, as amended, by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

F. In the event of the Contractor's non-compliance with the non-discrimination clauses of this contract or with any such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended, in whole or in part and the Contractor may be declared ineligible for Government contracts in accordance with procedures authorized in Executive Order 11246, as amended, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246, as amended, by rules, regulations, or orders of the Secretary of Labor, or as otherwise provided by law.

G. The Contractor will include the provisions of paragraphs A through G above in every subcontract or purchase order unless exempted by rules, regulations,

or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246, as amended, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions, including sanctions for non-compliance; provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as result of such directions by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interest of the United States.

2. The Contractor shall comply with the "Copeland Anti-Kickback" (18 U.S.C. 874) as supplemented by Department of Labor Regulations (29 CFR, Part 3).

3. The State, NPS, the Comptroller General of the United States, or any of their duly authorized representatives, shall have access to any books, documents, papers, and records of the Contractor for the purpose of making audit, examination, exerpts, and transcriptions.

4. The Engineer shall establish initial field control. All dimensions indicated on the plans are to be verified in the field by the Contractor.

5. The Contractor shall provide all material, labor, equipment, and facilities necessary for the completion of the project.
6. The Contractor is assumed to be thoroughly familiar with all requirements of the contract and specifications, having investigated the site and satisfied himself regarding the character of the work and local conditions that may affect his performance.
7. All workmanship shall, in every respect, be in accordance with the best modern practice.
8. The Contractor shall be responsible for any damage occurring to the existing premises during the construction project.
9. The Contractor shall take extreme care to avoid pollution of downstream waters.
10. The State shall not be held responsible for any damage caused by vandalism to either the project or to the Contractor's property.
11. Access to the construction site shall be only over public roads and across State owned property.
12. Bids are to be submitted using the enclosed bid sheet.
13. The Contractor shall comply with all State and local regulations where applicable to this contract.
14. The Contractor shall remove all construction equipment, materials, and debris caused by the project from the site.
15. The Contractor shall adhere to all Federal, State, and Local safety standards and regulations.

16. The Contractor shall be responsible for safety on the job. He shall take due care to protect the public. He shall protect the rights and property of adjacent landowners and shall be fully responsible for any damage beyond the limits of construction shown on the plans. He shall take due care to protect the property of the State of Vermont. Damage to roads and structures caused by tracked vehicles and trucks shall be repaired at the Contractor's expense.

17. The Contractor shall guarantee the materials and workmanship of the project for a period of one year after the acceptance of the project by the State.

18. The Contractor shall notify the Engineer at least three (3) days prior to moving equipment onto the project.

19. The Contractor shall not sublet or assign any portion of this contract without written consent of the Engineer. In any event, the Contractor shall perform with his own organization not less than 50 percent of the total initial contract cost. No subcontracts or assignments shall in any case release the Contractor of his liability under his contract and bonds.

20. The Contractor shall submit requisitions for payment in the following manner: (1) Bills shall be addressed to the Agency of Natural Resources, 103 South Main Street, Building 1 South, Waterbury, Vermont 05676, to the attention of the Engineer in charge; (2) all requisitions shall be originals - no photocopies will be acceptable; (3) the Contractor

shall include the contract number, requisition number, and appropriation number as shown on the contract; (4) the Contractor shall also include either his personal social security number or his firm's State Tax Department identification number; (5) if the contract is for an itemized bid, then the Contractor shall itemize all requisitions for payments.

21. The successful bidder shall be given three additional sets of project plans and specifications for the project. At least one such set shall be present at the project site at any time that construction is being performed.

22. The bidder should obtain or have a copy of the "Standard Specifications for Construction - 1986" by the State of Vermont, Agency of Transportation. One may be obtained at nominal cost from the Agency of Transportation, Division of Contract Administration.

SPECIFICATIONS

All work related to the following specifications, unless otherwise noted, shall be accomplished in accordance with the State of Vermont, Agency of Transportation - "Standard Specifications for Construction", dated 1986 (hereafter referred to as AOT), and the most recent revision of the Agency of Transportation's "General Special Provisions."

Item #1 - 60 Mil Hypalon Liner -

This item shall consist of the installation of an

elastomeric liner of the type normally approved for pond and lagoon lining such as that made by Staff Industries, Stevens Elastomerics, and other manufacturers. The material shall be 60 mils nominal thickness. Included in this item shall be a minor amount of regrading of the existing riprap surface to minimize the likelihood of damage to the liner.

Item #2 - 9-Inch Thick Gabion Mattress -

This item shall consist of the installation of a vinyl coated gabion basket of the dimensions shown on the plans. The material shall meet or exceed the specifications for wire type and thickness and coating characteristics of Reno Mattresses as manufactured by Maccaferri Gabions, Inc., P.O. Box 157, Wyckoff, NH 07481. Installation shall be as shown on the plans or directed in the field by the Engineer and shall conform to the manufacturer's recommendations. Particular care shall be used to avoid any damage to the underlying elastomeric liner.

Item #3 - 4-Inch Stone Fill for Gabions -

This item shall consist of the placement of stone fill into the Gabion Mattress specified above. The stone shall be hard, durable, well-graded stone ranging in size from 2 to 6 inches and may be either shot rock or cobbles. The stone fill shall be placed in strict conformance with the manufacturer's recommendations and the directions of the Engineer.

BASIS FOR PAYMENT

Bid Item #1 -

This item shall be paid for at the contract unit price per square foot as measured in place. The unit price shall be full compensation for furnishing, transporting, handling and placing the material specified including regrading of bedding as indicated in the field.

Bid Item #2 -

This item will be paid for at the contract unit price per square foot as measured in place. The unit price shall be full compensation for furnishing, transporting, handling and placing the material specified.

Bid Item #3 -

This item will be paid for at the contract unit price per cubic yard as measured in place. The unit price shall be full compensation for furnishing, transporting, handling and placing the material specified.

SILVER LAKE DAM

GABION FLUME FOR OUTFALL OF TOWN STORM DRAIN

Item	Description	Est.	Unit	Unit Price	Total
1	60-Mil Hypalon Liner	720	s.f.	_____	_____
2	9-Inch Thick Gabion Mattress	720	s.f.	_____	_____
3	4-Inch stone Fill for Gabions	30	c.y.	_____	_____

TOTAL BID _____

TOTAL BID IN WORDS _____

CONTRACTOR _____

ADDRESS _____

_____

TELEPHONE _____

AUTHORIZED SIGNATURE _____