



STATE OF VERMONT
JOINT FISCAL OFFICE

MEMORANDUM

To: James Reardon, Commissioner of Finance & Management
From: Nathan Lavery, Fiscal Analyst
Date: November 5, 2009
Subject: JFO #2396, #2397, #2398

No Joint Fiscal Committee member has requested that the following items be held for review:

JFO #2396 — \$38,026 grant from the U.S. Department of Health and Human Services Administration on Aging to – Department of Disabilities, Aging and Independent Living (DAIL). These grant funds will be used to inform new and existing Medicare beneficiaries about eligibility for federal programs that help them pay for prescription drugs and other health costs, as well as enrollment assistance for these programs.

[JFO received 10/06/09]

JFO #2397 — \$545,842 grant from the Federal Emergency Management Agency (FEMA) to Department of Public Safety. These grant funds will be used to provide financial assistance to implement measures that will permanently reduce or eliminate future damage from natural hazards through safer building practices and improving existing structures.

[JFO received 10/06/09]

JFO #2398 — \$100,000 grant from the U.S. Department of Justice to State's Attorneys and Sheriffs. These grant funds will be used to purchase equipment to document and record Special Investigation Units (SIUs)/Child Advocacy Center interviews, crime scene evidence, etc., and train SIU personnel.

[JFO received 10/06/09]

In accordance with 32 V.S.A. §5, the requisite 30 days having elapsed since these items were submitted to the Joint Fiscal Committee, the Governor's approval may now be considered final. We ask that you inform the Secretary of Administration and your staff of this action.

cc: Joan Senecal, Commissioner
Thomas Tremblay, Commissioner
Jane Woodruff, Executive Director



STATE OF VERMONT
JOINT FISCAL OFFICE

MEMORANDUM

To: Joint Fiscal Committee Members
From: Nathan Lavery, Fiscal Analyst
Date: October 13, 2009
Subject: Grant Requests

Enclosed please find five (5) requests that the Joint Fiscal Office has received from the administration:

JFO #2396 — \$38,026 grant from the U.S. Department of Health and Human Services Administration on Aging to – Department of Disabilities, Aging and Independent Living (DAIL). These grant funds will be used to inform new and existing Medicare beneficiaries about eligibility for federal programs that help them pay for prescription drugs and other health costs, as well as enrollment assistance for these programs.

[JFO received 10/06/09]

JFO #2397 — \$545,842 grant from the Federal Emergency Management Agency (FEMA) to Department of Public Safety. These grant funds will be used to provide financial assistance to implement measures that will permanently reduce or eliminate future damage from natural hazards through safer building practices and improving existing structures.

[JFO received 10/06/09]

JFO #2398 — \$100,000 grant from the U.S. Department of Justice to State's Attorneys and Sheriffs. These grant funds will be used to purchase equipment to document and record Special Investigation Units (SIUs)/Child Advocacy Center interviews, crime scene evidence, etc., and train SIU personnel.

[JFO received 10/06/09]

JFO #2399 — \$130,000 grant from the U.S. Department of Justice to the Department of Public Safety. These grant funds will be used to hire one intelligence analyst who will be assigned to the Vermont Fusion Center (VTFC) to support rural law enforcement investigations in Vermont. **This grant is a competitive award under the American Recovery and Reinvestment Act (ARRA) and expedited approval of this item has been requested.** The Joint Fiscal Committee members will be contacted within two weeks with a request to waive the statutory review period and accept this item.

[JFO received 10/13/09]

JFO #2400 — \$29,220 grant from the U.S. Department Agriculture to the Agency of Agriculture, Food and Markets. These funds will be used to increase the level of participation of Vermont livestock owners in the National Animal Identification System (NAIS).

[JFO received 10/13/09]

The Joint Fiscal Office has reviewed these submissions and determined that all appropriate forms bearing the necessary approvals are in order. In accordance with the procedures for processing such requests, we ask you to review the enclosed and notify the Joint Fiscal Office (Nathan Lavery at (802) 828-1488; nlavery@leg.state.vt.us) if you have questions or would like an item held for Joint Fiscal Committee review. Unless we hear from you to the contrary by October 27 we will assume that you agree to consider as final the Governor's acceptance of these requests.

cc: James Reardon, Commissioner
Roger Allbee, Secretary
Joan Senecal, Commissioner
Thomas Tremblay, Commissioner
Jane Woodruff, Executive Director



STATE OF VERMONT
JOINT FISCAL OFFICE

MEMORANDUM

To: Representative William Lippert

From: Nathan Lavery, Fiscal Analyst

Date: October 13, 2009

Subject: JFO #2397 & #2398

Representative Michael Obuchowski asked that I forward to you a copy of the enclosed grant materials and cover memo. He requests your observations regarding the enclosed items.

cc: Rep. Michael Obuchowski
Stephen Klein



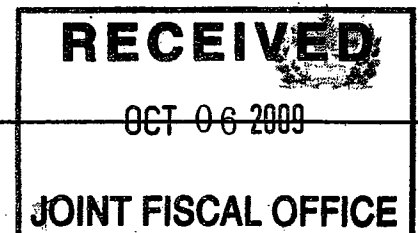
State of Vermont
 Department of Finance & Management
 109 State Street, Pavilion Building
 Montpelier, VT 05620-0401

Agency of Administration

[phone] 802-828-2376
 [fax] 802-828-2428

**STATE OF VERMONT
 FINANCE & MANAGEMENT GRANT REVIEW FORM**

Grant Summary:		FEMA grant in response to summer 2008 flood damage			
Date:		9/16/2009			
Department:		Department of Public Safety			
Legal Title of Grant:		Hazard Mitigation Grant Program, FEMA-DR-1790-VT			
Federal Catalog #:		97.039			
Grant/Donor Name and Address:		US Department of Homeland Security, Federal Emergency Management Agency (FEMA), Region 1			
Grant Period:	From:	6/30/2009	To:	9/30/2011	
Grant/Donation		\$545,842			
Grant Amount:	SFY 1	SFY 2	SFY 3	Total	Comments
	\$272,921	\$272,921	\$	\$545,842 ✓	AB
Position Information:		# Positions	Explanation/Comments		
		0 ✓			
Additional Comments:					
Department of Finance & Management					(Initial)
Secretary of Administration					(Initial)
Sent To Joint Fiscal Office					Date 10/1/09



**Dept. of Public Safety
Administration Division
Accounting Unit**

Memo

To: David Beatty, Budget & Management Analyst
From: Tracy O'Connell, Programs Administration Supervisor *TO*
Date: 09/11/09
CC: file
Re: Request for Grant Acceptance

Attached you will find a Request for Grant Acceptance for the Hazard Mitigation Grant Program, Disaster #1790, received from FEMA.

If you have any questions, please contact me at 802-241-5574 or toconnel@dps.state.vt.us.

Thank you.

REC'D SEP 14 2009

STATE OF VERMONT REQUEST FOR GRANT ACCEPTANCE (Form AA-1)

BASIC GRANT INFORMATION					
1. Agency:					
2. Department:		Public Safety			
3. Program:		Emergency Management			
4. Legal Title of Grant:		Hazard Mitigation Grant Program			
5. Federal Catalog #:		97.039			
6. Grant/Donor Name and Address: U.S. Dept. of Homeland Security/FEMA Region I 99 High St, Sixth Floor Boston, MA 02110-2132					
7. Grant Period:		From: 6/30/2009	To: 9/30/2011		
8. Purpose of Grant: The Hazard Mitigation Grant Program provides States and local governments financial assistance to implement measures that will permanently reduce or eliminate future damages and losses from natural hazards through safer building practices and improving existing structures and supporting infrastructure.					
9. Impact on existing program if grant is not Accepted: The severe storms that occurred July 21, 2008 - August 12, 2008, resulted in Vermont cities and towns suffering flood damage. The President declared this a federal disaster (#1790) and made federal aid available to mitigate future reoccurring flood problems.					
10. BUDGET INFORMATION					
	SFY 1	SFY 2	SFY 3	Comments	
Expenditures:	FY 2010	FY 2011	FY 2012		
Personal Services	\$	\$	\$		
Operating Expenses	\$	\$	\$		
Grants	\$363,924	\$363,924	\$		
Total	\$363,924	\$363,924	\$		
Revenues:					
State Funds:	\$	\$	\$		
Cash	\$	\$	\$		
In-Kind	\$	\$	\$		
Federal Funds:	\$	\$	\$		
(Direct Costs)	\$272,921	\$272,921	\$		
(Statewide Indirect)	\$	\$	\$		
(Departmental Indirect)	\$	\$	\$		
Other Funds:	\$	\$	\$		
Grant (source Local Match)	\$91,003	\$91,003	\$		
Total	\$363,924	\$363,924	\$		
Appropriation No:	2140031000	Amount:	\$545,842		
			\$		
			\$		

REC'D SEP 14 2009

STATE OF VERMONT REQUEST FOR GRANT ACCEPTANCE (Form AA-1)

		\$
		\$
		\$
		\$
		\$
	Total	\$545,842

PERSONAL SERVICE INFORMATION

11. Will monies from this grant be used to fund one or more Personal Service Contracts? Yes No
 If "Yes", appointing authority must initial here to indicate intent to follow current competitive bidding process/policy.

Appointing Authority Name: _____ Agreed by: _____ (initial)

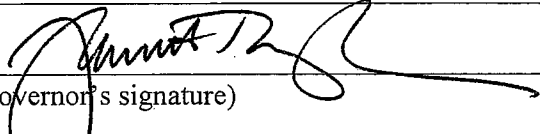
12. Limited Service Position Information:	# Positions	Title
Total Positions		

12a. Equipment and space for these positions: Is presently available. Can be obtained with available funds.

13. AUTHORIZATION AGENCY/DEPARTMENT

I/we certify that no funds beyond basic application preparation and filing costs have been expended or committed in anticipation of Joint Fiscal Committee approval of this grant, unless previous notification was made on Form AA-1PN (if applicable):	Signature: <i>Tom R. Tully</i>	Date: 9/9/09
	Title: Commissioner	
	Signature:	Date:
	Title:	

14. ACTION BY GOVERNOR

<input checked="" type="checkbox"/> Accepted	 (Governor's signature)	9/30/09
<input type="checkbox"/> Rejected		Date:

15. SECRETARY OF ADMINISTRATION

<input checked="" type="checkbox"/> Request to JFO	(Secretary's signature or designee) <i>Tom R. Tully</i>	Date:
<input type="checkbox"/> Information to JFO		9/24/09

16. DOCUMENTATION REQUIRED

Required GRANT Documentation

<input type="checkbox"/> Request Memo	<input type="checkbox"/> Notice of Donation (if any)
<input type="checkbox"/> Dept. project approval (if applicable)	<input type="checkbox"/> Grant (Project) Timeline (if applicable)
<input type="checkbox"/> Notice of Award	<input type="checkbox"/> Request for Extension (if applicable)
<input type="checkbox"/> Grant Agreement	<input type="checkbox"/> Form AA-1PN attached (if applicable)
<input type="checkbox"/> Grant Budget	

End Form AA-1



FEMA

June 30, 2009

Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101

SUBJECT: FEMA-DR-1790-VT
Hazard Mitigation Grant Program Project #1R
Middlebury River Erosion Project, Town of Ripton, VT

Dear Ms. Farr:

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program project:

1790-1	Town of Ripton Ice Jam Mitigation Project	\$ 103,125
	Total:	\$ 103,125

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,


Kevin M. Merli, Director
Mitigation Division

Attachment

Project Review and Conditions Status

Project Name/Number: FEMA-HMGP-1790-1R – Ripton, VT Middlebury River
Erosion Project

Project Location: Middlebury River and VT Route 125, Ripton, VT
Latitude 43.5828 N Longitude 73.0211 W

Project Description: The purpose of the Ripton, VT Middlebury River Erosion Project to reduce the road and building damage. The project consists of installing rip-rap (2000 cubic yards) on 700 feet of the northern bank in the village area to protect nearby historic properties. In addition minimum channel adjustments will be made to allow the Middlebury River to better access historic flood chutes in the village area. Construction easements will be provided. Detailed engineering plans will be submitted to Region 1 with pertinent details. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Environmental Review Project Conditions

1. If ground disturbing activities occur during implementation, the applicant will monitor excavation activity, and if any artifacts or human remains are found during the excavation process all work is to cease and the applicant will notify FEMA, Grantee, and SHPO/THPO.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material the applicant must contact the Grantee and the Grantee must contact FEMA. The applicant must also contact the relevant agency with authority for regulation of the material.
3. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Other Required Project Specific Conditions

1. The applicant must comply with all applicable local, state and federal laws, regulations, policies, and requirement. Any conditions of these regulations, laws, and policies become conditions of this grant, project, and environmental review.
2. In accordance with FEMA guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA. Any conditions resulting from this process become part of this project.
3. The applicant must ensure that best managing practices for roads and culverts are utilized, and installation of erosion control. Construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act's: "Best Management Practices, BMP" for erosion control during construction of this project. This includes, the applicant applying for all local, state, and federal permits and easements necessary to complete the project and obtaining these permits prior to commencement of any work. Any conditions of these permits become conditions of this grant, project, and environmental review. In accordance with FEMA Guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA.
4. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
5. The Department of Fish & Wildlife recommends: the retention (or restoration) of natural stream bottom and stream bank conditions; the retention or establishment of naturally-vegetated riparian buffers; and, incorporating buffers and bridges or large bottomless culverts wherever possible and eliminating or minimizing the use of rip-rap to retain natural stream bank and streambed conditions.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 137,500
Federal Share	\$ 103,125
Applicant Share	\$ 34,375

Period of Performance

This project must be complete by: 9/30/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- **All permits must be obtained and forwarded to FEMA before any work begins.**
- **Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.**
- **Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal State, and laws and standards.**

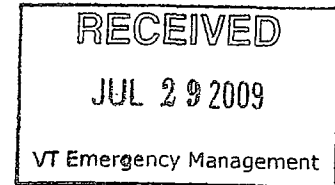
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U.S. Department of Homeland Security
Region I
99 High Street, Sixth Floor
Boston, MA 02110-2132



FEMA

July 27, 2009



Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101



SUBJECT: FEMA-DR-1790-VT Hazard Mitigation Grant Program Projects

FEMA DR 1790-2R Gibou Road Culvert Upgrade Project, Town of Montgomery, VT
FEMA DR 1790-3R Central Street Culvert Upgrade Project, Town of Northfield, VT

Dear Ms. ~~Farr~~: *Barbara*

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program projects:

1790-2R	Town of Montgomery Gibou Road Culvert Upgrade Project	\$ 138,358
	Total:	\$ 138,358
1790-3R	Town of Northfield Central Street Culvert Upgrade Project	\$ 233,231
	Total:	\$ 233,231

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,

Kevin M. Merli, Director
Mitigation Division

Attachment

Project Review and Conditions Status

Project Location: Gibou Road, Vermont Route 33 (about 1.1 miles from the intersection with Route 118 as indicated on map enclosed with application in Montgomery, VT

Latitude: N 44 .8531797 Longitude: W -72.6143255

Project Description: The Town of Montgomery, VT proposes to replace two 4.5 foot boiler pipes with a 14' wide by 7 foot high by 35 concrete box culvert as indicated on the diagram attached to the application. In the bottom of the box a 6-inch-high retention sill (baffles) will be installed. The box invert will be buried 12" so the top of the baffles will be buried 6" and not visible. All site approach guard rails specified by AOT are also included in the project.

Environmental Review Project Conditions

1. If ground disturbing activities occur during implementation, the applicant will monitor excavation activity, and if any artifacts or human remains are found during the excavation process all work is to cease and the applicant will notify FEMA, Grantee, and SHPO/THPO.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material the applicant must contact the Grantee and the Grantee must contact FEMA. The applicant must also contact the relevant agency with authority for regulation of the material.
3. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Other Required Project Specific Conditions

1. The applicant must comply with all applicable local, state and federal laws, regulations, policies, and requirement. Any conditions of these regulations, laws, and policies become conditions of this grant, project, and environmental review.
2. In accordance with FEMA guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All

correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA. Any conditions resulting from this process become part of this project.

3. The applicant must ensure that best managing practices for roads and culverts are utilized, and installation of erosion control. Construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act's: "Best Management Practices, BMP" for erosion control during construction of this project. This includes, the applicant applying for all local, state, and federal permits and easements necessary to complete the project and obtaining these permits prior to commencement of any work. Any conditions of these permits become conditions of this grant, project, and environmental review. In accordance with FEMA Guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA.
4. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
5. The Department of Fish & Wildlife recommends: the retention (or restoration) of natural stream bottom and stream bank conditions; the retention or establishment of naturally-vegetated riparian buffers; and, incorporating buffers and bridges or large bottomless culverts wherever possible and eliminating or minimizing the use of rip-rap to retain natural stream bank and streambed conditions.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 184,717
Federal Share	\$ 138,538
Applicant Share	\$ 46,179

Period of Performance

This project must be complete by: 7/31/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- All permits must be obtained and forwarded to FEMA before any work begins.

- Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.
- Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal State, and laws and standards.

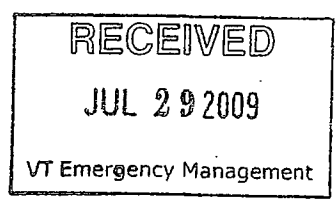
COPY

U.S. Department of Homeland Security
Region I
99 High Street, Sixth Floor
Boston, MA 02110-2132



FEMA

July 27, 2009



Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101



SUBJECT: FEMA-DR-1790-VT Hazard Mitigation Grant Program Projects

FEMA DR 1790-2R Gibou Road Culvert Upgrade Project, Town of Montgomery, VT
FEMA DR 1790-3R Central Street Culvert Upgrade Project, Town of Northfield, VT

Dear Ms. Farr: *Barbara*

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program projects:

1790-2R	Town of Montgomery Gibou Road Culvert Upgrade Project	\$ 138,358
	Total:	\$ 138,358
1790-3R	Town of Northfield Central Street Culvert Upgrade Project	\$ 233,231
	Total:	\$ 233,231

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,

Kevin M. Merli
Kevin M. Merli, Director
Mitigation Division

Attachment

Project Review and Conditions Status

Project Name/Number: FEMA-HMGP-1790 Central Street Culvert Upgrade Project, Northfield, VT

Project Location: Central Street, Northfield, VT, as indicated on map enclosed with application.

Latitude: 44.831 N Longitude: -72.3930W

Project Description: The Town of Northfield, VT proposes to upgrade a 48-inch wide by 24-inch high corrugated metal pipe (CMP) arch at the entrance and at the exit a 30-inch CMP (The total culvert length is 130 feet.) with a 10' wide by 6' high, 150 feet long precast concrete box culvert. The bottom of the culvert would be set approximately two feet below the channel invert; four feet would be clear, an opening that meets VTrans hydraulic standards. It also meets current environmental permitting requirements by having both a width equal or greater to the stream's natural bankfull dimension, and a natural channel bottom.

Environmental Review Project Conditions

1. If ground disturbing activities occur during implementation, the applicant will monitor excavation activity, and if any artifacts or human remains are found during the excavation process all work is to cease and the applicant will notify FEMA, Grantee, and SHPO/THPO.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material the applicant must contact the Grantee and the Grantee must contact FEMA. The applicant must also contact the relevant agency with authority for regulation of the material.
3. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Other Required Project Specific Conditions

1. The applicant must comply with all applicable local, state and federal laws, regulations, policies, and requirement. Any conditions of these regulations, laws, and policies become conditions of this grant, project, and environmental review.

2. In accordance with FEMA guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA. Any conditions resulting from this process become part of this project.
3. The applicant must ensure that best managing practices for roads and culverts are utilized, and installation of erosion control. Construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act's: "Best Management Practices, BMP" for erosion control during construction of this project. This includes, the applicant applying for all local, state, and federal permits and easements necessary to complete the project and obtaining these permits prior to commencement of any work. Any conditions of these permits become conditions of this grant, project, and environmental review. In accordance with FEMA Guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA.
4. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
5. The Department of Fish & Wildlife recommends: the retention (or restoration) of natural stream bottom and stream bank conditions; the retention or establishment of naturally-vegetated riparian buffers; and, incorporating buffers and bridges or large bottomless culverts wherever possible and eliminating or minimizing the use of rip-rap to retain natural stream bank and streambed conditions.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 310,974
Federal Share	\$ 233,231
Applicant Share	\$ 77,743

Period of Performance

This project must be complete by: 7/31/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- **All permits must be obtained and forwarded to FEMA before any work begins.**
- **Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.**
- **Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal State, and laws and standards.**

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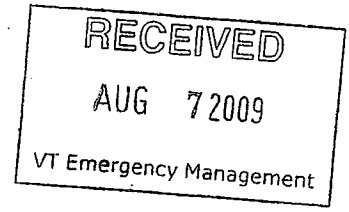
U.S. Department of Homeland Security
Region I
99 High Street, Sixth Floor
Boston, MA 02110-2132



FEMA

August 5, 2009

Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101



SUBJECT: FEMA-DR-1790-VT
Hazard Mitigation Grant Program Project #4R
Mountain Road Culvert Upgrade Project, Town of Moretown, VT

Dear Ms. Farr:

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program project:

1790-4R	Town of Moretown Mountain Road Culvert Upgrade Project	\$ 36,000
	Total:	\$ 36,000

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,

Kevin M. Merli
Kevin M. Merli, Director
Mitigation Division

Attachment

Project Review and Conditions Status

Project Name/Number: FEMA-HMGP-1790 Mountain Road Culvert Upgrade Project, Moretown, VT

Project Location: north of 3756 Mountain Road, at Cox Brook, Moretown, VT, as indicated on map enclosed with application.

Latitude: 44.234013 N Longitude: -72.712039

Project Description: The Town of Moretown, VT, proposes to upgrade a 48-inch in diameter corrugated metal pipe with a 6.5 by 4.5 precast concrete box culvert and install full flared headwalls that match the channel banks at inlet and outlet at least four feet below the channel bottom, or to ledge, to act as cutoff walls and prevent undermining. Stone fill Type II will be used to protect any disturbed channel banks or roadway slopes at the inlet and outlet up to a height of at least one foot above the top of the opening. The stone fill should not constrict the channel or structure opening. The area of installation will be resurfaced.

Environmental Review Project Conditions

1. If ground disturbing activities occur during implementation, the applicant will monitor excavation activity, and if any artifacts or human remains are found during the excavation process all work is to cease and the applicant will notify FEMA, Grantee, and SHPO/THPO.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material the applicant must contact the Grantee and the Grantee must contact FEMA. The applicant must also contact the relevant agency with authority for regulation of the material.
3. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Other Required Project Specific Conditions

1. The applicant must comply with all applicable local, state and federal laws, regulations, policies, and requirement. Any conditions of these regulations, laws, and policies become conditions of this grant, project, and environmental review.

2. In accordance with FEMA guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA. Any conditions resulting from this process become part of this project.
3. The applicant must ensure that best managing practices for roads and culverts are utilized, and installation of erosion control. Construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act's: "Best Management Practices, BMP" for erosion control during construction of this project. This includes, the applicant applying for all local, state, and federal permits and easements necessary to complete the project and obtaining these permits prior to commencement of any work. Any conditions of these permits become conditions of this grant, project, and environmental review. In accordance with FEMA Guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA.
4. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
5. The Department of Fish & Wildlife recommends: the retention (or restoration) of natural stream bottom and stream bank conditions; the retention or establishment of naturally-vegetated riparian buffers; and, incorporating buffers and bridges or large bottomless culverts wherever possible and eliminating or minimizing the use of rip-rap to retain natural stream bank and streambed conditions.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 48,000
Federal Share	\$ 36,000
Applicant Share	\$ 12,000

Period of Performance

This project must be complete by: 8/31/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- **All permits must be obtained and forwarded to FEMA before any work begins.**
- **Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.**
- **Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal State, and laws and standards.**

COPY



FEMA

August 26, 2009

Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101



SUBJECT: FEMA-DR-1790-VT Hazard Mitigation Grant Program Project

FEMA DR 1790-5F Chittenden Regional Planning Commission NFIP Outreach Project

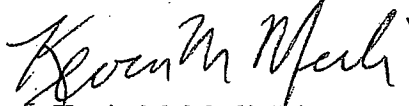
Dear Ms. Farr:

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program projects:

1790-5F	Chittenden Regional Planning Commission NFIP Outreach Project Gibou Road Culvert Upgrade Project	\$ 35,128
Total:		\$ 35,128

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,


Kevin M. Merli, Director
Mitigation Division

Attachment

Project Review and Conditions Status

Project Name/Number: FEMA-HMGP-1790 NFIP Outreach Project, Chittenden
Regional Planning Commission, VT

Project Location: Statewide

Project Description: The Chittenden Regional Planning Commission intends to provide an outreach program to several audiences through six public meetings that will be from one to three hours long. Training for local administrative staff will be provided on how to read the maps, what to do with questionable properties, the interplay of zoning and flood regulations and insurance, and the special meanings of terms like "development" or "substantial improvement" to improve the effectiveness and compliance with NFIP.

Targeted for the outreach in particular are the following towns: Barnard, Bethel, Bradford, Braintree, Bridgewater, Brookfield, Chelsea, Corinth, Fairlee, Granville, Hancock, Hartford, Hartland, Newbury, Norwich, Pittsfield, Plymouth, Pomfret, Randolph, Rochester, Royalton, Sharon, Stockbridge, Strafford, Thetford, Topsham, Tunbridge, Vershire, West Fairlee and Woodstock. The Towns of Chelsea, Stockbridge, Granville, Bethel, Sharon, Tunbridge, Fairlee, Hartland, and Newbury.

No changes to bylaws were included in the proposal. All towns in Windsor County have compliant bylaws since they have been through MapMod, but the towns now need training on understanding and following the regulations.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 46,837
Federal Share	\$ 35,128
Applicant Share	\$ 11,709

Period of Performance

This project must be complete by: 8/31/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.
- Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal State, and laws and standards.



State of Vermont
 Department of Finance & Management
 109 State Street, Pavilion Building
 Montpelier, VT 05620-0401

Agency of Administration

[phone] 802-828-2376
 [fax] 802-828-2428

**STATE OF VERMONT
 FINANCE & MANAGEMENT GRANT REVIEW FORM**

Grant Summary:		FEMA grant in response to summer 2008 flood damage			
Date:		9/16/2009			
Department:		Department of Public Safety			
Legal Title of Grant:		Hazard Mitigation Grant Program, FEMA-DR-1790-VT			
Federal Catalog #:		97.039			
Grant/Donor Name and Address:		US Department of Homeland Security, Federal Emergency Management Agency (FEMA), Region I			
Grant Period:	From:	6/30/2009	To:	9/30/2011	
Grant/Donation		\$545,842			
	SFY 1	SFY 2	SFY 3	Total	Comments
Grant Amount:	\$272,921	\$272,921	\$	\$545,842 ✓	AB
Position Information:		# Positions	Explanation/Comments		
		0 ✓			
Additional Comments:					
Department of Finance & Management					(Initial)
Secretary of Administration					(Initial)
Sent To Joint Fiscal Office					Date 10/1/09

RECEIVED
 OCT 06 2009
JOINT FISCAL OFFICE

**Dept. of Public Safety
Administration Division
Accounting Unit**

Memo

To: David Beatty, Budget & Management Analyst
From: Tracy O'Connell, Programs Administration Supervisor *TO*
Date: 09/11/09
CC: file
Re: Request for Grant Acceptance

Attached you will find a Request for Grant Acceptance for the Hazard Mitigation Grant Program, Disaster #1790, received from FEMA.

If you have any questions, please contact me at 802-241-5574 or toconnel@dps.state.vt.us.

Thank you.

REC'D SEP 14 2009

STATE OF VERMONT REQUEST FOR GRANT ACCEPTANCE (Form AA-1)

BASIC GRANT INFORMATION					
1. Agency:					
2. Department:		Public Safety			
3. Program:		Emergency Management			
4. Legal Title of Grant:		Hazard Mitigation Grant Program			
5. Federal Catalog #:		97.039			
6. Grant/Donor Name and Address: U.S. Dept. of Homeland Security/FEMA Region I 99 High St, Sixth Floor Boston, MA 02110-2132					
7. Grant Period:		From:	6/30/2009	To:	9/30/2011
8. Purpose of Grant: The Hazard Mitigation Grant Program provides States and local governments financial assistance to implement measures that will permanently reduce or eliminate future damages and losses from natural hazards through safer building practices and improving existing structures and supporting infrastructure.					
9. Impact on existing program if grant is not Accepted: The severe storms that occurred July 21, 2008 - August 12, 2008, resulted in Vermont cities and towns suffering flood damage. The President declared this a federal disaster (#1790) and made federal aid available to mitigate future reoccurring flood problems.					
10. BUDGET INFORMATION					
		SFY 1	SFY 2	SFY 3	Comments
Expenditures:		FY 2010	FY 2011	FY 2012	
Personal Services		\$	\$	\$	
Operating Expenses		\$	\$	\$	
Grants		\$363,924	\$363,924	\$	
	Total	\$363,924	\$363,924	\$	
Revenues:					
State Funds:		\$	\$	\$	
Cash		\$	\$	\$	
In-Kind		\$	\$	\$	
Federal Funds:		\$	\$	\$	
(Direct Costs)		\$272,921	\$272,921	\$	
(Statewide Indirect)		\$	\$	\$	
(Departmental Indirect)		\$	\$	\$	
Other Funds:		\$	\$	\$	
Grant (source Local Match)		\$91,003	\$91,003	\$	
	Total	\$363,924	\$363,924	\$	
Appropriation No:		2140031000	Amount:	\$545,842	
				\$	
				\$	

REC'D SEP 14 2009



FEMA

June 30, 2009

Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101

SUBJECT: FEMA-DR-1790-VT
Hazard Mitigation Grant Program Project #1R
Middlebury River Erosion Project, Town of Ripton, VT

Dear Ms. Farr:

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program project:

1790-1	Town of Ripton Ice Jam Mitigation Project	\$ 103,125
	Total:	\$ 103,125

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,


Kevin M. Merli, Director
Mitigation Division

Attachment

Project Review and Conditions Status

Project Name/Number: FEMA-HMGP-1790-1R – Ripton, VT Middlebury River Erosion Project

Project Location: Middlebury River and VT Route 125, Ripton, VT
Latitude 43.5828 N Longitude 73.0211 W

Project Description: The purpose of the Ripton, VT Middlebury River Erosion Project to reduce the road and building damage. The project consists of installing rip-rap (2000 cubic yards) on 700 feet of the northern bank in the village area to protect nearby historic properties. In addition minimum channel adjustments will be made to allow the Middlebury River to better access historic flood chutes in the village area. Construction easements will be provided. Detailed engineering plans will be submitted to Region 1 with pertinent details. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Environmental Review Project Conditions

1. If ground disturbing activities occur during implementation, the applicant will monitor excavation activity, and if any artifacts or human remains are found during the excavation process all work is to cease and the applicant will notify FEMA, Grantee, and SHPO/THPO.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material the applicant must contact the Grantee and the Grantee must contact FEMA. The applicant must also contact the relevant agency with authority for regulation of the material.
3. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Other Required Project Specific Conditions

1. The applicant must comply with all applicable local, state and federal laws, regulations, policies, and requirement. Any conditions of these regulations, laws, and policies become conditions of this grant, project, and environmental review.
2. In accordance with FEMA guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA. Any conditions resulting from this process become part of this project.
3. The applicant must ensure that best managing practices for roads and culverts are utilized, and installation of erosion control. Construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act's: "Best Management Practices, BMP" for erosion control during construction of this project. This includes, the applicant applying for all local, state, and federal permits and easements necessary to complete the project and obtaining these permits prior to commencement of any work. Any conditions of these permits become conditions of this grant, project, and environmental review. In accordance with FEMA Guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA.
4. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
5. The Department of Fish & Wildlife recommends: the retention (or restoration) of natural stream bottom and stream bank conditions; the retention or establishment of naturally-vegetated riparian buffers; and, incorporating buffers and bridges or large bottomless culverts wherever possible and eliminating or minimizing the use of rip-rap to retain natural stream bank and streambed conditions.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 137,500
Federal Share	\$ 103,125
Applicant Share	\$ 34,375

Period of Performance

This project must be complete by: 9/30/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- **All permits must be obtained and forwarded to FEMA before any work begins.**
- **Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.**
- **Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal State, and laws and standards.**

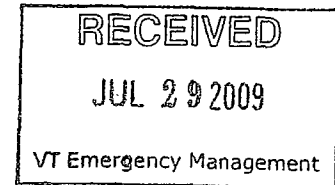
COPY

U.S. Department of Homeland Security
Region I
99 High Street, Sixth Floor
Boston, MA 02110-2132



FEMA

July 27, 2009



Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101



SUBJECT: FEMA-DR-1790-VT Hazard Mitigation Grant Program Projects

FEMA DR 1790-2R Gibou Road Culvert Upgrade Project, Town of Montgomery, VT
FEMA DR 1790-3R Central Street Culvert Upgrade Project, Town of Northfield, VT

Dear Ms. Farr: *Barbara*

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program projects:

1790-2R	Town of Montgomery Gibou Road Culvert Upgrade Project	\$ 138,358
	Total:	\$ 138,358
1790-3R	Town of Northfield Central Street Culvert Upgrade Project	\$ 233,231
	Total:	\$ 233,231

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,

Kevin M. Merli, Director
Mitigation Division

Attachment

Project Review and Conditions Status

Project Location: Gibou Road, Vermont Route 33 (about 1.1 miles from the intersection with Route 118 as indicated on map enclosed with application in Montgomery, VT

Latitude: N 44.8531797 Longitude: W -72.6143255

Project Description: The Town of Montgomery, VT proposes to replace two 4.5 foot boiler pipes with a 14' wide by 7 foot high by 35 concrete box culvert as indicated on the diagram attached to the application. In the bottom of the box a 6-inch-high retention sill (baffles) will be installed. The box invert will be buried 12" so the top of the baffles will be buried 6" and not visible. All site approach guard rails specified by AOT are also included in the project.

Environmental Review Project Conditions

1. If ground disturbing activities occur during implementation, the applicant will monitor excavation activity, and if any artifacts or human remains are found during the excavation process all work is to cease and the applicant will notify FEMA, Grantee, and SHPO/THPO.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material the applicant must contact the Grantee and the Grantee must contact FEMA. The applicant must also contact the relevant agency with authority for regulation of the material.
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Other Required Project Specific Conditions

1. The applicant must comply with all applicable local, state and federal laws, regulations, policies, and requirement. Any conditions of these regulations, laws, and policies become conditions of this grant, project, and environmental review.
2. In accordance with FEMA guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All

correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA. Any conditions resulting from this process become part of this project.

3. The applicant must ensure that best managing practices for roads and culverts are utilized, and installation of erosion control. Construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act's: "Best Management Practices, BMP" for erosion control during construction of this project. This includes, the applicant applying for all local, state, and federal permits and easements necessary to complete the project and obtaining these permits prior to commencement of any work. Any conditions of these permits become conditions of this grant, project, and environmental review. In accordance with FEMA Guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA.
4. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
5. The Department of Fish & Wildlife recommends: the retention (or restoration) of natural stream bottom and stream bank conditions; the retention or establishment of naturally-vegetated riparian buffers; and, incorporating buffers and bridges or large bottomless culverts wherever possible and eliminating or minimizing the use of rip-rap to retain natural stream bank and streambed conditions.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 184,717
Federal Share	\$ 138,538
Applicant Share	\$ 46,179

Period of Performance

This project must be complete by: 7/31/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- All permits must be obtained and forwarded to FEMA before any work begins.

- Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.
- Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal State, and laws and standards.

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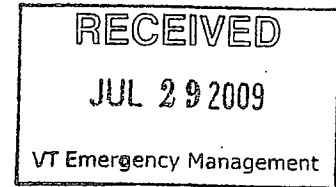
U.S. Department of Homeland Security
Region I
99 High Street, Sixth Floor
Boston, MA 02110-2132



FEMA

July 27, 2009

Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101



SUBJECT: FEMA-DR-1790-VT Hazard Mitigation Grant Program Projects

FEMA DR 1790-2R Gibou Road Culvert Upgrade Project, Town of Montgomery, VT
FEMA DR 1790-3R Central Street Culvert Upgrade Project, Town of Northfield, VT

Dear Ms. Farr: *Barbara*

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program projects:

1790-2R	Town of Montgomery Gibou Road Culvert Upgrade Project	\$ 138,358
	Total:	\$ 138,358
1790-3R	Town of Northfield Central Street Culvert Upgrade Project	\$ 233,231
	Total:	\$ 233,231

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,

Kevin M. Merli, Director
Mitigation Division

Attachment

Project Review and Conditions Status

Project Name/Number: FEMA-HMGP-1790 Central Street Culvert Upgrade Project, Northfield, VT

Project Location: Central Street, Northfield, VT, as indicated on map enclosed with application.

Latitude: 44.831 N Longitude: -72.3930W

Project Description: The Town of Northfield, VT proposes to upgrade a 48-inch wide by 24-inch high corrugated metal pipe (CMP) arch at the entrance and at the exit a 30-inch CMP (The total culvert length is 130 feet.) with a 10' wide by 6' high, 150 feet long precast concrete box culvert. The bottom of the culvert would be set approximately two feet below the channel invert; four feet would be clear, an opening that meets VTrans hydraulic standards. It also meets current environmental permitting requirements by having both a width equal or greater to the stream's natural bankfull dimension, and a natural channel bottom.

Environmental Review Project Conditions

1. If ground disturbing activities occur during implementation, the applicant will monitor excavation activity, and if any artifacts or human remains are found during the excavation process all work is to cease and the applicant will notify FEMA, Grantee, and SHPO/THPO.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material the applicant must contact the Grantee and the Grantee must contact FEMA. The applicant must also contact the relevant agency with authority for regulation of the material.
3. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Other Required Project Specific Conditions

1. The applicant must comply with all applicable local, state and federal laws, regulations, policies, and requirement. Any conditions of these regulations, laws, and policies become conditions of this grant, project, and environmental review.

2. In accordance with FEMA guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA. Any conditions resulting from this process become part of this project.
3. The applicant must ensure that best managing practices for roads and culverts are utilized, and installation of erosion control. Construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act's: "Best Management Practices, BMP" for erosion control during construction of this project. This includes, the applicant applying for all local, state, and federal permits and easements necessary to complete the project and obtaining these permits prior to commencement of any work. Any conditions of these permits become conditions of this grant, project, and environmental review. In accordance with FEMA Guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA.
4. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
5. The Department of Fish & Wildlife recommends: the retention (or restoration) of natural stream bottom and stream bank conditions; the retention or establishment of naturally-vegetated riparian buffers; and, incorporating buffers and bridges or large bottomless culverts wherever possible and eliminating or minimizing the use of rip-rap to retain natural stream bank and streambed conditions.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 310,974
Federal Share	\$ 233,231
Applicant Share	\$ 77,743

Period of Performance

This project must be complete by: 7/31/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- **All permits must be obtained and forwarded to FEMA before any work begins.**
- **Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.**
- **Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal State, and laws and standards.**

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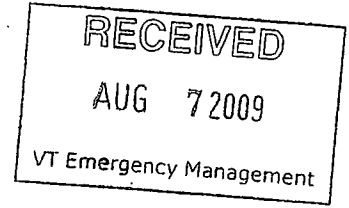
U.S. Department of Homeland Security
Region I
99 High Street, Sixth Floor
Boston, MA 02110-2132



FEMA

August 5, 2009

Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101



SUBJECT: FEMA-DR-1790-VT
Hazard Mitigation Grant Program Project #4R
Mountain Road Culvert Upgrade Project, Town of Moretown, VT

Dear Ms. Farr:

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program project:

1790-4R	Town of Moretown Mountain Road Culvert Upgrade Project	\$ 36,000
	Total:	\$ 36,000

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,

Kevin M. Merli
Kevin M. Merli, Director
Mitigation Division

Attachment

Project Review and Conditions Status

Project Name/Number: FEMA-HMGP-1790 Mountain Road Culvert Upgrade Project, Moretown, VT

Project Location: north of 3756 Mountain Road, at Cox Brook, Moretown, VT, as indicated on map enclosed with application.

Latitude: 44.234013 N Longitude: -72.712039

Project Description: The Town of Moretown, VT, proposes to upgrade a 48-inch in diameter corrugated metal pipe with a 6.5 by 4.5 precast concrete box culvert and install full flared headwalls that match the channel banks at inlet and outlet at least four feet below the channel bottom, or to ledge, to act as cutoff walls and prevent undermining. Stone fill Type II will be used to protect any disturbed channel banks or roadway slopes at the inlet and outlet up to a height of at least one foot above the top of the opening. The stone fill should not constrict the channel or structure opening. The area of installation will be resurfaced.

Environmental Review Project Conditions

1. If ground disturbing activities occur during implementation, the applicant will monitor excavation activity, and if any artifacts or human remains are found during the excavation process all work is to cease and the applicant will notify FEMA, Grantee, and SHPO/THPO.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material the applicant must contact the Grantee and the Grantee must contact FEMA. The applicant must also contact the relevant agency with authority for regulation of the material.
3. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Other Required Project Specific Conditions

1. The applicant must comply with all applicable local, state and federal laws, regulations, policies, and requirement. Any conditions of these regulations, laws, and policies become conditions of this grant, project, and environmental review.

2. In accordance with FEMA guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA. Any conditions resulting from this process become part of this project.
3. The applicant must ensure that best managing practices for roads and culverts are utilized, and installation of erosion control. Construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act's: "Best Management Practices, BMP" for erosion control during construction of this project. This includes, the applicant applying for all local, state, and federal permits and easements necessary to complete the project and obtaining these permits prior to commencement of any work. Any conditions of these permits become conditions of this grant, project, and environmental review. In accordance with FEMA Guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA.
4. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
5. The Department of Fish & Wildlife recommends: the retention (or restoration) of natural stream bottom and stream bank conditions; the retention or establishment of naturally-vegetated riparian buffers; and, incorporating buffers and bridges or large bottomless culverts wherever possible and eliminating or minimizing the use of rip-rap to retain natural stream bank and streambed conditions.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 48,000
Federal Share	\$ 36,000
Applicant Share	\$ 12,000

Period of Performance

This project must be complete by: 8/31/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- **All permits must be obtained and forwarded to FEMA before any work begins.**
- **Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.**
- **Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal State, and laws and standards.**

COPY



FEMA

August 26, 2009

Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101



SUBJECT: FEMA-DR-1790-VT Hazard Mitigation Grant Program Project

FEMA DR 1790-5F Chittenden Regional Planning Commission NFIP Outreach Project

Dear Ms. Farr:

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program projects:

1790-5F	Chittenden Regional Planning Commission NFIP Outreach Project Gibou Road Culvert Upgrade Project	\$ 35,128
Total:		\$ 35,128

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,

Kevin M. Merli, Director
Mitigation Division

Attachment

Project Review and Conditions Status

Project Name/Number: FEMA-HMGP-1790 NFIP Outreach Project, Chittenden
Regional Planning Commission, VT

Project Location: Statewide

Project Description: The Chittenden Regional Planning Commission intends to provide an outreach program to several audiences through six public meetings that will be from one to three hours long. Training for local administrative staff will be provided on how to read the maps, what to do with questionable properties, the interplay of zoning and flood regulations and insurance, and the special meanings of terms like "development" or "substantial improvement" to improve the effectiveness and compliance with NFIP.

Targeted for the outreach in particular are the following towns: Barnard, Bethel, Bradford, Braintree, Bridgewater, Brookfield, Chelsea, Corinth, Fairlee, Granville, Hancock, Hartford, Hartland, Newbury, Norwich, Pittsfield, Plymouth, Pomfret, Randolph, Rochester, Royalton, Sharon, Stockbridge, Strafford, Thetford, Topsham, Tunbridge, Vershire, West Fairlee and Woodstock. The Towns of Chelsea, Stockbridge, Granville, Bethel, Sharon, Tunbridge, Fairlee, Hartland, and Newbury.

No changes to bylaws were included in the proposal. All towns in Windsor County have compliant bylaws since they have been through MapMod, but the towns now need training on understanding and following the regulations.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 46,837
Federal Share	\$ 35,128
Applicant Share	\$ 11,709

Period of Performance

This project must be complete by: 8/31/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.
- Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal State, and laws and standards.



State of Vermont
 Department of Finance & Management
 109 State Street, Pavilion Building
 Montpelier, VT 05620-0401

Agency of Administration

[phone] 802-828-2376
 [fax] 802-828-2428

**STATE OF VERMONT
 FINANCE & MANAGEMENT GRANT REVIEW FORM**

Grant Summary:		FEMA grant in response to summer 2008 flood damage			
Date:		9/16/2009			
Department:		Department of Public Safety			
Legal Title of Grant:		Hazard Mitigation Grant Program, FEMA-DR-1790-VT			
Federal Catalog #:		97.039			
Grant/Donor Name and Address:		US Department of Homeland Security, Federal Emergency Management Agency (FEMA), Region 1			
Grant Period:	From:	6/30/2009	To:	9/30/2011	
Grant/Donation		\$545,842			
Grant Amount:	SFY 1	SFY 2	SFY 3	Total	Comments
	\$272,921	\$272,921	\$	\$545,842 ✓	AB
Position Information:		# Positions	Explanation/Comments		
		0			
Additional Comments:					
Department of Finance & Management					(Initial)
Secretary of Administration					(Initial)
Sent To Joint Fiscal Office					Date 10/1/09

RECEIVED
 OCT 06 2009
JOINT FISCAL OFFICE

**Dept. of Public Safety
Administration Division
Accounting Unit**

Memo

To: David Beatty, Budget & Management Analyst
From: Tracy O'Connell, Programs Administration Supervisor *TO*
Date: 09/11/09
CC: file
Re: Request for Grant Acceptance

Attached you will find a Request for Grant Acceptance for the Hazard Mitigation Grant Program, Disaster #1790, received from FEMA.

If you have any questions, please contact me at 802-241-5574 or toconnel@dps.state.vt.us.

Thank you.

REC'D SEP 14 2009

STATE OF VERMONT REQUEST FOR GRANT ACCEPTANCE (Form AA-1)

BASIC GRANT INFORMATION					
1. Agency:					
2. Department:		Public Safety			
3. Program:		Emergency Management			
4. Legal Title of Grant:		Hazard Mitigation Grant Program			
5. Federal Catalog #:		97.039			
6. Grant/Donor Name and Address: U.S. Dept. of Homeland Security/FEMA Region I 99 High St, Sixth Floor Boston, MA 02110-2132					
7. Grant Period:		From: 6/30/2009	To: 9/30/2011		
8. Purpose of Grant: The Hazard Mitigation Grant Program provides States and local governments financial assistance to implement measures that will permanently reduce or eliminate future damages and losses from natural hazards through safer building practices and improving existing structures and supporting infrastructure.					
9. Impact on existing program if grant is not Accepted: The severe storms that occurred July 21, 2008 - August 12, 2008, resulted in Vermont cities and towns suffering flood damage. The President declared this a federal disaster (#1790) and made federal aid available to mitigate future reoccurring flood problems.					
10. BUDGET INFORMATION					
	SFY 1	SFY 2	SFY 3	Comments	
Expenditures:	FY 2010	FY 2011	FY 2012		
Personal Services	\$	\$	\$		
Operating Expenses	\$	\$	\$		
Grants	\$363,924	\$363,924	\$		
Total	\$363,924	\$363,924	\$		
Revenues:					
State Funds:					
Cash	\$	\$	\$		
In-Kind	\$	\$	\$		
Federal Funds:					
(Direct Costs)	\$272,921	\$272,921	\$		
(Statewide Indirect)	\$	\$	\$		
(Departmental Indirect)	\$	\$	\$		
Other Funds:					
Grant (source Local Match)	\$91,003	\$91,003	\$		
Total	\$363,924	\$363,924	\$		
Appropriation No:	2140031000		Amount:	\$545,842 ✓	
				\$	
				\$	

REC'D SEP 14 2009

STATE OF VERMONT REQUEST FOR GRANT ACCEPTANCE (Form AA-1)

			\$
			\$
			\$
			\$
		Total	\$545,842

PERSONAL SERVICE INFORMATION

11. Will monies from this grant be used to fund one or more Personal Service Contracts? Yes No
 If "Yes", appointing authority must initial here to indicate intent to follow current competitive bidding process/policy.

Appointing Authority Name: _____ Agreed by: _____ (initial)

12. Limited Service Position Information:	# Positions	Title
Total Positions		

12a. Equipment and space for these positions: Is presently available. Can be obtained with available funds.

13. AUTHORIZATION AGENCY/DEPARTMENT

I/we certify that no funds beyond basic application preparation and filing costs have been expended or committed in anticipation of Joint Fiscal Committee approval of this grant, unless previous notification was made on Form AA-1PN (if applicable):	Signature: <i>Tom R. Trudy</i>	Date: 9/9/09
	Title: Commissioner	
	Signature:	Date:
	Title:	

14. ACTION BY GOVERNOR

<input checked="" type="checkbox"/> Check One Box: Accepted	<i>[Signature]</i> (Governor's signature)	9/30/09
<input type="checkbox"/> Rejected		Date:

15. SECRETARY OF ADMINISTRATION

<input checked="" type="checkbox"/> Check One Box: Request to JFO	<i>[Signature]</i> (Secretary's signature or designee)	Date:
<input type="checkbox"/> Information to JFO		9/22/09

16. DOCUMENTATION REQUIRED

Required GRANT Documentation

<input type="checkbox"/> Request Memo	<input type="checkbox"/> Notice of Donation (if any)
<input type="checkbox"/> Dept. project approval (if applicable)	<input type="checkbox"/> Grant (Project) Timeline (if applicable)
<input type="checkbox"/> Notice of Award	<input type="checkbox"/> Request for Extension (if applicable)
<input type="checkbox"/> Grant Agreement	<input type="checkbox"/> Form AA-1PN attached (if applicable)
<input type="checkbox"/> Grant Budget	

End Form AA-1



FEMA

June 30, 2009

Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101

SUBJECT: FEMA-DR-1790-VT
Hazard Mitigation Grant Program Project #1R
Middlebury River Erosion Project, Town of Ripton, VT

Dear Ms. Farr:

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program project:

1790-1	Town of Ripton Ice Jam Mitigation Project	\$ 103,125
	Total:	\$ 103,125

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,


Kevin M. Merli, Director
Mitigation Division

Attachment

Project Review and Conditions Status

Project Name/Number: FEMA-HMGP-1790-1R – Ripton, VT Middlebury River
Erosion Project

Project Location: Middlebury River and VT Route 125, Ripton, VT
Latitude 43.5828 N Longitude 73.0211 W

Project Description: The purpose of the Ripton, VT Middlebury River Erosion Project to reduce the road and building damage. The project consists of installing rip-rap (2000 cubic yards) on 700 feet of the northern bank in the village area to protect nearby historic properties. In addition minimum channel adjustments will be made to allow the Middlebury River to better access historic flood chutes in the village area. Construction easements will be provided. Detailed engineering plans will be submitted to Region 1 with pertinent details. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Environmental Review Project Conditions

1. If ground disturbing activities occur during implementation, the applicant will monitor excavation activity, and if any artifacts or human remains are found during the excavation process all work is to cease and the applicant will notify FEMA, Grantee, and SHPO/THPO.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material the applicant must contact the Grantee and the Grantee must contact FEMA. The applicant must also contact the relevant agency with authority for regulation of the material.
3. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Other Required Project Specific Conditions

1. The applicant must comply with all applicable local, state and federal laws, regulations, policies, and requirement. Any conditions of these regulations, laws, and policies become conditions of this grant, project, and environmental review.
2. In accordance with FEMA guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA. Any conditions resulting from this process become part of this project.
3. The applicant must ensure that best managing practices for roads and culverts are utilized, and installation of erosion control. Construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act's: "Best Management Practices, BMP" for erosion control during construction of this project. This includes, the applicant applying for all local, state, and federal permits and easements necessary to complete the project and obtaining these permits prior to commencement of any work. Any conditions of these permits become conditions of this grant, project, and environmental review. In accordance with FEMA Guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA.
4. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
5. The Department of Fish & Wildlife recommends: the retention (or restoration) of natural stream bottom and stream bank conditions; the retention or establishment of naturally-vegetated riparian buffers; and, incorporating buffers and bridges or large bottomless culverts wherever possible and eliminating or minimizing the use of rip-rap to retain natural stream bank and streambed conditions.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 137,500
Federal Share	\$ 103,125
Applicant Share	\$ 34,375

Period of Performance

This project must be complete by: 9/30/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- **All permits must be obtained and forwarded to FEMA before any work begins.**
- **Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.**
- **Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal State, and laws and standards.**

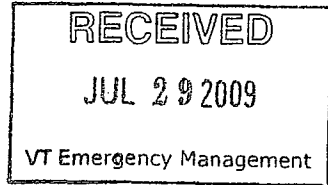
COPY

U.S. Department of Homeland Security
Region I
99 High Street, Sixth Floor
Boston, MA 02110-2132



FEMA

July 27, 2009



Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101



SUBJECT: FEMA-DR-1790-VT Hazard Mitigation Grant Program Projects

FEMA DR 1790-2R Gibou Road Culvert Upgrade Project, Town of Montgomery, VT
FEMA DR 1790-3R Central Street Culvert Upgrade Project, Town of Northfield, VT

Dear Ms. Farr: *Barbara*

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program projects:

1790-2R	Town of Montgomery Gibou Road Culvert Upgrade Project	\$ 138,358
	Total:	\$ 138,358
1790-3R	Town of Northfield Central Street Culvert Upgrade Project	\$ 233,231
	Total:	\$ 233,231

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,

Kevin M. Merli
Kevin M. Merli, Director
Mitigation Division

Attachment

Project Review and Conditions Status

Project Location: Gibou Road, Vermont Route 33 (about 1.1 miles from the intersection with Route 118 as indicated on map enclosed with application in Montgomery, VT

Latitude: N 44 .8531797 Longitude: W -72.6143255

Project Description: The Town of Montgomery, VT proposes to replace two 4.5 foot boiler pipes with a 14' wide by 7 foot high by 35 concrete box culvert as indicated on the diagram attached to the application. In the bottom of the box a 6-inch-high retention sill (baffles) will be installed. The box invert will be buried 12" so the top of the baffles will be buried 6" and not visible. All site approach guard rails specified by AOT are also included in the project.

Environmental Review Project Conditions

1. If ground disturbing activities occur during implementation, the applicant will monitor excavation activity, and if any artifacts or human remains are found during the excavation process all work is to cease and the applicant will notify FEMA, Grantee, and SHPO/THPO.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material the applicant must contact the Grantee and the Grantee must contact FEMA. The applicant must also contact the relevant agency with authority for regulation of the material.
3. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Other Required Project Specific Conditions

1. The applicant must comply with all applicable local, state and federal laws, regulations, policies, and requirement. Any conditions of these regulations, laws, and policies become conditions of this grant, project, and environmental review.
2. In accordance with FEMA guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All

correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA. Any conditions resulting from this process become part of this project.

3. The applicant must ensure that best managing practices for roads and culverts are utilized, and installation of erosion control. Construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act's: "Best Management Practices, BMP" for erosion control during construction of this project. This includes, the applicant applying for all local, state, and federal permits and easements necessary to complete the project and obtaining these permits prior to commencement of any work. Any conditions of these permits become conditions of this grant, project, and environmental review. In accordance with FEMA Guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA.
4. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
5. The Department of Fish & Wildlife recommends: the retention (or restoration) of natural stream bottom and stream bank conditions; the retention or establishment of naturally-vegetated riparian buffers; and, incorporating buffers and bridges or large bottomless culverts wherever possible and eliminating or minimizing the use of rip-rap to retain natural stream bank and streambed conditions.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 184,717
Federal Share	\$ 138,538
Applicant Share	\$ 46,179

Period of Performance

This project must be complete by: 7/31/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- All permits must be obtained and forwarded to FEMA before any work begins.

- Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.
- Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal, State, and local laws and standards.

COPY

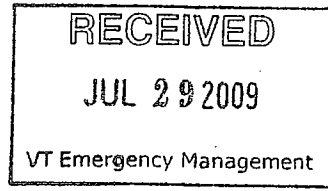
U.S. Department of Homeland Security
Region I
99 High Street, Sixth Floor
Boston, MA 02110-2132



FEMA

July 27, 2009

Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101



SUBJECT: FEMA-DR-1790-VT Hazard Mitigation Grant Program Projects

FEMA DR 1790-2R Gibou Road Culvert Upgrade Project, Town of Montgomery, VT
FEMA DR 1790-3R Central Street Culvert Upgrade Project, Town of Northfield, VT

Dear Ms. Farr: *Barbara*

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program projects:

1790-2R	Town of Montgomery	
	Gibou Road Culvert Upgrade Project	\$ 138,358
	Total:	\$ 138,358
1790-3R	Town of Northfield	
	Central Street Culvert Upgrade Project	\$ 233,231
	Total:	\$ 233,231

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,

Kevin M. Merli, Director
Mitigation Division

Attachment

Project Review and Conditions Status

Project Name/Number: FEMA-HMGP-1790 Central Street Culvert Upgrade Project, Northfield, VT

Project Location: Central Street, Northfield, VT, as indicated on map enclosed with application.

Latitude: 44.831 N Longitude: -72.3930W

Project Description: The Town of Northfield, VT proposes to upgrade a 48-inch wide by 24-inch high corrugated metal pipe (CMP) arch at the entrance and at the exit a 30-inch CMP (The total culvert length is 130 feet.) with a 10' wide by 6' high, 150 feet long precast concrete box culvert. The bottom of the culvert would be set approximately two feet below the channel invert; four feet would be clear, an opening that meets VTrans hydraulic standards. It also meets current environmental permitting requirements by having both a width equal or greater to the stream's natural bankfull dimension, and a natural channel bottom.

Environmental Review Project Conditions

1. If ground disturbing activities occur during implementation, the applicant will monitor excavation activity, and if any artifacts or human remains are found during the excavation process all work is to cease and the applicant will notify FEMA, Grantee, and SHPO/THPO.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material the applicant must contact the Grantee and the Grantee must contact FEMA. The applicant must also contact the relevant agency with authority for regulation of the material.
3. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Other Required Project Specific Conditions

1. The applicant must comply with all applicable local, state and federal laws, regulations, policies, and requirement. Any conditions of these regulations, laws, and policies become conditions of this grant, project, and environmental review.

2. In accordance with FEMA guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA. Any conditions resulting from this process become part of this project.
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4. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
5. The Department of Fish & Wildlife recommends: the retention (or restoration) of natural stream bottom and stream bank conditions; the retention or establishment of naturally-vegetated riparian buffers; and, incorporating buffers and bridges or large bottomless culverts wherever possible and eliminating or minimizing the use of rip-rap to retain natural stream bank and streambed conditions.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 310,974
Federal Share	\$ 233,231
Applicant Share	\$ 77,743

Period of Performance

This project must be complete by: 7/31/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- **All permits must be obtained and forwarded to FEMA before any work begins.**
- **Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.**
- **Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal State, and laws and standards.**

COPY

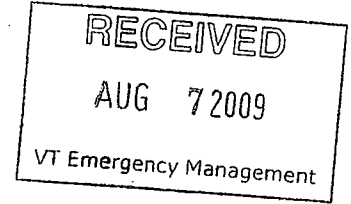
U.S. Department of Homeland Security
Region I
99 High Street, Sixth Floor
Boston, MA 02110-2132



FEMA

August 5, 2009

Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101



SUBJECT: FEMA-DR-1790-VT
Hazard Mitigation Grant Program Project #4R
Mountain Road Culvert Upgrade Project, Town of Moretown, VT

Dear Ms. Farr:

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program project:

1790-4R	Town of Moretown Mountain Road Culvert Upgrade Project	\$ 36,000
	Total:	\$ 36,000

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,

Kevin M. Merli
Kevin M. Merli, Director
Mitigation Division

Attachment

Project Review and Conditions Status

Project Name/Number: FEMA-HMGP-1790 Mountain Road Culvert Upgrade Project, Moretown, VT

Project Location: north of 3756 Mountain Road, at Cox Brook, Moretown, VT, as indicated on map enclosed with application.

Latitude: 44.234013 N Longitude: -72.712039

Project Description: The Town of Moretown, VT, proposes to upgrade a 48-inch in diameter corrugated metal pipe with a 6.5 by 4.5 precast concrete box culvert and install full flared headwalls that match the channel banks at inlet and outlet at least four feet below the channel bottom, or to ledge, to act as cutoff walls and prevent undermining. Stone fill Type II will be used to protect any disturbed channel banks or roadway slopes at the inlet and outlet up to a height of at least one foot above the top of the opening. The stone fill should not constrict the channel or structure opening. The area of installation will be resurfaced.

Environmental Review Project Conditions

1. If ground disturbing activities occur during implementation, the applicant will monitor excavation activity, and if any artifacts or human remains are found during the excavation process all work is to cease and the applicant will notify FEMA, Grantee, and SHPO/THPO.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material the applicant must contact the Grantee and the Grantee must contact FEMA. The applicant must also contact the relevant agency with authority for regulation of the material.
3. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Other Required Project Specific Conditions

1. The applicant must comply with all applicable local, state and federal laws, regulations, policies, and requirement. Any conditions of these regulations, laws, and policies become conditions of this grant, project, and environmental review.

2. In accordance with FEMA guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA. Any conditions resulting from this process become part of this project.
3. The applicant must ensure that best managing practices for roads and culverts are utilized, and installation of erosion control. Construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act's: "Best Management Practices, BMP" for erosion control during construction of this project. This includes, the applicant applying for all local, state, and federal permits and easements necessary to complete the project and obtaining these permits prior to commencement of any work. Any conditions of these permits become conditions of this grant, project, and environmental review. In accordance with FEMA Guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA.
4. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
5. The Department of Fish & Wildlife recommends: the retention (or restoration) of natural stream bottom and stream bank conditions; the retention or establishment of naturally-vegetated riparian buffers; and, incorporating buffers and bridges or large bottomless culverts wherever possible and eliminating or minimizing the use of rip-rap to retain natural stream bank and streambed conditions.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 48,000
Federal Share	\$ 36,000
Applicant Share	\$ 12,000

Period of Performance

This project must be complete by: 8/31/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- **All permits must be obtained and forwarded to FEMA before any work begins.**
- **Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.**
- **Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal State, and laws and standards.**

COPY



FEMA

August 26, 2009

Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101



SUBJECT: FEMA-DR-1790-VT Hazard Mitigation Grant Program Project

FEMA DR 1790-5F Chittenden Regional Planning Commission NFIP Outreach Project

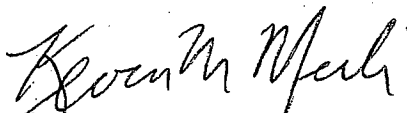
Dear Ms. Farr:

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program projects:

1790-5F	Chittenden Regional Planning Commission NFIP Outreach Project Gibou Road Culvert Upgrade Project	\$ 35,128
Total:		\$ 35,128

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,


Kevin M. Merli, Director
Mitigation Division

Attachment

Project Review and Conditions Status

Project Name/Number: FEMA-HMGP-1790 NFIP Outreach Project, Chittenden
Regional Planning Commission, VT

Project Location: Statewide

Project Description: The Chittenden Regional Planning Commission intends to provide an outreach program to several audiences through six public meetings that will be from one to three hours long. Training for local administrative staff will be provided on how to read the maps, what to do with questionable properties, the interplay of zoning and flood regulations and insurance, and the special meanings of terms like "development" or "substantial improvement" to improve the effectiveness and compliance with NFIP.

Targeted for the outreach in particular are the following towns: Barnard, Bethel, Bradford, Braintree, Bridgewater, Brookfield, Chelsea, Corinth, Fairlee, Granville, Hancock, Hartford, Hartland, Newbury, Norwich, Pittsfield, Plymouth, Pomfret, Randolph, Rochester, Royalton, Sharon, Stockbridge, Strafford, Thetford, Topsham, Tunbridge, Vershire, West Fairlee and Woodstock. The Towns of Chelsea, Stockbridge, Granville, Bethel, Sharon, Tunbridge, Fairlee, Hartland; and Newbury.

No changes to bylaws were included in the proposal. All towns in Windsor County have compliant bylaws since they have been through MapMod, but the towns now need training on understanding and following the regulations.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 46,837
Federal Share	\$ 35,128
Applicant Share	\$ 11,709

Period of Performance

This project must be complete by: 8/31/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- **Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.**
- **Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal State, and laws and standards.**



FEMA

June 30, 2009

Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101

SUBJECT: FEMA-DR-1790-VT
Hazard Mitigation Grant Program Project #1R
Middlebury River Erosion Project, Town of Ripton, VT

Dear Ms. Farr:

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program project:

1790-1	Town of Ripton Ice Jam Mitigation Project	\$ 103,125
	Total:	\$ 103,125

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,


Kevin M. Merli, Director
Mitigation Division

Attachment

Record of Environmental Consideration

See 44 Code of Federal Regulation Part 10.

Project Name/Number: FEMA-HMGP-1790-1R – Ripton, VT Middlebury River Erosion Project

Project Location: Middlebury River and VT Route 125, Ripton, VT

Latitude 43.5828 N Longitude 73.0211 W

Project Description: The purpose of the Ripton, VT Middlebury River Erosion Project to reduce the road and building damage. The project consists of installing rip-rap (2000 cubic yards) on 700 feet of the northern bank in the village area to protect nearby historic properties. In addition minimum channel adjustments will be made to allow the Middlebury River to better access historic flood chutes in the village area. Construction easements will be provided. Detailed engineering plans will be submitted to Region 1 with pertinent details. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Documentation Requirements

- No Documentation Required (**Review Concluded**)
- (**Short version**) All consultation and agreements implemented to comply with the National Historic Preservation Act, Endangered Species Act, and Executive Orders 11988, 11990 and 12898 are completed and no other laws apply. (**Review Concluded**)
- (**Long version**) All applicable laws and executive orders were reviewed. Additional information for compliance is attached to this REC.

National Environmental Policy Act (NEPA) Determination

- Statutorily excluded from NEPA review. (**Review Concluded**)
- Categorical Exclusion - Category (xi, xv & xvi) **Type** Single Project
 - No Extraordinary Circumstances exist.
 - Are project conditions required? Yes (see section V) No (**Review Concluded**)
 - Extraordinary Circumstances exist (See Section IV).
 - Extraordinary Circumstances mitigated. (See Section IV comments)
 - Are project conditions required? Yes (see section V) No (**Review Concluded**)
 - Environmental Assessment required. See FONSI for determination, conditions and approval.
- Environmental Assessment required. See FONSI for determination, conditions and approval.

Comments: This is a project within the area of previously disturbed ground. See project description.

Reviewer and Approvals

FEMA Environmental Reviewer.

Name: Judith A. Maloney

Signature Judith A. Maloney Date 6-16-09

FEMA Regional Environmental Officer or delegated approving official.

Name: John P. Sullivan

Signature John P. Sullivan Date 6/17/09

I. Compliance Review for Environmental Laws (other than NEPA)

A. National Historic Preservation Act

- Not type of activity with potential to affect historic properties. **(Review Concluded)**
- Applicable executed Programmatic Agreement. Sept. 23, 2002 Otherwise, conduct standard Section 106 review.
 - Activity meets Programmatic Allowance # Appendix (B,IA)
 - Are project conditions required? Yes (see section V) No **(Review Concluded)**

HISTORIC BUILDINGS AND STRUCTURES

- No historic properties 50 years or older in project area. **(Review Concluded)**
- Building or structure 50 years or older in project area and activity not exempt from review.
 - Determination of No Historic Properties Affected (FEMA finding/SHPO/THPO concurrence on file)
 - Are project conditions required? Yes (see section V) No **(Review Concluded)**
 - Determination of Historic Properties Affected (FEMA finding/SHPO/THPO concurrence on file)
 - Property a National Historic Landmark and National Park Service was provided early notification during the consultation process. If not, explain in comments
 - No Adverse Effect Determination (FEMA finding/SHPO/THPO concurrence on file).
 - Are project conditions required? Yes (see section V) No **(Review Concluded)**
 - Adverse Effect Determination (FEMA finding/SHPO/THPO concurrence on file)
 - Resolution of Adverse Effect completed. (MOA on file)
 - Are project conditions required Yes (see section V) No **(Review Concluded)**

ARCHEOLOGICAL RESOURCES

- Project affects only previously disturbed ground. **(Review Concluded)**
- Project affects undisturbed ground.
 - Project area has no potential for presence of archeological resources
 - Determination of no historic properties affected (FEMA finding/SHPO/THPO concurrence or consultation on file). **(Review Concluded)**
 - Project area has potential for presence of archeological resources
 - Determination of no historic properties affected (FEMA finding/SHPO/THPO concurrence on file)

Are project conditions required Yes (see section V) No **(Review Concluded)**
 Determination of historic properties affected
 NR eligible resources not present (FEMA finding/SHPO/THPO concurrence on file).

Are project conditions required Yes (see section V) No **(Review Concluded)**
 NR eligible resources present in project area. (FEMA finding/ SHPO/THPO concurrence on file)
 No Adverse Effect Determination. (FEMA finding/ SHPO/THPO concurrence on file)

Are project conditions required? Yes (see section V) No **(Review Concluded)**
 Adverse Effect Determination. (FEMA finding/ SHPO/THPO concurrence on file)

Resolution of Adverse Effect completed. (MOA on file)
Are project conditions required? Yes (see section V) No **(Review Concluded)**

Comments: This project involves rip rapping part of the riverbank to harden the slope to control erosion. The project will protect historic properties by stabilizing the nearby riverbank. Although historic properties are nearby, they are not in the project area. Correspondence/Consultation/References: The Vermont Programmatic Agreement covers the hardening of slope stabilization systems within the area of previously disturbed ground (Appendix B,IA).

B. Endangered Species Act

No listed species and/or designated critical habitat present in the action area. **(Review Concluded)**
 Listed species and/or designated critical habitat present in the action area.
 No effect to species or designated critical habitat. (See comments for justification) **(Review Concluded)**
 May affect, but not likely to adversely affect species or designated critical habitat (FEMA determination/USFWS/NMFS concurrence on file) **(Review Concluded)**
 Likely to adversely affect species or designated critical habitat
 Formal consultation concluded. (Biological Assessment and Biological Opinion on file)
Are project conditions required? YES (see section V) NO **(Review Concluded)**

*Comments: Review by Judith Maloney, FEMA, of U.S. Fish and Wildlife Service Endangered Species web site revealed that no federally listed or proposed threatened and endangered species under the jurisdiction of the U.S. Fish and Wildlife are known to occur in the vicinity of the areas of proposed projects.
Correspondence/Consultation/References: U.S. Fish and Wildlife Service Endangered Species web site*

C. Coastal Barrier Resources Act

Project is not located in Coastal Barriers Resource System or Otherwise Protected Area.
 Project does not affect a coastal barrier within the COBRA System (regardless of in or out) **(Review Concluded)**

- Project is located in a coastal barrier system and/or affects a coastal barrier. (FEMA determination/USFWS consultation on file)
 - Proposed action an exception under Section 3505.a.6? **(Review Concluded)**
 - Proposed action not excepted under Section 3505.a.6.
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

*Comments: N/A This project is not in or near a coastal area.
Correspondence/Consultation/References: Review of Vermont, N.E. maps*

D. Clean Water Act

- Project site located outside of and would not affect any waters of the U.S. **(Review Concluded)**
- Project site located in or would affect waters, including wetlands, of the U.S.
 - Project exempted as in kind replacement or other exemption. **(Review Concluded)**
 - Project requires Section 404/401/10 permit, including qualification under Nationwide Permits.
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

*Comments: Project improvements will require permits from appropriate local, state, and federal agencies. Additionally, construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act, " Best Management Practices BMP". The Town must contact the US Army Corps of Engineers to inquire if a permit is required. The Town will need to obtain all necessary permits from relevant state agencies after the project specifications have been completed.
Correspondence / Consultation / References: Section 10 of the Rivers and Harbors Act, Section 404 of the Clean Water Act, (Re: determinations and acquisition of appropriate permits), and local Conservation Commission regulations.*

E. Coastal Zone Management Act

- Project does not affect a coastal zone area (regardless of in or out) **(Review concluded)**
- Project is not located in a coastal zone area – **(Review concluded)**
- Project is located in a coastal zone area and/or affects the coastal zone
 - State administering agency does not require consistency review. **(Review Concluded).**
 - State administering agency requires consistency review.
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

*Comments: N/A This project is not in or near a coastal area.
Correspondence/Consultation/References: Review of Vermont, N.E. maps*

F. Fish and Wildlife Coordination Act

- Project is not located in or affects a waterway/body of water. **(Review Concluded)**
- Project affects, controls or modifies a waterway/body of water.
 - Coordination with USFWS conducted
 - No Recommendations offered by USFWS. **(Review Concluded)**
 - Recommendations provided by USFWS.
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: N/A This project is not in or near a coastal area.
Correspondence/Consultation/References: Review of Vermont, N.E. maps

G. Clean Air Act

- Project will not result in permanent air emissions. **(Review Concluded)**
- Project is located in an attainment area. **(Review Concluded)**
- Project is located in a non-attainment area.
 - Coordination required with applicable state administering agency.
 - Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Only minimal, temporary dust and increased emissions from construction vehicles caused by a routine construction project might occur.
Correspondence/Consultation/References: project description

H. Farmlands Protection Policy Act

- Project does not affect prime or unique farmland. **(Review Concluded)**
- Project causes unnecessary or irreversible conversion of prime or unique farmland.
 - Coordination with Natural Resource Conservation Commission required.
 - Farmland Conversion Impact Rating, Form AD-1006, completed.
 - Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: No commitment of farm lands
Correspondence/Consultation/References: The project has no negative impact on farm lands. See enclosed pictures of project area and project description.

I. Migratory Bird Treaty Act

- Project not located within a flyway zone. **(Review Concluded)**
- Project located within a flyway zone.
 - Project does not have potential to take migratory birds. **(Review Concluded)**
 - Project has potential to take migratory birds.
 - Contact made with USFWS
 - Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: N/A This project is not in or near a coastal area.
Correspondence/Consultation/References: Review of Vermont, N.E. maps

J. Magnuson-Stevens Fishery Conservation and Management Act

- Project not located in or near Essential Fish Habitat. **(Review Concluded)**
- Project located in or near Essential Fish Habitat.
 - Project does not adversely affect Essential Fish Habitat. **(Review Concluded)**
 - Project adversely affects Essential Fish Habitat (FEMA determination/USFWS/NMFS concurrence on file)
 - NOAA Fisheries provided no recommendation(s) **(Review Concluded)**.
 - NOAA Fisheries provided recommendation(s)
 - Written reply to NOAA Fisheries recommendations completed.
 - Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: N/A This project is not in or near a coastal area.

Correspondence/Consultation/References: Review of Vermont, N.E. maps

K. Wild and Scenic Rivers Act

- Project is not along and does not affect Wild or Scenic River - **(Review Concluded)**
 - Project is along or affects Wild or Scenic River
 - Project adversely affects WSR as determined by NPS/USFS. **FEMA cannot fund the action.** (NPS/USFS/USFWS/BLM consultation on file)
 - Project does not adversely affect WSR. (NPS/USFS/USFWS/BLM consultation on file)
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: N/A Middlebury River is not a designated river.

Correspondence/Consultation/References: Review of Web site <http://www.nps.gov/rivers/wildriverslisthtml#vt>

L. Other Relevant Laws and Environmental Regulations

Identify relevant law or regulations, resolution and any consultation/references *Not applicable.*

II. Compliance Review for Executive Orders

A. E.O. 11988 - Floodplains

- Outside Floodplain and No Effect on Floodplains/Flood levels - **(Review Concluded)**
 - Located in Floodplain or Effects on Floodplains/Flood levels
 - No adverse effect on floodplain or can be adversely affected by the floodplain. **(Review Concluded).**
 - Beneficial Effect on Floodplain Occupancy/Values **(Review Concluded).**
 - Possible adverse effects associated with investment in floodplain, occupancy or modification of floodplain environment
 - 8 Step Process Complete - documentation on file
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: This project will decrease the erosion of part of the bank of the Middlebury River into the river and protect the road and buildings from erosion damage.

Correspondence/Consultation/References: Project is located in a FEMA designated A zone, a special flood hazard area inundated by the 100 year flood. Flood Insurance Rate Map, Town of Ripton, VT, Addison County, Community-number 500010 B, effective date Sept. 18, 1985.

B. E.O. 11990 - Wetlands

- Outside Wetland and No Effect on Wetland(s) - **(Review Concluded)**
 - Located in Wetland or effects Wetland(s)
 - Beneficial Effect on Wetland - **(Review Concluded)**
 - Possible adverse effect associated with constructing in or near wetland
 - Review completed as part of floodplain review
 - 8 Step Process Complete - documentation on file
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Project will be in the floodway and flood plain (See project description).
Correspondence/Consultation/References: Project is located in a FEMA designated A zone, a special flood hazard area inundated by the 100 year flood. Flood Insurance Rate Map, Town of Ripton, VT, Addison County, Community-number 500010 B, effective date Sept. 18, 1985.

C. E.O. 12898 - Environmental Justice for Low Income and Minority Populations

- No Low income or minority population in, near or affected by the project - **(Review Concluded)**
- Low income or minority population in or near project area
 - No disproportionately high and adverse impact on low income or minority population- **(Review Concluded)**
 - Disproportionately high or adverse effects on low income or minority population
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Project will benefit residents of the erosion area.
Correspondence/Consultation/References: Project description

III. Other Environmental Issues

Identify other potential environmental concerns in the comment box not clearly falling under a law or executive order (see environmental concerns scoping checklist for guidance).

Comments: A review of the scoping guidance indicates no other environmental concerns.
Correspondence/Consultation/References:

IV. Extraordinary Circumstances

Based on the review of compliance with other environmental laws and Executive Orders, and in consideration of other environmental factors, review the project for extraordinary circumstances.

* A "Yes" under any circumstance may require an Environmental Assessment (EA) with the exception of (ii) which should be applied in conjunction with controversy on an environmental issue. If the circumstance can be mitigated, please explain in comments. If no, leave blank.

Yes

- (i) Greater scope or size than normally experienced for a particular category of action
- (ii) Actions with a high level of public controversy
- (iii) Potential for degradation, even though slight, of already existing poor environmental conditions;
- (iv) Employment of unproven technology with potential adverse effects or actions involving unique or unknown environmental risks;
- (v) Presence of endangered or threatened species or their critical habitat, or archaeological, cultural, historical or other protected resources;
- (vi) Presence of hazardous or toxic substances at levels which exceed Federal, state or local regulations or standards requiring action or attention;
- (vii) Actions with the potential to affect special status areas adversely or other critical resources such as wetlands, coastal zones, wildlife refuge and wilderness areas, wild and scenic rivers, sole or principal drinking water aquifers;
- (viii) Potential for adverse effects on health or safety; and
- (ix) Potential to violate a federal, state, local or tribal law or requirement imposed for the protection of the environment.

- (x) Potential for significant cumulative impact when the proposed action is combined with other past, present and reasonably foreseeable future actions, even though the impacts of the proposed action may not be significant by themselves.

Comments: Not applicable-no additional environmental concerns.

V. Environmental Review Project Conditions

General comments:

1. If ground disturbing activities occur during implementation, the applicant will monitor excavation activity, and if any artifacts or human remains are found during the excavation process all work is to cease and the applicant will notify FEMA, Grantee, and SHPO/THPO.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material the applicant must contact the Grantee and the Grantee must contact FEMA. The applicant must also contact the relevant agency with authority for regulation of the material.
3. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Other Required Project Specific Conditions

1. The applicant must comply with all applicable local, state and federal laws, regulations, policies, and requirement. Any conditions of these regulations, laws, and policies become conditions of this grant, project, and environmental review.
2. In accordance with FEMA guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA. Any conditions resulting from this process become part of this project.
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USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA.

4. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
5. The Department of Fish & Wildlife recommends: the retention (or restoration) of natural stream bottom and stream bank conditions; the retention or establishment of naturally-vegetated riparian buffers; and, incorporating buffers and bridges or large bottomless culverts wherever possible and eliminating or minimizing the use of rip-rap to retain natural stream bank and streambed conditions.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Project Review and Conditions Status

Project Name/Number: FEMA-HMGP-1790-1R – Ripton, VT Middlebury River
Erosion Project

Project Location: Middlebury River and VT Route 125, Ripton, VT
Latitude 43.5828 N Longitude 73.0211 W

Project Description: The purpose of the Ripton, VT Middlebury River Erosion Project to reduce the road and building damage. The project consists of installing rip-rap (2000 cubic yards) on 700 feet of the northern bank in the village area to protect nearby historic properties. In addition minimum channel adjustments will be made to allow the Middlebury River to better access historic flood chutes in the village area. Construction easements will be provided. Detailed engineering plans will be submitted to Region 1 with pertinent details. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

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4. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
5. The Department of Fish & Wildlife recommends: the retention (or restoration) of natural stream bottom and stream bank conditions; the retention or establishment of naturally-vegetated riparian buffers; and, incorporating buffers and bridges or large bottomless culverts wherever possible and eliminating or minimizing the use of rip-rap to retain natural stream bank and streambed conditions.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 137,500
Federal Share	\$ 103,125
Applicant Share	\$ 34,375

Period of Performance

This project must be complete by: 9/30/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- All permits must be obtained and forwarded to FEMA before any work begins.
- Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.
- Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal State, and laws and standards.

7:00 AM

HAZARD MITIGATION GRANT PROGRAM

Allocation Request

Disaster Number : 1790

Allocation Number : 0

IFMIS Status : Accept

IFMIS Date :06/29/2009

FEMA Project Number	Proj Amend Number	State Appl ID	FY	Project Amount	Grantee Admin Est	Subgrantee Admin Est	Total Allocation	Proj Total Fed Share	Proj Fed Share Prev Alloc	Max Avail for Curr Alloc
1-R	0	1	2009	\$103,125	\$0	\$0	\$103,125	\$103,125	\$103,125	\$0
TOTALS				\$103,125	\$	\$0	\$103,125			

Comments

Date: 06 / 23 / 2009

User Id: JMALONE2

Comment: allocation of \$103,125 approved

Date: 06 / 23 / 2009

User Id: KTIRRELL

Comment: HMO approves allocation of \$103,125

Authorization

Preparer Name : JUDITH MALONEY

Preparation Date : 06/23/2009

HMO Authorization Name : KERRI ANN TIRRELL

HMO Authorization Date : 06/24/2009

Allocation Request with Signature

Disaster Number : 1790 Allocation Number : 0 IFMIS Status : Accept IFMIS Date : 06/29/2009

FEMA Project Number	Proj Amend Number	State Appl ID	FY	Project Amount	Grantee Admin Est	Subgrantee Admin Est	Total Allocation	Proj Total Fed Share	Proj Fed Share Prev Alloc	Max Avail for Curr Alloc
1 - R	0	1	2009	\$103,125	\$0	\$0	\$103,125	\$103,125	\$103,125	\$0
TOTALS				\$103,125	\$	\$0	\$103,125			

Comments

Date: 06 / 23 / 2009 User Id: JMALONE2

Comment: allocation of \$103,125 approved

Date: 06 / 23 / 2009 User Id: KTIRRELL

Comment: HMO approves allocation of \$103,125

Authorization

Preparer Name : JUDITH MALONEY

Preparation Date : 06/23/2009

HMO Authorization Name : KERRI ANN TIRRELL

HMO Authorization Date : 06/24/2009

K. Maloney
Authorizing Official Signature

M.A. DD
Authorizing Official Title

6/30/09
Authorization Date

Authorizing Official Signature

Authorizing Official Title

Authorization Date

FEDERAL EMERGENCY MANAGEMENT AGENCY
HAZARD MITIGATION GRANTS PROGRAM
Obligation Report w/ Signatures

Disaster No	FEMA Project No	Amendment No	State Application ID	Action No	Supplemental No	State	Grantee
1790	1-R	0	1	1	0	VT	Statewide

Subgrantee: Ripton (Town of)
Subgrantee FIPS Code: 001-59650

Project Title : Ripton, VT Middlebury River Erosion Project

Total Amount Previously Allocated	Total Amount Previously Obligated	Total Amount Pending Obligation	Total Amount Available for New Obligation	Project Amount	Grantee Admin Est	Subgrantee Admin Est	Total Obligation	IFMIS Date	IFMIS Status	FY
\$103,125	\$103,125	\$0	\$0	\$103,125	\$0	\$0	\$103,125	06/29/2009	Accept	2009

Comments

Date: 06/29/2009 User Id: JMALONE2

Comment: obligation of \$103,125 approved

Date: 06/29/2009 User Id: KTIRRELL

Comment: obligation approved \$103,125

Authorization

Preparer Name: JUDITH MALONEY

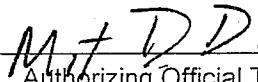
Preparation Date: 06/29/2009

HMO Authorization Name: KERRI ANN TIRRELL

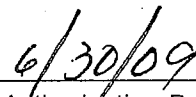
HMO Authorization Date: 06/29/2009



Authorizing Official Signature



Authorizing Official Title



Authorization Date

Authorizing Official Signature

Authorizing Official Title

Authorization Date

Project Management Report

Disaster Number: 1790
 FEMA Project Number: 1-R
 Amendment Number: 0
 App ID: 1
 State: VT
 Grantee: Statewide

Subgrantee: Ripton (Town of)
 FIPS Code: 001-59650

Project Title : Ripton, VT Middlebury River Erosion Project

Mitigation Project Description

Amendment Status : Approved

Approval Status: Approved

Project Title : Ripton, VT Middlebury River Erosion Project

Grantee : Statewide

Subgrantee : Ripton (Town of)

Grantee County Name : Addison

Subgrantee County Name : Addison

Grantee County Code : 1

Subgrantee County Code : 1

Grantee Place Name : Ripton (Town of)

Subgrantee Place Name : Ripton (Town of)

Grantee Place Code : 0

Subgrantee Place Code : 59650

Project Closeout Date : 00/00/0000

Work Schedule Status

Amend #	Description	Time Frame	Due Date	Revised Date	Completion Date
0	rip rap	180 da.	00/00/0000	00/00/0000	00/00/0000
0	easement purchases	180 da.	00/00/0000	00/00/0000	00/00/0000
0	flood chute access	180 da.	00/00/0000	00/00/0000	00/00/0000
0	mgmt of grant	270 da.	00/00/0000	00/00/0000	00/00/0000

Approved Amounts

Total Approved Net Eligible	Federal Share Percent	Total Approved Federal Share Amount	Non-Federal Share Percent	Total Approved Non-Fed Share Amount
\$137,500	75.000000000	\$103,125	25.000000000	\$34,375

Allocations

Allocation Number	IFMIS Status	IFMIS Date	Submission Date	FY	ES Support Req ID	ES Amend Number	Proj Alloc Amount Fed Share	Grantee Admin Amount	Subgrantee Admin Amount	Total Alloc Amount
0	A	06/29/2009	06/24/2009	2009	1622307	1	\$103,125	\$0	\$0	\$103,125
Total							\$103,125	\$0	\$0	\$103,125

Obligations

Action Nr	IFMIS Status	IFMIS Date	Submission Date	FY	ES Support Req ID	ES Amend Number	Suppl Nr	Project Obligated Amt - Fed Share	Grantee Admin Amount	Subgrantee Admin Amount	Total Obligated Amount
1	A	06/29/2009	06/29/2009	2009	1716840	0	0	\$103,125	\$0	\$0	\$103,125
Total								\$103,125	\$0	\$0	\$103,125

FEDERAL EMERGENCY MANAGEMENT AGENCY
HAZARD MITIGATION GRANT PROGRAM
Funding Estimate Financial Activity Report

Disaster Number: 1790 State: VT Region: 1 Declaration Date: 09/12/2008 Grantee : Statewide

	Projected A	Total Allocated in NEMIS B	Available C (A - B)	Total Obligated in NEMIS D	Available E (A - D)
HMGP Project Funds	\$721,688	\$103,125	\$618,563	\$103,125	\$618,563
Regular Projects	\$635,086	\$103,125	\$531,961	\$103,125	\$531,961
Initiative Projects	\$36,084	\$0	\$36,084	\$0	\$36,084
Planning Projects	\$50,518	\$0	\$50,518	\$0	\$50,518
Subtotal	\$721,688	\$103,125	\$618,563	\$103,125	\$618,563
State Management Cost	\$35,291	\$0	\$35,291	\$0	\$35,291
TOTALS	\$756,979	\$103,125	\$653,854	\$103,125	\$653,854

For disasters declared on or after 11/13/2007:

HMGP Project funds = Regular Projects + Initiative Projects + Planning Projects.

State Management Cost is separate from the HMGP Project Funds.

State of Vermont
Hazard Mitigation Grant Program
Project Application

FEMA Disaster Code:	FEMA- DR- 1790 VT	Date Submitted:	3/31/2009
Part 1:	Applicant Information		
Applicant Name: <small>(Eligible Applicant i.e. local government, state agency, non-profit)</small>	Town of Ripton, Vermont		
County:	Addison		
Name of Local Hazard Mitigation Plan: <small>(County or Town)</small>	Addison County Regional Planning Commission County-Wide Hazard Mitigation Plan Volume I and Annex N Ripton		
Date of FEMA approval of Local Plan:	7/31/2008		
Federal Tax ID Number:	03-6009314		

Primary Contact Information			
Name:	William Ford		
Title:	Select Board Chair		
Organization:	Town of Ripton, VT		
Mailing Address:	P.O. Box 10 Ripton, VT 05766		
Work Phone Number:	(802) 388-2266	Alternate Phone Number:	(802) 388-7804
Fax Number:		Email:	

Secondary Contact Information			
Name:	Peter Karpack		
Title:	Select Board Clerk		
Organization:	Town of Ripton		
Mailing Address:	P.O. Box 10, Ripton, VT 05766		
Work Phone Number:	(802) 388-2266	Alternate Phone Number:	(802) 388-2744
Fax Number:		Email:	

Part 2: Problem Description

Location of Project:	Latitude:	43 58 28.5 N	Longitude:	73 02 11.1 W	<i>(in decimals)</i>
Identify adjacent roads/streets and bodies of water:	VT Route #125 and Middlebury River				

Required Maps:	<input checked="" type="checkbox"/>	Local General Highway Map <i>(attached)</i>
	<input checked="" type="checkbox"/>	Flood Insurance Rate Map with panel number <i>(attached)</i>
	<input checked="" type="checkbox"/>	Topographic Map <i>(attached)</i>

Problem Statement: <i>(What's Happening?)</i>	<p>The village center of the Town of Ripton is constantly threatened by erosive actions due to high water flow in the Middlebury River. During the summer of 2008, the river flooded and sent flood waters through the village area and down state Route #125. In addition, this same event washed away several feet of protective river bank in the village area. Extensive damage to State Route #125 occurred along the river both upstream and downstream of the Village of Ripton. As the river bank continues to be eroded in this area, homes and State Rte #125 are increasingly at risk a pattern that has accelerated over the past 10 years.</p> <p style="text-align: center;"><input type="checkbox"/></p>
---------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Supporting Documentation: <i>(Attach)</i>	<input type="checkbox"/>	Photos
	<input type="checkbox"/>	Engineering Studies
	<input type="checkbox"/>	Site Diagrams

Part 2: Problem Description
continued

Statement of Damages				
Date	Event	Description of Direct Damages	Description of Indirect Damages	Cost of Damage
8/6/2008	Flooding DR 1790	Loss of river bank and previously installed armoring along Middlebury River. Flood damage to structures along river due to basement flooding. Erosion of foundations to Hoyler barn and McKnight house.	Event includes closure of State Rte #125 from washouts both East and West of the village area.	\$520,000

Preferred Alternative				
Chosen Alternative:	Ripton Village flood protection			
Justification:	The costs associated with the buyout of four village structures make this alternative prohibitive. In addition, the cost of maintaining protection for State Rte #125 is not addressed.			
Part 5:	Project Description			
Project Description	Reduce the risk to Ripton village of flooding damages by armoring the North bank of the Middlebury River, creating increased access to existing flood chutes in the village area, create increased access to flood plain upstream to attenuate flooding impacts in the village, and purchase easements on upstream floodplain to ensure perpetual flood access to these areas.			
Expected Life of Project	Estimated life of project is 75 years if regularly maintained			
Supporting Documentation: (Attach)	<input checked="" type="checkbox"/>	Photos		
	<input type="checkbox"/>	Engineering Studies		
	<input checked="" type="checkbox"/>	Site Diagrams		
Project Costs for Preferred Alternative				
Item	Unit Qty.	Unit Measurement	Unit Cost	Cost Estimate
Installation of 700 ft of RipRap (total 777 cu/yd) Reach M12	2000	cubic yard	\$50	\$100,000.00
Purchase easements of floodplains on T4.01	5.6	Acre	\$2,000	\$11,200.00
Excavator costs to create floodchute access on M12	500	cubic yard	\$5	\$2,500.00
Site survey, H&H analysis, Project design, Construction mgmt.	160	hours	\$100	\$16,000.00
Project mgmt., Easement creation, Grant writing	200	Hours	\$60	\$12,000.00
Grant Administration	60	Hours	\$60	\$3,600.00
Purchase access easements on M12	4	Easements	\$1,000	\$4,000.00
Buyout of Hoyler Barn M12	1	Barn	\$5,000	\$5,000.00
Purchase McKnight easement M12	1.4	Acre	\$2,000	\$2,800.00
				\$0.00
			Total Project Cost Estimate	\$157,100.00
Summary of Project Costs				
A		Total Project Costs		\$157,100.00
B		FEMA Share (75% of Line A)		\$117,825.00
C		Local Share (25% of Line A) Note: The sum of lines 1-3 must equal Line C		\$39,275.00
		1. Cash		\$5,275.00
		2. In-Kind Service		\$23,000.00
		3. Other		\$11,000.00
D		Total Local Share (Equal to Line C)		\$39,275.00
E		Total Project Costs (Line B + Line D) Note: Line A and D are equal		\$157,100.00
Identify source of local non-federal match:	State of VT Clean and Clear grant to ACRPC, donated easements, Town of Ripton, landowner shares			

Project Summary

Recent History

The village of Ripton, Vermont and State Route #125 which passes through the village area have been struck by a number of flood events in the past 10 years. In 1998, a flooding event caused over \$400,000 in repair costs to Rte #125 west of the village area. Again in 2000, erosion to Route #125 from a sudden storm caused road closures and over \$75,000 in repair costs. In 2005, \$9,290 was spent to partially armor the north bank of the Middlebury River to protect property sited along the bank. Most recently, in August of 2008, an additional \$400,000 in costs was inflicted to Route #125 and riverbank erosion damaged a home to the south of Rte #125 in the village area resulting in a \$120,000 claim to NFIP. In the 2008 storm, the partial armoring completed in 2005 was washed away in flood waters.

Reach condition

Located in the Village of Ripton, this segment is 1,091' long. Route 125 and residential development encroach into the river corridor on the right bank for approximately half of the segment length. The confluence of the Middle and South Branches of the Middlebury River is at the head of this segment, making it a natural deposition (delta) area. The valley is narrowly confined with a human caused change in the confinement from the road and residential encroachments. The stream is entrenched and incised, possibly due to fill for the road and residential development. Planform is the dominant adjustment process with minor aggradation noted, though significant aggradation occurred after the flood of August 2008. The reference stream type is Cb step pool and it is currently Fb step pool. It is naturally a Coarse Equilibrium/Fine Deposition sediment regime type that has been converted to Fine Source and Transport/Coarse Deposition. Stream sensitivity is extreme, channel evolution is stage II, incised, with moderate planform and aggradation being the dominant adjustment processes. The bankfull width is 56' and the reference channel width is 56.8'. The 1945 USGS topographic map indicates that the river was much farther away from the residential development at that time, most likely because the channel was moved left (south) when the village was developed.

Stressors

Hydrologic stressors are extreme due to road density within the sub-watershed. The sediment load is greatly increased from significant erosion, a head cut, two steep riffles and more than 5 depositional features per mile. The segment is located just downstream of the confluence of the South and Middle Branches of the Middlebury River, making it a natural deltaic depositional area. Stream power is decreased due to a decrease in the channel slope from deposition and increased from stream corridor encroachments. There are no vertical constraints and the road and residential development are constraints along the right bank. All of this is located on highly erodible glacial sediments.

Alternatives Analysis

The Town of Ripton wishes to reduce the threat to lives and property caused by ever increasing flood events.

Alternative #3- Do Nothing.

Limitations of Alternative #3-

The costs of doing nothing at this site would be a projection of past event costs. Over the past 10 years, a total of \$217,390 could be expected to be mitigated by a successful project along this reach of the river. This would include expected repairs to homes as well as a portion of the repairs to Rte #125. As the river bank continues to erode toward the village, increased numbers of structures are put at risk as a result.

Expected cost of alternative #3 over the life of the project:

\$1,630,425

Alternative #2- Selective buyout and relocation of structures south of Rte #125 through the village.

Limitations of Alternative #3-

Structures that would need to be bought out represent \$522,450 in current appraised value. In addition, two of the four structures were built prior to 1860 and contribute significantly to the structure of the Ripton historic district. These structures would need to be relocated so their historic value was preserved which would add significantly to the overall cost of this project. Though a B/C analysis on just the buyout would still return a greater than 1 benefit, the loss of the historic value of the structures to the village area would alter the final outcome of that analysis. In addition, a buyout would not address the eventual erosion of river bank toward Rte #125. The continued erosion would lead to an eventual hard armoring of the river bank just to protect the highway.

Expected cost of buyout (does not include mitigation of historic village context lost):

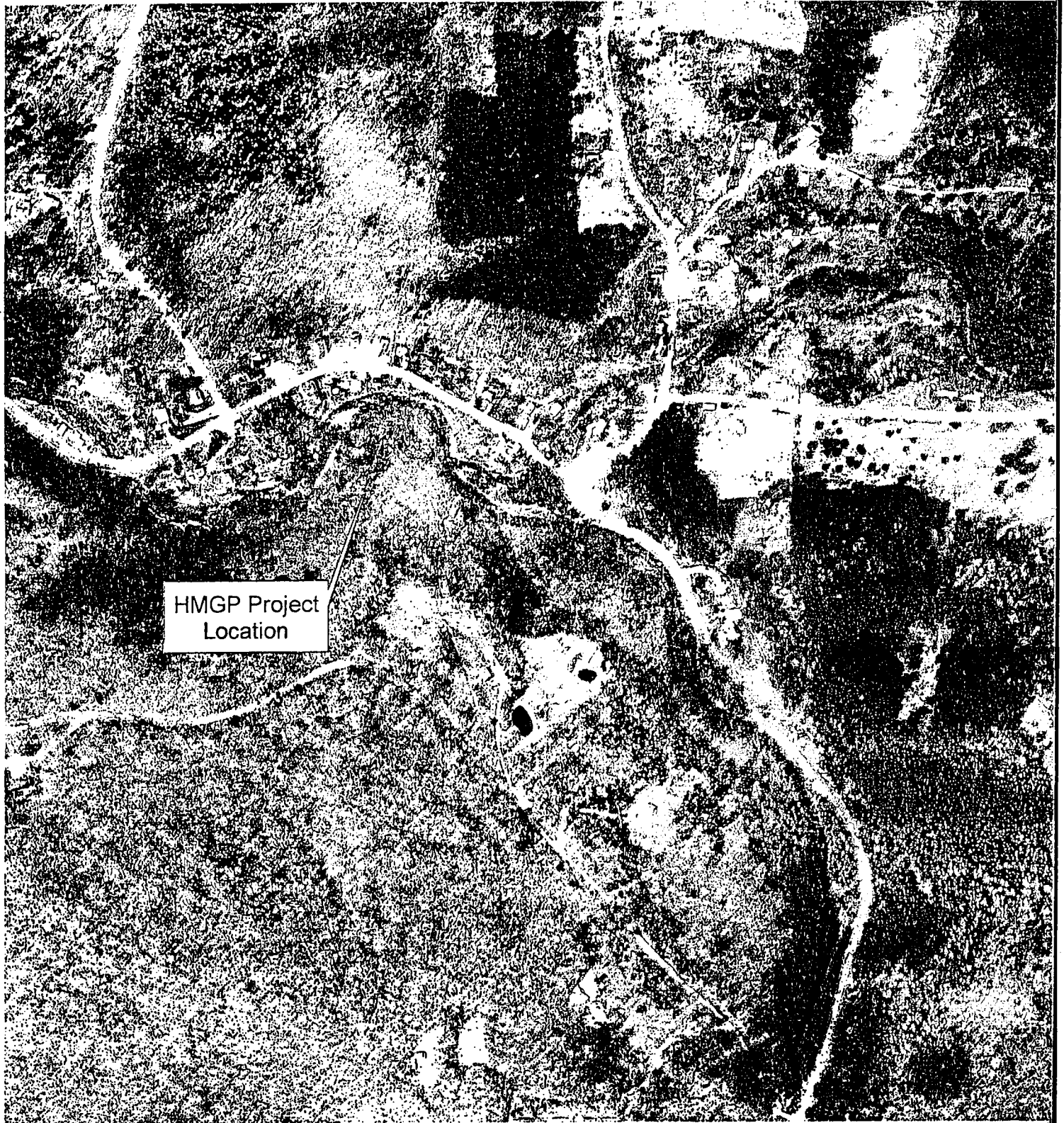
\$522,450

Alternative #1- Ripton Village Flood protection through armoring, flood chute restoration and easement purchases.

Alternative of choice-

This is the alternative of choice because its multi-task approach appears to provide the best and longest lasting mitigation effort for the location. Easement purchases would occur on 5.6 acres of floodplain east of the village to ensure

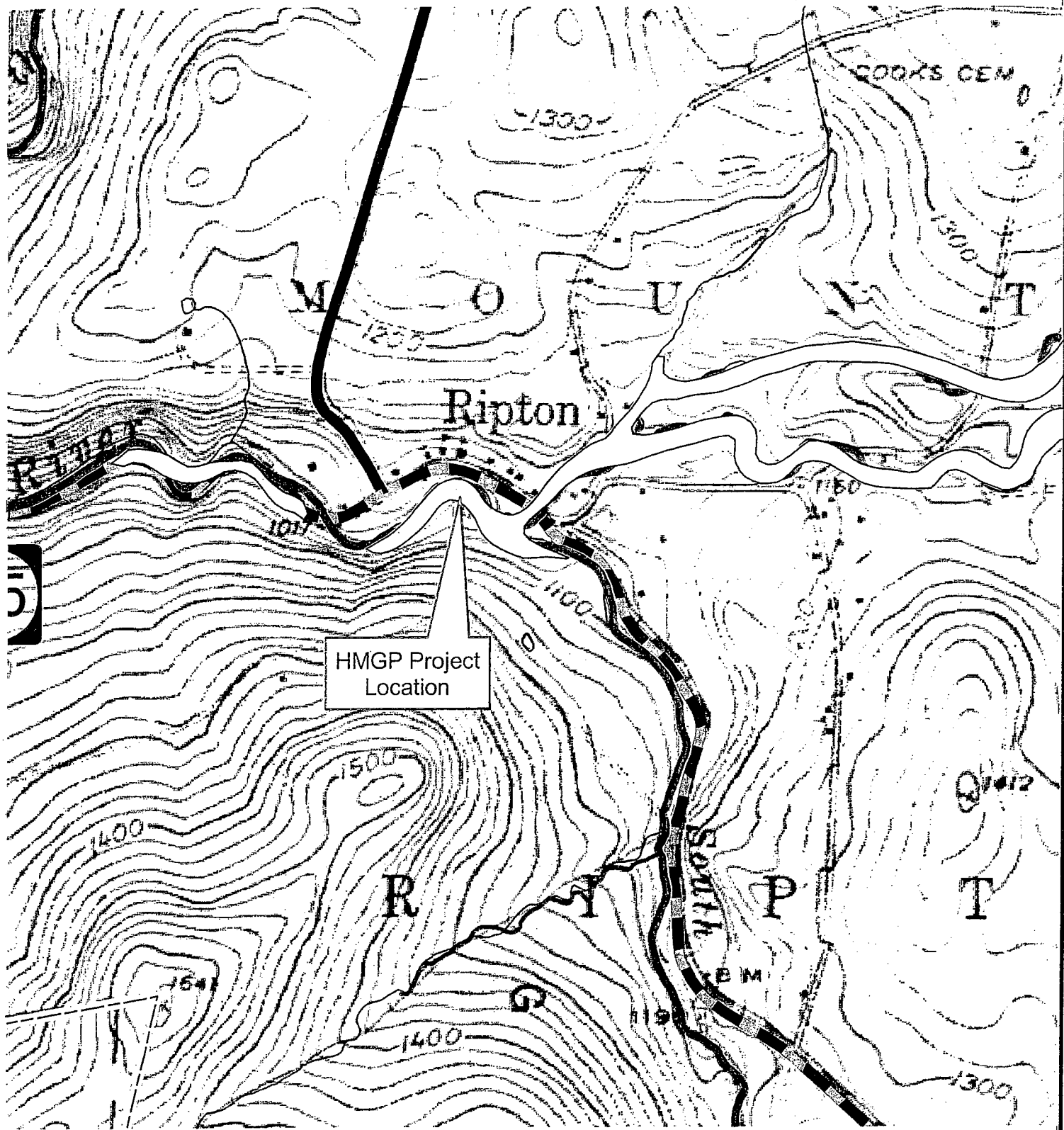
Town of Ripton HMGP Project Location Map - Site Diagram



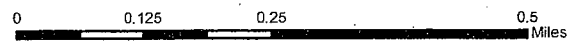
Vermont Mapping Program Orthophotography, 2006
(108160,108164) 1:6,000



Town of Ripton HMGP Project Location Map - FEMA Floodplain

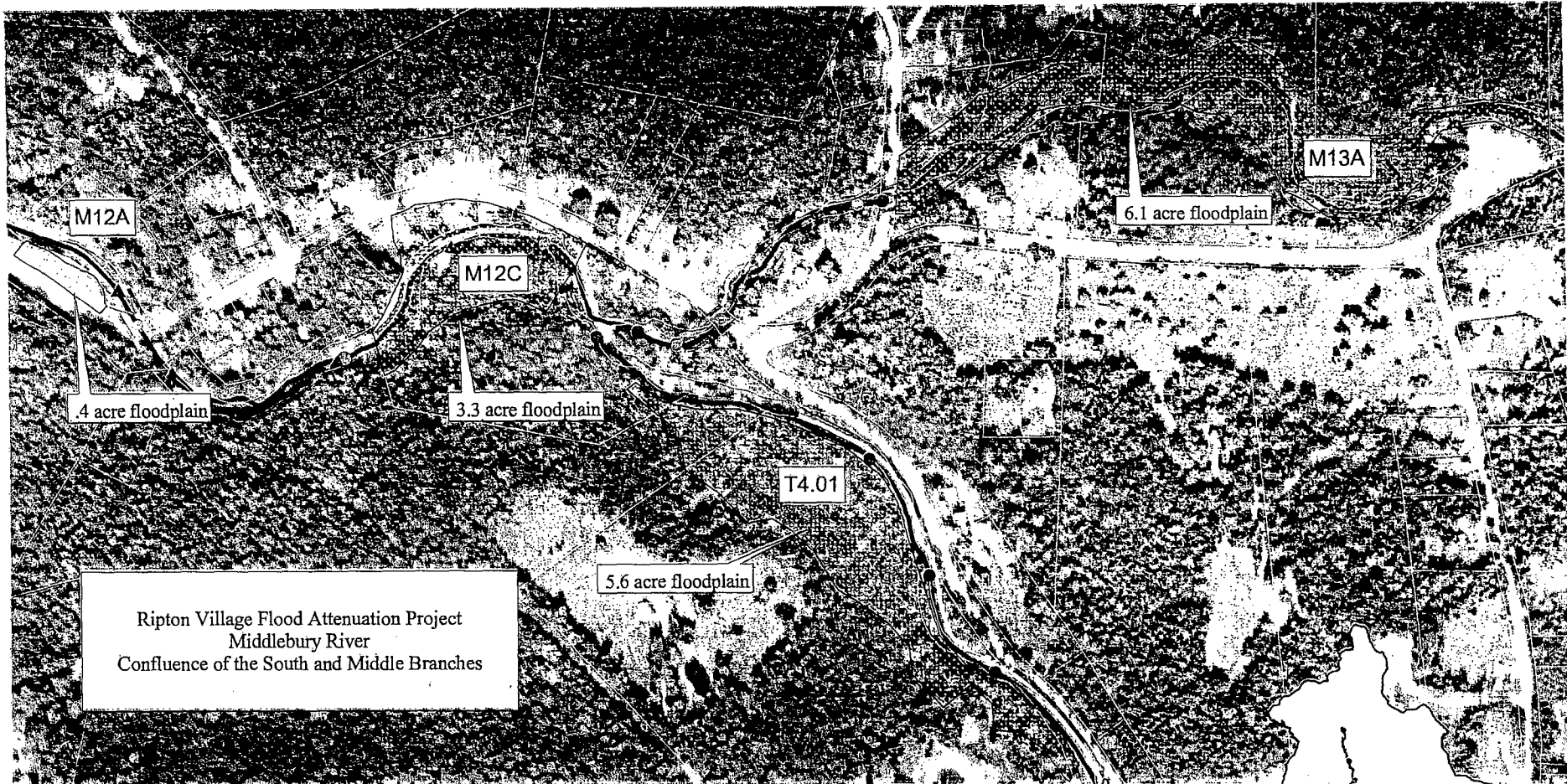


Breadloaf and East Middlebury USGS quad
FEMA floodplain
(draft - digitized by ACRPC) 1:12,000



This map intended for planning purposes

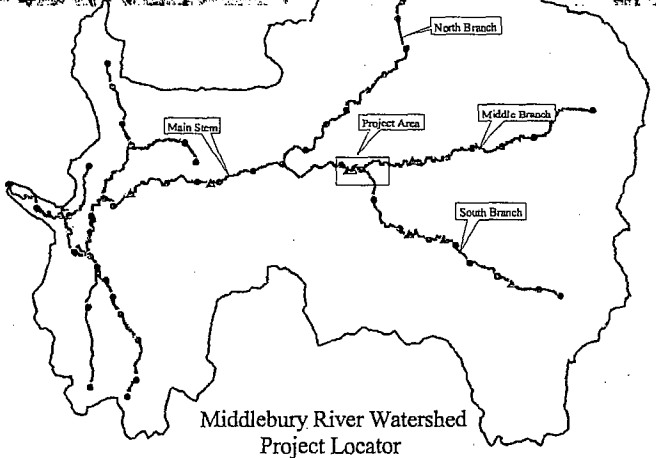
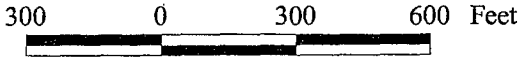
ADDISON COUNTY REGIONAL PLANNING COMMISSION GTS



Legend

● Reach Break	● Stormwater Inputs	⚡ Hard Bank Armoring
▲ Segment Break	Structures	⚡ Erosion
Channel Migration	⊙ Bridge	⚡ Buffer < 25'
Avulsion	F Culvert	Encroachments
Braiding	Steep Riffle	⚡ Berm
Flood Chute	▲ Steep Riffle	⚡ Improved Path
Migration	Parcel Boundary	⚡ Road
Neck Cutoff	⚡ Sraightening	

Scale = 1:5,000



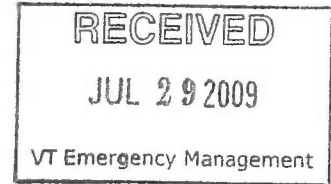
COPY

U.S. Department of Homeland Security
Region I
99 High Street, Sixth Floor
Boston, MA 02110-2132



FEMA

July 27, 2009



Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101



SUBJECT: FEMA-DR-1790-VT Hazard Mitigation Grant Program Projects

FEMA DR 1790-2R Gibou Road Culvert Upgrade Project, Town of Montgomery, VT
FEMA DR 1790-3R Central Street Culvert Upgrade Project, Town of Northfield, VT

Dear Ms. Farr: *Barbara*

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program projects:

1790-2R	Town of Montgomery Gibou Road Culvert Upgrade Project	\$ 138,358
	Total:	\$ 138,358
1790-3R	Town of Northfield Central Street Culvert Upgrade Project	\$ 233,231
	Total:	\$ 233,231

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,

Kevin M. Merli, Director
Mitigation Division

Attachment

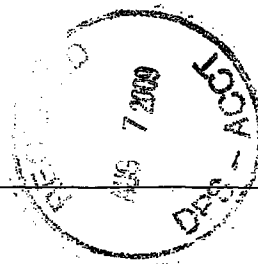
Project Management Report

Disaster Number	FEMA Project Number	Amendment Number	App ID	State	Grantee
1790	2-R	0	2	VT	Statewide

Subgrantee: Montgomery (Town of)

FIPS Code: 011-45850

Project Title : Gibou Rd. Culvert Upgrade Project



Mitigation Project Description

Amendment Status : Approved

Approval Status: Approved

Project Title : Gibou Rd. Culvert Upgrade Project

Grantee : Statewide

Subgrantee : Montgomery (Town of)

Grantee County Name : Franklin

Subgrantee County Name : Franklin

Grantee County Code : 11

Subgrantee County Code : 11

Grantee Place Name : Montgomery (Town of)

Subgrantee Place Name : Montgomery (Town of)

Grantee Place Code : 0

Subgrantee Place Code : 45850

Project Closeout Date : 00/00/0000

Work Schedule Status

Amend #	Description	Time Frame	Due Date	Revised Date	Completion Date
0	install culvert	10 days	00/00/0000	00/00/0000	00/00/0000

Approved Amounts

Total Approved Net Eligible	Federal Share Percent	Total Approved Federal Share Amount	Non-Federal Share Percent	Total Approved Non-Fed Share Amount
\$184,717	75.000000000	\$138,538	25.000000000	\$46,179

Allocations

Allocation Number	IFMIS Status	IFMIS Date	Submission Date	FY	ES Support Req ID	ES Amend Number	Proj Alloc Amount Fed Share	Grantee Admin Amount	Subgrantee Admin Amount	Total Alloc Amount
1	A	07/24/2009	07/23/2009	2009	1622307	2	\$138,358	\$0	\$0	\$138,358
Total							\$138,358	\$0	\$0	\$138,358

Obligations

Action Nr	IFMIS Status	IFMIS Date	Submission Date	FY	ES Support Req ID	ES Amend Number	Suppl Nr	Project Obligated Amt - Fed Share	Grantee Admin Amount	Subgrantee Admin Amount	Total Obligated Amount
1	A	07/27/2009	07/27/2009	2009	1735428	1	1	\$138,358	\$0	\$0	\$138,358
Total								\$138,358	\$0	\$0	\$138,358

HAZARD MITIGATION GRANT PROGRAM

Allocation Request

Disaster Number : 1790

Allocation Number : 1

IFMIS Status : Accept

IFMIS Date : 07/24/2009

FEMA Project Number	Proj Amend Number	State Appl ID	FY	Project Amount	Grantee Admin Est	Subgrantee Admin Est	Total Allocation	Proj Total Fed Share	Proj Fed Share Prev Alloc	Max Avail for Curr Alloc
2 - R	0	2	2009	\$138,358	\$0	\$0	\$138,358	\$138,538	\$138,358	\$180
3 - R	0	4	2009	\$233,231	\$0	\$0	\$233,231	\$233,231	\$233,231	\$0
TOTALS				\$371,589	\$	\$0	\$371,589			

Comments

Date: 07 / 23 / 2009 User Id: JMALONE2

Comment: allocation of \$138,358 approved

Date: 07 / 23 / 2009 User Id: JMALONE2

Comment: allocation of \$233,231 approved

Date: 07 / 23 / 2009 User Id: JMALONE2

Comment: total allocation of both \$233,231 and \$138,358 - \$371,589

Date: 07 / 23 / 2009 User Id: KTIRRELL

Comment: HMO approves

Authorization

Preparer Name : JUDITH MALONEY

Preparation Date : 07/23/2009

HMO Authorization Name : KERRI ANN TIRRELL

HMO Authorization Date : 07/23/2009

Admin Calculation

Admin Cost Calculation: Sliding Scale Calculation Percentage: N/A

Justification:

Sliding Scale Percentage:

up to	\$100,000	=	3.00%
up to	\$1,000,000	=	2.00%
up to	\$5,000,000.00	=	1.00%
Excess		=	0.50%

Allocation Request with Signature

Disaster Number : 1790 Allocation Number : 1 IFMIS Status : Accept IFMIS Date : 07/24/2009

FEMA Project Number	Proj Amend Number	State Appl ID	FY	Project Amount	Grantee Admin Est	Subgrantee Admin Est	Total Allocation	Proj Total Fed Share	Proj Fed Share Prev Alloc	Max Avail for Curr Alloc
2 -R	0	2	2009	\$138,358	\$0	\$0	\$138,358	\$138,538	\$138,358	\$180
3 -R	0	4	2009	\$233,231	\$0	\$0	\$233,231	\$233,231	\$233,231	\$0
TOTALS				\$371,589	\$	\$0	\$371,589			

Comments

Date: 07 / 23 / 2009 User Id: JMALONE2

Comment: allocation of \$138,358 approved

Date: 07 / 23 / 2009 User Id: JMALONE2

Comment: allocation of \$233,231 approved

Date: 07 / 23 / 2009 User Id: JMALONE2

Comment: total allocation of both \$233,231 and \$138,358 -\$371,589

Date: 07 / 23 / 2009 User Id: KTIRRELL

Comment: HMO approves

Authorization

Preparer Name : JUDITH MALONEY

Preparation Date : 07/23/2009

HMO Authorization Name : KERRI ANN TIRRELL

HMO Authorization Date : 07/23/2009

Sliding Scale Percentage:

up to	\$100,000	=	3.00%
up to	\$1,000,000	=	2.00%
up to	\$5,000,000.00	=	1.00%
Excess		=	0.50%

HAZARD MITIGATION GRANTS PROGRAM

Allocation Request with Signature

Disaster Number : 1790

Allocation Number : 1

IFMIS Status : Accept

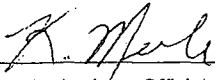
IFMIS Date : 07/24/2009

Admin Calculation

Admin Cost Calculation: Sliding Scale

Calculation Percentage: N/A

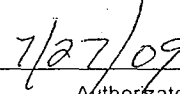
Justification:



Authorizing Official Signature



Authorizing Official Title



Authorization Date

Authorizing Official Signature

Authorizing Official Title

Authorization Date

Sliding Scale Percentage:

up to	\$100,000	=	3.00%
up to	\$1,000,000	=	2.00%
up to	\$5,000,000.00	=	1.00%
Excess		=	0.50%

HAZARD MITIGATION GRANT PROGRAM

Obligation

Disaster No	FEMA Project No	Amendment No	State Application ID	Action No	Supplemental No	State	Grantee
1790	2-R	0	2	1	1	VT	Statewide

Subgrantee: Montgomery (Town of)
 Subgrantee FIPS Code: 011-45850

Project Title : Gibou Rd. Culvert Upgrade Project

Total Amount Previously Allocated	Total Amount Previously Obligated	Total Amount Pending Obligation	Total Amount Available for New Obligation
\$138,358	\$138,358	\$0	\$0

Project Amount	Grantee Admin Est	Subgrantee Admin Est	Total Obligation	IFMIS Date	IFMIS Status	FY
\$138,358	\$0	\$0	\$138,358	07/27/2009	Accept	2009

Comments

Date: 07/24/2009 User Id: JMALONE2

Comment: \$138,358 approved

Date: 07/27/2009 User Id: KTIRRELL

Comment: HMO approves obligation of \$138,358

Authorization

Preparer Name: JUDITH MALONEY

Preparation Date: 07/24/2009

HMO Authorization Name: KERRI ANN TIRRELL

HMO Authorization Date: 07/27/2009

FEDERAL EMERGENCY MANAGEMENT AGENCY
HAZARD MITIGATION GRANTS PROGRAM
Obligation Report w/ Signatures

Disaster No	FEMA Project No	Amendment No	State Application ID	Action No	Supplemental No	State	Grantee
1790	2-R	0	2	1	1	VT	Statewide

Subgrantee: Montgomery (Town of)
Subgrantee FIPS Code: 011-45850

Project Title : Gibou Rd. Culvert Upgrade Project

Total Amount Previously Allocated	Total Amount Previously Obligated	Total Amount Pending Obligation	Total Amount Available for New Obligation	Project Amount	Grantee Admin Est	Subgrantee Admin Est	Total Obligation	IFMIS Date	IFMIS Status	FY
\$138,358	\$138,358	\$0	\$0	\$138,358	\$0	\$0	\$138,358	07/27/2009	Accept	2009

Comments

Date: 07/24/2009 User Id: JMALONE2

Comment: \$138,358 approved

Date: 07/27/2009 User Id: KTIRRELL

Comment: HMO approves pbligation of \$138,358

Authorization

Preparer Name: JUDITH MALONEY

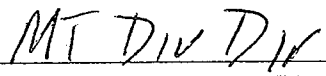
Preparation Date: 07/24/2009

HMO Authorization Name: KERRI ANN TIRRELL

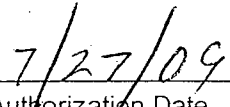
HMO Authorization Date: 07/27/2009



Authorizing Official Signature



Authorizing Official Title



Authorization Date

Authorizing Official Signature

Authorizing Official Title

Authorization Date

Record of Environmental Consideration

See 44 Code of Federal Regulation Part 10.

Project Name/Number: FEMA-HMGP-1790 Gibou Road Culvert Upgrade Project, Montgomery, VT

Project Location: Gibou Road, Vermont Route 33 (about 1.1 miles from the intersection with Route 118 as indicated on map enclosed with application in Montgomery, VT
Latitude: N 44.8531797 Longitude: W -72.6143255

Project Description: The Town of Montgomery, VT proposes to replace two 4.5 foot boiler pipes with a 14' wide by 7 foot high by 35 concrete box culvert as indicated on the diagram attached to the application. In the bottom of the box a 6-inch-high retention sill (baffles) will be installed. The box invert will be buried 12" so the top of the baffles will be buried 6" and not visible. All site approach guard rails specified by AOT are also included in the project.

Documentation Requirements

- No Documentation Required (**Review Concluded**)
- (**Short version**) All consultation and agreements implemented to comply with the National Historic Preservation Act, Endangered Species Act, and Executive Orders 11988, 11990 and 12898 are completed and no other laws apply. (**Review Concluded**)
- (**Long version**) All applicable laws and executive orders were reviewed. Additional information for compliance is attached to this REC.

National Environmental Policy Act (NEPA) Determination

- Statutorily excluded from NEPA review. (**Review Concluded**)
- Categorical Exclusion - Category (xv & xvi) Type Single Project
- No Extraordinary Circumstances exist.
Are project conditions required? Yes (see section V) No (**Review Concluded**)
- Extraordinary Circumstances exist (See Section IV).
 Extraordinary Circumstances mitigated. (See Section IV comments)
Are project conditions required? Yes (see section V) No (**Review Concluded**)
- Environmental Assessment required. See FONSI for determination, conditions and approval.
- Environmental Assessment required. See FONSI for determination, conditions and approval.

Comments: This is a project within the area of previously disturbed ground.

Correspondence/Consultation/References: Project Description. Based on information provided by the grantee, the scope of work for this project qualifies as a Categorical Exclusion (CATEX) under 44 CFR Part 10.8.(d)(2)(xv & xvi)

Reviewer and Approvals


FEMA Environmental Reviewer

Name: Judith A. Maloney

Signature  Date 7-14-09

FEMA Regional Environmental Officer or delegated approving official

Name:

Signature  Date 7/21/09

I. Compliance Review for Environmental Laws (other than NEPA)

A. National Historic Preservation Act

- Not type of activity with potential to affect historic properties. **(Review Concluded)**
- Applicable executed Programmatic Agreement. Sept. 23, 2002 Otherwise, conduct standard Section 106 review.

- Activity meets Programmatic Allowance # Appendix B, IB
Are project conditions required? Yes (see section V) No **(Review Concluded)**

HISTORIC BUILDINGS AND STRUCTURES

- No historic properties 50 years or older in project area. **(Review Concluded)**
- Building or structure 50 years or older in project area and activity not exempt from review.
 - Determination of No Historic Properties Affected (FEMA finding/SHPO/THPO concurrence on file)
Are project conditions required? Yes (see section V) No **(Review Concluded)**
 - Determination of Historic Properties Affected (FEMA finding/SHPO/THPO concurrence on file)

- Property a National Historic Landmark and National Park Service was provided early notification during the consultation process. If not, explain in comments
- No Adverse Effect Determination (FEMA finding/SHPO/THPO concurrence on file).

Are project conditions required? Yes (see section V) No **(Review Concluded)**

- Adverse Effect Determination (FEMA finding/SHPO/THPO concurrence on file)
 - Resolution of Adverse Effect completed. (MOA on file)

Are project conditions required Yes (see section V) No **(Review Concluded)**

ARCHEOLOGICAL RESOURCES

- Project affects only previously disturbed ground. **(Review Concluded)**
- Project affects undisturbed ground.
 - Project area has no potential for presence of archeological resources

- Determination of no historic properties affected (FEMA finding/SHPO/THPO concurrence or consultation on file). **(Review Concluded)**
- Project area has potential for presence of archeological resources
 - Determination of no historic properties affected (FEMA finding/SHPO/THPO concurrence on file)
 - Are project conditions required Yes (see section V) No **(Review Concluded)**
 - Determination of historic properties affected
 - NR eligible resources not present (FEMA finding/SHPO/THPO concurrence on file).
 - Are project conditions required Yes (see section V) No **(Review Concluded)**
 - NR eligible resources present in project area. (FEMA finding/ SHPO/THPO concurrence on file)
 - No Adverse Effect Determination. (FEMA finding/ SHPO/THPO concurrence on file)
 - Are project conditions required? Yes (see section V) No **(Review Concluded)**
 - Adverse Effect Determination. (FEMA finding/ SHPO/THPO concurrence on file)
 - Resolution of Adverse Effect completed. (MOA on file)
 - Are project conditions required? Yes (see section V) No **(Review Concluded)**

Comments: This project will upgrade existing culverts within the footprint of previously disturbed ground. **Correspondence/Consultation/References:** The Vermont Programmatic Agreement, Appendix B, IB

B. Endangered Species Act

- No listed species and/or designated critical habitat present in the action area. **(Review Concluded)**
- Listed species and/or designated critical habitat present in the action area.
 - No effect to species or designated critical habitat. (See comments for justification) **(Review Concluded)**
 - May affect, but not likely to adversely affect species or designated critical habitat (FEMA determination/USFWS/NMFS concurrence on file) **(Review Concluded)**
 - Likely to adversely affect species or designated critical habitat
 - Formal consultation concluded. (Biological Assessment and Biological Opinion on file)
 - Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Review by Judith Maloney, FEMA, of U.S. Fish and Wildlife Service Endangered Species web site revealed that no federally listed or proposed threatened and endangered species under the jurisdiction of the U.S. Fish and Wildlife are known to occur in the vicinity of the areas of proposed projects. Site visit confirmed common roadside species of plants.

Correspondence/Consultation/References: U.S. Fish and Wildlife Service Endangered Species web site

C. Coastal Barrier Resources Act

- Project is not located in Coastal Barriers Resource System or Otherwise Protected Area.
- Project does not affect a coastal barrier within the COBRA System (regardless of in or out)

(Review Concluded)

- Project is located in a coastal barrier system and/or affects a coastal barrier. (FEMA determination/USFWS consultation on file)
 - Proposed action an exception under Section 3505.a.6? **(Review Concluded)**
 - Proposed action not excepted under Section 3505.a.6.
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: This project is not in or near a coastal area.

Correspondence/Consultation/References: Coastal Barrier Resources Act, N.E. maps

D. Clean Water Act

- Project site located outside of and would not affect any waters of the U.S. **(Review Concluded)**
- Project site located in or would affect waters, including wetlands, of the U.S.
 - Project exempted as in kind replacement or other exemption. **(Review Concluded)**
 - Project requires Section 404/401/10 permit, including qualification under Nationwide Permits.

Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Project involves no activity in waters of the US, nor discharge of pollutants or dredged/fill materials.

Project improvements may require permits from appropriate local, state, and federal agencies. Additionally, construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act, "Best Management Practices BMP". The Town must contact the US Army Corps of Engineers to inquire if a permit is required. The Town will need to obtain all necessary permits from relevant state agencies after the project specifications have been completed.

Correspondence / Consultation / References: Section 10 of the Rivers and Harbors Act, Section 404 of the Clean Water Act, (Re: determinations and acquisition of appropriate permits), and local Conservation Commission regulations. See USACE General Permit No: NAE-2007-24
Expiration Date: December 5, 2012

E. Coastal Zone Management Act

- Project does not affect a coastal zone area (regardless of in or out)- **(Review concluded)**
- Project is not located in a coastal zone area – **(Review concluded)**
- Project is located in a coastal zone area and/or affects the coastal zone
 - State administering agency does not require consistency review. **(Review Concluded)**.
 - State administering agency requires consistency review.

Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: This project is not in or near a coastal area.

Correspondence/Consultation/References: Coastal Barrier Resources Act, N.E. maps

F. Fish and Wildlife Coordination Act

Project is not located in or affects a waterway/body of water. **(Review Concluded)**

Project affects, controls or modifies a waterway/body of water.

Coordination with USFWS conducted

No Recommendations offered by USFWS. **(Review Concluded)**

Recommendations provided by USFWS.

Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Review by Judith Maloney, FEMA, of U.S. Fish and Wildlife Service Endangered Species web site revealed that no federally listed or proposed threatened and endangered species under the jurisdiction of the U.S. Fish and Wildlife are known to occur in the vicinity of the areas of proposed projects.

Correspondence/Consultation/References: U.S. Fish and Wildlife Service Endangered Species web site

G. Clean Air Act

Project will not result in permanent air emissions. **(Review Concluded)**

Project is located in an attainment area. **(Review Concluded)**

Project is located in a non-attainment area.

Coordination required with applicable state administering agency.

Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Any emissions from construction equipment will be temporary in nature. *Only minimal, temporary dust and increased emissions from construction vehicles caused by a routine construction project might occur.*

Correspondence/Consultation/References: project description

H. Farmlands Protection Policy Act

Project does not affect prime or unique farmland. **(Review Concluded)**

Project causes unnecessary or irreversible conversion of prime or unique farmland.

Coordination with Natural Resource Conservation Commission required.

Farmland Conversion Impact Rating, Form AD-1006, completed.

Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: No commitment of farm lands.

Correspondence/Consultation/References: See project description.

I. Migratory Bird Treaty Act

Project not located within a flyway zone. **(Review Concluded)**

Project located within a flyway zone.

Project does not have potential to take migratory birds. **(Review Concluded)**

- Project has potential to take migratory birds.
 - Contact made with USFWS
 - Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: N/A This project will not result in the migratory taking of birds.
Correspondence/Consultation/References: The Migratory Bird Treaty Act and Executive Order 13186, project description

J. Magnuson-Stevens Fishery Conservation and Management Act

- Project not located in or near Essential Fish Habitat. **(Review Concluded)**
 - Project located in or near Essential Fish Habitat.
 - Project does not adversely affect Essential Fish Habitat. **(Review Concluded)**
 - Project adversely affects Essential Fish Habitat (FEMA determination/USFWS/NMFS concurrence on file)
 - NOAA Fisheries provided no recommendation(s) **(Review Concluded)**.
 - NOAA Fisheries provided recommendation(s)
 - Written reply to NOAA Fisheries recommendations completed.
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: No Essential Fish habitat is adversely affected by this project. Review by Judith Maloney, FEMA, of U.S. Fish and Wildlife Service Endangered Species web site revealed that no federally listed or proposed threatened and endangered species under the jurisdiction of the U.S. Fish and Wildlife are known to occur in the vicinity of the areas of proposed projects.
Correspondence/Consultation/References: U.S. Fish and Wildlife Service Endangered Species web site; site visit

K. Wild and Scenic Rivers Act

- Project is not along and does not affect a Wild or Scenic River - **(Review Concluded)**
 - Project is along or affects Wild or Scenic River
 - Project adversely affects WSR as determined by NPS/USFS. **FEMA cannot fund the action.** (NPS/USFS/USFWS/BLM consultation on file)
 - Project does not adversely affect WSR. (NPS/USFS/USFWS/BLM consultation on file)
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: No designated river is near the project.
Correspondence/Consultation/References: Review of Web site:
<http://www.rivers.gov/wildriverslist.html#vt>

L. Other Relevant Laws and Environmental Regulations

Identify relevant law or regulations, resolution and any consultation/references: *N/A*

II. Compliance Review for Executive Orders

A. E.O. 11988 - Floodplains

- Outside Floodplain and No Effect on Floodplains/Flood levels - **(Review Concluded)**
 - Located in Floodplain or Effects on Floodplains/Flood levels
 - No adverse effect on floodplain or can be adversely affected by the floodplain. **(Review Concluded)**,
 - Beneficial Effect on Floodplain Occupancy/Values **(Review Concluded)**.
 - Possible adverse effects associated with investment in floodplain, occupancy or modification of floodplain environment
 - 8 Step Process Complete - documentation on file
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: This project will mitigate damages to the road.
Correspondence/Consultation/References: Project is located in a FEMA designated X zone, an area of 500-year flood; area subject to 100-year flood with average depths of less than one foot or with contributing drainage area less than one square mile or an area protected by levees from the base flood. FIRM Flood Insurance Rate Map, Town of Montgomery, VT, Rutland County, Map Number 500056 0004-0013 (Panel not printed ((no flood hazard identified-Index), Effective July 5, 2001).

B. E.O. 11990 - Wetlands

- Outside Wetland and No Effect on Wetland(s) - **(Review Concluded)**
 - Located in Wetland or effects Wetland(s)
 - Beneficial Effect on Wetland - **(Review Concluded)**
 - Possible adverse effect associated with constructing in or near wetland
 - Review completed as part of floodplain review
 - 8 Step Process Complete - documentation on file
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Review of National Wetlands Inventory and topographical maps show wetlands in the general vicinity of the project area. The Town must follow the Clean Water Act, "Best Management Practices BMP". The Town must contact the U.S. Army Corps of Engineers to inquire if a permit is required. The Town will need to obtain all necessary permits from relevant state agencies after the project specifications have been completed and before work begins.
*Correspondence/Consultation/References: <http://wetlandsfws.er.usgs.gov/wtlnds/launch.html>;
 Topographical map of the area.*

C. E.O. 12898 - Environmental Justice for Low Income and Minority Populations

- No Low income or minority population in, near or affected by the project - **(Review Concluded)**
 - Low income or minority population in or near project area
 - No disproportionately high and adverse impact on low income or minority population- **(Review Concluded)**
 - Disproportionately high or adverse effects on low income or minority population
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Project will have no disproportionate effects on the local population.

Correspondence/Consultation/References:

III. Other Environmental Issues

Identify other potential environmental concerns in the comment box not clearly falling under a law or executive order (see environmental concerns scoping checklist for guidance).

Comments: A review of the scoping guidance indicates no other environmental concerns.

Correspondence/Consultation/References:

IV. Extraordinary Circumstances

Based on the review of compliance with other environmental laws and Executive Orders, and in consideration of other environmental factors, review the project for extraordinary circumstances.

* A "Yes" under any circumstance may require an Environmental Assessment (EA) with the exception of (ii) which should be applied in conjunction with controversy on an environmental issue. If the circumstance can be mitigated, please explain in comments. If no, leave blank.

Yes

- (i) Greater scope or size than normally experienced for a particular category of action
- (ii) Actions with a high level of public controversy
- (iii) Potential for degradation, even though slight, of already existing poor environmental conditions;
- (iv) Employment of unproven technology with potential adverse effects or actions involving unique or unknown environmental risks;
- (v) Presence of endangered or threatened species or their critical habitat, or archaeological, cultural, historical or other protected resources;
- (vi) Presence of hazardous or toxic substances at levels which exceed Federal, state or local regulations or standards requiring action or attention;
- (vii) Actions with the potential to affect special status areas adversely or other critical resources such as wetlands, coastal zones, wildlife refuge and wilderness areas, wild and scenic rivers, sole or principal drinking water aquifers;
- (viii) Potential for adverse effects on health or safety; and
- (ix) Potential to violate a federal, state, local or tribal law or requirement imposed for the protection of the environment.
- (x) Potential for significant cumulative impact when the proposed action is combined with other past, present and reasonably foreseeable future actions, even though the impacts of the proposed action may not be significant by themselves.

Comments:

V. Environmental Review Project Conditions

General comments:

1. If ground disturbing activities occur during implementation, the applicant will monitor excavation activity, and if any artifacts or human remains are found during the excavation process all work is to cease and the applicant will notify FEMA, Grantee (VEM), and SHPO/THPO.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material the applicant must contact the Grantee and the Grantee must contact FEMA. The applicant must also contact the relevant agency with authority for regulation of the material.
3. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Project Conditions:

1. As long as the appropriate soil erosion/siltation control measures and the best management practices for roads and culverts (e.g. placing culvert inverts at or slightly below grade in the bed of the stream to accommodate fish passage, working during low flow summer periods, etc.) are utilized, harm to fish and wildlife will be minimized.
2. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
3. Commence work during low flow period.
4. Reroute or stop the flow of water into the project site.
5. If necessary, dewater the project site.
6. Excavate unsuitable wash material from site.
7. Remove erosion control measures after the construction area has been stabilized.

The applicant must ensure that best managing practices for roads and culverts and installation of erosion control measures are utilized. Construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act's: "Best Management Practices, BMP" for erosion control during construction of this project. This includes, the applicant applying for all local, state, and federal permits and easements necessary to complete the project and obtaining these permits prior to commencement of any work. Any conditions of these permits become conditions of this grant, project, and environmental review. In accordance with FEMA Guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including

Reviewer Name: Judith A. Maione

Applicant: Town of Montgomery, VT

Disaster/Emergency/Program/Project Title: FEMA-HMGP-1790

Gibou Road Culvert Upgrade Project

copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements and/or obtain proper local, state, and federal permit concerning this project. Any conditions of this process or these regulations, laws, and policies become conditions of this grant, project, and environmental review.

Monitoring Requirements: Quarterly Reports, and final inspection of the scope of work and accounting records are required.

Project Review and Conditions Status

Project Location: Gibou Road, Vermont Route 33 (about 1.1 miles from the intersection with Route 118 as indicated on map enclosed with application in Montgomery, VT

Latitude: N 44 .8531797 Longitude: W -72.6143255

Project Description: The Town of Montgomery, VT proposes to replace two 4.5 foot boiler pipes with a 14' wide by 7 foot high by 35 concrete box culvert as indicated on the diagram attached to the application. In the bottom of the box a 6-inch-high retention sill (baffles) will be installed. The box invert will be buried 12" so the top of the baffles will be buried 6" and not visible. All site approach guard rails specified by AOT are also included in the project.

Environmental Review Project Conditions

1. If ground disturbing activities occur during implementation, the applicant will monitor excavation activity, and if any artifacts or human remains are found during the excavation process all work is to cease and the applicant will notify FEMA, Grantee, and SHPO/THPO.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material the applicant must contact the Grantee and the Grantee must contact FEMA. The applicant must also contact the relevant agency with authority for regulation of the material.
3. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Other Required Project Specific Conditions

1. The applicant must comply with all applicable local, state and federal laws, regulations, policies, and requirement. Any conditions of these regulations, laws, and policies become conditions of this grant, project, and environmental review.
2. In accordance with FEMA guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All

correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA. Any conditions resulting from this process become part of this project.

3. The applicant must ensure that best managing practices for roads and culverts are utilized, and installation of erosion control. Construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act's: "Best Management Practices, BMP" for erosion control during construction of this project. This includes, the applicant applying for all local, state, and federal permits and easements necessary to complete the project and obtaining these permits prior to commencement of any work. Any conditions of these permits become conditions of this grant, project, and environmental review. In accordance with FEMA Guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA.
4. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
5. The Department of Fish & Wildlife recommends: the retention (or restoration) of natural stream bottom and stream bank conditions; the retention or establishment of naturally-vegetated riparian buffers; and, incorporating buffers and bridges or large bottomless culverts wherever possible and eliminating or minimizing the use of rip-rap to retain natural stream bank and streambed conditions.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 184,717
Federal Share	\$ 138,538
Applicant Share	\$ 46,179

Period of Performance

This project must be complete by: 7/31/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- All permits must be obtained and forwarded to FEMA before any work begins.

- **Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.**
- **Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal State, and laws and standards.**



Town Of Montgomery

P.O. Box 356

Montgomery Center, VT 05471

802-326-4719

<http://www.montgomeryvt.us>

March 27, 2009

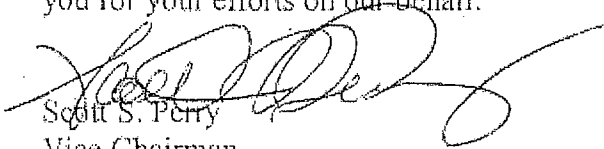
Ray Doherty
State Hazard Mitigation Officer
Vermont Emergency Management
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101

Subject: Montgomery Hazard Mitigation Grant Program Application: TH 33 Gibou Rd Box Culvert

Dear Mr. Doherty,

Attached is our grant application to remove an existing culvert and install a new box culvert on TH 33, the Gibou Rd in Montgomery. I was authorized to sign and forward this application, which include certification of our local match amount, at a duly warned Special Meeting of the Selectboard on March 27, 2009. (Warning and Minutes are available at www.montgomeryvt.us)

Please let us know if there is anything else you need or have any questions. I am our point of contact and can be reached at home at 326-3135 or via email at vtmooses@gmail.com. Thank you for your efforts on our behalf.


Scott S. Perry
Vice Chairman
Montgomery Selectboard

List of Attachments:

1. HMGP Application
2. Highway Map
3. FIRM Map
4. Topographic Map
5. Digital Photos
6. Diagram of Proposed Box Culvert
7. Problem Statement
8. Alt. 2 Bridge Cost Estimate
9. VT AOT Program Development Division Hydraulics Unit Letter
10. Benefit-Cost Analysis
11. Application Part 5, Project Costs for Preferred Alt.
12. Excerpts From Town Hazard Mitigation Plan
13. FEMA Letter Approving Montgomery's HMP

Part 2:		Problem Description continued		
Statement of Damages				
Date	Event	Description of Direct Damages	Description of Indirect Damages	Cost of Damage
2001	Ice Jam	Flooding and Erosion of Road	Loss of Function. Inability of Road Crew, Rescue or Fire Access	3,500.00
2003	High Water	Flooding and Erosion of Road	Loss of Function. Inability of Road Crew, Rescue or Fire Access	3,500.00
2004	Spring Runoff	Flooding and Erosion of Road	Loss of Function. Inability of Road Crew, Rescue or Fire Access	3,500.00
2006	Spring Runoff	Severe Mud, vehicles stuck	Loss of Function. Inability of Road Crew, Rescue or Fire Access	3,500.00
		See Allth 7 for Additional Information		
Total Damage				14,000.00

Part 3:	Project Objective
Project Objective	Install AOT approved concrete box culvert to prevent flooding and improve the site hydraulics and drainage. Widen road with associated elevation and approach changes to meet AOT highway standards.

Part 4:	Analysis of Alternative Solutions
---------	-----------------------------------

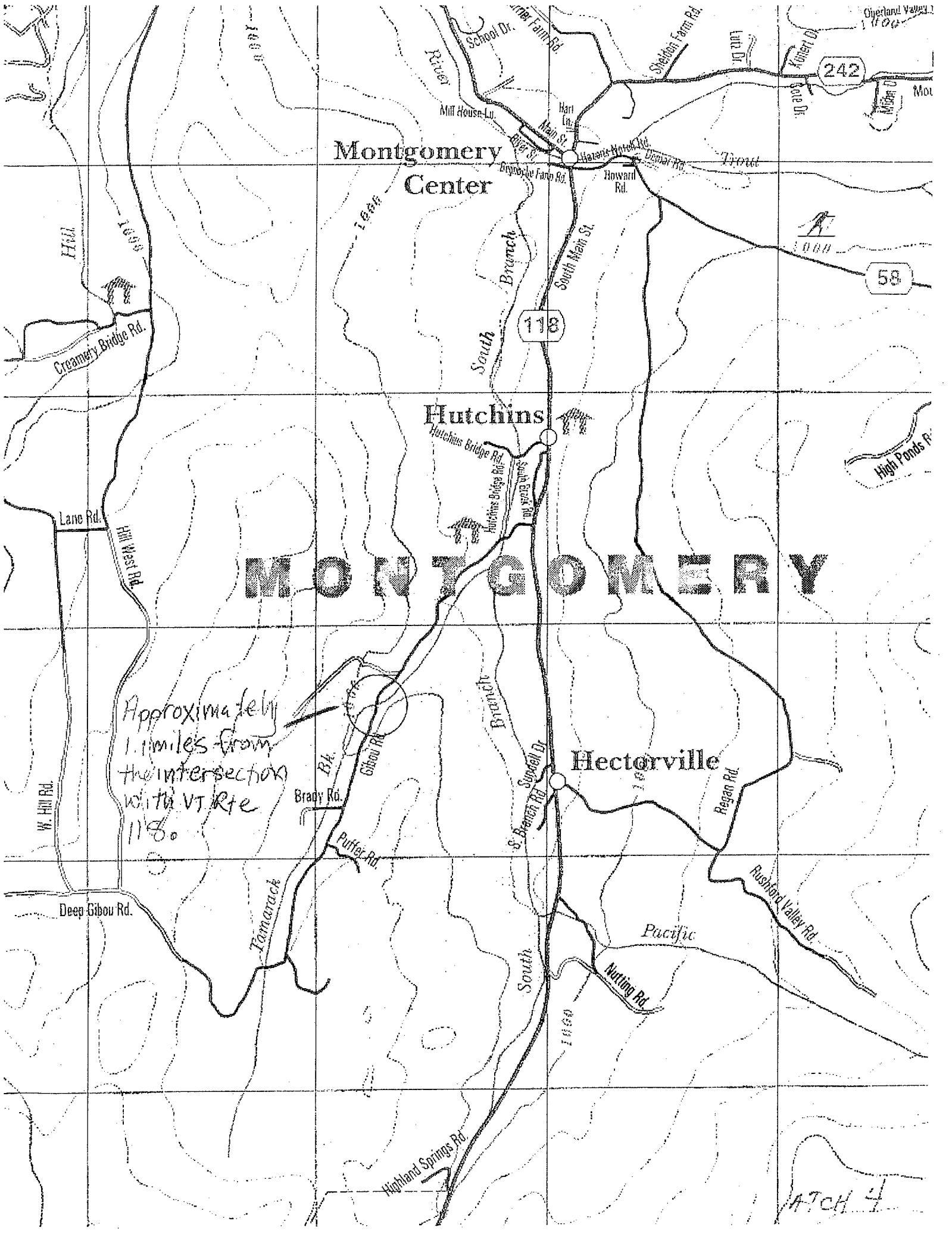
Alternative Solutions		
Alternative Solution	Brief Title	Description of Alternative
1	Box Culvert	Remove existing culvert and replace with a concrete box culvert to meet AOT standards. Widen road with associated elevation and approach changes to meet AOT standards.
2	Concrete Bridge	Remove existing culvert and replace with a poured in place (butments) concrete bridge. Widen road with associated elevation and approach changes to meet AOT standards.
3	No Action	No Action

Supporting Documentation: (Attach)	<input checked="" type="checkbox"/> Yes	Did any of the alternatives have significant impacts or limitations?
	<input checked="" type="checkbox"/> Yes	If Yes, provide additional information concerning these impacts. Is the information attached?
	<input checked="" type="checkbox"/> Yes	Hydrology/ hydraulics reports, if applicable
	<input checked="" type="checkbox"/>	Supporting documentation for the alternatives (i.e. drawings, designs, pictures) (Attached)

Preferred Alternative	
Chosen Alternative:	#1

Justification:	Chosen Alternative is the most cost effective solution and is recommended by AOT Hydrologists, Dist. 8 Advisor, and approved by
----------------	---------------------------------------------------------------------------------------------------------------------------------

Identify source of local non-federal match:	Town Highway Bridge Reserved Fund, in Kind Service, and/or loan		
Part 6:	Benefit/Cost Analysis - See Attachment 10		
Estimated Project Cost	See Attachment 10	Future Maintenance costs for life of project	See Attachment 10
Total Cost = Project Cost + Future Maintenance		Total Cost	\$184,717
Total Damages		Years of Damage	
Annualized Damages = Total Damages/Years of record		Annualized Damages	
Annualized Damages		Expected Life of Project	
Anticipated Damages without project over time = Annualized damages* Expected life of project		Anticipated Damage without Project (Anticipated Loss or Benefit)	
Benefit/Cost Ratio = Anticipated Loss or Benefit /Total Cost		Benefit/Cost Ratio	1.17
Only projects with a benefit/cost ratio of 1:0 or greater will be considered. If your project meets that criteria, continue through the next sections of the application.			
Part 7:	Scope of Work		
Task Description		Days to Complete	
Remove Boiler Pipes, diverting water, bed Prep		5	
Setting New Structure		3	
Backfill, grade, guardrails		2	
See Attachment 11			
TOTAL		10 Days	
Part 8:	Technical Confirmation		
Supporting Documentation: <i>(Attach)</i>	<input checked="" type="checkbox"/>	Has the hydrology/hydraulics/structural design of this project been endorsed by the local Highway District Engineer, Local Stream Alteration Engineer, a Consulting Engineer or other Technical Experts?	
	<input checked="" type="checkbox"/>	Supporting letter(s) <i>(attached)</i>	
Part 9:	Authorized Signature		
I certify that I am the authorized agent for the applicant and have responsibility for the development and completion of this application and all the information contained herein is true and accurate.			



Montgomery
Center

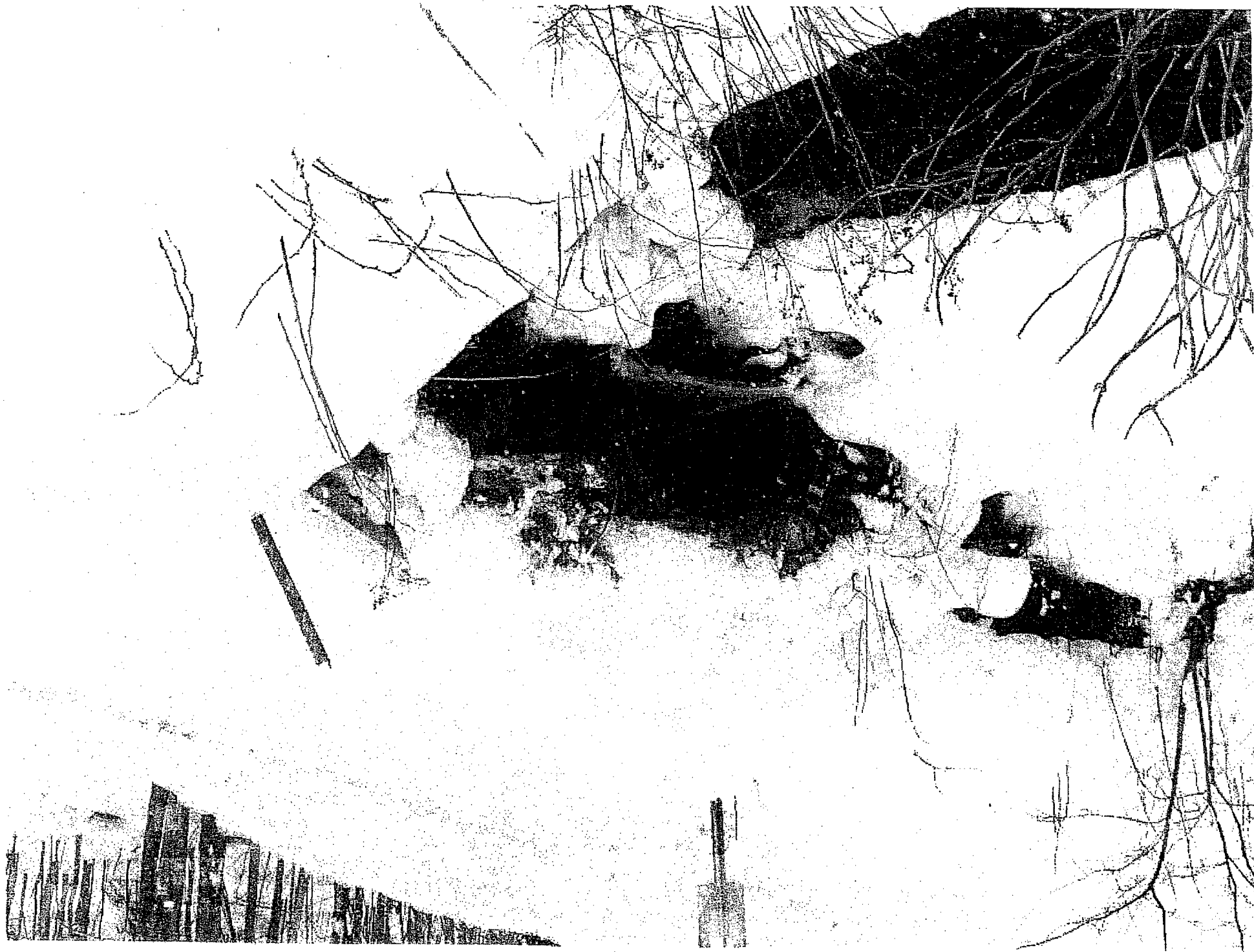
Hutchins

Hectorville

MONTGOMERY

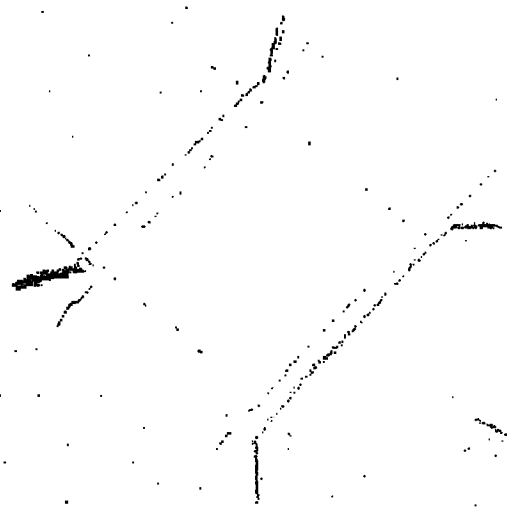
Approximately
1.1 miles from
the intersection
with VT Rte
118.

ATCH 4



Arch 5

SECTION

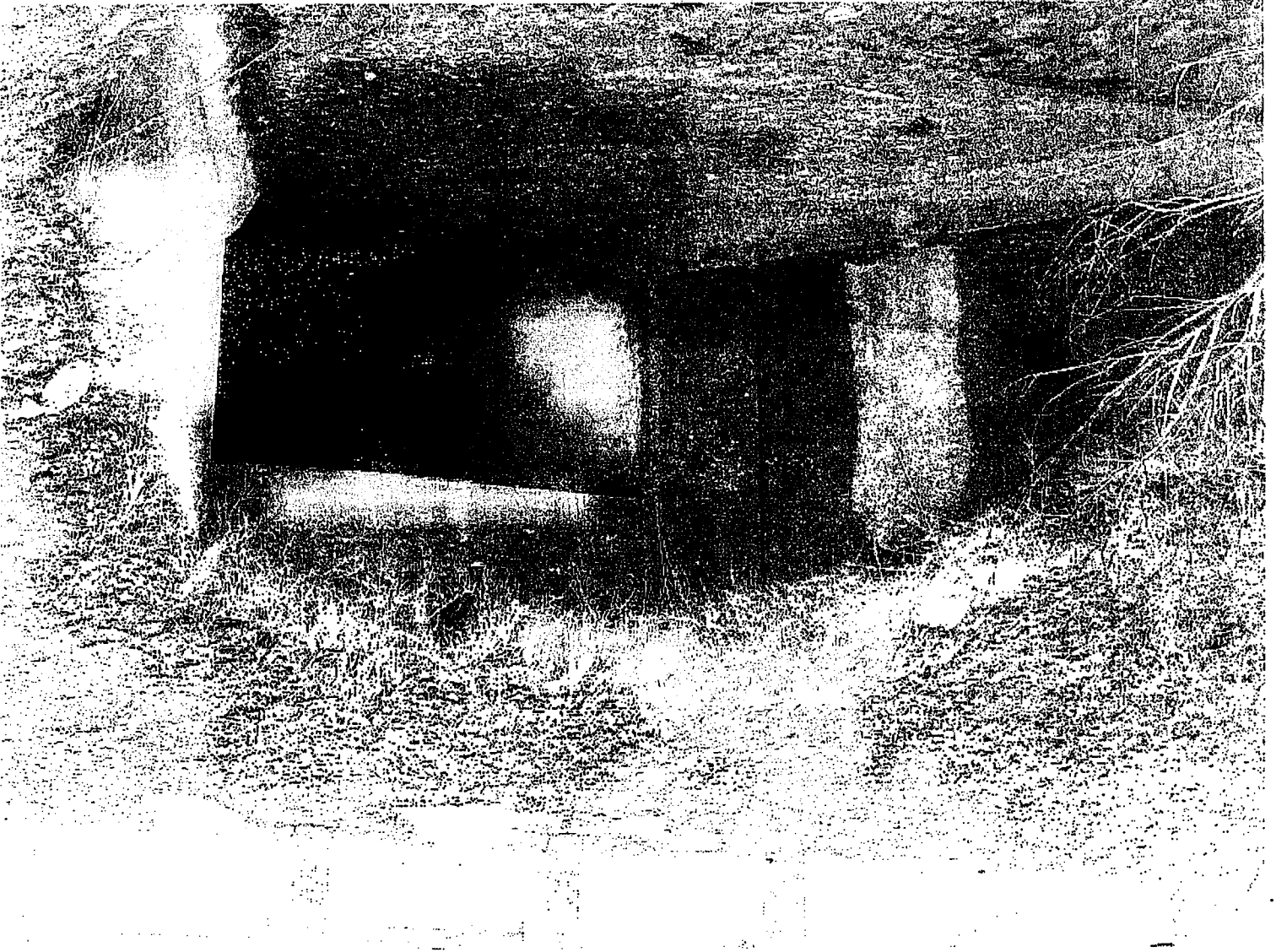


← CROSS SECTION
OF PRECAST CONCRETE
BOX CULVERT

DIAGRAM

FIG. 6

Box Culvert under VT Route 118



A.L. St. Onge Contractor, Inc.

P.O. Box 65

Montgomery, Vermont 05470

Tel.: [802] 326-4792 • Fax: [802] 326-4005

March 23, 2009

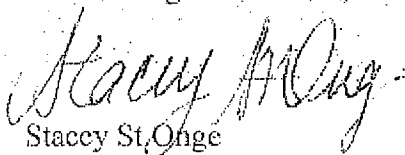
Town of Montgomery
Mr. Ken Cota
PO Box 356
Montgomery Ctr, VT 05471

RE: TH 33 – Gibou Road Culvert Replacement Estimate

We estimate the price to replace the pipes for the above mentioned project with a cast in place concrete slab bridge to be around \$320,000.00. This price does not include a temporary bridge so the road would be closed for 40 days. The price of a temporary bridge would be around \$25,000.00.

Respectfully submitted;

A.L. St. Onge Contractor, Inc.


Stacey St. Onge

ALTERNATIVE 2
COST ESTIMATE

03-23-09

Recommendations

In sizing a new structure we attempted to select structures that met the hydraulic standards, fit the natural channel width, the roadway grade, and other site conditions. Due to the limited height from the stream to the road, a box structure is recommended. We recommend a concrete box with a 14' wide by 7' high inside opening, with 6" high bed retention sills (baffles) in the bottom. The box invert should be buried 12", so the top of the baffles will be buried 6" and not visible. That will result in a 14' wide by 6' high waterway opening above streambed, or 84-sq. ft. of waterway area. Baffles should be spaced no more than 8'-0" apart throughout the structure with one baffle placed at the inlet and one at the outlet. Sills should be cast in a V shape with a 10:1 lateral slope, to create a low flow channel in the center if the bed material in the structure is washed out. The spaces between sills should be filled with stone graded to match the natural stream bed material. This structure will result in a headwater depth at Q25 = 5.7' and at Q100 = 7.7', with no roadway overtopping until above Q50.

Any similar structure with a minimum clear span of 14' and at least 84 sq. ft. of waterway area, that fits the site conditions, could be considered.

General comments

If a new box is installed, we recommend it have full headwalls at the inlet and outlet. The headwalls should extend at least four feet below the channel bottom, or to ledge, to act as cutoff walls and prevent undermining.

It is always desirable for a new structure of this size to have flared wingwalls at the inlet and outlet, to smoothly transition flow through the structure, and to protect the structure and roadway approaches from erosion. The wingwalls should match into the channel banks. Any new structure should be properly aligned with the channel, and constructed on a grade that matches the channel.

Stone Fill, Type II should be used to protect any disturbed channel banks or roadway slopes at the structure's inlet and outlet, up to a height of at least one-foot above the top of the opening. The stone fill should not constrict the channel or structure opening.

The Agency of Natural Resources (ANR), Corps of Engineers, or other permitting agency may have additional concerns regarding replacement of this structure, or any channel work. The Stream Alteration Engineer should be contacted with respect to those concerns, before a replacement culvert is ordered. If ANR requires the invert of the pipe to be buried more than 1', the size of the structure will have to be larger to provide the required waterway area.

Please keep in mind that while a site visit was made, these recommendations were made without the benefit of a survey and are based on limited information. The final decision regarding the replacement of this structure should take into consideration matching the natural channel conditions, the roadway grade, environmental concerns, safety, and other requirements of the site.

Please contact us if you have any questions or if we may be of further assistance.

DCW

cc: Chris Brunelle, ANR Stream Alteration Engineer
Mike Heapes, Structures Engineer
Hydraulics Project File via NJW
Hydraulics Group File

DAMAGES BEFORE MITIGATION

Flood Frequency Events (Years)	Scenario Flood Damages			Loss of Function Time and Dollars		TOTAL Damages and Losses
	road repair	B	C	Days	Losses	
1					\$0	\$0
2	\$3,600			4.00	\$37,129	\$40,629
5					\$0	\$40,629
10					\$0	\$40,629
25					\$0	\$40,629
50					\$0	\$40,629
100					\$0	\$40,629
250					\$0	\$40,629
500					\$0	\$40,629
Total Annualized Damages						\$20,314

Data Sources and Documentation

town of Montgomery hwy department

DAMAGES AFTER MITIGATION

Flood Frequency Events (Years)	Scenario Flood Damages			Loss of Function Time and Dollars		TOTAL Damages and Losses
	road repair	B	C	Days	Losses	
1					\$0	\$0
2	\$100			1.00	\$9,282	\$9,382
5					\$0	\$9,382
10					\$0	\$9,382
25					\$0	\$9,382
50					\$0	\$9,382
100					\$0	\$9,382
250					\$0	\$9,382
500					\$0	\$9,382
Total Annualized Damages						\$4,691

Data Sources and Documentation

A.L. St. Onge Contractor, Inc.

P.O. Box 65

Montgomery, Vermont 05470

Tel.: [802] 326-4792 • Fax: [802] 326-4005

March 23, 2009

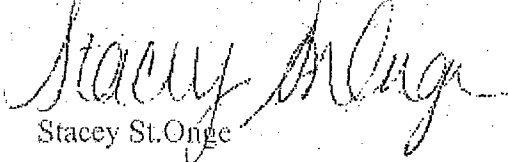
Town of Montgomery
Mr. Ken Cota
PO Box 356
Montgomery Ctr. Vt 05471

RE: TH 33 - Gibou Road Culvert Replacement Estimate

We estimate the price for replacement of the pipes on TH 33 as per Hydraulic Study dated 1/7/09 to be around \$184,717.00. The price includes Granular Backfill, Guard Rail and all other related items to purchase and install a 14' x 7' x 60' Precast Concrete Box Culvert with precast wing walls. This price does not include a Temporary Bridge so the road would be closed.

Respectfully submitted;

A.L. St. Onge Contractor, Inc.


Stacey St. Onge

Town of Montgomery, Vermont

HAZARD MITIGATION PLAN 2008

Approved by the Town of Montgomery, Selectboard

Date: January 21st, 2008

EXCERPTS

On June 5, 2002 flash flooding occurred in Montgomery due to a local heavy thunderstorm. Road washouts occurred along Route 58 near Montgomery Center resulting in \$25,000 in damages.

On May 19, 2006 heavy rainfall produced flooding within the Trout River basin, especially in the Town of Montgomery. Numerous roads were flooded and washed out. Several basements were inundated. A swift water rescue from a vehicle was conducted and a minor evacuation took place. There was approximately \$75,000 in property damages from the event.

According to FEMA's National Flood Insurance Program as June 30, 2007, the Town of Montgomery has 32 policies in force with \$4,360,100 in insurance in-force and \$22,417 written premium in force.

The Black Falls Brook stream channel has been moving over the last several years and threatens Route 118 in Montgomery Village as well as several residences in that area.

There are twin 6' foot boiler tubes located on the Gibou Road that fill-in during rain events. The Town Highway Department is interested in addressing this area.

A GIS based overlay analysis was conducted using FIRM data with the Vermont E-911 Esite data of structure locations. The results found that there are one hundred eight (108) structures within the 100 or 500 year flood plain in Montgomery. Sixty-eight (68) are all-season single family units, six (6) are mobile homes, fourteen (14) are classified as commercial, two (2) are classified as other commercial, one (1) is a commercial farm, two (2) are lodging, one (1) is a church, four (4) are government buildings (including public safety building), and ten (10) are classified as "other". This represents 14% of all structures in the community.

Estimating flood damage of the 14% of structures with 20% damage is \$3,111,476. Cost of repairing or replacing the utilities, roads, bridges, culverts, and contents of structures is not included.

Fluvial Erosion/Landslide

Fluvial erosion/landslides are becoming more common within the region. Historic land uses along the river and its streams, including flood plain encroachments, and vegetative debris removal have increased the risk of erosion and landslides.

On July 14-16, 1997, flooding in northern Vermont caused severe local damage and resulted in a Presidential disaster declaration (FEMA-1184-DR-VT). The erosion and deposition were significant at numerous locations. Local officials and residents are concerned that the accumulation of sand, gravel, and cobbles in stream channels magnified the severe flooding. Currently, Vermont and Federal stream-management policies restrict the removal of these materials. The flood of 1997 exacerbated an already serious river erosion problem. Historic land use changes, channel management practices, and floods had resulted in an extremely unstable river system.

The Trout River, immediately downstream of Montgomery Center, was experiencing very high rates of bank erosion. Little streambank vegetation remained along certain reaches. The river had become so broad and shallow in places that it braided and cut across two meanders. There was a loss of agricultural productivity and property values along the river. Stability of the embankment along VT Route 118 was severely compromised.

Landowners downstream from Montgomery Center called for extensive state and federal assistance to restore the river. A unique partnership, the Trout River Restoration Project, formed to address longstanding river and field erosion problems, and enhance or restore the natural resource values of the Trout River. In 1998,

ALSO
2008
\$121,000
AT SIX
LOCATION

5.3. Risk Reduction Goals

Through current plans, policies and mitigation actions, Montgomery is working to decrease damages from winter storms, floods and structure fires. Other less hazardous risks are also being addressed.

5.4. Identified Hazard Mitigation Programs, Projects and Activities

The following table outlines mitigation programs, projects and activities describe the overall direction the Town is taking to work toward mitigating risk from natural, technological and societal hazards. These mitigation strategies have been chosen by the Town, through surveys and interviews with community officials, as the most appropriate policies and programs to lessen the impacts of potential hazards.

The following list documents the questions (criteria) considered in establishing an order of priority. Each of the following criteria was rated according to a numeric score of "1" (indicating Poor), "2" (indicating Average) and "3" (indicating Good). The highest possible score is 36. The full scoring matrix used is located at the end of this annex.

- 1) Does the action reduce damage?
- 2) Does the action contribute to community objectives?
- 3) Does the action meet existing regulations?
- 4) Does the action protect historic structures or structures critical to Town operations?
- 5) Can the action be implemented quickly?
- 6) Is the action socially acceptable?
- 7) Is the action technically feasible?
- 8) Is the action administratively possible?
- 9) Is the action politically acceptable?
- 10) Is the action legal?
- 11) Does the action offer reasonable benefits compared to its cost of implementation?
- 12) Is the action environmentally sound?

Mitigation projects are listed in terms of mitigating threat or risk to public health and safety, reduction of hazard to community assets, adherence to Town plan and local ordinances, cost, and feasibility. Projects are classified as either short - term or long - term activities. Short -term action items are activities which the municipality may be capable of implementing within one to two years. Long-term action items may require new or additional resources, funding or authorities. Ongoing action items occur at least once per year. Potential funding sources are found in Chapter 4 and Appendix D of the Regional Pre-Disaster Mitigation Plan.

Attachment C

Town of Montgomery Priority Matrix

Each of the following criteria was rated according to a numeric score of "1" (indicating Poor), "2" (indicating Average) and "3" (indicating Good).

1. Does the action reduce damage?
2. Does the action contribute to community objectives?
3. Does the action meet existing regulations?
4. Does the action protect historic structures or structures critical to Town operations?
5. Can the action be implemented quickly?
6. Is the action socially acceptable?
7. Is the action technically feasible?
8. Is the action administratively possible?
9. Is the action politically acceptable?
10. Is the action legal?
11. Does the action offer reasonable benefits compared to its cost of implementation?

	Criteria												Total Score
	1	2	3	4	5	6	7	8	9	10	11	12	
Gibou Road culvert replacement.	3	3	3	3	3	3	3	3	3	3	3	2	35
Procure and install generator and automatic switch for Town water system. <i>DONE</i>	3	3	3	3	3	3	3	3	3	3	3	2	35
Procure and install generator for Public Safety Building	3	3	3	3	3	3	3	3	3	3	3	2	35
Emergency response training for first response personnel	3	3	3	3	3	3	3	3	3	3	3	3	36
Upgrade communications equipment to address gaps in hand-held and cell coverage areas.	2	3	2	2	2	2	3	2	2	3	3	2	28
Stream bed maintenance in high risk areas	3	3	2	3	3	3	3	3	2	2	3	2	30
Flood buyout West Hill Road residences affected by flooding <i>ACTUALLY BURNED</i>	3	3	2	1	2	3	3	3	3	3	3	3	32
Flood buyout for residences along Black Falls Brook affected by flooding/geofluvial erosion.	3	3	2	1	2	3	3	3	3	3	3	3	32
Purchase Excavator for Highway Dept.	1	3	2	2	2	2	3	3	2	3	2	2	27
Purchase barricades for Highway Dept.	2	3	1	2	3	3	3	2	2	2	2	2	27
Replace Town Garage with new facility	2	3	3	3	2	3	3	3	2	3	3	2	32
Replace Fire Dept. pumper with pumper/tanker.	3	3	3	3	2	3	3	2	3	2	3	2	32
Purchase new ambulance	2	3	2	1	2	3	3	2	3	2	3	2	28

12. Is the action environmentally sound?

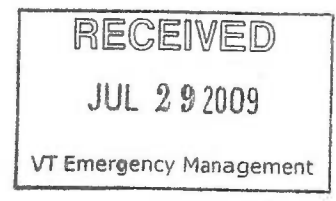
COPY

U.S. Department of Homeland Security
Region I
99 High Street, Sixth Floor
Boston, MA 02110-2132



FEMA

July 27, 2009



Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101



SUBJECT: FEMA-DR-1790-VT Hazard Mitigation Grant Program Projects

FEMA DR 1790-2R Gibou Road Culvert Upgrade Project, Town of Montgomery, VT
FEMA DR 1790-3R Central Street Culvert Upgrade Project, Town of Northfield, VT

Dear Ms. Farr: *Barbara*

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program projects:

1790-2R	Town of Montgomery Gibou Road Culvert Upgrade Project	\$ 138,358
	Total:	\$ 138,358
1790-3R	Town of Northfield Central Street Culvert Upgrade Project	\$ 233,231
	Total:	\$ 233,231

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,

Kevin M. Merli
Kevin M. Merli, Director
Mitigation Division

Attachment

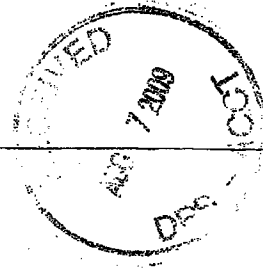
Project Management Report

Disaster FEMA Amendment App ID State Grantee
Number Project Number Number
1790 3-R 0 4 VT Statewide

Subgrantee: Northfield (Town of)

FIPS Code: 023-50275

Project Title : Central St. Culvert Upgrade



Mitigation Project Description

Amendment Status : Approved

Approval Status: Approved

Project Title : Central St. Culvert Upgrade

Grantee : Statewide

Subgrantee : Northfield (Town of)

Grantee County Name : Washington

Subgrantee County Name : Washington

Grantee County Code : 23

Subgrantee County Code : 23

Grantee Place Name : Northfield (Town of)

Subgrantee Place Name : Northfield (Town of)

Grantee Place Code : 0

Subgrantee Place Code : 50275

Project Closeout Date : 00/00/0000

Work Schedule Status

Amend #	Description	Time Frame	Due Date	Revised Date	Completion Date
0	permitting	120 days	00/00/0000	00/00/0000	00/00/0000
0	const.	120 days	00/00/0000	00/00/0000	00/00/0000

Approved Amounts

Total Approved Net Eligible	Federal Share Percent	Total Approved Federal Share Amount	Non-Federal Share Percent	Total Approved Non-Fed Share Amount
\$310,974	75.00000000	\$233,231	25.00000000	\$77,743

Allocations

Allocation Number	IFMIS Status	IFMIS Date	Submission Date	FY	ES Support Req ID	ES Amend Number	Proj Alloc Amount Fed Share	Grantee Admin Amount	Subgrantee Admin Amount	Total Alloc Amount
1	A	07/24/2009	07/23/2009	2009	1622307	2	\$233,231	\$0	\$0	\$233,231
Total							\$233,231	\$0	\$0	\$233,231

Obligations

Action Nr	IFMIS Status	IFMIS Date	Submission Date	FY	ES Support Req ID	ES Amend Number	Suppl Nr	Project Obligated Amt - Fed Share	Grantee Admin Amount	Subgrantee Admin Amount	Total Obligated Amount
1	A	07/27/2009	07/27/2009	2009	1735429	2	2	\$233,231	\$0	\$0	\$233,231
Total								\$233,231	\$0	\$0	\$233,231

Allocation Request

Disaster Number : 1790 Allocation Number : 1 IFMIS Status : Accept IFMIS Date : 07/24/2009

FEMA Project Number	Proj Amend Number	State Appl ID	FY	Project Amount	Grantee Admin Est	Subgrantee Admin Est	Total Allocation	Proj Total Fed Share	Proj Fed Share Prev Alloc	Max Avail for Curr Alloc
2 - R	0	2	2009	\$138,358	\$0	\$0	\$138,358	\$138,538	\$138,358	\$180
3 - R	0	4	2009	\$233,231	\$0	\$0	\$233,231	\$233,231	\$233,231	\$0
TOTALS				\$371,589	\$	\$0	\$371,589			

Comments

Date: 07 / 23 / 2009 User Id: JMALONE2

Comment: allocation of \$138,358 approved

Date: 07 / 23 / 2009 User Id: JMALONE2

Comment: allocation of \$233,231 approved

Date: 07 / 23 / 2009 User Id: JMALONE2

Comment: total allocation of both \$233,231 and \$138,358 - \$371,589

Date: 07 / 23 / 2009 User Id: KTIRRELL

Comment: HMO approves

Authorization

Preparer Name : JUDITH MALONEY

Preparation Date : 07/23/2009

HMO Authorization Name : KERRI ANN TIRRELL

HMO Authorization Date : 07/23/2009

Admin Calculation

Admin Cost Calculation: Sliding Scale Calculation Percentage: N/A

Justification:

Sliding Scale Percentage:

up to	\$100,000	=	3.00%
up to	\$1,000,000	=	2.00%
up to	\$5,000,000.00	=	1.00%
Excess		=	0.50%

10:38 AM

Allocation Request with Signature

Disaster Number : 1790 Allocation Number : 1 IFMIS Status : Accept IFMIS Date : 07/24/2009

FEMA Project Number	Proj Amend Number	State Appl ID	FY	Project Amount	Grantee Admin Est	Subgrantee Admin Est	Total Allocation	Proj Total Fed Share	Proj Fed Share Prev Alloc	Max Avail for Curr Alloc
2 - R	0	2	2009	\$138,358	\$0	\$0	\$138,358	\$138,538	\$138,358	\$180
3 - R	0	4	2009	\$233,231	\$0	\$0	\$233,231	\$233,231	\$233,231	\$0
TOTALS				\$371,589	\$	\$0	\$371,589			

Comments

Date: 07 / 23 / 2009 User Id: JMALONE2

Comment: allocation of \$138,358 approved

Date: 07 / 23 / 2009 User Id: JMALONE2

Comment: allocation of \$233,231 approved

Date: 07 / 23 / 2009 User Id: JMALONE2

Comment: total allocation of both \$233,231 and \$138,358 - \$371,589

Date: 07 / 23 / 2009 User Id: KTIRRELL

Comment: HMO approves

Authorization

Preparer Name : JUDITH MALONEY

Preparation Date : 07/23/2009

HMO Authorization Name : KERRI ANN TIRRELL

HMO Authorization Date : 07/23/2009

Sliding Scale Percentage:

up to	\$100,000	=	3.00%
up to	\$1,000,000	=	2.00%
up to	\$5,000,000.00	=	1.00%
Excess		=	0.50%

Allocation Request with Signature

Disaster Number : 1790

Allocation Number : 1

IFMIS Status : Accept

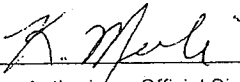
IFMIS Date : 07/24/2009

Admin Calculation

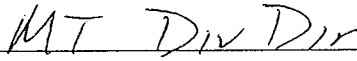
Admin Cost Calculation: Sliding Scale

Calculation Percentage: N/A

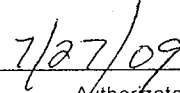
Justification:



Authorizing Official Signature



Authorizing Official Title



Authorization Date

Authorizing Official Signature

Authorizing Official Title

Authorization Date

Sliding Scale Percentage:

up to	\$100,000	=	3.00%
up to	\$1,000,000	=	2.00%
up to	\$5,000,000.00	=	1.00%
Excess		=	0.50%

HAZARD MITIGATION GRANT PROGRAM

Obligation

Disaster No	FEMA Project No	Amendment No	State Application ID	Action No	Supplemental No	State	Grantee
1790	3-R	0	4	1	2	VT	Statewide

Subgrantee: Northfield (Town of)
 Subgrantee FIPS Code: 023-50275

Project Title : Central St. Culvert Upgrade

Total Amount Previously Allocated	Total Amount Previously Obligated	Total Amount Pending Obligation	Total Amount Available for New Obligation	Project Amount	Grantee Admin Est	Subgrantee Admin Est	Total Obligation	IFMIS Date	IFMIS Status	FY
\$233,231	\$233,231	\$0	\$0	\$233,231	\$0	\$0	\$233,231	07/27/2009	Accept	2009

Comments

Date: 07/27/2009 User Id: JMALONE2

Comment: obligation \$233,231 approved

Date: 07/27/2009 User Id: KTIRRELL

Comment: HMO approval of obligation of \$233,231

Authorization

Preparer Name: JUDITH MALONEY

Preparation Date: 07/27/2009

HMO Authorization Name: KERRI ANN TIRRELL

HMO Authorization Date: 07/27/2009

Funding Estimate Financial Activity Report

Disaster Number: 1790

State: VT

Region: 1

Declaration Date: 09/12/2008

Grantee : Statewide

	Projected A	Total Allocated in NEMIS B	Available C (A - B)	Total Obligated in NEMIS D	Available E (A - D)
HMGP Project Funds	\$721,688	\$474,714	\$246,974	\$474,714	\$246,974
Regular Projects	\$635,086	\$474,714	\$160,372	\$474,714	\$160,372
Initiative Projects	\$36,084	\$0	\$36,084	\$0	\$36,084
Planning Projects	\$50,518	\$0	\$50,518	\$0	\$50,518
State Management Costs	\$35,291	\$0	\$35,291	\$0	\$35,291
Estimated Ceiling	\$721,688	\$474,714	\$246,974	\$474,714	\$246,974
Grantee Admin Costs	\$76,072	\$0	\$76,072	\$0	\$76,072
Subgrantee Admin Costs	\$123,551	\$0	\$123,551	\$0	\$123,551
Admin Cost Sub Total	\$199,623	\$0	\$199,623	\$0	\$199,623
TOTALS	\$921,311	\$474,714	\$446,597	\$474,714	\$446,597

Record of Environmental Consideration

See 44 Code of Federal Regulation Part 10.

Project Name/Number: FEMA-HMGP-1790 Central Street Culvert Upgrade Project, Northfield, VT

Project Location: Central Street, Northfield, VT, as indicated on map enclosed with application.
Latitude: 44.831 N Longitude: -72.3930W

Project Description: The Town of Northfield, VT proposes to upgrade a 48-inch wide by 24-inch high corrugated metal pipe (CMP) arch at the entrance and at the exit a 30-inch CMP (The total culvert length is 130 feet.) with a 10' wide by 6' high, 150 feet long precast concrete box culvert. The bottom of the culvert would be set approximately two feet below the channel invert; four feet would be clear, an opening that meets VTrans hydraulic standards. It also meets current environmental permitting requirements by having both a width equal or greater to the stream's natural bankfull dimension, and a natural channel bottom.

Documentation Requirements

- No Documentation Required (**Review Concluded**)
- (**Short version**) All consultation and agreements implemented to comply with the National Historic Preservation Act, Endangered Species Act, and Executive Orders 11988, 11990 and 12898 are completed and no other laws apply. (**Review Concluded**)
- (**Long version**) All applicable laws and executive orders were reviewed. Additional information for compliance is attached to this REC.

National Environmental Policy Act (NEPA) Determination

- Statutorily excluded from NEPA review. (**Review Concluded**)
- Categorical Exclusion - Category (xv & xvi) Type Single Project
 - No Extraordinary Circumstances exist.
 - Are project conditions required? Yes (see section V) No (**Review Concluded**)
 - Extraordinary Circumstances exist (See Section IV).
 - Extraordinary Circumstances mitigated. (See Section IV comments)
 - Are project conditions required? Yes (see section V) No (**Review Concluded**)
 - Environmental Assessment required. See FONSI for determination, conditions and approval.
- Environmental Assessment required. See FONSI for determination, conditions and approval.

Comments: This is a project within the area of previously disturbed ground.
Correspondence/Consultation/References: Project Description; Based on information provided by the grantee, the scope of work for this project qualifies as a Categorical Exclusion (CATEX) under 44 CFR Part 10.8 (d)(2)(xv & xvi)

Reviewer and Approvals

Reviewer Name: Judith A. Matoney

Applicant: Town of Northfield, VT

Disaster/Emergency/Program/Project Title: FEMA-HMGP-1790
Central Street Culvert Upgrade Project

FEMA Regional Environmental Officer or delegated approving official
Name: John P. Sullivan *John P. Sullivan* 7/21/09

Signature: *John A. Matoney* Date: 7-14-09

I. Compliance Review for Environmental Laws (other than NEPA)

A. National Historic Preservation Act

- Not type of activity with potential to affect historic properties. **(Review Concluded)**
- Applicable executed Programmatic Agreement. Sept. 23, 2002 Otherwise, conduct standard Section 106 review.
 - Activity meets Programmatic Allowance # Appendix B, IB
 - Are project conditions required? Yes (see section V) No **(Review Concluded)**

HISTORIC BUILDINGS AND STRUCTURES

- No historic properties 50 years or older in project area. **(Review Concluded)**
- Building or structure 50 years or older in project area and activity not exempt from review.
 - Determination of No Historic Properties Affected (FEMA finding/SHPO/THPO concurrence on file)
 - Are project conditions required? Yes (see section V) No **(Review Concluded)**
 - Determination of Historic Properties Affected (FEMA finding/SHPO/THPO concurrence on file)
 - Property a National Historic Landmark and National Park Service was provided early notification during the consultation process. If not, explain in comments
 - No Adverse Effect Determination (FEMA finding/SHPO/THPO concurrence on file).
 - Are project conditions required? Yes (see section V) No **(Review Concluded)**
 - Adverse Effect Determination (FEMA finding/SHPO/THPO concurrence on file)
 - Resolution of Adverse Effect completed. (MOA on file)
 - Are project conditions required Yes (see section V) No **(Review Concluded)**

ARCHEOLOGICAL RESOURCES

- Project affects only previously disturbed ground. **(Review Concluded)**
- Project affects undisturbed ground.
 - Project area has no potential for presence of archeological resources
 - Determination of no historic properties affected (FEMA finding/SHPO/THPO concurrence or consultation on file). **(Review Concluded)**
 - Project area has potential for presence of archeological resources
 - Determination of no historic properties affected (FEMA finding/SHPO/THPO concurrence on file)
 - Are project conditions required Yes (see section V) No **(Review Concluded)**
 - Determination of historic properties affected
 - NR eligible resources not present (FEMA finding/SHPO/THPO concurrence on file).
 - Are project conditions required Yes (see section V) No **(Review Concluded)**
 - NR eligible resources present in project area. (FEMA finding/ SHPO/THPO concurrence on file)
 - No Adverse Effect Determination. (FEMA finding/ SHPO/THPO concurrence on file)
 - Are project conditions required? Yes (see section V) No **(Review Concluded)**
 - Adverse Effect Determination. (FEMA finding/ SHPO/THPO concurrence on file)
 - Resolution of Adverse Effect completed. (MOA on file)
 - Are project conditions required? Yes (see section V) No **(Review Concluded)**

Comments: This project will replace an existing culvert within the footprint previously disturbed ground.
Correspondence/Consultation/References: The Vermont Programmatic Agreement, Appendix B, IB

B. Endangered Species Act

- No listed species and/or designated critical habitat present in the action area. **(Review Concluded)**
- Listed species and/or designated critical habitat present in the action area.
 - No effect to species or designated critical habitat. (See comments for justification) **(Review Concluded)**
 - May affect, but not likely to adversely affect species or designated critical habitat (FEMA determination/USFWS/NMFS concurrence on file) **(Review Concluded)**
 - Likely to adversely affect species or designated critical habitat
 - Formal consultation concluded. (Biological Assessment and Biological Opinion on file)
 - Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Review by Judith Maloney, FEMA, of U.S. Fish and Wildlife Service Endangered Species web site revealed that no federally listed or proposed threatened and endangered species under the jurisdiction of the U.S. Fish and Wildlife are known to occur in the vicinity of the areas of proposed projects. Site visit confirmed common roadside species of plants.

Correspondence/Consultation/References: U.S. Fish and Wildlife Service Endangered Species web site

C. Coastal Barrier Resources Act

- Project is not located in Coastal Barriers Resource System or Otherwise Protected Area.
- Project does not affect a coastal barrier within the COBRA System (regardless of in or out) **(Review Concluded)**
- Project is located in a coastal barrier system and/or affects a coastal barrier. (FEMA determination/USFWS consultation on file)
 - Proposed action an exception under Section 3505.a.6? **(Review Concluded)**
 - Proposed action not excepted under Section 3505.a.6.
 - Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: This project is not in or near a coastal area.

Correspondence/Consultation/References: Coastal Barrier Resources Act, N.E. maps

D. Clean Water Act

- Project site located outside of and would not affect any waters of the U.S. **(Review Concluded)**
- Project site located in or would affect waters, including wetlands, of the U.S.
 - Project exempted as in kind replacement or other exemption. **(Review Concluded)**
 - Project requires Section 404/401/10 permit, including qualification under Nationwide Permits.
 - Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Project involves no activity in waters of the US, nor discharge of pollutants or dredged/fill materials. Project improvements may require permits from appropriate local, state, and federal agencies. Additionally, construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act, " Best Management Practices BMP". The Town must contact the US Army Corps of Engineers to inquire if a permit is required. The Town will need to obtain all necessary permits from relevant state agencies after the project specifications have been completed.

Correspondence / Consultation / References: Section 10 of the Rivers and Harbors Act, Section 404 of the Clean Water Act, (Re: determinations and acquisition of appropriate permits), and local Conservation Commission regulations. See .USACE General Permit No: NAE-2007-24 Expiration Date: December 5, 2012

E. Coastal Zone Management Act

- Project does not affect a coastal zone area (regardless of in or out)- **(Review concluded)**
- Project is not located in a coastal zone area - **(Review concluded)**
- Project is located in a coastal zone area and/or affects the coastal zone
 - State administering agency does not require consistency review. **(Review Concluded)**.
 - State administering agency requires consistency review.
 - Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: This project is not in or near a coastal area.

Correspondence/Consultation/References: Coastal Barrier Resources Act, N.E. maps

F. Fish and Wildlife Coordination Act

Project is not located in or affects a waterway/body of water. **(Review Concluded)**

Project affects, controls or modifies a waterway/body of water.

Coordination with USFWS conducted

No Recommendations offered by USFWS. **(Review Concluded)**

Recommendations provided by USFWS.

Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Review by Judith Maloney, FEMA, of U.S. Fish and Wildlife Service Endangered Species web site revealed that no federally listed or proposed threatened and endangered species under the jurisdiction of the U.S. Fish and Wildlife are known to occur in the vicinity of the areas of proposed projects.

Correspondence/Consultation/References: U.S. Fish and Wildlife Service Endangered Species web site

G. Clean Air Act

Project will not result in permanent air emissions. **(Review Concluded)**

Project is located in an attainment area. **(Review Concluded)**

Project is located in a non-attainment area.

Coordination required with applicable state administering agency.

Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Any emissions from construction equipment will be temporary in nature. Only minimal, temporary dust and increased emissions from construction vehicles caused by a routine construction project might occur.

Correspondence/Consultation/References: project description

H. Farmlands Protection Policy Act

Project does not affect prime or unique farmland. **(Review Concluded)**

Project causes unnecessary or irreversible conversion of prime or unique farmland.

Coordination with Natural Resource Conservation Commission required.

Farmland Conversion Impact Rating, Form AD-1006, completed.

Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: No commitment of farm lands. All new construction and footprint will be in rocky hillside. No intrusion into existing farmland will occur.

Correspondence/Consultation/References: The project is in a forested area far from farm lands. See enclosed pictures of project area and project description.

I. Migratory Bird Treaty Act

Project not located within a flyway zone. **(Review Concluded)**

Project located within a flyway zone.

Project does not have potential to take migratory birds. **(Review Concluded)**

Project has potential to take migratory birds.

Contact made with USFWS

Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: N/A This project will not result in the migratory taking of birds.

Correspondence/Consultation/References: The Migratory Bird Treaty Act and Executive Order 13186, project description

Reviewer Name: Judith A. Maloney

Applicant: Town of Northfield, VT

Disaster/Emergency/Program/Project Title: FEMA-HMGP-1790

Central Street Culvert Upgrade Project

J. Magnuson-Stevens Fishery Conservation and Management Act

- Project not located in or near Essential Fish Habitat. **(Review Concluded)**
- Project located in or near Essential Fish Habitat.
- Project does not adversely affect Essential Fish Habitat. **(Review Concluded)**
 - Project adversely affects Essential Fish Habitat (FEMA determination/USFWS/NMFS concurrence on file)
 - NOAA Fisheries provided no recommendation(s) **(Review Concluded)**.
 - NOAA Fisheries provided recommendation(s)
 - Written reply to NOAA Fisheries recommendations completed.
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: No Essential Fish habitat is adversely affected by this project. Review by Judith Maloney, FEMA, of U.S. Fish and Wildlife Service Endangered Species web site revealed that no federally listed or proposed threatened and endangered species under the jurisdiction of the U.S. Fish and Wildlife are known to occur in the vicinity of the areas of proposed projects.

Correspondence/Consultation/References: U.S. Fish and Wildlife Service Endangered Species web site; site visit

K. Wild and Scenic Rivers Act

- Project is not along and does not affect a Wild or Scenic River - **(Review Concluded)**
- Project is along or affects Wild or Scenic River
- Project adversely affects WSR as determined by NPS/USFS. **FEMA cannot fund the action.** (NPS/USFS/USFWS/BLM consultation on file)
 - Project does not adversely affect WSR. (NPS/USFS/USFWS/BLM consultation on file)
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: No designated river is near the project.

Correspondence/Consultation/References: Review of Web site: <http://www.rivers.gov/wildriverslist.html#vt>

L. Other Relevant Laws and Environmental Regulations

Identify relevant law or regulations, resolution and any consultation/references: *N/A*

II. Compliance Review for Executive Orders

A. E.O. 11988 - Floodplains

- Outside Floodplain and No Effect on Floodplains/Flood levels - **(Review Concluded)**
- Located in Floodplain or Effects on Floodplains/Flood levels
- No adverse effect on floodplain or can be adversely affected by the floodplain. **(Review Concluded)**,
 - Beneficial Effect on Floodplain Occupancy/Values **(Review Concluded)**.
 - Possible adverse effects associated with investment in floodplain, occupancy or modification of floodplain environment
 - 8 Step Process Complete - documentation on file
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: This project will mitigate damages to the road.

Correspondence/Consultation/References: Project is located in a FEMA designated C zone, an area outside the 500-year flood. NFIP (HUD) Flood Boundary and Floodway Map, Village of Northfield, VT, Washington County, Map Number 500117 0001B (Page 1 of 1, Effective May 15, 1978).

B. E.O. 11990 - Wetlands

- Outside Wetland and No Effect on Wetland(s) - **(Review Concluded)**
- Located in Wetland or effects Wetland(s)
- Beneficial Effect on Wetland - **(Review Concluded)**

- Possible adverse effect associated with constructing in or near wetland
 - Review completed as part of floodplain review
 - 8 Step Process Complete - documentation on file
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Review of National Wetlands Inventory and topographical maps show wetlands in the general vicinity of the project area. The Town must follow the Clean Water Act, "Best Management Practices BMP". The Town must contact the U.S. Army Corps of Engineers to inquire if a permit is required. The Town will need to obtain all necessary permits from relevant state agencies after the project specifications have been completed and before work begins.

Correspondence/Consultation/References: <http://wetlandsfws.er.usgs.gov/wtlnds/launch.html>; Topographical map of the area.

C. E.O. 12898 - Environmental Justice for Low Income and Minority Populations

- No Low income or minority population in, near or affected by the project - **(Review Concluded)**
- Low income or minority population in or near project area
 - No disproportionately high and adverse impact on low income or minority population- **(Review Concluded)**
 - Disproportionately high or adverse effects on low income or minority population
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Project will have no disproportionate effects on the local population.

Correspondence/Consultation/References:

III. Other Environmental Issues

Identify other potential environmental concerns in the comment box not clearly falling under a law or executive order (see environmental concerns scoping checklist for guidance).

Comments: A review of the scoping guidance indicates no other environmental concerns.

Correspondence/Consultation/References:

IV. Extraordinary Circumstances

Based on the review of compliance with other environmental laws and Executive Orders, and in consideration of other environmental factors, review the project for extraordinary circumstances.

* A "Yes" under any circumstance may require an Environmental Assessment (EA) with the exception of (ii) which should be applied in conjunction with controversy on an environmental issue. If the circumstance can be mitigated, please explain in comments. If no, leave blank.

Yes

- (i) Greater scope or size than normally experienced for a particular category of action
- (ii) Actions with a high level of public controversy
- (iii) Potential for degradation, even though slight, of already existing poor environmental conditions;
- (iv) Employment of unproven technology with potential adverse effects or actions involving unique or unknown environmental risks;
- (v) Presence of endangered or threatened species or their critical habitat, or archaeological, cultural, historical or other protected resources;
- (vi) Presence of hazardous or toxic substances at levels which exceed Federal, state or local regulations or standards requiring action or attention;

- (vii) Actions with the potential to affect special status areas adversely or other critical resources such as wetlands, coastal zones, wildlife refuge and wilderness areas, wild and scenic rivers, sole or principal drinking water aquifers;
- (viii) Potential for adverse effects on health or safety; and
- (ix) Potential to violate a federal, state, local or tribal law or requirement imposed for the protection of the environment.
- (x) Potential for significant cumulative impact when the proposed action is combined with other past, present and reasonably foreseeable future actions, even though the impacts of the proposed action may not be significant by themselves.

Comments:

V. Environmental Review Project Conditions

General comments:

1. If ground disturbing activities occur during implementation, the applicant will monitor excavation activity, and if any artifacts or human remains are found during the excavation process all work is to cease and the applicant will notify FEMA, Grantee (VEM), and SHPO/THPO.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material the applicant must contact the Grantee and the Grantee must contact FEMA. The applicant must also contact the relevant agency with authority for regulation of the material.
3. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Project Conditions:

1. As long as the appropriate soil erosion/siltation control measures and the best management practices for roads and culverts (e.g. placing culvert inverts at or slightly below grade in the bed of the stream to accommodate fish passage, working during low flow summer periods, etc.) are utilized, harm to fish and wildlife will be minimized.
2. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
3. Commence work during low flow period.
4. Reroute or stop the flow of water into the project site.
5. If necessary, dewater the project site.
6. Excavate unsuitable wash material from site.
7. Remove erosion control measures after the construction area has been stabilized.

The applicant must ensure that best managing practices for roads and culverts and installation of erosion control measures are utilized. Construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act's: "Best Management Practices, BMP" for erosion control during construction of this project. This includes, the applicant applying for all local, state, and federal permits and easements necessary to complete the project and obtaining these permits prior to commencement of any work. Any conditions of these permits become conditions of this grant, project, and environmental review. In accordance with FEMA Guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements

Reviewer Name: Judith A. Maloney

Applicant: Town of Northfield, VT

Disaster/Emergency/Program/Project Title: FEMA-HMGP-1790

Central Street Culvert Upgrade Project

and/or obtain proper local, state, and federal permit concerning this project. Any conditions of this process or these regulations, laws, and policies become conditions of this grant, project, and environmental review.

Monitoring Requirements: Quarterly Reports, and final inspection of the scope of work and accounting records are required.

Project Review and Conditions Status

Project Name/Number: FEMA-HMGP-1790 Central Street Culvert Upgrade Project, Northfield, VT

Project Location: Central Street, Northfield, VT, as indicated on map enclosed with application.

Latitude: 44.831 N Longitude: -72.3930W

Project Description: The Town of Northfield, VT proposes to upgrade a 48-inch wide by 24-inch high corrugated metal pipe (CMP) arch at the entrance and at the exit a 30-inch CMP (The total culvert length is 130 feet.) with a 10' wide by 6' high, 150 feet long precast concrete box culvert. The bottom of the culvert would be set approximately two feet below the channel invert; four feet would be clear, an opening that meets VTrans hydraulic standards. It also meets current environmental permitting requirements by having both a width equal or greater to the stream's natural bankfull dimension, and a natural channel bottom.

Environmental Review Project Conditions

1. If ground disturbing activities occur during implementation, the applicant will monitor excavation activity, and if any artifacts or human remains are found during the excavation process all work is to cease and the applicant will notify FEMA, Grantee, and SHPO/THPO.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material the applicant must contact the Grantee and the Grantee must contact FEMA. The applicant must also contact the relevant agency with authority for regulation of the material.
3. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Other Required Project Specific Conditions

1. The applicant must comply with all applicable local, state and federal laws, regulations, policies, and requirement. Any conditions of these regulations, laws, and policies become conditions of this grant, project, and environmental review.

2. In accordance with FEMA guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA. Any conditions resulting from this process become part of this project.
3. The applicant must ensure that best managing practices for roads and culverts are utilized, and installation of erosion control. Construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act's: "Best Management Practices, BMP" for erosion control during construction of this project. This includes, the applicant applying for all local, state, and federal permits and easements necessary to complete the project and obtaining these permits prior to commencement of any work. Any conditions of these permits become conditions of this grant, project, and environmental review. In accordance with FEMA Guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA.
4. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
5. The Department of Fish & Wildlife recommends: the retention (or restoration) of natural stream bottom and stream bank conditions; the retention or establishment of naturally-vegetated riparian buffers; and, incorporating buffers and bridges or large bottomless culverts wherever possible and eliminating or minimizing the use of rip-rap to retain natural stream bank and streambed conditions.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 310,974
Federal Share	\$ 233,231
Applicant Share	\$ 77,743

Period of Performance

This project must be complete by: 7/31/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- **All permits must be obtained and forwarded to FEMA before any work begins.**
- **Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.**
- **Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal State, and laws and standards.**

MUNICIPAL OFFICES



Superintendent of Public Works
williamlyon@northfield.vt.us

Phone (802) 485-6121
Fax (802) 485-8426

51 SOUTH MAIN STREET
NORTHFIELD, VERMONT 05663

March 30, 2009

Mr. Ray Doherty
State Hazard Mitigation Officer
Vermont Emergency Management
103 South Main Street
Waterbury, VT 05671

Subject: HMGP Grant Application
Central Street Culvert, Northfield, Vermont

Dear Ray:

Enclosed is the HMGP Grant Application for the Village of Northfield's Central Street Culvert Project.

Thank you for the opportunity to apply.

Please feel free to contact me should you have any questions

Sincerely,

A handwritten signature in black ink, appearing to read "William C. Lyon".

William C. Lyon
Superintendent of Public Works

cc: Nanci Allard/Municipal Manager

Part 2:		Problem Description continued		
Statement of Damages				
Date	Event	Description of Direct Damages	Description of Indirect Damages	Cost of Damage
73				
89				
3				
Total Damage				163,000
Part 3:		Project Objective		
Project Objective		TO ELIMINATE PUBLIC AND PRIVATE DAMAGES DURING HIGH WATER EVENTS.		
Part 4:		Analysis of Alternative Solutions		
Alternative Solutions				
Alternative Solution	Brief Title	Description of Alternative		
1	THE VILLAGE HIGHWAY DEPT INSTALLED THREE SMALLER CULVERTS TO REDUCE THE ELEVATION OF THE WATER DURING			
2				
3	No Action	No Action		
Supporting Documentation: (Attach)	<input checked="" type="checkbox"/> Yes	Did any of the alternatives have significant impacts or limitations?		
	<input type="checkbox"/> Yes	If Yes, provide additional information concerning these impacts Is the information attached?		
	<input checked="" type="checkbox"/> Yes	Hydrology/ hydraulics reports, if applicable		
	<input checked="" type="checkbox"/>	Supporting documentation for the alternatives (i.e. drawings, designs, pictures) (Attached)		
Preferred Alternative				
Chosen Alternative:				
Justification:		THE BEST METHOD IS TO REPLACE THE CULVERT WITH A CONCRETE BOX		

E	Total Project Costs (Line B + Line D) Note: Line A and D are equal	\$370,000.00
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Identify source of local non-federal match:

Part 6:	Benefit/Cost Analysis
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SEE ATTACHED BCA	Future Maintenance costs for life of project	
Total Cost = Project Cost + Future Maintenance	Total Cost	
Total Damages	Years of Damage	
Annualized Damages = Total Damages/Years of record	Annualized Damages	
Annualized Damages	Expected Life of Project	
Anticipated Damages without project over time = Annualized damages* Expected life of project	Anticipated Damage without Project (Anticipated Loss or Benefit)	
Benefit/Cost Ratio = Anticipated Loss or Benefit /Total Cost	Benefit/Cost Ratio	1.14

Only projects with a **benefit/cost ratio of 1:0 or greater will be considered**. If your project meets that criteria, continue through the next sections of the application.

Part 7:	Scope of Work
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Task Description	Days to Complete
DESIGN AND PERMITTING	120
CONSTRUCTION	120

Part 8:	Technical Confirmation
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Supporting Documentation: <i>(Attach)</i>	<input checked="" type="checkbox"/>	Has the hydrology/hydraulics/structural design of this project been endorsed by the local Highway District Engineer, Local Stream Alteration Engineer, a Consulting Engineer or other Technical Experts?
	<input checked="" type="checkbox"/>	Supporting letter(s) <i>(attached)</i>

Part 9:	Authorized Signature
----------------	-----------------------------

BCA Attachment
CENTRAL ST Culvert.

LIMITED DATA MODULE
Benefit-Cost Analysis of Flood Mitigation Projects

PROJECT INFORMATION

Disaster Number
DSR Number
DSR Category
DSR Subject
Inspection Date
Application Date
Analysis Date
Analyst

DR:1790
3:31:09
3:26:09
Ray Doherty

Project
Address
City, State, Zip
County
Applicant
Contact Person
Scenario Run ID
File Save As Name

Washington county
Town of Northfield
Bill Lyon
BCA-HMGP-Northfield-FY:09

PROJECT DATA

Project Description

Culvert upgrade on Central St, Northfield

Project Useful Life (Years)
Base Year of Costs

100
2009
No
No

Historic Preservation Issues (Yes or No)?
Environmental Issues (Yes or No)?

Economic Factors: Discount Rate (%)

57.00

Present Value Coefficient

14.27

Net Mitigation Project Cost:
Notes:

from Dubois & King proposal

Additional Annual Maintenance Cost (\$/year) for Mitigation Project
Present Value of Additional Annual Maintenance Cost (\$)

100
\$1,427
\$371,427

TOTAL MITIGATION PROJECT COST

TYPE OF FACILITY
(for Loss of Function)

FACILITY DESCRIPTION

Village street/class 3 culvert upgrade needed for flood mitigation

Loss of Function for Roads/Bridges

Estimated Number of One-Way Traffic Trips Per Day
Estimated Delay (Detour) Time Per One Way Trip (hours)

650
0.25
\$9220

Total Economic Loss Per Hour of Delay: Ordinary, commercial, and emergency traffic

Economic Loss Per Day of Loss of Function of Bridge or Road

\$4,432

FLOOD HISTORY

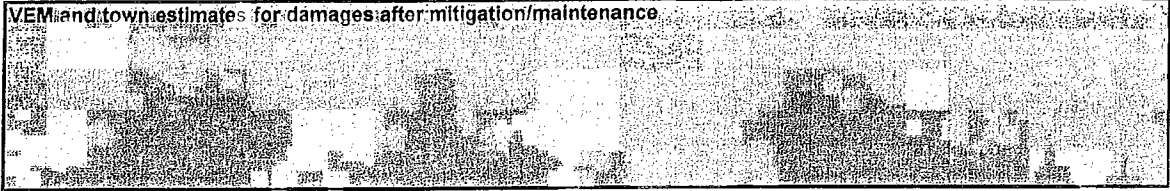
Estimated Frequency of Declared Flood Event (Years)

5

Data Sources and Documentation

Town of Northfield
VEM records

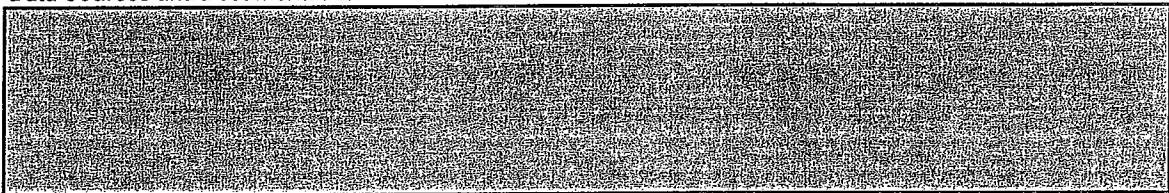
Data Sources and Documentation



SUMMARY OF BENEFITS AND COSTS

	Expected Annual	Present Value
Expected Annual Damages Before Mitigation	\$30,145	\$430,151
Expected Annual Damages After Mitigation	\$463	\$6,609
Expected Avoided Damages After Mitigation (BENEFITS)	\$29,682	\$423,542
PROJECT COSTS	\$371,427	
PROJECT BENEFITS	\$423,542	
BENEFITS MINUS COSTS	\$52,115	
BENEFIT-COST RATIO	1.14	

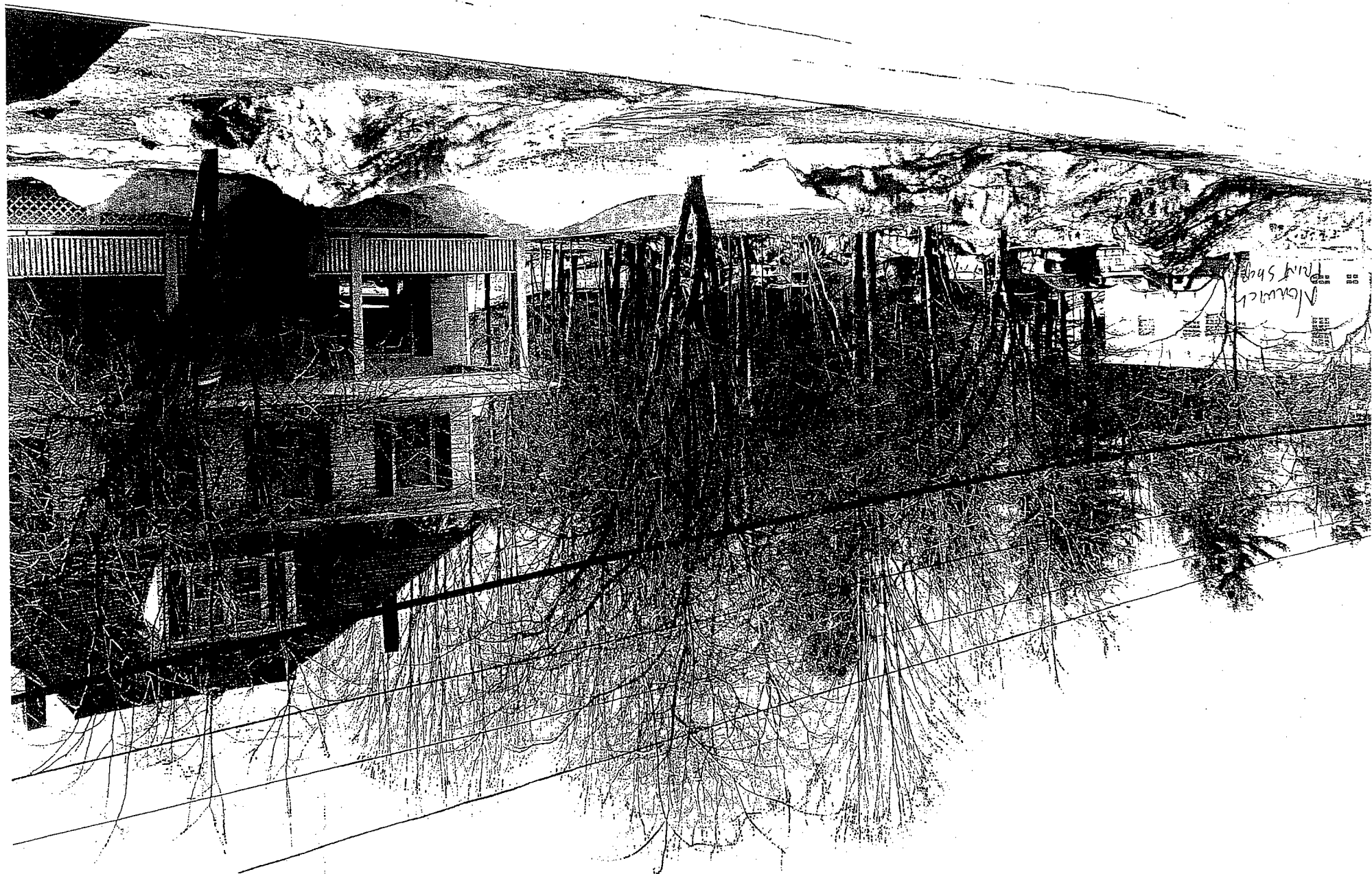
Data Sources and Documentation

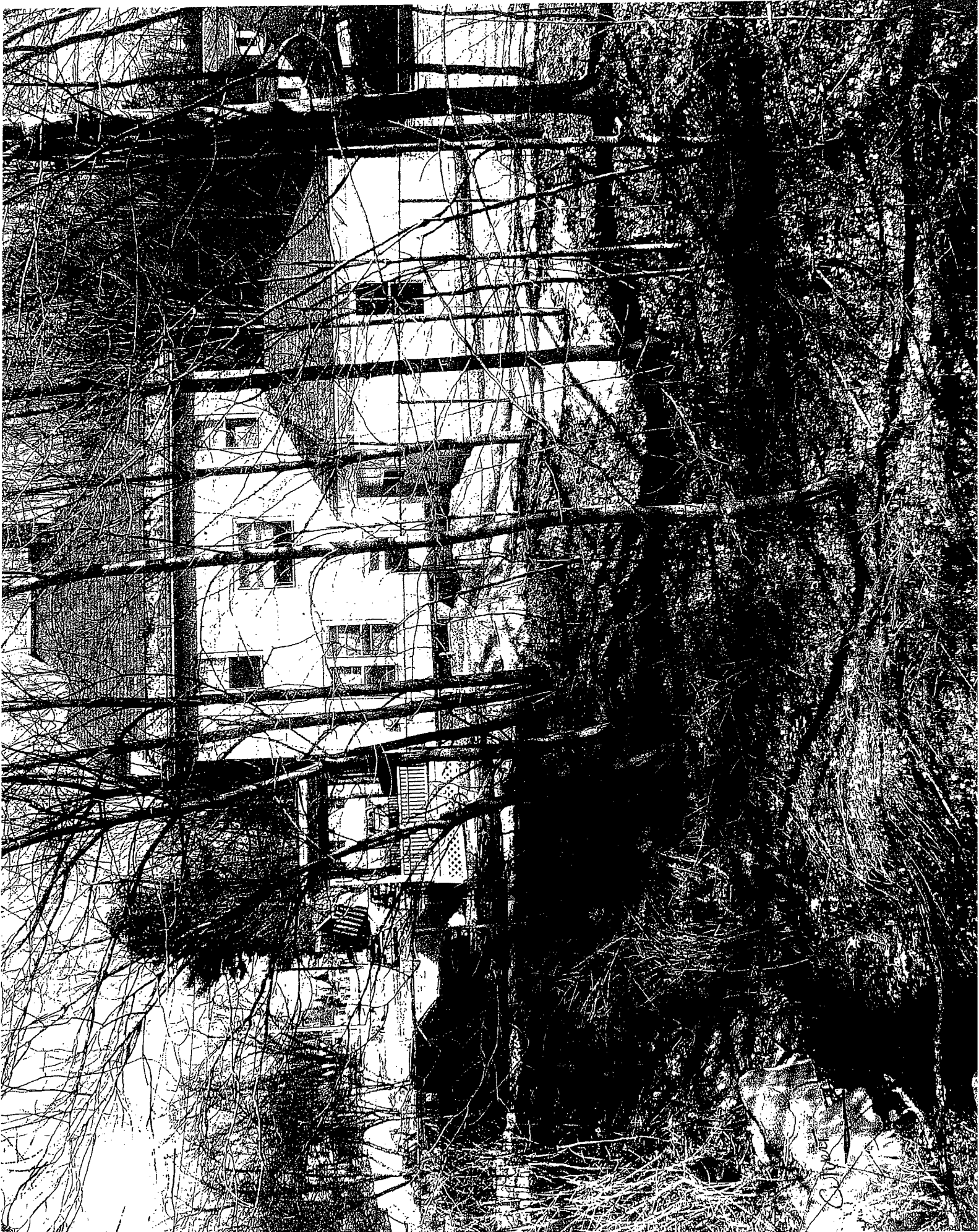


FEMA Disclaimer: The results produced by this analysis are neither conclusive evidence that a proposed project is cost-effective, nor a guarantee that a project is eligible for any government grant for whatever purpose.



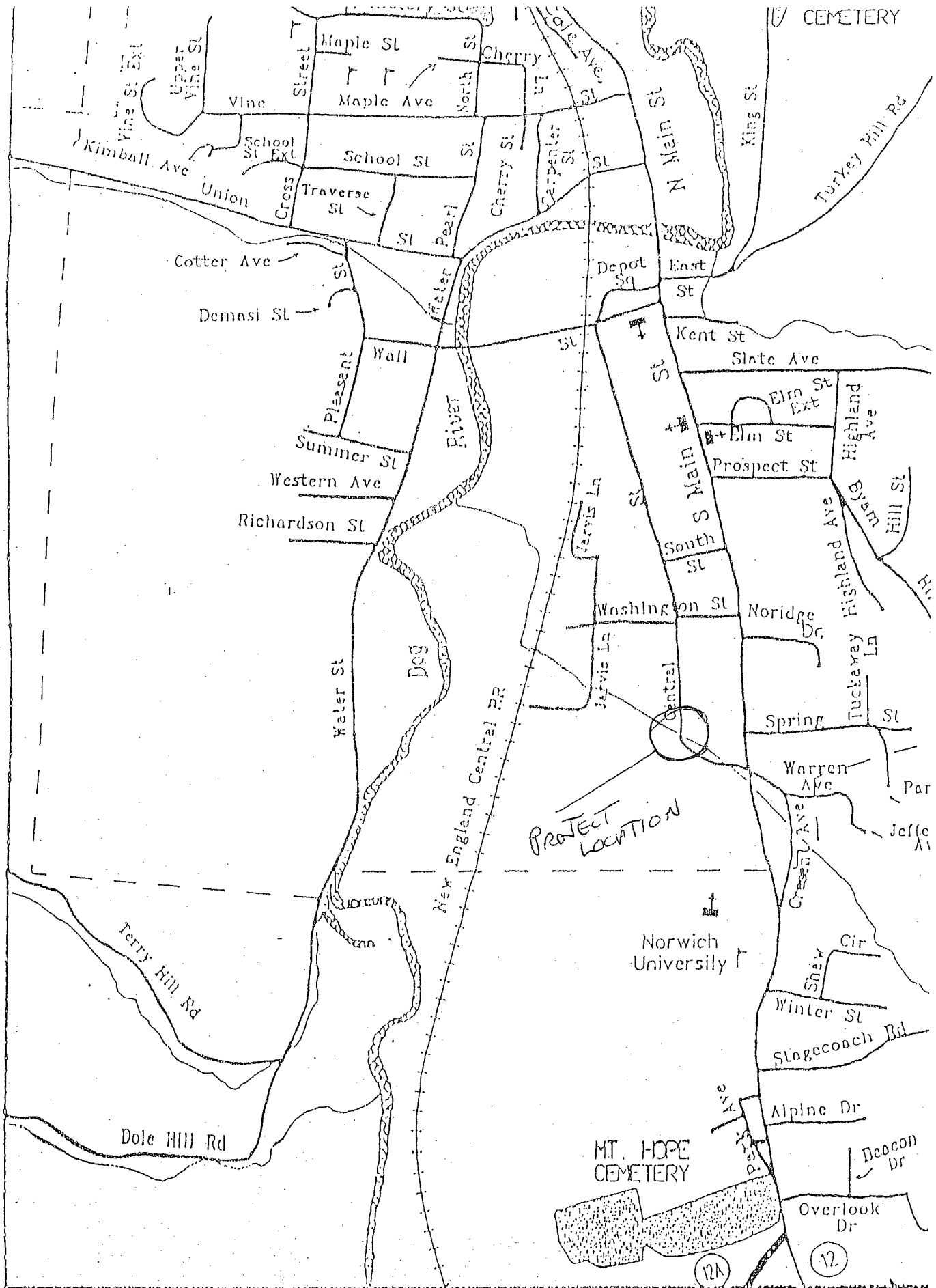
Nowich
Paint Shop
Apprentice
Elevation of
Floor Level





North
Point
510





Northfield VT-Central St Culvert H.M.G.P.

There is a scour hole at the outlet of this culvert that was approximately 1' deep on the day of the site visit.

In a conversation with Bill Lyons of the Village of Northfield, it was determined that the downstream culvert on Jarvis Street is probably too small. This culvert is a 30" diameter corrugated metal pipe. There is 62" of fill height from the streambed to the road. This culvert overtops the roadway below the Q2.33 flood flow. Conveying more water through the Central Street culvert may create problems at this culvert during a flood event. A preliminary analysis revealed that an 8' X 4' box would be hydraulically adequate for Jarvis Street without providing a natural bottom.

Downstream of Jarvis Street is a 30" X 30" stone box under the New England Central Railroad. This box is also too small to convey flood flows. However, it is under about 15' of fill and there is a wetland upstream of this box as well as downstream. There is evidence of beaver activity upstream and downstream that has been stopped at least for now. If the railroad culvert cannot handle the flood flow, the wetland will act as a detention pond. There is one house that has been affected by the beaver dam activity and during high flows, this house did have some flooding.

Recommendations

In sizing a new structure we attempted to select structures that meet the hydraulic standards, fit the natural channel width, the roadway grade and other site conditions. Based on these considerations the following would best fit the site:

- A concrete box with a 7' wide by 4' high inside opening, which has a waterway area, of 28 sq. ft., that results in a headwater depth at Q25 = 3.9' and at Q100 = 5.3'.
- A corrugated metal pipe that is 6' in diameter would be hydraulically adequate. This structure would provide a waterway opening of 28.3 sq. ft. and would result in headwater depths at Q25 = 5.1' and Q100 = 6.9'.
- Other structures with a minimum span of 6' and at least 28 sq. ft. of waterway area that fit the site could be considered.

General Comments

If a new box is installed, we recommend it have full headwalls at the inlet and outlet. The headwalls should extend at least four feet below the channel bottom, or to ledge, to act as cutoff walls and prevent undermining.

If a new pipe is installed we recommend it have a minimum of 3 ft of cover and a maximum cover to meet specific structure specifications. Pipe manufacturers can be contacted for certain pipe specifications. All structures must be able to handle HS-25 loading. Additionally, we recommend pipes have cradle or full headwalls at the inlet and outlet. The headwalls should extend at least four feet below the channel bottom, or to ledge, to act as cutoff walls and prevent undermining.

It is always desirable for any new structure to have flared wingwalls at the inlet and outlet, to smoothly transition flow through the structure, and to protect the structure and roadway approaches from erosion. The wingwalls should match into the channel banks. Any new structure should be

Northfield - Central St Culvert

** OPINION OF PROBABLE COST **

Northfield Stormwater Drainage System Evaluation

Town of Northfield, Vermont

CENTRAL STREET CULVERT REPLACEMENT

(Based on October 31, 2008 Evaluation Report)

	DESCRIPTION OF THE ITEM	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE	ESTIMATED COST
GENERAL					
1	Mobilization (8%) of remaining construction costs	LS	1	\$ 18,354	\$ 18,354
2	Clearing and Grubbing	LS	1	\$ 5,000	\$ 5,000
3	Utility Conflicts	LS	1	\$ 5,000	\$ 5,000
4	Traffic Control	LS	1	\$ 3,000	\$ 3,000
5	Erosion Prevention and Sediment Control	LS	1	\$ 5,000	\$ 5,000
6	Railroad Coordination	LS			\$ -
OPEN CONVEYANCE					
7	Rock-lined Swale	LF		\$ 35	\$ -
8	Rock-lined Chute	LF		\$ 130	\$ -
9	Grass Swale	LF		\$ 20	\$ -
CATCH BASINS / MANHOLES					
10	48" Diameter, 4' - 6' deep	EA		\$ 3,200	\$ -
11	48" Diameter, 6' - 10' deep	EA		\$ 4,500	\$ -
12	60" Diameter, 4' - 6' deep	EA		\$ 5,000	\$ -
13	60" Diameter, 6' - 10' deep	EA		\$ 7,031	\$ -
14	72" Diameter, 4' - 6' deep	EA		\$ 7,200	\$ -
15	72" Diameter, 6' - 10' deep	EA		\$ 10,125	\$ -
16	96" Diameter, 4' - 6' deep	EA		\$ 12,800	\$ -
17	96" Diameter, 6' - 10' deep	EA		\$ 18,000	\$ -
STORMDRAIN PIPE					
18	12" Diameter, 4' - 6' deep	LF		\$ 38	\$ -
19	12" Diameter, 6' - 10' deep	LF		\$ 65	\$ -
20	18" Diameter, 4' - 6' deep	LF		\$ 45	\$ -
21	18" Diameter, 6' - 10' deep	LF		\$ 70	\$ -
22	24" Diameter, 4' - 6' deep	LF		\$ 52	\$ -
23	24" Diameter, 6' - 10' deep	LF		\$ 80	\$ -
24	30" Diameter, 4' - 6' deep	LF		\$ 60	\$ -
25	30" Diameter, 6' - 10' deep	LF		\$ 90	\$ -
26	36" Diameter, 4' - 6' deep	LF		\$ 65	\$ -
27	36" Diameter, 6' - 10' deep	LF		\$ 100	\$ -
28	42" Diameter, 4' - 6' deep	LF		\$ 100	\$ -
29	42" Diameter, 6' - 10' deep	LF		\$ 150	\$ -
MISC					
30	Remove Existing Stormdrain	LF	125	\$ 30	\$ 3,750
31	Sawcut Existing Pavement	LF	52	\$ 10	\$ 520
32	Repair Pavement	SY	290	\$ 35	\$ 10,150
33	Reconstruct Side Road Drainage	LF		\$ 35	\$ -
34	Headwall / Trashrack	EA		\$ 6,000	\$ -
CULVERT REPLACEMENT					
35	10' x 6' Concrete Box Culvert, 150' Long	EA	1	\$ 112,000	\$ 112,000
36	10' x 6' Concrete Box Culvert, 50' Long	EA		\$ 60,000	\$ -
37	60" Dia. Pipe J&B Under RR, 85' Long	EA		\$ 202,000	\$ -
38	Excavation / Backfill	CY	3400	\$ 25	\$ 85,000
CONSTRUCTION SUBTOTAL					\$ 247,774
ADD 20% CONTINGENCY					\$ 49,555
SUB-TOTAL					\$ 297,328
USE					\$ 300,000
ENGINEERING AND PERMITTING					
39	Design (6.9%) of Construction Cost	LS	1	\$ 20,700	\$ 20,700
40	Bid / Const. (12.5%) of Construction Cost	LS	1	\$ 37,500	\$ 37,500
41	Permitting	LS	1	\$ 5,000	\$ 5,000
ENGINEERING AND PERMITTING SUBTOTAL					\$ 63,200
ADD 10% CONTINGENCY					\$ 6,320
SUB-TOTAL					\$ 69,520
USE					\$ 70,000
CONSTRUCTION SUBTOTAL					\$ 300,000
ENGINEERING AND PERMITTING SUBTOTAL					\$ 70,000
TOTAL					\$ 370,000

This estimate is our opinion of probable construction cost based on conceptual-level design. D&K has no control over the cost or availability of labor, equipment or materials, market conditions, or the Contractor's method of pricing. D&K makes no warranty, express or implied, with respect to the accuracy of this opinion of probable cost relative to actual costs. Actual costs may differ.

TOWN OF NORTHFIELD, VERMONT

STORMWATER DRAINAGE STUDY

November 2008

Prepared for:

The Town of Northfield

Prepared by:

DuBois & King, Inc.

P.O. Box 339

Randolph, Vermont 05060

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ATTACHMENTS

- A. Watershed Maps
- B. Hydrologic and Hydraulic Analysis Documentation
- C. Maps of Existing Conditions and Conceptual-level Proposed Conditions
- D. Cost Estimates

- Southern Route 12 East Side Mixed Closed and Open System
- Open Systems between Route 12 and 12A
- Open System below Route 12
- Two major culverts at Route 12 and Route 12A

2.0 METHODS

2.1 Review of Available Information

There is limited information available about the existing stormwater system within the project area. The following organizations were contacted for information:

- Village of Northfield. The Village provided a set of design drawings for the Water System Improvements – Phase 1 dated August 2006. The drawings provided some location and elevation information on the stormwater facilities that happened to be located near the proposed water improvements. The information was incorporated into the inventory of existing conditions presented in this report.
- New England Central Railroad (NECR). NECR was contacted to inform them of the study and to obtain any available data on the railroad culvert that conveys flows from the northern portion of the project area. No information was available.
- Norwich University. The University of Norwich was contacted to inform them of the study and to request information on their stormwater system. The information they have is based on previous drainage design work D&K completed for the University, and the information was incorporated into the inventory of existing conditions presented in this report.
- Vermont Agency of Transportation. A preliminary hydraulic report on the existing culvert at Central Street was obtained from the State of Vermont Agency of Transportation. The report included estimates of peak flows at the culvert and an assessment of the culvert's capacity. This information was used as a check on an independent assessment included with this report.
- DuBois & King, Inc. Reviewed base mapping prepared by D&K dated November 2003 for the Center Drainage and Wellfield Protection Improvement Project, which has not yet been advanced beyond the survey phase. This survey coverage included areas within the southern drainage area.

2.2 Field Inspections

Field inspections were conducted on July 29, August 5, and August 22, and September 5, 2008 to inventory and observe the condition of the stormwater systems. Municipal staff were present for portions of each inspection. During the last inspection, Municipal staff performed a flow test

To estimate flows at locations not modeled with HydroCad, regression equations were developed using the HydroCad-computed results. The equations provide unit discharge as a function of drainage area for the 10-year and the 25-year recurrence intervals. The equations were applied to each location of interest to provide a screening-level estimate of peak inflows.

2.5 Hydraulic Analysis

Hydraulic analyses were conducted to evaluate the capacity of the existing closed pipe systems on Route 12, the major culverts, and portions of the open drainage system. Analyses of the closed pipe systems on Route 12 were conducted using the HydraFlow model. The model inputs – including manhole locations, pipe sizes, pipe lengths, and elevations – were based on data collected from previous studies and field survey and measurements.

The three major culverts in the northern drainage area were analyzed using HydroCad. In the southern drainage, the Route 12A culvert was analyzed using HydraFlow in order to account for its unique construction (two lengths of varying pipe sizes and materials connected by a manhole), and the Route 12 culvert was analyzed with a nomograph. Model inputs, including culvert sizes, roughness, and available headwater depth, were based on field measurements and observations.

The open drainage systems were analyzed using simple normal depth calculations. The exception is the open system between Route 12 and Route 12A, which was analyzed using HEC-RAS to account for the impact of the downstream constricting culvert. Cross section geometry and slope of the open systems were based on field survey.

3.0 EXISTING STORMWATER SYSTEM – INVENTORY AND ASSESSMENT

3.1 General

Stormwater runoff within the study area drains to two locations as shown on the maps in Attachment A. In the northern portion, the runoff drains to a perennial stream beginning near the intersection of Route 12 and Central Street and ultimately flows under the railroad tracks to the Dog River. In the southern portion, the runoff drains to an intermittent drainage swale near the Norwich Apartments, and ultimately to the Dog River.

3.2 Northern Drainage

The major components of the northern portion include closed pipe systems on Route 12, a closed pipe system on Central Street, three major culverts. The following sections describe each component including their condition and hydraulic capacity. A map of the Northern Drainage stormwater components is included in Attachment C.

3.2.2 Middle Route 12 Closed Pipe System

3.2.2.1 *Description*

The Middle Route 12 closed pipe system consists of approximately 1,350 feet of 12 to 36-inch pipes with 9 catch basins. The system generally conveys runoff from the south to the north and discharges into the same stream channel as the Northern Route 12 system. The system has two branches. The first intercepts a perennial stream above Crescent Avenue via a 24-inch corrugated metal pipe (CMP) and conveys it across Route 12 and to the stream channel. The second branch conveys flows along Route 12 and feeds into the first branch.

3.2.2.2 *Condition*

Based on a limited visual inspection, the system is in poor condition. The top of the 24-inch CMP pipe at the start of the first branch is exposed and a joint is visibly separated. A sink hole on the ground above the pipe alignment was visible on the day of the field investigation. The grate on the most downstream manhole before the stream channel is damaged and is currently covered with plywood.

3.2.2.3 *Capacity*

The capacity of the first branch of the system (the 24-inch CMP that intercepts the stream) is approximately 15 cfs at the inlet. The estimated 10 and 25-year peak inflow is approximately 64 cfs and 107 cfs, respectively. Flows greater than approximately the 2-year peak will overtop the pipe entrance and flow overland to Crescent Road. At the outlet of this branch at the stream channel, the capacity is approximately 38 to 40 cfs.

The capacity of the second branch was not surveyed and analyzed, but assuming 12-inch to 18-inch pipes like those elsewhere in the system, the capacity is likely on the order of 10 to 15 cfs. The estimated 10 and 25-year peak rates of runoff into this portion of the stormwater system are approximately 2 cfs and 4 cfs, respectively.

3.2.3 Central Street Closed Pipe System

3.2.3.1 *Description*

The Central Street closed pipe system consists of approximately 850 feet of 12 to 16-inch pipes with 9 catch basins. The system discharges to the stream channel on the west side of Central Street. The visible portions of pipe appeared to be clay.

3.2.3.2 *Condition*

Based on a limited visual inspection, the Central Street system is in poor condition. The system is old and is of non-standard construction that, at a minimum, makes maintenance difficult. The catch basins are non-standard cast-in-place structures approximately 2 ft x 2 ft. A number of the catch basins on Central Street were under repair. A number of the pipes in the manholes were in

3.2.5.2 *Condition*

Based on a limited visual inspection, the Jarvis Street culvert in good condition.

3.2.5.3 *Capacity*

The estimated discharge capacity of the Jarvis Lane culvert is 44 cfs with a headwater depth of four feet (equal to the top of the road). The estimated 10 and 25-year peak rates of runoff into the culvert are approximately 95 cfs and 169 cfs, respectively. Flows above approximately the 3-year discharge will overtop the road. New culverts under Town roads are typically designed to pass a minimum of the 25-year peak flow.

3.2.6 New England Central Railroad Culvert

3.2.6.1 *Description*

The existing culvert under the railroad tracks is a 2 feet wide x 1.5 feet high box of unknown material with concrete headwall at entrance. It is approximately 100 feet long. At the entrance, there is approximately 18.3 feet of available headwater to the top of the railroad tracks. However, at a headwater depth of approximately ten feet, homes located near the channel would be flooded. Additionally, a headwater depth of 10-feet will submerge the outlet of the Jarvis Lane culvert and reduce its capacity.

3.2.6.2 *Condition*

Only the inlet of the railroad culvert was inspected. The outlet was either obscured by excessive vegetation or has failed and there is, in effect, no longer a discrete outlet. Other culverts under this rail line in similar locations are constructed of laid up masonry blocks, and this one is likely of similar construction. Given the age of the culvert, there is a reasonable chance that it has failed. The beaver activity near the outlet of the culvert will reduce its capacity.

3.2.6.3 *Capacity*

The estimated discharge capacity of the Railroad culvert if unobstructed is 110 cfs with 18.3 ft of headwater (equal to the top of the railroad tracks), 35 cfs with 10 feet of headwater (the approximate elevation at which adjacent homes are flooded), and 27 cfs with six feet of headwater (approximate elevation to avoid backwater impacts on Jarvis Lane culvert). The estimated 10 and 25-year peak rates of runoff into the culvert are approximately 95 cfs and 169 cfs, respectively. Flows in the 2-year to 5-year range will impact adjacent homes.

3.3 **Southern Drainage**

The major components of the southern portion include a closed pipe system on the west side of Route 12, an open system on the east side of Route 12, open systems between Route 12 and 12A and below Route 12A, and two major culverts. A map of the Southern Drainage stormwater

eastern system and flow over Route 12 and into the west side closed system. With these additional flows accounted for, the system is likely to be inadequate.

3.3.2 Southern Route 12 East Side Mixed Open and Closed System

3.3.2.1 *Description*

The stormwater system on the east side of Route 12 includes approximately 500 feet of open ditch with several drive and roadway culverts, approximately 335 feet of 24-inch RCP, and three catch basins. It receives runoff from the east side of Route 12 from approximately Winter Street southward and from the crown (centerline) of Route 12. It terminates at a culvert under Route 12.

3.3.2.2 *Condition*

The condition of the open swale is generally good in spite of the relatively steep side slopes (1H:1V or steeper) and unarmored bottom. The condition of the RCP at the downstream end is unknown.

3.3.2.3 *Capacity*

The hydraulic capacity of the open ditch portion of the system is approximately 10 cfs. However, the 12-inch driveway culverts that cross the ditch have a capacity of only about 2 to 5 cfs. These constrictions reduce flow velocities and are likely responsible for the ditch's relative stability. The capacity of the closed system at the downstream end is approximately 15 to 20 cfs. The estimated peak runoff to the system for the 10-year and 25-year events is approximately 13 cfs and 24 cfs, respectively.

3.3.3 Route 12 Culvert

3.3.3.1 *Description*

The culvert under Route 12 is a 30-inch RCP approximately 85 feet long. Available headwater depth at the inlet is 5.0 feet.

3.3.3.2 *Condition*

The overall condition of the culvert is fair. There is vegetation and debris obstructing the downstream end. The entrance to the culvert is skewed 30 degrees to the flow, which reduces capacity and increases the chance for debris at the inlet.

3.3.3.3 *Capacity*

The hydraulic capacity of the culvert is 45 cfs. Additional flows would overtop the road. The estimated peak runoff to the system for the 10-year and 25-year events is approximately 18 cfs

3.3.5.3 Capacity

The estimated discharge capacity at the Route 12A culvert is 24 cfs at a headwater of 4.0-feet or to the top of the road. The estimated 10 and 25-year peak rates of runoff into this portion of the stormwater system are approximately 23 cfs and 46 cfs, respectively. Thus, the culvert can pass approximately the 10-year storm event before Route 12A overtops. The design standard for State Highways, as defined by VTrans, is the 50-year event.

3.3.6 Open System Below Route 12A

3.3.6.1 Description

The existing open swale conveys runoff approximately 1,100 feet from a culvert under Route 12A to the Dog River. The upper portion (approximately 300 feet) of the swale, adjacent to the Norwich Apartments, is stone-lined. The swale is earth and vegetation for another approximately 300 feet at which point the swale effectively ends. The average slope of the swale over the 500 feet downstream of Route 12A is approximately 0.01 ft/ft. Flow over the final 600 feet to the Dog River is in the form of dispersed sheet flow and through a Dog River oxbow.

3.3.6.2 Condition

Overall, the condition of the Open System below Route 12 is poor. The installation of stone lining of the upper section significantly reduced the cross sectional area of the swale, in places leaving only approximately six inches of available depth before water would spill widely across adjacent land. The cross-sectional area is further reduced at some locations further downstream, and made worse by dense vegetation. The open swale terminates in the backyard of a manufactured home. The owner reported that his yard fills with water when the swale is discharging, though it does not directly impact his building.

3.3.6.3 Capacity

The estimated discharge capacity near the head of the open swale is approximately 90 cfs. Three hundred feet downstream, where the swale is shallower, the capacity is reduced to approximately 10 cfs. The estimated 10 and 25-year peak rates of runoff into this portion of the stormwater system are approximately 23 cfs and 46 cfs, respectively. At something less than the 10-year discharge, water will be exceeding the limits of the lower portion of the swale.

4.0 RECOMMENDED STORMWATER SYSTEM IMPROVEMENTS

Conceptual designs and accompanying cost estimates were developed for improvements to the stormdrain system throughout the study area, and are included in Attachments C and D, respectively.

At this conceptual phase of identifying potential stormwater drainage system improvements, it is not possible to fully coordinate the stormwater improvements identified herein, with these other pending or potential projects. As all of these projects are located in immediate proximity to each other, there is a potential for horizontal and/or vertical utility conflicts (and additional costs) if these projects are not coordinated as they are being developed. The design for each project needs to be accomplished in recognition that other parallel and crossing infrastructure piping may be installed in the future.

Due to the impact that new sidewalks invariably have on existing drainage patterns, it would be ideal to advance the sidewalk design concurrent with the stormwater design. As the design of the water system improvement project is already completed, if not already done so, it would be prudent to review this design in light of the potential future requirement to install a gravity sewer, sewer force main, and gravity stormwater piping in the same project area. The municipality may wish to further evaluate the water/sewer/stormwater utilities that are “competing” for space within the project area before the first project proceeds into construction. This coordination could be accomplished by developing one (or perhaps several) Road and Utility Typical Sections that would establish a preferred “utility corridor” for each of these utilities that would acknowledge and account for required horizontal and vertical offsets.

4.2 Basis for Cost Estimates

Cost estimates were developed for the conceptual designs for each of the stormwater system components and are included in Attachment D. Pay items were based on the conceptual designs shown in Attachment C and the preliminary hydraulic analysis to estimate required pipe sizes and depths. Unit prices were based on recent in-house bid tabulations for similar work, standard references including RS Means, and professional judgement.

A 20 percent contingency is provided in the construction costs, which is appropriate to reflect the conceptual-level planning completed in this study phase of the project. Should the project move forward in a final design phase, this contingency allowance would be reduced as the design is advanced. Once final design has been completed, a 10 percent construction contingency is common.

Additional budget allowances have been provided (based on percentages of the construction cost identified by the State of Vermont Agency of Natural Resources for similar municipal projects) for technical engineering services to complete the final design phase (6.9 percent) and construction phase (12.65 percent). Again, these allowances would be refined as the project advances.

D&K has developed project costs on a system-by-system basis in an effort to convey how total project costs are allocated to the various segments of the overall drainage improvements project. These cost allocations may assist the municipality in identifying a phased-approach to accomplishing drainage improvements.

Pipes and manholes would generally be sized to accommodate the expected 10-year flow. The portion of the system that intercepts the perennial stream above Crescent Avenue would be sized to accommodate a larger 25-year event.

The construction cost to replace the Middle Route 12 Closed Pipe System is approximately \$430,000. Engineering (design and construction phases) and permitting are expected to be approximately \$96,000. Total project cost is estimated to be \$526,000.

4.3.3 Central Street Closed Pipe System

Given its age and condition, we recommend planning for eventual replacement of the Central Street Closed Pipe System. A conceptual design and a cost estimate are included in Attachments C and D, respectively. The primary components of a replacement system include the following:

- New storm drain and catch basins. The stormdrain would approximately follow the alignment of the existing line. The system would be expanded to include improved drainage on Washington Street. The pipe size would range from 12-inch to 18-inch diameter. The catch basins would be 48-inch diameter. Pipes and manholes would generally be sized to accommodate the expected 10-year flow.
- Improved side-road drainage on Washington Street. For the purpose of the conceptual design and cost estimate, we have assumed that the improvements will extend approximately 150 feet up Washington Street and will include construction of a bituminous curb and/or gutter on both sides and the addition of four catch basins. During final design, alternative drainage configurations including open ditches instead of curbing should be considered.

The construction cost to replace the Central Street Closed Pipe System is approximately \$250,000. Engineering (design and construction phases) and permitting are expected to be approximately \$58,000. Total project cost is estimated to be \$308,000.

4.3.4 Central Street Culvert

Given the poor condition and inadequate hydraulic capacity of the Central Street Culvert, we recommend planning for eventual replacement. A conceptual design and a cost estimate are included in Attachments C and D, respectively. The primary components of a replacement culvert include the following:

- New 10'-wide by 6'-high 150'-long precast concrete box culvert. The bottom of the culvert would be set approximately two feet below the channel invert leaving four feet clear. Such an opening meets VTrans hydraulic capacity standards. It also meets current environmental permitting requirements by having both a width equal or greater to the stream's natural bankfull dimension, and a natural channel bottom.

4.4 Southern Drainage

4.4.1 Southern Route 12 West Side Closed Pipe System

Given the age of the system and limited hydraulic capacity, we recommend planning for eventual replacement of the Southern Route 12 West Side System. This should be a lower priority than improving the East Side system because with the East Side improved, runoff will be captured before it can flow over Route 12, where it negatively impacts the performance of the existing west side system. Consideration was given to combining the West and East side systems into a single system with a common trunk line. There would be a minor reduction in pipe length, but the savings would likely be offset by significantly increased utility conflicts under Route 12 that would need to be designed and constructed around. A conceptual design and a cost estimate are included in Attachments C and D, respectively. The primary components of a replacement system include the following:

- New storm drain and catch basins. The stormdrain would approximately follow the alignment of the existing line. The pipe size would range from 24 to 30-inch diameter. The catch basins would be 48-inch diameter. Pipes and manholes would generally be sized to accommodate the expected 10-year flow.

The construction cost to replace this system is approximately \$210,000. Engineering (design and construction phases) and permitting are expected to be approximately \$49,000. Total project cost is estimated to be \$259,000.

4.4.2 Southern Route 12 East Side Mixed Open and Closed System

We recommend replacing the Southern Route 12 East side system with a new, entirely closed system. A conceptual design and a cost estimate are included in Attachments C and D, respectively. The primary components of a replacement system include the following:

- New storm drain and catch basins on Route 12. The stormdrain would approximately follow the alignment of the existing drainage (ditch line and closed pipe). For the purpose of the conceptual design and cost estimate, we have assumed that the project will be constructed in conjunction with sidewalk construction (currently in early planning phase), and the cost of curbing along Route 12 is not included in our estimate. However, if the stormdrain improvements are conducted prior to the sidewalk/curb construction, a grass swale (with catch basins) would be needed in lieu of curb to direct water to the catch basins. The pipe size would range from 24-inch to 30-inch diameter. Pipes and manholes would generally be sized to accommodate the expected 10-year flow.
- Improved side-road drainage on Winter, Stagecoach, Alpine and Overlook Streets. For the purpose of the conceptual design and cost estimate, we have assumed that the improvements will extend approximately 200 feet up each street and will include construction of a bituminous curb and/or gutter on both sides and

4.4.6 Open System Below Route 12A

We recommend the open system below Route 12A be reconstructed and lengthened to accommodate the increased flow that an upgraded southern system would deliver, and to eliminate the frequent flooding adjacent to the existing channel. A conceptual design and a cost estimate are included in Attachments C and D, respectively. The primary components of a replacement system include the following:

- New Stone-lined Ditch below Rt 12A. The new ditch would follow the alignment of the current ditch for approximately 650 feet, but would have considerably greater capacity. While the existing flooding of adjacent residential land would be eliminated, which is a benefit, the flows that reach the Dog River would be more concentrated – and thus more erosive – than under existing conditions.
- New Stone-lined Chute down to Dog River. To avoid erosion of the relatively steep slope down to the Dog River, a stone-lined chute would be needed for approximately 150 feet between the end of the new stone ditch and the Dog River.

The construction cost to install this system is approximately \$66,000. Engineering (design and construction phases) and permitting are expected to be approximately \$19,600. Total project cost is estimated to be \$85,600.

4.5 **Summary of Recommended System Improvements and Costs**

The table below summarizes the recommended improvements to and cost of each of the existing stormdrain systems within the study area. Conceptual designs are shown in Attachment C and costs estimates in Attachment D.

4.6 Implementation of Drainage Improvements

It is recognized that the costs presented in the previous section are significant. The scope of the drainage improvements is dictated to a large degree by the age, deteriorated condition, and hydraulic limitations associated with the existing/outdated drainage system, and are based on complete replacement. While planning for complete system replacement is appropriate, it is acknowledged that the existing system is still functional and should continue to perform as it has historically for some time. Should a portion of the closed drainage system fail or become blocked, the topography of the drainage areas should permit excess runoff to flow generally toward the low-lying, system outlet location. During periods when hydraulic capacities are exceeded, local ponding and/or localized flooding will continue to occur. Typically, these failures or hydraulic limitations have not resulted in a catastrophic condition.

Given the scope of the drainage system replacements and the fact that the existing system is basically functional, the drainage system improvements outlined herein could be accomplished in a phased implementation approach, over a multi-year period. As a general rule, stormwater improvements should be accomplished in a systematic approach, starting from the downstream end of the system and moving toward the upstream end of the system. This approach would avoid an undesirable situation where a hydraulically improved upstream section is discharging to an unimproved, hydraulically restricted downstream section.

However, it is also recognized that a systematic approach to drainage system improvements is not always possible. Sometimes, upper segments of a drainage system are improved first in order to coincide with other infrastructure improvement projects that may be scheduled (such as water/sewer utility replacements) and/or in order to be coordinated with street overlay or street reconstruction priorities/schedules.

The following sections present general guidance for drainage improvement implementation priorities for the northern and southern systems.

4.6.1 Northern Drainage System

The Town should prioritize replacement the three (3) significant culverts. As noted above, ideally, the culverts would be replaced starting with the railroad culvert (downstream) and moving to the Central Street culvert (upstream). However, taking into account the hydraulic limitations and structural concerns, the following may be a more appropriate prioritized approach to culvert replacement:

- Replace Central Street culvert first, because of unknown internal conditions, questionable structural integrity, and inadequate hydraulic capacity. This culvert has been repaired a number of times, flooding has occurred in the recent past, and the middle section of the culvert is old masonry stone construction of unknown materials/condition. The “sink holes” that have developed in the roadway above this culvert suggests the culvert is in poor condition or failing. If unable to replace this culvert for some time, consideration should be given to conducting a detailed internal inspection to assess its actual structural condition. Slip lining

COPY

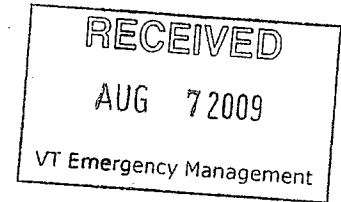
U.S. Department of Homeland Security
Region I
99 High Street, Sixth Floor
Boston, MA 02110-2132



FEMA

August 5, 2009

Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101



SUBJECT: FEMA-DR-1790-VT
Hazard Mitigation Grant Program Project #4R
Mountain Road Culvert Upgrade Project, Town of Moretown, VT

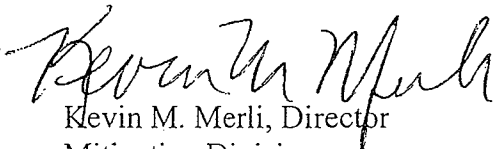
Dear Ms. Farr:

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program project:

1790-4R	Town of Moretown Mountain Road Culvert Upgrade Project	\$ 36,000
	Total:	\$ 36,000

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,


Kevin M. Merli, Director
Mitigation Division

Attachment



Record of Environmental Consideration

See 44 Code of Federal Regulation Part 10.

Project Name/Number: FEMA-HMGP-1790 Mountain Road Culvert Upgrade Project, Moretown, VT

Project Location: north of 3756 Mountain Road, at Cox Brook, Moretown, VT, as indicated on map enclosed with application.

Latitude: 44.234013 N Longitude: -72.712039

Project Description: The Town of Moretown, VT, proposes to upgrade a 48-inch in diameter corrugated metal pipe with a 6.5 by 4.5 precast concrete box culvert and install full flared headwalls that match the channel banks at inlet and outlet at least four feet below the channel bottom, or to ledge, to act as cutoff walls and prevent undermining. Stone fill Type II will be used to protect any disturbed channel banks or roadway slopes at the inlet and outlet up to a height of at least one foot above the top of the opening. The stone fill should not constrict the channel or structure opening. The area of installation will be resurfaced.

Documentation Requirements

- No Documentation Required **(Review Concluded)**
- (Short version)** All consultation and agreements implemented to comply with the National Historic Preservation Act, Endangered Species Act, and Executive Orders 11988, 11990 and 12898 are completed and no other laws apply. **(Review Concluded)**
- (Long version)** All applicable laws and executive orders were reviewed. Additional information for compliance is attached to this REC.

National Environmental Policy Act (NEPA) Determination

- Statutorily excluded from NEPA review. **(Review Concluded)**
- Categorical Exclusion - Category (xv & xvi) Type Single Project**
 - No Extraordinary Circumstances exist.
 - Are project conditions required? Yes (see section V) No **(Review Concluded)**
 - Extraordinary Circumstances exist (See Section IV).
 - Extraordinary Circumstances mitigated. (See Section IV comments)
 - Are project conditions required? Yes (see section V) No **(Review Concluded)**
 - Environmental Assessment required. See FONSI for determination, conditions and approval.
- Environmental Assessment required. See FONSI for determination, conditions and approval.

Comments: This is a project within the area of previously disturbed ground.

Correspondence/Consultation/References: Project Description; Based on information provided by the grantee, the scope of work for this project qualifies as a Categorical Exclusion (CATEX) under 44 CFR Part 10.8 (d)(2)(xv &xvi)

Reviewer and Approvals

FEMA Environmental Reviewer

Name: Judith A. Maloney

Signature *Judith A. Maloney* Date 7-20-09

FEMA Regional Environmental Officer or delegated approving official

Name: John P. Sullivan

Signature *John P. Sullivan* Date 7/21/09

I. Compliance Review for Environmental Laws (other than NEPA)

A. National Historic Preservation Act

- Not type of activity with potential to affect historic properties. **(Review Concluded)**
- Applicable executed Programmatic Agreement. Sept. 23, 2002 Otherwise, conduct standard Section 106 review.
 - Activity meets Programmatic Allowance # Appendix B, IB
 - Are project conditions required? Yes (see section V) No **(Review Concluded)**

HISTORIC BUILDINGS AND STRUCTURES

- No historic properties 50 years or older in project area. **(Review Concluded)**
- Building or structure 50 years or older in project area and activity not exempt from review.
 - Determination of No Historic Properties Affected (FEMA finding/SHPO/THPO concurrence on file)
 - Are project conditions required? Yes (see section V) No **(Review Concluded)**
 - Determination of Historic Properties Affected (FEMA finding/SHPO/THPO concurrence on file)
 - Property a National Historic Landmark and National Park Service was provided early notification during the consultation process. If not, explain in comments
 - No Adverse Effect Determination (FEMA finding/SHPO/THPO concurrence on file).
 - Are project conditions required? Yes (see section V) No **(Review Concluded)**
 - Adverse Effect Determination (FEMA finding/SHPO/THPO concurrence on file)
 - Resolution of Adverse Effect completed. (MOA on file)
 - Are project conditions required Yes (see section V) No **(Review Concluded)**

ARCHEOLOGICAL RESOURCES

Project affects only previously disturbed ground. **(Review Concluded)**

Project affects undisturbed ground.

Project area has no potential for presence of archeological resources

Determination of no historic properties affected (FEMA finding/SHPO/THPO concurrence or consultation on file). **(Review Concluded)**

Project area has potential for presence of archeological resources

Determination of no historic properties affected (FEMA finding/SHPO/THPO concurrence on file)

Are project conditions required Yes (see section V) No **(Review Concluded)**

Determination of historic properties affected

NR eligible resources not present (FEMA finding/SHPO/THPO concurrence on file).

Are project conditions required Yes (see section V) No **(Review Concluded)**

NR eligible resources present in project area. (FEMA finding/ SHPO/THPO concurrence on file)

No Adverse Effect Determination. (FEMA finding/ SHPO/THPO concurrence on file)

Are project conditions required? Yes (see section V) No

(Review Concluded)

Adverse Effect Determination. (FEMA finding/ SHPO/THPO concurrence on file)

Resolution of Adverse Effect completed. (MOA on file)

Are project conditions required? Yes (see section V) No **(Review Concluded)**

Comments: This project will replace an existing culvert within the footprint previously disturbed ground. **Correspondence/Consultation/References:** The Vermont Programmatic Agreement, Appendix B, IB

B. Endangered Species Act

No listed species and/or designated critical habitat present in the action area. **(Review Concluded)**

Listed species and/or designated critical habitat present in the action area.

No effect to species or designated critical habitat. (See comments for justification)

(Review Concluded)

May affect, but not likely to adversely affect species or designated critical habitat (FEMA determination/USFWS/NMFS concurrence on file) **(Review Concluded)**

Likely to adversely affect species or designated critical habitat

Formal consultation concluded. (Biological Assessment and Biological Opinion on file)

Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Review by Judith Maloney, FEMA, of U.S. Fish and Wildlife Service Endangered Species web site revealed that no federally listed or proposed threatened and endangered species under the jurisdiction of the U.S. Fish and Wildlife are known to occur in the vicinity of the areas of proposed projects. **Correspondence/Consultation/References:** U.S. Fish and Wildlife Service Endangered Species web site

C. Coastal Barrier Resources Act

- Project is not located in Coastal Barriers Resource System or Otherwise Protected Area.
- Project does not affect a coastal barrier within the COBRA System (regardless of in or out)

(Review Concluded)

- Project is located in a coastal barrier system and/or affects a coastal barrier. (FEMA determination/USFWS consultation on file)
 - Proposed action an exception under Section 3505.a.6? **(Review Concluded)**
 - Proposed action not excepted under Section 3505.a.6.
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: This project is not in or near a coastal area.

Correspondence/Consultation/References: Coastal Barrier Resources Act, N.E. maps

D. Clean Water Act

- Project site located outside of and would not affect any waters of the U.S. **(Review Concluded)**
- Project site located in or would affect waters, including wetlands, of the U.S.
 - Project exempted as in kind replacement or other exemption. **(Review Concluded)**
 - Project requires Section 404/401/10 permit, including qualification under Nationwide

Permits.

Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Project involves no activity in waters of the US, nor discharge of pollutants or dredged/fill materials.

Project improvements may require permits from appropriate local, state, and federal agencies. Additionally, construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act, "Best Management Practices BMP". The Town must contact the US Army Corps of Engineers to inquire if a permit is required. The Town will need to obtain all necessary permits from relevant state agencies after the project specifications have been completed.

Correspondence / Consultation / References: Section 10 of the Rivers and Harbors Act, Section 404 of the Clean Water Act, (Re: determinations and acquisition of appropriate permits), and local Conservation Commission regulations. See USACE General Permit No: NAE-2007-24
Expiration Date: December 5, 2012

E. Coastal Zone Management Act

- Project does not affect a coastal zone area (regardless of in or out)- **(Review concluded)**
- Project is not located in a coastal zone area - **(Review concluded)**
- Project is located in a coastal zone area and/or affects the coastal zone
 - State administering agency does not require consistency review. **(Review Concluded).**
 - State administering agency requires consistency review.

Are project conditions required? YES (see section V) NO (**Review Concluded**)

Comments: This project is not in or near a coastal area.

Correspondence/Consultation/References: Coastal Barrier Resources Act, N.E. maps

F. Fish and Wildlife Coordination Act

Project is not located in or affects a waterway/body of water. (**Review Concluded**)

Project affects, controls or modifies a waterway/body of water.

Coordination with USFWS conducted

No Recommendations offered by USFWS. (**Review Concluded**)

Recommendations provided by USFWS.

Are project conditions required? YES (see section V) NO (**Review Concluded**)

Comments: Review by Judith Maloney, FEMA, of U.S. Fish and Wildlife Service Endangered Species web site revealed that no federally listed or proposed threatened and endangered species under the jurisdiction of the U.S. Fish and Wildlife are known to occur in the vicinity of the areas of proposed projects.

Correspondence/Consultation/References: U.S. Fish and Wildlife Service Endangered Species web site

G. Clean Air Act

Project will not result in permanent air emissions. (**Review Concluded**)

Project is located in an attainment area. (**Review Concluded**)

Project is located in a non-attainment area.

Coordination required with applicable state administering agency.

Are project conditions required? YES (see section V) NO (**Review Concluded**)

Comments: Any emissions from construction equipment will be temporary in nature. Only minimal, temporary dust and increased emissions from construction vehicles caused by a routine construction project might occur.

Correspondence/Consultation/References: project description

H. Farmlands Protection Policy Act

Project does not affect prime or unique farmland. (**Review Concluded**)

Project causes unnecessary or irreversible conversion of prime or unique farmland.

Coordination with Natural Resource Conservation Commission required.

Farmland Conversion Impact Rating, Form AD-1006, completed.

Are project conditions required? YES (see section V) NO (**Review Concluded**)

Comments: No commitment of farm lands. All new construction and footprint will be in rocky hillside. No intrusion into existing farmland will occur.

Correspondence/Consultation/References: The project is in a forested area far from farm lands. See enclosed pictures of project area and project description.

I. Migratory Bird Treaty Act

- Project not located within a flyway zone. **(Review Concluded)**
- Project located within a flyway zone.
 - Project does not have potential to take migratory birds. **(Review Concluded)**
 - Project has potential to take migratory birds.
 - Contact made with USFWS
 - Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: N/A This project will not result in the migratory taking of birds.
Correspondence/Consultation/References: The Migratory Bird Treaty Act and Executive Order 13186, project description

J. Magnuson-Stevens Fishery Conservation and Management Act

- Project not located in or near Essential Fish Habitat. **(Review Concluded)**
- Project located in or near Essential Fish Habitat.
 - Project does not adversely affect Essential Fish Habitat. **(Review Concluded)**
 - Project adversely affects Essential Fish Habitat (FEMA determination/USFWS/NMFS concurrence on file)
 - NOAA Fisheries provided no recommendation(s) **(Review Concluded).**
 - NOAA Fisheries provided recommendation(s)
 - Written reply to NOAA Fisheries recommendations completed.
 - Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: No Essential Fish habitat is adversely affected by this project. Review by Judith Maloney, FEMA, of U.S. Fish and Wildlife Service Endangered Species web site revealed that no federally listed or proposed threatened and endangered species under the jurisdiction of the U.S. Fish and Wildlife are known to occur in the vicinity of the areas of proposed projects.
Correspondence/Consultation/References: U.S. Fish and Wildlife Service Endangered Species web site; site visit

K. Wild and Scenic Rivers Act

- Project is not along and does not affect a Wild or Scenic River - **(Review Concluded)**
- Project is along or affects Wild or Scenic River
 - Project adversely affects WSR as determined by NPS/USFS. **FEMA cannot fund the action.** (NPS/USFS/USFWS/BLM consultation on file)
 - Project does not adversely affect WSR. (NPS/USFS/USFWS/BLM consultation on file)
 - Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: No designated river is near the project.
Correspondence/Consultation/References: Review of Web site:
<http://www.rivers.gov/wildriverslist.html#vt>

L. Other Relevant Laws and Environmental Regulations

Identify relevant law or regulations, resolution and any consultation/references: *N/A*

II. Compliance Review for Executive Orders

A. E.O. 11988 - Floodplains

- Outside Floodplain and No Effect on Floodplains/Flood levels - **(Review Concluded)**
 - Located in Floodplain or Effects on Floodplains/Flood levels
 - No adverse effect on floodplain or can be adversely affected by the floodplain. **(Review Concluded)**
 - Beneficial Effect on Floodplain Occupancy/Values **(Review Concluded)**
 - Possible adverse effects associated with investment in floodplain, occupancy or modification of floodplain environment
 - 8 Step Process Complete - documentation on file
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: This project will mitigate damages to the road.
Correspondence/Consultation/References: FIRM Flood Insurance Rate Map, Town of Moretown, VT, Washington County, Map Number 50016 0003B (Page 3 of 4), Effective September 29, 1978).

B. E.O. 11990 - Wetlands

- Outside Wetland and No Effect on Wetland(s) - **(Review Concluded)**
 - Located in Wetland or effects Wetland(s)
 - Beneficial Effect on Wetland - **(Review Concluded)**
 - Possible adverse effect associated with constructing in or near wetland
 - Review completed as part of floodplain review
 - 8 Step Process Complete - documentation on file
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Review of National Wetlands Inventory and topographical maps show wetlands in the general vicinity of the project area. The Town must follow the Clean Water Act, "Best Management Practices BMP". The Town must contact the U.S. Army Corps of Engineers to inquire if a permit is required. The Town will need to obtain all necessary permits from relevant state agencies after the project specifications have been completed and before work begins.
Correspondence/Consultation/References: <http://wetlandsfws.er.usgs.gov/wtlnds/launch.html>; Topographical map of the area.

C. E.O. 12898 - Environmental Justice for Low Income and Minority Populations

- No Low income or minority population in, near or affected by the project - **(Review Concluded)**
- Low income or minority population in or near project area
 - No disproportionately high and adverse impact on low income or minority population- **(Review Concluded)**
 - Disproportionately high or adverse effects on low income or minority population

Are project conditions required? YES (see section V) NO (Review Concluded)

Comments: Project will have no disproportionate effects on the local population.

Correspondence/Consultation/References:

III. Other Environmental Issues

Identify other potential environmental concerns in the comment box not clearly falling under a law or executive order (see environmental concerns scoping checklist for guidance).

Comments: A review of the scoping guidance indicates no other environmental concerns.

Correspondence/Consultation/References:

IV. Extraordinary Circumstances

Based on the review of compliance with other environmental laws and Executive Orders, and in consideration of other environmental factors, review the project for extraordinary circumstances.

* A "Yes" under any circumstance may require an Environmental Assessment (EA) with the exception of (ii) which should be applied in conjunction with controversy on an environmental issue. If the circumstance can be mitigated, please explain in comments. If no, leave blank.

Yes

- (i) Greater scope or size than normally experienced for a particular category of action
- (ii) Actions with a high level of public controversy
- (iii) Potential for degradation, even though slight, of already existing poor environmental conditions;
- (iv) Employment of unproven technology with potential adverse effects or actions involving unique or unknown environmental risks;
- (v) Presence of endangered or threatened species or their critical habitat, or archaeological, cultural, historical or other protected resources;
- (vi) Presence of hazardous or toxic substances at levels which exceed Federal, state or local regulations or standards requiring action or attention;
- (vii) Actions with the potential to affect special status areas adversely or other critical resources such as wetlands, coastal zones, wildlife refuge and wilderness areas, wild and scenic rivers, sole or principal drinking water aquifers;
- (viii) Potential for adverse effects on health or safety; and
- (ix) Potential to violate a federal, state, local or tribal law or requirement imposed for the protection of the environment.
- (x) Potential for significant cumulative impact when the proposed action is combined with other past, present and reasonably foreseeable future actions, even though the impacts of the proposed action may not be significant by themselves.

Comments:**V. Environmental Review Project Conditions**

General comments:

1. If ground disturbing activities occur during implementation, the applicant will monitor excavation activity, and if any artifacts or human remains are found during the excavation process all work is to cease and the applicant will notify FEMA, Grantee (VEM), and SHPO/THPO.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material the applicant must contact the Grantee and the Grantee must contact FEMA. The applicant must also contact the relevant agency with authority for regulation of the material.
3. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Project Conditions:

1. As long as the appropriate soil erosion/siltation control measures and the best management practices for roads and culverts (e.g. placing culvert inverts at or slightly below grade in the bed of the stream to accommodate fish passage, working during low flow summer periods, etc.) are utilized, harm to fish and wildlife will be minimized.
2. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
3. Commence work during low flow period.
4. Reroute or stop the flow of water into the project site.
5. If necessary, dewater the project site.
6. Excavate unsuitable wash material from site.
7. Remove erosion control measures after the construction area has been stabilized.

The applicant must ensure that best managing practices for roads and culverts and installation of erosion control measures are utilized. Construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act's: "Best Management Practices, BMP" for erosion control during construction of this project. This includes, the applicant applying for all local, state, and federal permits and easements necessary to complete the project and obtaining these permits prior to commencement of any work. Any conditions of these permits become conditions of this grant, project, and environmental review. In accordance with FEMA Guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean

Reviewer Name: Judith A. Maloney

Applicant: Town of Moretown, VT

Disaster/Emergency/Program/Project Title: FEMA-HMGP-1790

Mountain Road Culvert Upgrade Project

Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements and/or obtain proper local, state, and federal permit concerning this project. Any conditions of this process or these regulations, laws, and policies become conditions of this grant, project, and environmental review.

Monitoring Requirements: Quarterly Reports and final inspection of the scope of work and accounting records are required.

Project Review and Conditions Status

Project Name/Number: FEMA-HMGP-1790 Mountain Road Culvert Upgrade Project, Moretown, VT

Project Location: north of 3756 Mountain Road, at Cox Brook, Moretown, VT, as indicated on map enclosed with application.

Latitude: 44.234013 N Longitude: -72.712039

Project Description: The Town of Moretown, VT, proposes to upgrade a 48-inch in diameter corrugated metal pipe with a 6.5 by 4.5 precast concrete box culvert and install full flared headwalls that match the channel banks at inlet and outlet at least four feet below the channel bottom, or to ledge, to act as cutoff walls and prevent undermining. Stone fill Type II will be used to protect any disturbed channel banks or roadway slopes at the inlet and outlet up to a height of at least one foot above the top of the opening. The stone fill should not constrict the channel or structure opening. The area of installation will be resurfaced.

Environmental Review Project Conditions

1. If ground disturbing activities occur during implementation, the applicant will monitor excavation activity, and if any artifacts or human remains are found during the excavation process all work is to cease and the applicant will notify FEMA, Grantee, and SHPO/THPO.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material the applicant must contact the Grantee and the Grantee must contact FEMA. The applicant must also contact the relevant agency with authority for regulation of the material.
3. If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or result in any other unanticipated changes to the physical environment, the Grantee must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws will be conducted by FEMA.

Other Required Project Specific Conditions

1. The applicant must comply with all applicable local, state and federal laws, regulations, policies, and requirement. Any conditions of these regulations, laws, and policies become conditions of this grant, project, and environmental review.

2. In accordance with FEMA guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA. Any conditions resulting from this process become part of this project.
3. The applicant must ensure that best managing practices for roads and culverts are utilized, and installation of erosion control. Construction activities that result in disturbed ground must be protected against erosion into the stream. The Town must follow the Clean Water Act's: "Best Management Practices, BMP" for erosion control during construction of this project. This includes, the applicant applying for all local, state, and federal permits and easements necessary to complete the project and obtaining these permits prior to commencement of any work. Any conditions of these permits become conditions of this grant, project, and environmental review. In accordance with FEMA Guidelines, applicants are required to comply with the federal law provisions of: the Water Pollution Control Act, as amended; Section 10 of the Rivers and Harbors Act; and Section 404 of the Clean Water Act, requirements regarding acquisition of appropriate permits or determinations from the U.S. Army Corps of Engineers (USACE) for projects funded by FEMA. All correspondence (including copies of any permits issued by USACE) regarding these determinations should be coordinated with and copies forwarded to FEMA.
4. The applicant must seed, mulch, and replant any disturbed ground with native shrubs and vegetation. A special effort shall be made to plant native vegetation at higher bank elevations.
5. The Department of Fish & Wildlife recommends: the retention (or restoration) of natural stream bottom and stream bank conditions; the retention or establishment of naturally-vegetated riparian buffers; and, incorporating buffers and bridges or large bottomless culverts wherever possible and eliminating or minimizing the use of rip-rap to retain natural stream bank and streambed conditions.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 48,000
Federal Share	\$ 36,000
Applicant Share	\$ 12,000

Period of Performance

This project must be complete by: 8/31/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- **All permits must be obtained and forwarded to FEMA before any work begins.**
- **Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.**
- **Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal State, and laws and standards.**

HAZARD MITIGATION GRANT PROGRAM

Allocation Request

Disaster Number : 1790

Allocation Number : 2

IFMIS Status : Accept

IFMIS Date :07/30/2009

FEMA Project Number	Proj Amend Number	State Appl ID	FY	Project Amount	Grantee Admin Est	Subgrantee Admin Est	Total Allocation	Proj Total Fed Share	Proj Fed Share Prev Alloc	Max Avail for Curr Alloc
4 -R	0	7	2009	\$36,000	\$0	\$0	\$36,000	\$36,000	\$36,000	\$0
TOTALS				\$36,000	\$	\$0	\$36,000			

Comments

Date: 07 / 29 / 2009 User Id: JMALONE2

Comment: allocation \$36,000 approved

Date: 07 / 29 / 2009 User Id: KTIRRELL

Comment: HMO approves allocation \$36,000

Authorization

Preparer Name : JUDITH MALONEY

Preparation Date : 07/29/2009

HMO Authorization Name : KERRI ANN TIRRELL

HMO Authorization Date : 07/29/2009

8:33 AM

Allocation Request with Signature

Disaster Number : 1790 Allocation Number : 2 IFMIS Status : Accept IFMIS Date : 07/30/2009

FEMA Project Number	Proj Amend Number	State Appl ID	FY	Project Amount	Grantee Admin Est	Subgrantee Admin Est	Total Allocation	Proj Total Fed Share	Proj Fed Share Prev Alloc	Max Avail for Curr Alloc
4 - R	0	7	2009	\$36,000	\$0	\$0	\$36,000	\$36,000	\$36,000	\$0
TOTALS				\$36,000	\$	\$0	\$36,000			

Comments

Date: 07 / 29 / 2009 User Id: JMALONE2

Comment: allocation \$36,000 approved

Date: 07 / 29 / 2009 User Id: KTIRRELL

Comment: HMO approves allocation \$36,000

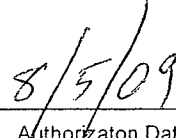
Authorization

Preparer Name : JUDITH MALONEY

Preparation Date : 07/29/2009

HMO Authorization Name : KERRI ANN TIRRELL

HMO Authorization Date : 07/29/2009



Authorizing Official Signature

Authorizing Official Title

Authorization Date

Authorizing Official Signature

Authorizing Official Title

Authorization Date

HAZARD MITIGATION GRANT PROGRAM

Obligation

Disaster No	FEMA Project No	Amendment No	State Application ID	Action No	Supplemental No	State	Grantee
1790	4-R	0	7	1	3	VT	Statewide

Subgrantee: Moretown (Town of)
 Subgrantee FIPS Code: 023-46225

Project Title : Mountain Rd. Culvert Upgrade Project, Moretown, VT

Total Amount Previously Allocated	Total Amount Previously Obligated	Total Amount Pending Obligation	Total Amount Available for New Obligation	Project Amount	Grantee Admin Est	Subgrantee Admin Est	Total Obligation	IFMIS Date	IFMIS Status	FY
\$36,000	\$36,000	\$0	\$0	\$36,000	\$0	\$0	\$36,000	08/03/2009	Accept	2009

Comments

Date: 08/03/2009 User id: JMALONE2

Comment: \$36,000 total obligation approved

Date: 08/03/2009 User id: KTIRRELL

Comment: HMO approval of obligation \$36,000

Authorization

Preparer Name: JUDITH MALONEY

Preparation Date: 08/03/2009

HMO Authorization Name: KERRI ANN TIRRELL

HMO Authorization Date: 08/03/2009

HAZARD MITIGATION GRANTS PROGRAM

Obligation Report w/ Signatures

Disaster No	FEMA Project No	Amendment No	State Application ID	Action No	Supplemental No	State	Grantee
1790	4-R	0	7	1	3	VT	Statewide

Subgrantee: Moretown (Town of)

Project Title : Mountain Rd. Culvert Upgrade Project, Moretown, VT

Subgrantee FIPS Code: 023-46225

Total Amount Previously Allocated	Total Amount Previously Obligated	Total Amount Pending Obligation	Total Amount Available for New Obligation
\$36,000	\$36,000	\$0	\$0

Project Amount	Grantee Admin Est	Subgrantee Admin Est	Total Obligation	IFMIS Date	IFMIS Status	FY
\$36,000	\$0	\$0	\$36,000	08/03/2009	Accept	2009

Comments

Date: 08/03/2009 User Id: JMALONE2

Comment: \$36,000 total obligation approved

Date: 08/03/2009 User Id: KTIRRELL

Comment: HMO approval of obligation \$36,000

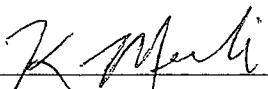
Authorization

Preparer Name: JUDITH MALONEY

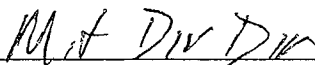
Preparation Date: 08/03/2009

HMO Authorization Name: KERRI ANN TIRRELL

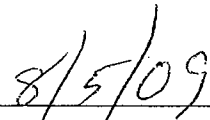
HMO Authorization Date: 08/03/2009



Authorizing Official Signature



Authorizing Official Title



Authorization Date

Authorizing Official Signature

Authorizing Official Title

Authorization Date

Project Management Report

Disaster Number	FEMA Project Number	Amendment Number	App ID	State	Grantee
1790	4-R	0	7	VT	Statewide

Subgrantee: Moretown (Town of)

FIPS Code: 023-46225

Project Title : Mountain Rd. Culvert Upgrade Project, Moretown, VT

Mitigation Project Description

Amendment Status : Approved

Approval Status: Approved

Project Title : Mountain Rd. Culvert Upgrade Project, Moretown, VT

Grantee : Statewide

Subgrantee : Moretown (Town of)

Grantee County Name : Washington

Subgrantee County Name : Washington

Grantee County Code : 23

Subgrantee County Code : 23

Grantee Place Name : Moretown (Town of)

Subgrantee Place Name : Moretown (Town of)

Grantee Place Code : 0

Subgrantee Place Code : 46225

Project Closeout Date : 00/00/0000

Work Schedule Status

Amend #	Description	Time Frame	Due Date	Revised Date	Completion Date
0	install culvert	30 days	00/00/0000	00/00/0000	00/00/0000

Approved Amounts

Total Approved Net Eligible	Federal Share Percent	Total Approved Federal Share Amount	Non-Federal Share Percent	Total Approved Non-Fed Share Amount
\$48,000	75.000000000	\$36,000	25.000000000	\$12,000

Allocations

Allocation Number	IFMIS Status	IFMIS Date	Submission Date	FY	ES Support Req ID	ES Amend Number	Proj Alloc Amount Fed Share	Grantee Admin Amount	Subgrantee Admin Amount	Total Alloc Amount
2	A	07/30/2009	07/29/2009	2009	1622307	3	\$36,000	\$0	\$0	\$36,000
Total							\$36,000	\$0	\$0	\$36,000

Obligations

Action Nr	IFMIS Status	IFMIS Date	Submission Date	FY	ES Support Req ID	ES Amend Number	Suppl Nr	Project Obligated Amt - Fed Share	Grantee Admin Amount	Subgrantee Admin Amount	Total Obligated Amount
1	A	08/03/2009	08/03/2009	2009	1738092	3	3	\$36,000	\$0	\$0	\$36,000
Total								\$36,000	\$0	\$0	\$36,000

HAZARD MITIGATION GRANT PROGRAM

Funding Estimate Financial Activity Report

Disaster Number: 1790

State: VT

Region: 1

Declaration Date: 09/12/2008

Grantee : Statewide

	Projected A	Total Allocated in NEMIS B	Available C (A - B)	Total Obligated in NEMIS D	Available E (A - D)
HMGP Project Funds	\$721,688	\$510,714	\$210,974	\$510,714	\$210,974
Regular Projects	\$635,086	\$510,714	\$124,372	\$510,714	\$124,372
Initiative Projects	\$36,084	\$0	\$36,084	\$0	\$36,084
Planning Projects	\$50,518	\$0	\$50,518	\$0	\$50,518
Subtotal	\$721,688	\$510,714	\$210,974	\$510,714	\$210,974
State Management Cost	\$35,291	\$0	\$35,291	\$0	\$35,291
TOTALS	\$756,979	\$510,714	\$246,265	\$510,714	\$246,265

For disasters declared on or after 11/13/2007:

HMGP Project funds = Regular Projects + Initiative Projects + Planning Projects.

State Management Cost is separate from the HMGP Project Funds.

State of Vermont
Hazard Mitigation Grant Program
Project Application

FEMA Disaster Code:	FEMA- DR- VT	Date Submitted:	25-Mar-09
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Part 1:	Applicant Information
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Applicant Name: <small>(Eligible Applicant i.e. local government, state agency, non-profit)</small>	Town of Moretown
---------------------------------------------------------------------------------------------------------------	------------------

County:	Washington
---------	------------

Name of Local Hazard Mitigation Plan: <small>(County or Town)</small>	Moretown
--------------------------------------------------------------------------	----------

Date of FEMA approval of Local Plan:	12/10/2007
--------------------------------------	------------

Federal Tax ID Number:	03-6000582
------------------------	------------

Primary Contact Information

Name:	Stephanie Venema
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Title:	Moretown Selectboard Member
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Organization:	Town of Moretown
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Mailing Address:	P.O. Box 666, Moretown Vermont 05660
------------------	--------------------------------------

Work Phone Number:	802-496-2035	Alternate Phone Number:	802-496-3645
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Fax Number	802-329-2222	Email:	svenema@yahoo.com
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Secondary Contact Information

Name:	Cheryl Brown
-------	--------------

Title:	Administrative Assistant
--------	--------------------------

Organization:	Town of Moretown
---------------	------------------

Mailing Address:	P.O. Box 666
------------------	--------------

Work Phone Number:	802-496-2385	Alternate Phone Number:	802-496-3645
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Fax Number		Email:	mselectboard@yahoo.com
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Part 2:	Problem Description
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Location of Project:	Latitude:	44.234013	Longitude:	-72.712039 (in decimals)
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Identify adjacent roads/streets and bodies of water:	Cox Brook is the adjacent brook to the road.
------------------------------------------------------	----------------------------------------------

Required Maps:	<input checked="" type="checkbox"/>	Local General Highway Map (attached)
	<input checked="" type="checkbox"/>	Flood Insurance Rate Map with panel number (attached)
	<input checked="" type="checkbox"/>	Topographic Map (attached)

Problem Statement: <small>(What's Happening?)</small>	<p>In August, 2009, heavy rains caused severe damage to Moretown Mountain Road. FEMA estimated that the damage cost \$94,000. In 1989 the same area was damaged to approximately the same extent. FEMA staff assessed the area and determined that the culvert was undersized. Staff from the Vermont Department of Transportation conducted a hydraulic study and determined that a box culvert should be installed. At least every two years heavy rains cause less severe damage but still costing the town over \$4000 in materials, labor and equipment use.</p> <p style="text-align: center;"><input checked="" type="checkbox"/></p>
-----------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Supporting Documentation: <small>(Attach)</small>		Photos
	<input type="checkbox"/>	Engineering Studies
	<input type="checkbox"/>	Site Diagrams

Part 2:	Problem Description
----------------	----------------------------

Part 5:	Project Description		
Project Description	Install a culvert that can process water flow of minimum to flood sized waters. The town will put out to bid the project of installing a box culvert purchased by the town.		
Expected Life of Project	50 years		
Supporting Documentation: (Attach)	<input checked="" type="checkbox"/>	Photos	
	<input type="checkbox"/>	Engineering Studies	
	<input type="checkbox"/>	Site Diagrams	

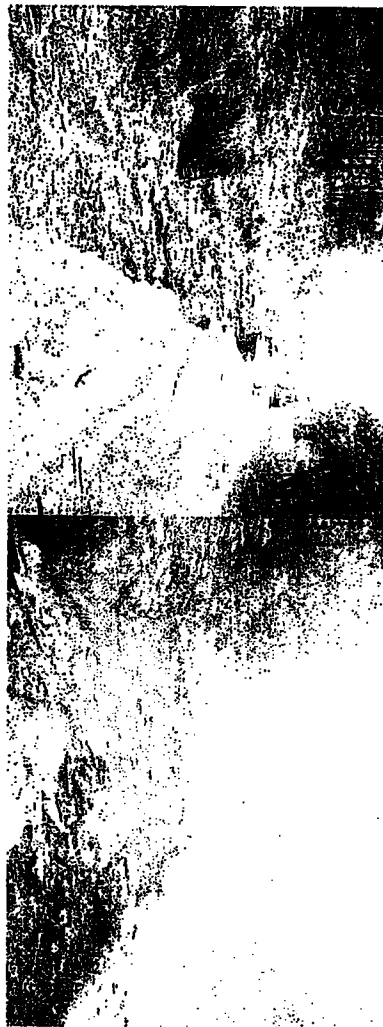
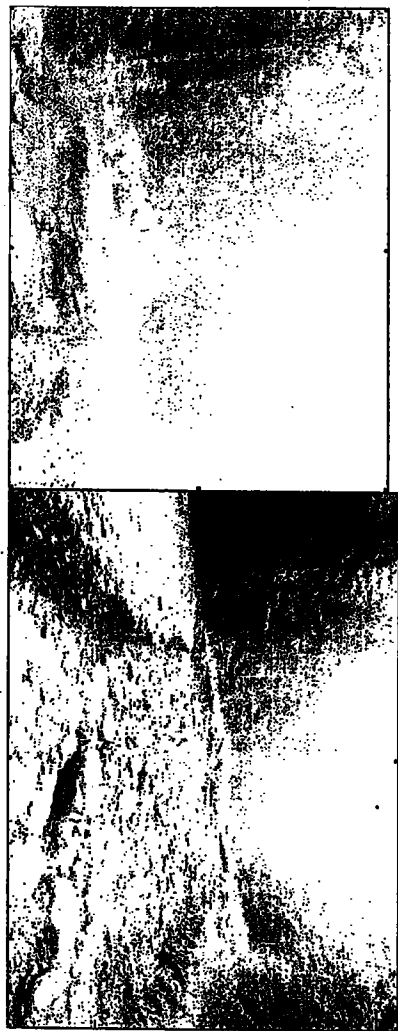
Project Costs for Preferred Alternative

Item	Unit Qty.	Unit Measurement	Unit Cost	Cost Estimate
Remove undersize culvert and install a box culvert. Resurface area of installation	1			\$48,000.00
		Total Project Cost Estimate		\$48,000.00

Summary of Project Costs

A		Total Project Costs		\$48,000.00
B		FEMA Share (75% of Line A)		\$36,000.00
C		Local Share (25% of Line A) Note: The sum of lines 1-3 must equal Line C		\$12,000.00
		1. Cash		\$12,000.00
		2. In-Kind Service		
		3. Other		
D		Total Local Share (Equal to Line C)		\$12,000.00
E		Total Project Costs (Line B + Line D) Note: Line A and D are equal		\$48,000.00

Identify source of local non-federal match: Town Funds



HYDRAULICS UNIT

TO: Doug Newton, D.T.A., District 6

FROM: Leslie Russell, P.E., Project Engineer *LR*

DATE: 5 August 2008

SUBJECT: Moretown TH 1 – Two sites – north and south of house number 3756

We have completed our preliminary hydraulic study for the above referenced sites, and offer the following information for your use.

Site No. 1 – North of House Number 3756 over the Cox Brook

Hydrology

This site has a hilly to mountainous drainage basin. It is mostly forested with some clearings and ponds. The total contributing drainage area is about 275 acres. There is an overall length of 7,640' from the divide to the site, with a 950' drop in elevation, giving an average slope of 12.5%. Slope at the site is estimated to be approximately 3%. Using several hydrologic methods, we determined the following design flow rates:

<u>Recurrence Interval in Years</u>	<u>Flow Rate in Cubic Feet per Second (CFS)</u>
Q2.33	30
Q10	90
Q25	110 - Town Highway Design Flow
Q50	135
Q100	155 - Check flow

Existing Structure

The existing 4' diameter corrugated metal pipe provides a waterway opening of about 12.6 sq. ft. Our calculations show this structure to be hydraulically inadequate. Water overtops the roadway just below the Q25 flow. During the recent storm of August 2-3, 2008, water ponded on the adjacent property and eventually made its way south toward Northfield Falls destroying a large section of roadway. The elevation of part of the adjacent property is barely above bankfull elevation. Therefore, overflow onto the adjacent property is likely to occur at flows approaching the Q10 flow. There is bank erosion up and downstream of this culvert. Along the north side of the channel on the upstream side, there is heavy brush which can contribute to the flooding in this area. There is some scour at the outlet of the culvert. There is not much cover at this site, so replacement options are limited.

Recommendations

In sizing a new structure we attempted to select structures that meet the hydraulic standards, fit the natural channel width, the roadway grade and other site conditions. Based on these considerations the following would best fit the site:

6.5 x 4.5 = 26 sq ft Fish Baffle 6" High

- A concrete box with a 6' wide by 4' high inside opening, which has a waterway area, of 24 sq. ft., that results in a headwater depth at Q25 = 3.7' and at Q100 = 4.7'. Water may still pond in the adjacent

LIMITED DATA MODULE
Benefit-Cost Analysis of Flood Mitigation Projects

PROJECT INFORMATION

Disaster Number	DR 1778	Project	Moretown Mountain Rd mitigation
DSR Number		Address	P.O. Box 666
DSR Category		City, State, Zip	Moretown, VT 05660
DSR Subject		County	Washington
Inspection Date		Applicant	Town of Moretown
Application Date	March 2009	Contact Person	Stephanie Venema
Analysis Date	3-05-09	Scenario Run ID	
Analyst	R:Doherty/S Venema	File Save As Name	BCA- Moretown- HMGP '09

PROJECT DATA

Project Description: **Box culvert to be installed on Mountain Road**

Project Useful Life (Years)	75
Base Year of Costs	2009
Historic Preservation Issues (Yes or No)?	
Environmental Issues (Yes or No)?	Yes

Economic Factors:	Discount Rate (%)	7.00	Present Value Coefficient	14.20
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Net Mitigation Project Cost: **\$48,000**
 Notes:

Additional Annual Maintenance Cost (\$/year) for Mitigation Project	\$500
Present Value of Additional Annual Maintenance Cost (\$)	\$7,098
TOTAL MITIGATION PROJECT COST	\$55,098

TYPE OF FACILITY
 (for Loss of Function)

FACILITY DESCRIPTION: **class II rural mountain road- town hwy #1**

Loss of Function for Roads/Bridges	
Estimated Number of One-Way Traffic Trips Per Day	600
Estimated Delay (Detour) Time Per One Way Trip (hours)	0.80
Total Economic Loss Per Hour of Delay: Ordinary, commercial, and emergency traffic	\$32.23
Economic Loss Per Day of Loss of Function of Bridge or Road	\$9,669

FLOOD HISTORY

Estimated Frequency of Declared Flood Event (Years): **10**

Data Sources and Documentation
Town of Moretown and ANR

SUMMARY OF BENEFITS AND COSTS

Expected Annual Damages Before Mitigation
 Expected Annual Damages After Mitigation
 Expected Avoided Damages After Mitigation (BENEFITS)

Expected Annual	Present Value
\$25,353	\$359,917
\$100	\$1,420
\$25,253	\$358,497

PROJECT COSTS
 PROJECT BENEFITS
 BENEFITS MINUS COSTS
 BENEFIT-COST RATIO

\$55,098
\$358,497
\$303,399
6.51

Data Sources and Documentation

Moretown records

FEMA Disclaimer: The results produced by this analysis are neither conclusive evidence that a proposed project is cost-effective, nor a guarantee that a project is eligible for any government grant for whatever purpose.

COPY



FEMA

August 26, 2009

Ms. Barbara Farr, Director
Vermont Emergency Management Agency
Dept of Public Safety
103 South Main Street
Waterbury, VT 05671-2101



SUBJECT: FEMA-DR-1790-VT Hazard Mitigation Grant Program Project

FEMA DR 1790-5F Chittenden Regional Planning Commission NFIP Outreach Project


Dear Ms. Farr:

Enclosed please find the Regional Environmental Officer's Record of Environmental Consideration and the Allocation, Obligation, Financial Activity and Project Management reports for the following Hazard Mitigation Grant Program projects:

1790-5F	Chittenden Regional Planning Commission NFIP Outreach Project Gibou Road Culvert Upgrade Project	\$ 35,128
Total:		\$ 35,128

If you have any questions, please do not hesitate to call Judith Maloney at our Hazard Mitigation Office at (617) 832-4797.

Sincerely,


Kevin M. Merli, Director
Mitigation Division

Attachment

ABBREVIATED RECORD OF ENVIRONMENTAL CONSIDERATION

See 44 Code of Federal Regulation Part 10.

Project Name/Number: FEMA-HMGP-1790 NFIP Outreach Project, Chittenden Regional Planning Commission, VT

Project Location: Statewide

Project Description: The Chittenden Regional Planning Commission intends to provide an outreach program to several audiences through six public meetings that will be from one to three hours long. Training for local administrative staff will be provided on how to read the maps, what to do with questionable properties, the interplay of zoning and flood regulations and insurance, and the special meanings of terms like "development" or "substantial improvement" to improve the effectiveness and compliance with NFIP.

Targeted for the outreach in particular are the following towns: Barnard, Bethel, Bradford, Braintree, Bridgewater, Brookfield, Chelsea, Corinth, Fairlee, Granville, Hancock, Hartford, Hartland, Newbury, Norwich, Pittsfield, Plymouth, Pomfret, Randolph, Rochester, Royalton, Sharon, Stockbridge, Strafford, Thetford, Topsham, Tunbridge, Vershire, West Fairlee and Woodstock. The Towns of Chelsea, Stockbridge, Granville, Bethel, Sharon, Tunbridge, Fairlee, Hartland, and Newbury. No changes to bylaws were included in the proposal. All towns in Windsor County have compliant bylaws since they have been through MapMod, but the town now need training on understanding and following the regulations.

Project Conditions & Other Required Project Specific Conditions

1. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the contracting of consultants and or contractors.
2. The applicant must follow all applicable local, state, and federal laws, regulations, and requirements for the release of public information. The applicant must also contact the State NFIP Coordinator for regulation of the material.
3. If deviations from the proposed scope of work result in design changes, the need for additional or result in any other unanticipated changes to the scope of work, the Grantee must contact FEMA, and a re-evaluation of the project will be discussed.

HISTORIC BUILDINGS AND STRUCTURES

No historic properties that are listed or 45/50 years or older in project area. **(Review Concluded)**

Building or structure listed or 45/50 years or older in project area and activity not exempt from review.

Determination of No Historic Properties Affected (FEMA finding/SHPO/THPO concurrence on file)

Are project conditions required? Yes (see section V) No **(Review Concluded)**

- Determination of Historic Properties Affected (FEMA finding/SHPO/THPO concurrence on file)
 - Property a National Historic Landmark and National Park Service was provided early notification during the consultation process. If not, explain in comments
 - No Adverse Effect Determination (FEMA finding/SHPO/THPO concurrence on file).
- Are project conditions required? Yes (see section V) No **(Review Concluded)**
- Adverse Effect Determination (FEMA finding/SHPO/THPO concurrence on file)
 - Resolution of Adverse Effect completed. (MOA on file)
- Are project conditions required Yes (see section V) No **(Review Concluded)**

Comments: This is an outreach activity and is excluded from NEPA review. Correspondence/Consultation/References: See project description. 44 CFR § 40.8 (d)(2) (ii) & (v)

ARCHEOLOGICAL RESOURCES

- Project affects only previously disturbed ground. **(Review Concluded)**
- Project affects undisturbed ground.
 - Project area has no potential for presence of archeological resources
 - Determination of no historic properties affected (FEMA finding/SHPO/THPO concurrence or consultation on file). **(Review Concluded)**
 - Project area has potential for presence of archeological resources
 - Determination of no historic properties affected (FEMA finding/SHPO/THPO concurrence on file)
 - Are project conditions required Yes (see section V) No **(Review Concluded)**
 - Determination of historic properties affected
 - NR eligible resources not present (FEMA finding/SHPO/THPO concurrence on file).
 - Are project conditions required Yes (see section V) No **(Review Concluded)**
 - NR eligible resources present in project area. (FEMA finding/ SHPO/THPO concurrence on file)
 - No Adverse Effect Determination. (FEMA finding/ SHPO/THPO concurrence on file)
 - Are project conditions required? Yes (see section V) No **(Review Concluded)**
 - Adverse Effect Determination. (FEMA finding/ SHPO/THPO concurrence on file)
 - Resolution of Adverse Effect completed. (MOA on file)
 - Are project conditions required? Yes (see section V) No **(Review Concluded)**

Comments: Correspondence/Consultation/References: Project description

THREATENED AND ENDANGERED SPECIES

- No listed species and/or designated critical habitat present in areas affected directly or indirectly by the Federal action. **(Review Concluded)**

Listed species and/or designated critical habitat present in the areas affected directly or indirectly by the Federal action.

No effect to species or designated critical habitat. (See comments for justification)

Are project conditions required? Yes (see section V) No **(Review Concluded)**

May affect, but not likely to adversely affect species or designated critical habitat (FEMA determination/USFWS/NMFS concurrence on file) **(Review Concluded)**

Are project conditions required? Yes (see section V) No **(Review Concluded)**

Likely to adversely affect species or designated critical habitat

Formal consultation concluded. (Biological Assessment and Biological Opinion on file)

Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: No threatened or endangered species or critical habitat will be affected.

Correspondence/Consultation/References: Project description

E.O. 11988 – FLOODPLAINS

No Effect on Floodplains/Flood levels and project outside Floodplain - **(Review Concluded)**

Located in Floodplain or Effects on Floodplains/Flood levels

No adverse effect on floodplain and not adversely affected by the floodplain. **(Review Concluded)**,

Are project conditions required? Yes (see section V) No **(Review Concluded)**

Beneficial Effect on Floodplain Occupancy/Values **(Review Concluded)**.

Possible adverse effects associated with investment in floodplain, occupancy or modification of floodplain environment

8 Step Process Complete - documentation on file

Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Project will not affect any floodplain values.

Correspondence/Consultation/References: Project description

E.O. 11990 – WETLANDS

No Effects on Wetland(s) and project located outside Wetland(s) - **(Review Concluded)**

Located in Wetland or effects Wetland(s)

Beneficial Effect on Wetland - **(Review Concluded)**

Possible adverse effect associated with constructing in or near wetland

Review completed as part of floodplain review

8 Step Process Complete - documentation on file

Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Project will not affect any wetland values.

Correspondence/Consultation/References: Project description

E.O. 12898 - Environmental Justice for Low Income and Minority Populations

- No Low income or minority population in, near or affected by the project - **(Review Concluded)**
- Low income or minority population in or near project area
 - No disproportionately high and adverse impact on low income or minority population- **(Review Concluded)**
 - Disproportionately high or adverse effects on low income or minority population
- Are project conditions required? YES (see section V) NO **(Review Concluded)**

Comments: Project will have no disproportionate effects on the local population.
Correspondence/Consultation/References: Project description

OTHER RELEVANT LAWS AND ENVIRONMENTAL REGULATIONS

- No impacts to other substantive laws/Executive Orders identified. Review concluded.
- Other applicable substantive laws/Executive Orders. (Identify law/E.O. and conditions if any below).

Identify relevant law or regulations, resolution and any consultation/references

No extraordinary circumstances as described in 44 CFR 10.8(d)(3) were identified during project review.

REVIEWER AND APPROVALS

FEMA Environmental Reviewer.
Name:

Signature _____ Date _____

FEMA Regional Environmental Officer or delegated approving official.
Name:

Signature _____ Date _____

Project Review and Conditions Status

Project Name/Number: FEMA-HMGP-1790 NFIP Outreach Project, Chittenden Regional Planning Commission, VT

Project Location: Statewide

Project Description: The Chittenden Regional Planning Commission intends to provide an outreach program to several audiences through six public meetings that will be from one to three hours long. Training for local administrative staff will be provided on how to read the maps, what to do with questionable properties, the interplay of zoning and flood regulations and insurance, and the special meanings of terms like "development" or "substantial improvement" to improve the effectiveness and compliance with NFIP.

Targeted for the outreach in particular are the following towns: Barnard, Bethel, Bradford, Braintree, Bridgewater, Brookfield, Chelsea, Corinth, Fairlee, Granville, Hancock, Hartford, Hartland, Newbury, Norwich, Pittsfield, Plymouth, Pomfret, Randolph, Rochester, Royalton, Sharon, Stockbridge, Strafford, Thetford, Topsham, Tunbridge, Vershire, West Fairlee and Woodstock. The Towns of Chelsea, Stockbridge, Granville, Bethel, Sharon, Tunbridge, Fairlee, Hartland, and Newbury.

No changes to bylaws were included in the proposal. All towns in Windsor County have compliant bylaws since they have been through MapMod, but the towns now need training on understanding and following the regulations.

Monitoring Requirements:

Quarterly Reports and final inspection of scope of work and accounting records are required.

Funding

Total Cost of Project:	\$ 46,837
Federal Share	\$ 35,128
Applicant Share	\$ 11,709

Period of Performance

This project must be complete by: 8/31/11

If an extension of the deadline is needed, please contact the State Hazard Mitigation Officer.

- **Any deviation from this scope of work, conditions or funding must be approved in advance, in writing.**
- **Applicants must comply with HMGP requirements, grants management procedures in 44 CFR Part 13, the grant agreement, and applicable Federal State, and laws and standards.**

HAZARD MITIGATION GRANT PROGRAM

Allocation Request

Disaster Number : 1790

Allocation Number : 3

IFMIS Status : Accept

IFMIS Date :08/25/2009

FEMA Project Number	Proj Amend Number	State Appl ID	FY	Project Amount	Grantee Admin Est	Subgrantee Admin Est	Total Allocation	Proj Total Fed Share	Proj Fed Share Prev Alloc	Max Avail for Curr Alloc
5-F	0	8	2009	\$35,128	\$0	\$0	\$35,128	\$35,128	\$35,128	\$0
TOTALS				\$35,128	\$	\$0	\$35,128			

Comments

Date: 08 / 25 / 2009 User Id: JMALONE2

Comment: allocation of \$35,128 approved

Date: 08 / 25 / 2009 User Id: KTIRRELL

Comment: allocation of \$35,128 approved

Authorization

Preparer Name : JUDITH MALONEY

Preparation Date : 08/25/2009

HMO Authorization Name : KERRI ANN TIRRELL

HMO Authorization Date : 08/25/2009

Allocation Request with Signature

Disaster Number : 1790 Allocation Number : 3 IFMIS Status : Accept IFMIS Date : 08/25/2009

FEMA Project Number	Proj Amend Number	State Appl ID	FY	Project Amount	Grantee Admin Est	Subgrantee Admin Est	Total Allocation	Proj Total Fed Share	Proj Fed Share Prev Alloc	Max Avail for Curr Alloc
5 - F	0	8	2009	\$35,128	\$0	\$0	\$35,128	\$35,128	\$35,128	\$0
TOTALS				\$35,128	\$	\$0	\$35,128			

Comments

Date: 08 / 25 / 2009 User Id: JMALONE2

Comment: allocation of \$35,128 approved

Date: 08 / 25 / 2009 User Id: KTIRRELL

Comment: allocation of \$35,128 approved

Authorization

Preparer Name : JUDITH MALONEY

Preparation Date : 08/25/2009

HMO Authorization Name : KERRI ANN TIRRELL

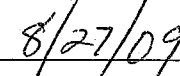
HMO Authorization Date : 08/25/2009



Authorizing Official Signature



Authorizing Official Title



Authorization Date

Authorizing Official Signature

Authorizing Official Title

Authorization Date

HAZARD MITIGATION GRANT PROGRAM

Obligation

Disaster No	FEMA Project No	Amendment No	State Application ID	Action No	Supplemental No	State	Grantee
1790	5-F	0	8	1	4	VT	Statewide
Subgrantee: CHITTENDEN REGIONAL PLANNING				Project Title : Chittenden Reg. Pl. Comm. NFIP Outreach			
Subgrantee FIPS Code: 007-007E5							

Total Amount Previously Allocated	Total Amount Previously Obligated	Total Amount Pending Obligation	Total Amount Available for New Obligation	Project Amount	Grantee Admin Est	Subgrantee Admin Est	Total Obligation	IFMIS Date	IFMIS Status	FY
\$35,128	\$35,128	\$0	\$0	\$35,128	\$0	\$0	\$35,128	08/25/2009	Accept	2009

Comments

Date: 08/25/2009 User Id: JMALONE2

Comment: obligation of \$35,128 approved

Date: 08/25/2009 User Id: SBELL7

Comment: obligation of \$35,128 approved by HMO

Authorization

Preparer Name: JUDITH MALONEY

Preparation Date: 08/25/2009

HMO Authorization Name: SAMUEL BELL

HMO Authorization Date: 08/25/2009

HAZARD MITIGATION GRANTS PROGRAM

Obligation Report w/ Signatures

Disaster No	FEMA Project No	Amendment No	State Application ID	Action No	Supplemental No	State	Grantee
1790	5-F	0	8	1	4	VT	Statewide

Subgrantee: CHITTENDEN REGIONAL PLANNING

Project Title : Chittenden Reg. Pl. Comm. NFIP Outreach

Subgrantee FIPS Code: 007-007E5

Total Amount Previously Allocated	Total Amount Previously Obligated	Total Amount Pending Obligation	Total Amount Available for New Obligation
\$35,128	\$35,128	\$0	\$0

Project Amount	Grantee Admin Est	Subgrantee Admin Est	Total Obligation	IFMIS Date	IFMIS Status	FY
\$35,128	\$0	\$0	\$35,128	08/25/2009	Accept	2009

Comments

Date: 08/25/2009 User Id: JMALONE2

Comment: obligation of \$35,128 approved

Date: 08/25/2009 User Id: SBELL7

Comment: obligation of \$35,128 approved by HMO

Authorization

Preparer Name: JUDITH MALONEY

Preparation Date: 08/25/2009

HMO Authorization Name: SAMUEL BELL

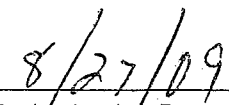
HMO Authorization Date: 08/25/2009



 Authorizing Official Signature



 Authorizing Official Title



 Authorization Date

Authorizing Official Signature

Authorizing Official Title

Authorization Date

11:30 AM

Project Management Report

Disaster Number	FEMA Project Number	Amendment Number	App ID	State	Grantee
1790	5-F	0	8	VT	Statewide

Subgrantee: CHITTENDEN REGIONAL PLANNING

FIPS Code: 007-007E5

Project Title : Chittenden Reg. Pl. Comm. NFIP Outreach

Mitigation Project Description

Amendment Status : Approved

Approval Status: Approved

Project Title : Chittenden Reg. Pl. Comm. NFIP Outreach

Grantee : Statewide

Subgrantee : CHITTENDEN REGIONAL PLANNING

Grantee County Name : Chittenden

Subgrantee County Name : Chittenden

Grantee County Code : 7

Subgrantee County Code : 7

Grantee Place Name : Chittenden (County)

Subgrantee Place Name : Chittenden (County)

Grantee Place Code : 0

Subgrantee Place Code : 99007

Project Closeout Date : 00/00/0000

Work Schedule Status

Amend #	Description	Time Frame	Due Date	Revised Date	Completion Date
0	outreach	15 months	00/00/0000	00/00/0000	00/00/0000

Approved Amounts

Total Approved Net Eligible	Federal Share Percent	Total Approved Federal Share Amount	Non-Federal Share Percent	Total Approved Non-Fed Share Amount
\$46,837	75.00000000	\$35,128	25.00000000	\$11,709

Allocations

Allocation Number	IFMIS Status	IFMIS Date	Submission Date	FY	ES Support Req ID	ES Amend Number	Proj Alloc Amount Fed Share	Grantee Admin Amount	Subgrantee Admin Amount	Total Alloc Amount
3	A	08/25/2009	08/25/2009	2009	1622307	4	\$35,128	\$0	\$0	\$35,128
Total							\$35,128	\$0	\$0	\$35,128

Obligations

Action Nr	IFMIS Status	IFMIS Date	Submission Date	FY	ES Support Req ID	ES Amend Number	Suppl Nr	Project Obligated Amt - Fed Share	Grantee Admin Amount	Subgrantee Admin Amount	Total Obligated Amount
1	A	08/25/2009	08/25/2009	2009	1755103	4	4	\$35,128	\$0	\$0	\$35,128
Total								\$35,128	\$0	\$0	\$35,128

FEDERAL EMERGENCY MANAGEMENT AGENCY
HAZARD MITIGATION GRANT PROGRAM
Funding Estimate Financial Activity Report

Disaster Number: 1790 State: VT Region: 1 Declaration Date: 09/12/2008 Grantee : Statewide

	Projected A	Total Allocated in NEMIS B	Available C (A - B)	Total Obligated in NEMIS D	Available E (A - D)
HMGP Project Funds	\$721,688	\$545,842	\$175,846	\$545,842	\$175,846
Regular Projects	\$635,086	\$510,714	\$124,372	\$510,714	\$124,372
Initiative Projects	\$36,084	\$35,128	\$956	\$35,128	\$956
Planning Projects	\$50,518	\$0	\$50,518	\$0	\$50,518
Subtotal	\$721,688	\$545,842	\$175,846	\$545,842	\$175,846
State Management Cost	\$35,291	\$0	\$35,291	\$0	\$35,291
TOTALS	\$756,979	\$545,842	\$211,137	\$545,842	\$211,137

For disasters declared on or after 11/13/2007:

HMGP Project funds = Regular Projects + Initiative Projects + Planning Projects.

State Management Cost is separate from the HMGP Project Funds.

State of Vermont
Hazard Mitigation Grant Program
Project Application

FEMA Disaster Code:	FEMA- DR- VT	Date Submitted:	31-Mar-09
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Part 1:	Applicant Information
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Applicant Name: <small>(Eligible Applicant i.e. local government, state agency, non-profit)</small>	Chittenden County Regional Planning Commission
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County:	Chittenden and Washington
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Name of Local Hazard Mitigation Plan: <small>(County or Town)</small>	
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Date of FEMA approval of Local Plan:	
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Federal Tax ID Number:	
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Primary Contact Information			
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Name:	Samantha Tilton		
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Title:	Staff Planner		
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Organization:	Chittenden County Regional Planning Commission		
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Mailing Address:	30 Kimball Ave. Suite 206 South Burlington VT 05403		
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Work Phone Number:	846.4490 x 26	Alternate Phone Number:	n/a
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Fax Number	846.4494	Email:	stilton@ccrpcvt.org
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Secondary Contact Information			
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Name:	Daniel Senecal-Albrecht		
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Title:	Senior Planner		
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Organization:	Chittenden County Regional Planning Commission		
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Mailing Address:	30 Kimball Ave. Suite 206 South Burlington VT 05403		
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Work Phone Number:	846.4490 x 29	Alternate Phone Number:	n/a
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Fax Number	846.4494	Email:	Dsenecal-Albrecht@ccrpcvt.org
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Part 2:	Problem Description			
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Location of Project:	Latitude:		Longitude:		<i>(in decimals)</i>
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Identify adjacent roads/streets and bodies of water:	
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Required Maps:	<input type="checkbox"/>	Local General Highway Map <i>(attached)</i>
	<input type="checkbox"/>	Flood Insurance Rate Map with panel number <i>(attached)</i>
	<input type="checkbox"/>	Topographic Map <i>(attached)</i>

Problem Statement: <small>(What's Happening?)</small>	<p>CCRPC and Central Vermont RPC is serving in a facilitation and support role to assist communities in updating their bylaws to comply with the National Flood Insurance Program. For many of our smaller, more rural communities, our help is essential in achieving this update by 2010.</p> <p style="text-align: center;"><input type="checkbox"/></p>
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Supporting Documentation: <small>(Attach)</small>		Photos
	<input type="checkbox"/>	Engineering Studies
	<input type="checkbox"/>	Site Diagrams

Part 2:	Problem Description <small>continued</small>			
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Statement of Damages

Preferred Alternative

Chosen Alternative:	None
Justification:	This work must be done in order to achieve compliant bylaws and many of our municipalities need assistance other than their volunteer boards.
Part 5:	Project Description
Project Description	CCRPC and Central Vermont RPC will assist our municipalities participating in the National Flood Insurance Program to update and adopt Flood Hazard Bylaws, meeting Federal standards by spring of 2010. We will provide resources and assistance as requested regarding municipal bylaws. This will involve multiple meetings with each municipality as needed, describing the NIFP and the process to reconsider and update local bylaws. RPC staff will then be available for further discussion, review of draft bylaw updates, and potential facilitation during public meetings.
Expected Life of Project	July 2009 - June 2010
Supporting Documentation: <i>(Attach)</i>	<input type="checkbox"/> Photos
	<input type="checkbox"/> Engineering Studies
	<input type="checkbox"/> Site Diagrams

Project Costs for Preferred Alternative

Item	Unit Qty.	Unit Measurement	Unit Cost	Cost Estimate
RPC Senior Planner Staff	220	hours	\$79.08	\$17,397.60
RPC Executive Director	31	hours	\$131.94	\$4,090.14
RPC Senior Planner Staff	30	hours	\$78.70	\$2,361.00
RPC GIS Services	40	hours	104.62	\$4,184.80
Central Vermont	200	hours	50	\$10,000.00
Milly Archer, VLCT	176	hours	50	\$8,803.00
35210				
Total Project Cost Estimate				\$46,836.54

Summary of Project Costs

A	Total Project Costs	\$46,836.54
B	FEMA Share (75% of Line A)	\$35,127.41
C	Local Share (25% of Line A) Note: The sum of lines 1-3 must equal Line C	\$11,709.14
	1. Cash	\$2,906.14
	2. In-Kind Service	\$8,803.00
	3. Other	
D	Total Local Share (Equal to Line C)	\$11,709.14
E	Total Project Costs (Line B + Line D) Note: Line A and D are equal	\$46,836.54