

**TOWN OF GOFFSTOWN**  
**NEW HAMPSHIRE**

**REQUEST FOR PROPOSALS**  
**FOR**  
**CONSTRUCTION SERVICES RELATED TO**  
**2013 HISTORIC BOX CULVERT RESTORATION**

The Town of Goffstown, New Hampshire, is seeking Proposals from qualified contractors to provide construction services in the Town of Goffstown on a Historic Box Culvert Restoration Project. The project is located to the east of the State Women's Prison @ 329 Mast Road, in a wooded area along the Goffstown Rail Trail, and before the open field across from the County Nursing Home @ 400 Mast Road (please see attached locus map).

All proposals must be received by, 2:00PM, prevailing time, on Wednesday, July 31, 2013. Interested parties must submit three (3) copies of their proposal in a sealed envelope marked with the company name, address, and "2013 Historic Box Culvert Restoration - RFP". Proposals should be addressed to the Town Administrator, Town Hall, 16 Main Street, Goffstown, NH 03045. The Town of Goffstown reserves the right to reject any and all statements. Interviews may be scheduled the week of the August 5, 2013.

The Town hereby notifies all respondents that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit proposals in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, sex, age, or disability in consideration for an award.

A digital version of the RFP is available on the Town's website at <http://www.goffstown.com> (under RFP/BIDS Information). Any questions, please call Meghan Theriault, Town Engineer, at the Department of Public Works at (603)-497-3617 ext. 280.

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**REQUEST FOR PROPOSALS**  
**FOR**  
**CONSTRUCTION SERVICES RELATED TO**  
**2013 HISTORIC BOX CULVERT RESTORATION**

**BACKGROUND**

*Please see the attached Project Description for Background information and photos.*

**SCOPE OF SERVICES**

*Please see the attached Project Description for Scope of Services.*

**SUBMISSION REQUIREMENTS**

Proposal must contain the following:

- Evidence that the general contractor has completed a minimum of two (2) or more similar projects with comparable scope of services for either private or local municipal government clients in the last three (3) years.
- Demonstrated experience and qualifications of the actual people who will undertake the work (including subcontractors).
- Demonstrate that the contractor and their employees who will be on the job site, have a thorough understanding of New Hampshire Department of Environmental Services permit requirements.
- Provide a listing of private or municipal/local government clients for whom similar construction services have been provided. Include client name, address, contact person, telephone number, number of years of service, and parameters covered.
- Identify any subcontractor or firm that may be used during the course of the contract.
- Brief discussion on methodology for project approach and management.
- Draft Schedule through construction – please note low flow requirements for wetlands permit work.
- Separate/bid alternate lump sum cost to construct temporary access road, staging area, and stabilized construction entrance within the limits of the County agreement. Depending on the combined cost of the project and access roads, the Town may need to do this work ahead of a contractor starting the project for funding reasons.

- Lump sum cost of all remaining scope items (excluding above items for access road/staging area and construction entrance) including all incidentals.
- Three (3) copies of proposal.

### **SELECTION PROCESS:**

The Department of Public Works will review all proposals and select a number of contractors for formal interview. The selection will be based upon a combination of factors including, but not limited to:

- Understanding of Project Scope
- Experience of appointed staff
- Schedule and time to perform work
- Experience of supervisory personnel
- Experience and capabilities of the company
- Management approach and capacity to perform the work
- Experience with NHDES Wetlands Permits
- Successful completion of similar scope of work
- References

Proposals, when received, shall be irrevocable for a period of ninety (90) calendar days following date received. The Board of Selectmen's judgment shall be final and the right is reserved by the Town to reject any or all statements as he/she may determine *incomplete*, and to waive defects in form or minor irregularities where the best interest of the Town would be served.

General questions regarding this RFP may be addressed to:

Meghan Theriault, P.E.  
Town Engineer  
Goffstown Department of Public Works  
404 Elm Street  
Goffstown, NH 03045

(603) 365-6160 cell  
(603) 497-3617 ext 280 office  
[mtheriault@goffstownnh.gov](mailto:mtheriault@goffstownnh.gov)

**LOCUS MAP**  
**2013 HISTORIC BOX CULVERT RESTORATION**  
**GOFFSTOWN, NH**



# **ATTACHMENT "A"**

## **PROJECT DESCRIPTION**

# **Project Description**

## **Historic Granite Box Culvert Restoration**

### **Goffstown, NH**

#### **Background**

A historic granite box culvert, built circa 1850, as part of the NH Central Railroad system (now Goffstown's pedestrian Rail Trail) is showing profound signs of distress, undermining, and is threatening of collapse. The Town believes the issue, discovered in Spring 2011, was caused from several past powerful rainstorms. The Town performed walkthrough inspection in December 2011, final design in late 2012 and obtained a **wetlands permit** in May 2013 (see attached). An unknown stream drains to this box culvert which eventually outlets to the Piscataquog River. The box culvert is approximately 220 feet long x 3' wide x 5' high.

Several side granite pieces near the inlet of box culvert have collapsed causing a sinkhole approximate 15' wide. There is an old washing machine and debris that is lodged into the culvert and is partially interrupting flow through the box culvert. Scouring and erosion along the entire floor of the culvert is significant and in many places there are large voids under the sidewalls. There are several points where blocks have fractured in the center as a result of loss of foundation support. It appears that the culvert "steps down" in many locations due to the change in grade and scouring. Much debris has accumulated at the entrance and exit of the box culvert that needs to be removed. Please see attached photos 1-8 which depict the existing condition of the granite culvert.

The following is an approximate scope of work for the culvert project. The Town is open to other construction methods, suggestions or ideas. If any changes are significant though, an amendment may need to be filed with NHDES.

A staging area and temporary access road will need to be constructed on Hillsborough County Farm property (**see attached Access Plans and Project Plans**). The slope material around the culvert will be removed to expose the granite slabs. The stone work will carefully be disassembled back beyond the failure point. All debris will be removed from inside the culvert. Concrete will be formed and poured along the base of the culvert extending the entire length creating a new invert floor. The base blocks near the invert that were removed during construction will be set on the new concrete footing. Once the base sidewall blocks are set, then the lintels will be reassembled across the top. Voids will be filled with smaller pieces of granite (no mortar per **Cultural Resources Effect Memo** – see attached) to help secure the blocks. The top and sides will be wrapped in geotextile fabric to prevent future infiltration of soil materials. The stonework will be reassembled using methods recommended in NHDOT Historic Stone Highway Culverts in New Hampshire Asset Management Manual and other engineering publications as required. Best management practices such as strawbales, compost socks, stone

check dams and temporary stream bypassing will be used to reduce the impact to the unknown stream. See attached site plans for more details.

Rehabilitation of the box culvert will require work adjacent to an unknown stream. Some work will extend beyond the limits of the Town owned Rail Trail. Two (2) properties will be affected by the project both owned by the Hillsborough County Farm. The Town has obtained permission from the **County** in the form of an **agreement** (see attached).

### **Scope of Services**

- Construct temporary access road, staging area, and stabilized construction entrance within the limits of the County agreement. *\*\* This item should be bid as a lump sum cost separate from the remaining scope of work, as the Town may need to do this work if needed for funding reasons. \*\**
- Install temporary water management plan per detail sheet.
- Install all other erosion control as required (including temp stream bypass).
- Remove material around culvert to expose stone work.
- Disassemble culvert working towards failure point. Must provide proper photo and written documentation to ensure that stones will be reinstalled in original locations.
- Remove all internal debris.
- Pour concrete along invert and under base blocks for entire length of culvert.
- Reassemble base blocks near inlet.
- Reinstall lintels across top once base blocks are set.
- Wrap top and sides of culvert with fabric.
- Replace and stabilize material around culvert – compact in lifts.
- Clean debris at both upstream of culvert and at outlet.
- Reshape inlet and outlet to allow proper flow of water. Install large boulder along toe of scoured slope at outlet side.
- Loam and seed affected areas.
- Restore staging area, temporary access road and construction entrance.

The Contractor shall take all feasible measures necessary to protect and preserve the unknown stream and the wetlands that surround the area. The impacts to the area will be as minimal as possible, while still allowing for a timely restoration of the existing box culvert.



**Photo 1 (Inlet of box culvert and sink hole above)**



**Photo 2 (Zoom in of sink hole shown in photo 1)**



**Photo 3 (Inside of entrance of box culvert with light showing from above sink hole and silt eroding into culvert)**



**Photo 4 (Inside of culverts showing washing machine and other debris interrupting flow)**



**Photo 5 (Culvert outlet with debris to be removed)**



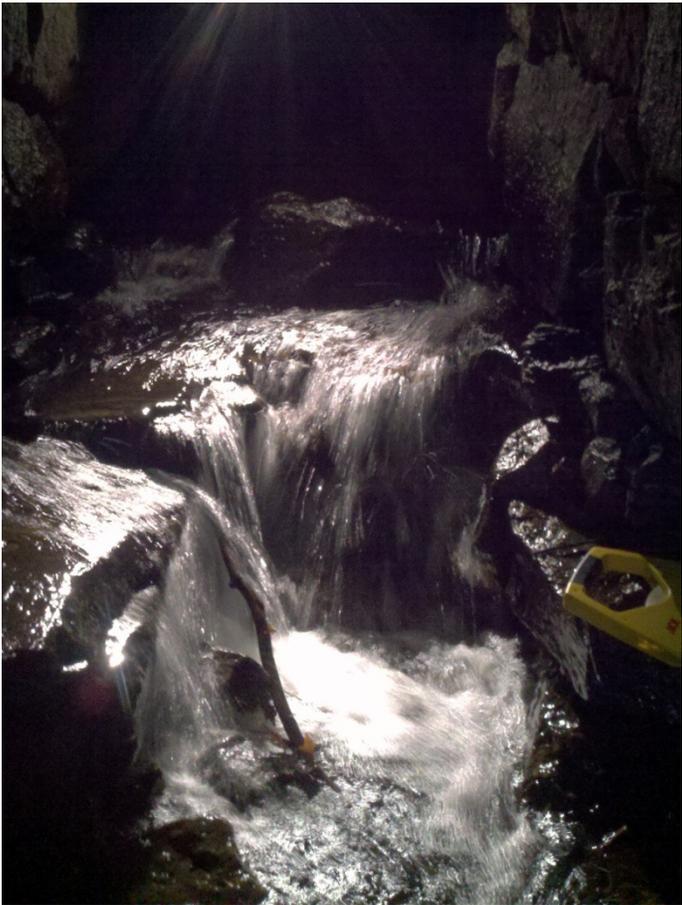
**Photo 6 (Upstream of inlet has significant debris that should be removed by others – not part of this contract)**



**Photo 7 (Blocks cracked in the center possibly due to pressure)**



**Photo 8 (Heavy Undermining and missing stone from sidewall and footing foundation)**



**Photo 9 (Scouring and drops in elevation have caused “steps” throughout culvert)**



**Photo 10 (View inside culvert from outlet end)**



**Photo 11 (Inlet Side – Debris, rocks and gravel has covered much of the original opening)**



**Photo 12 (Outlet Side – Appears to have original size opening)**

**ATTACHMENT "B"**

**WETLANDS PERMIT**



The State of New Hampshire  
**DEPARTMENT OF ENVIRONMENTAL SERVICES**



Thomas S. Burack, Commissioner

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**WETLANDS AND NON-SITE SPECIFIC PERMIT 2013-00580**

**Permittee:** Town of Goffstown Public Works  
404 Elm Street  
Goffstown, NH 03045

**Project Location:** Rail Trail, Goffstown  
Goffstown Tax Map/Lot No. 19 / 47, ROW

**Waterbody:** Unnamed stream

**NOTE--  
CONDITIONS**

Page 1 of 2

**APPROVAL DATE: 05/10/2013**

**EXPIRATION DATE: 05/10/2018**

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Based upon review of the above referenced application, in accordance with RSA 482-A and RSA 485-A:17, a Wetlands Permit and Non-Site Specific Permit was issued. This permit shall not be considered valid unless signed as specified below.

**PERMIT DESCRIPTION:** Dredge and fill 5,500 sq. ft. of wetlands (intermittent stream and existing stone culvert) to restore and stabilize a circa 1850 3 ft. span x 5 ft. rise x 220 ft. run granite box culvert within the Goffstown pedestrian Rail Trail (previously the NH Central Railroad system). Work includes debris removal, a new concrete invert with footings and new inlet and outlet scour protection.

**THIS APPROVAL IS SUBJECT TO THE FOLLOWING PROJECT SPECIFIC CONDITIONS:**

1. All work shall be in accordance with plans by the Goffstown Department of Public Works dated November 29, 2013, as received by the NH Department of Environmental Services (DES) on April 29, 2013.
2. The Town shall obtain temporary construction easements or written agreements from affected landowners with work in jurisdiction on their property. Copies shall be supplied to DES Wetlands Bureau File No. 2013-00580 prior to construction.
3. Appropriate siltation/erosion/turbidity controls shall be in place prior to construction, shall be maintained during construction, and remain in place until the area is stabilized. Silt fence(s) must be removed once the area is stabilized.
4. Appropriate turbidity controls shall be installed prior to construction, shall be maintained during construction such that no turbidity escapes the immediate dredge area, and shall remain until suspended particles have settled and the water at the work site has returned to normal clarity.
5. Work shall be done during low flow.
6. There shall be no excavation or operation of construction equipment in flowing water.
7. Extreme precautions shall be taken within riparian areas to limit unnecessary removal of vegetation for access.
8. Areas from which vegetation has been cleared to gain access to the site shall be replanted with like native species.
9. A qualified professional shall monitor the project during construction to assure it is constructed in accordance with the approved plans and narratives and to assure no water quality violations occur.
10. Prior to commencing work on a substructure located within surface waters, a cofferdam shall be constructed to isolate the substructure work area from the surface waters.
11. Temporary cofferdams shall be entirely removed immediately following construction.

DES Web site: [www.des.nh.gov](http://www.des.nh.gov)

P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095

Telephone: (603) 271-3503 • Fax: (603) 271-6588 • TDD Access: Relay NH 1-800-735-2964

12. Discharge from dewatering of work areas shall be to sediment basins that are: a) located in uplands; b) lined with hay bales or other acceptable sediment trapping liners; c) set back as far as possible from wetlands and surface waters, in all cases with a minimum of 20 feet of undisturbed vegetated buffer.
13. Dredged material shall be placed outside of the jurisdiction of the DES Wetlands Bureau.
14. Within three days of final grading, all exposed soil areas shall be stabilized by seeding and mulching during the growing season, or if not within the growing season, by mulching with tack or netting and pinning on slopes steeper than 3:1.
15. Where construction activities have been temporarily suspended within the growing season, all exposed soil areas shall be stabilized within 14 days by seeding and mulching.
16. Where construction activities have been temporarily suspended outside the growing season, all exposed areas shall be stabilized within 14 days by mulching and tack. Slopes steeper than 3:1 shall be stabilized by matting and pinning.
17. The contractor responsible for completion of the work shall utilize techniques described in the New Hampshire Stormwater Manual, Volume 3, Erosion and Sediment Controls During Construction (December 2008).
18. Construction equipment shall be inspected daily for leaking fuel, oil and hydraulic fluid prior to entering surface waters or wetlands. Faulty equipment shall be repaired immediately.
19. The contractor shall have appropriate oil spill kits on site and readily accessible at all times during construction and each operator shall be trained in its use.
20. All refueling of equipment shall occur outside of surface waters or wetlands during construction.

**GENERAL CONDITIONS THAT APPLY TO ALL DES WETLANDS PERMITS:**

1. A copy of this permit shall be posted on site during construction in a prominent location visible to inspecting personnel;
2. This permit does not convey a property right, nor authorize any injury to property of others, nor invasion of rights of others;
3. The Wetlands Bureau shall be notified upon completion of work;
4. This permit does not relieve the applicant from the obligation to obtain other local, state or federal permits, and/or consult with other agencies as may be required (including US EPA, US Army Corps of Engineers, NH Department of Transportation, NH Division of Historical Resources (NH Department of Cultural Resources), NHDES-Alteration of Terrain, etc.);
5. Transfer of this permit to a new owner shall require notification to and approval by DES;
6. This permit shall not be extended beyond the current expiration date.
7. This project has been screened for potential impacts to **known** occurrences of rare species and exemplary natural communities in the immediate area. Since many areas have never been surveyed, or have received only cursory inventories, unidentified sensitive species or communities may be present. This permit does not absolve the permittee from due diligence in regard to state, local or federal laws regarding such communities or species.
8. Review enclosed sheet for status of the US Army Corps of Engineers' federal wetlands permit.

APPROVED: \_\_\_\_\_

*William C. Thomas*  
William Thomas  
DES Wetlands Bureau

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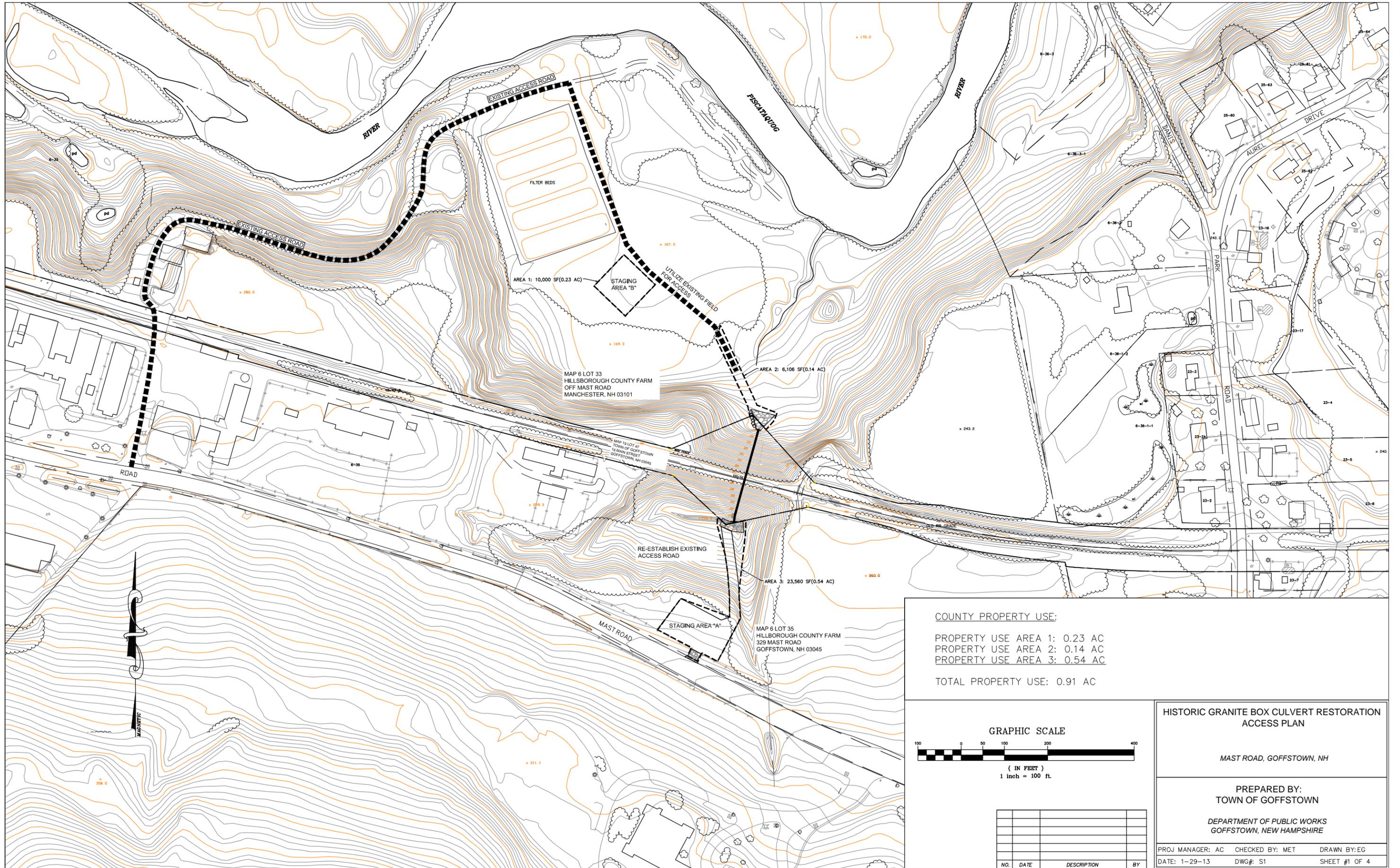
**BY SIGNING BELOW I HEREBY CERTIFY THAT I HAVE FULLY READ THIS PERMIT AND AGREE TO ABIDE BY ALL PERMIT CONDITIONS.**

\_\_\_\_\_  
OWNER'S SIGNATURE (required)

\_\_\_\_\_  
CONTRACTOR'S SIGNATURE (required)

# **ATTACHMENT “C”**

## **ACCESS & PROJECT PLANS**

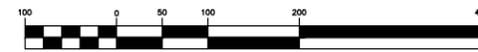


COUNTY PROPERTY USE:

PROPERTY USE AREA 1: 0.23 AC  
 PROPERTY USE AREA 2: 0.14 AC  
 PROPERTY USE AREA 3: 0.54 AC

TOTAL PROPERTY USE: 0.91 AC

GRAPHIC SCALE



( IN FEET )  
 1 inch = 100 ft.

HISTORIC GRANITE BOX CULVERT RESTORATION  
 ACCESS PLAN

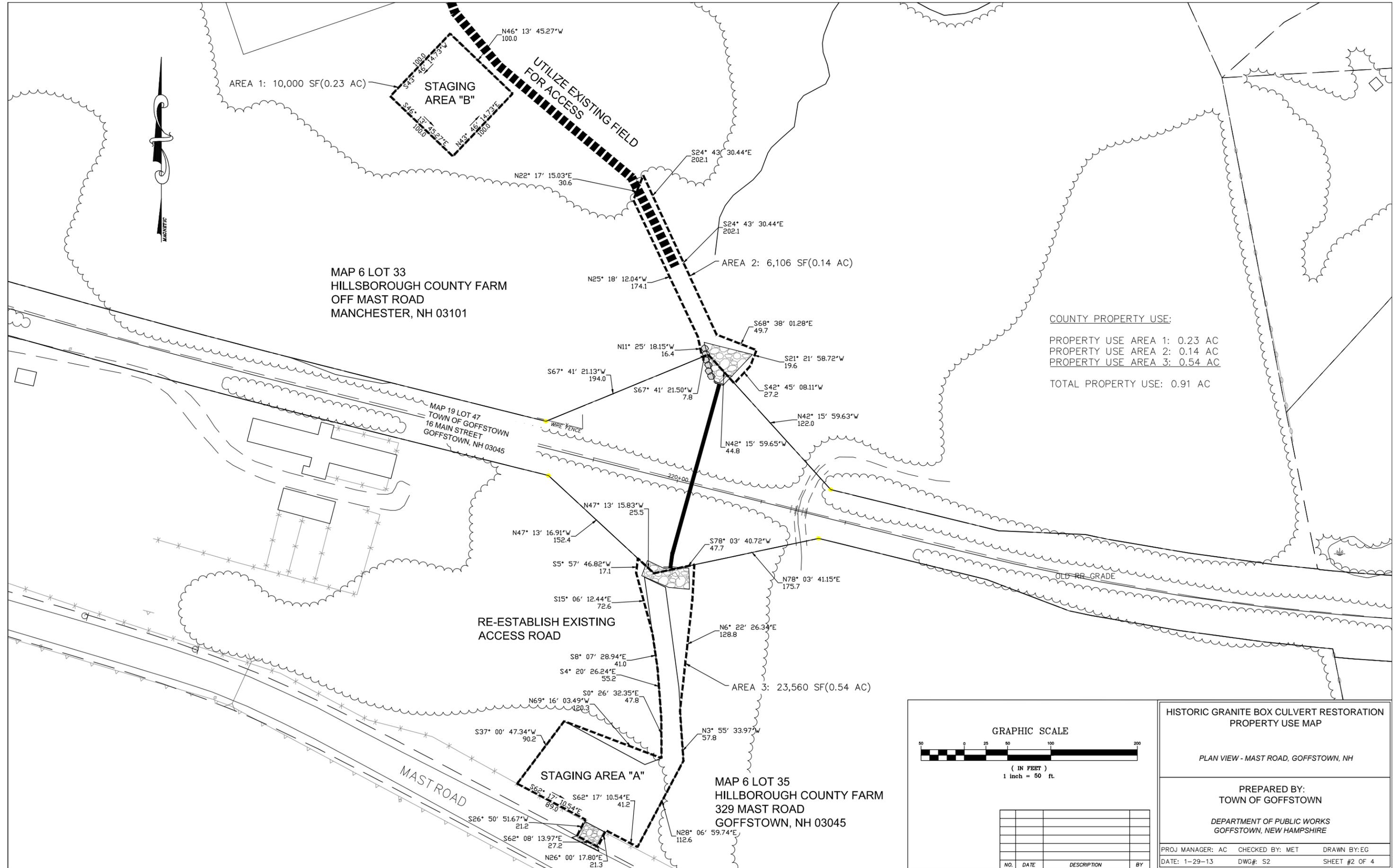
MAST ROAD, GOFFSTOWN, NH

PREPARED BY:  
 TOWN OF GOFFSTOWN

DEPARTMENT OF PUBLIC WORKS  
 GOFFSTOWN, NEW HAMPSHIRE

PROJ MANAGER: AC CHECKED BY: MET DRAWN BY: EG  
 DATE: 1-29-13 DWG#: S1 SHEET #1 OF 4

NO.	DATE	DESCRIPTION	BY



NO.	DATE	DESCRIPTION	BY

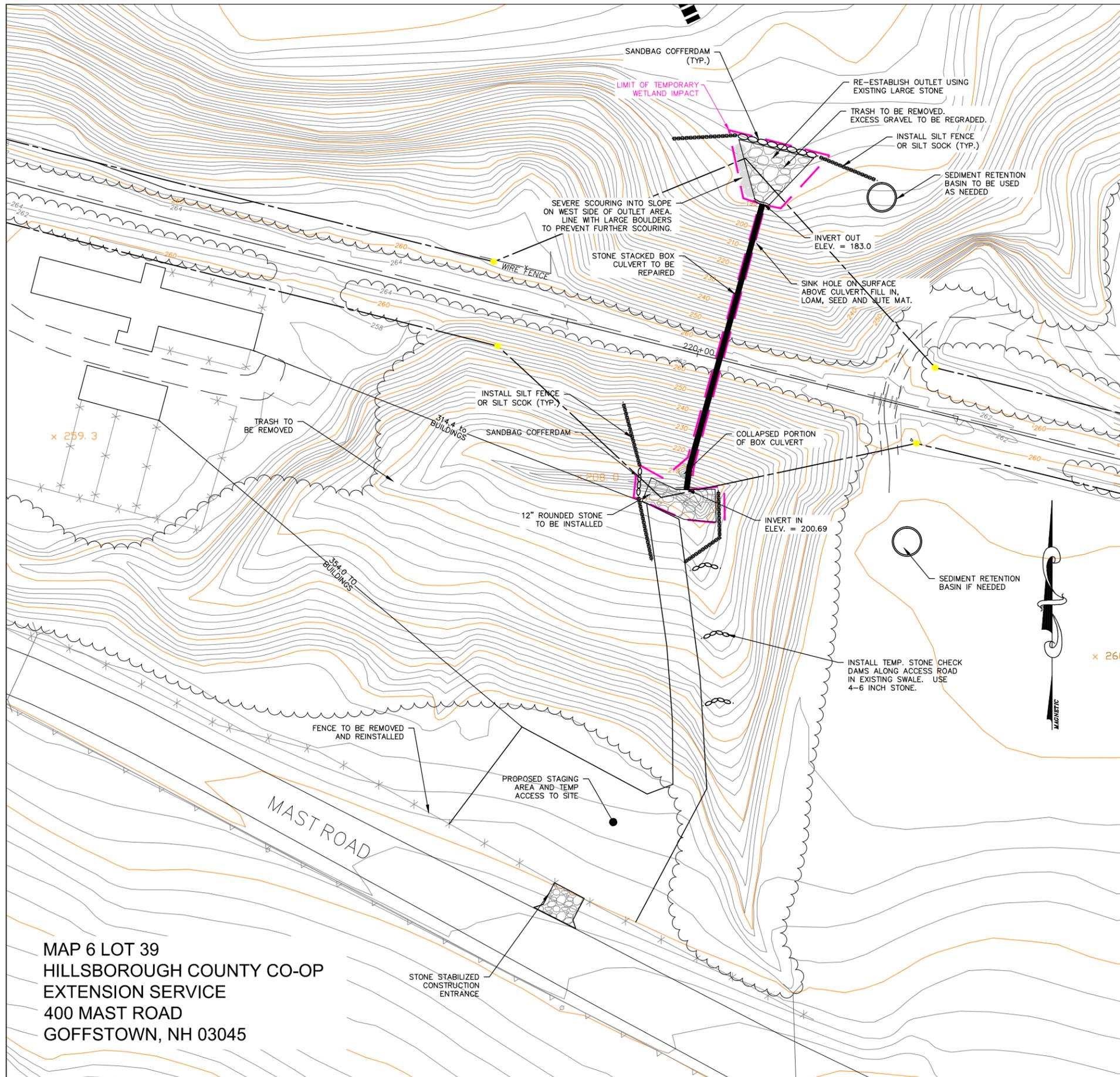
**HISTORIC GRANITE BOX CULVERT RESTORATION  
PROPERTY USE MAP**

PLAN VIEW - MAST ROAD, GOFFSTOWN, NH

PREPARED BY:  
TOWN OF GOFFSTOWN

DEPARTMENT OF PUBLIC WORKS  
GOFFSTOWN, NEW HAMPSHIRE

PROJ MANAGER: AC    CHECKED BY: MET    DRAWN BY: EG  
 DATE: 1-29-13    DWG#: S2    SHEET #2 OF 4

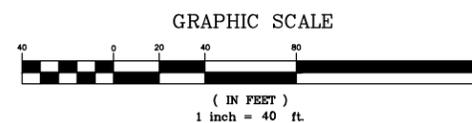


**NOTES:**

- 1) THE CONTRACTOR SHALL INSTALL A SANDBAG COFFERDAM ON INLET AND OUTLET SIDE WITH SAND BAGS OR ANOTHER ACCEPTABLE METHOD AS APPROVED BY TOWN ENGINEER.
- 2) IT WILL BE NECESSARY TO INSTALL A BYPASS PUMP ON THE INLET SIDE ABOVE THE WORK ZONE WHICH WILL OUTLET DOWNSTREAM BELOW THE WORK ZONE.
- 3) WETLAND IMPACTS RELATED TO REPAIRING THE BOX CULVERT WAS ESTIMATED TO BE THE FOLLOWING:  
TEMPORARY IMPACT = 5,500 SF
- 4) WORK IS TO BE DONE DURING A PERIOD OF LOW-FLOW CONDITIONS.
- 5) SHOP DRAWINGS FOR REPAIR TO BE SUBMITTED TO TOWN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO START OF CONSTRUCTION.
- 6) BACKFILL AROUND THE BOX CULVERT SHALL MEET NHDOT 209.2.1 UNLESS OTHERWISE SPECIFIED BY MANUFACTURER ON SHOP DRAWINGS. BACKFILL SHALL BE PLACED, COMPACTED AND TESTED IN 1' LIFTS.
- 7) REVIEW ANY TREES REQUIRED TO BE CUT FOR SAFETY AND PROPER CONSTRUCTION WITH TOWN ENGINEER PRIOR TO REMOVAL.

**LEGEND:**

STREAM		RETAINING WALL	
UTILITY POLE		SANDBAG	
STREET SIGN		GUARDRAIL	
HYDRANT		EDGE OF PAVMENT	
TREELINE		PROP. SILT FENCE	
CHAINLINK FENCE			



MAP 6 LOT 39  
HILLSBOROUGH COUNTY CO-OP  
EXTENSION SERVICE  
400 MAST ROAD  
GOFFSTOWN, NH 03045

**HISTORIC GRANITE BOX CULVERT RESTORATION  
PLAN VIEW**

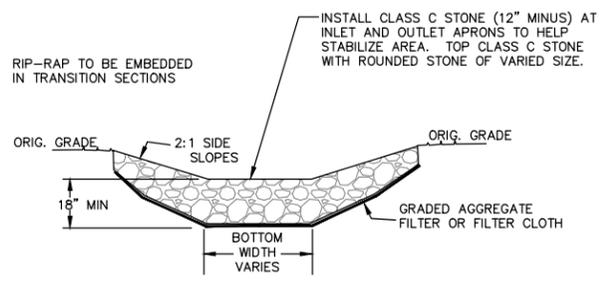
PLAN VIEW - MAST ROAD, GOFFSTOWN, NH

PREPARED BY:  
TOWN OF GOFFSTOWN

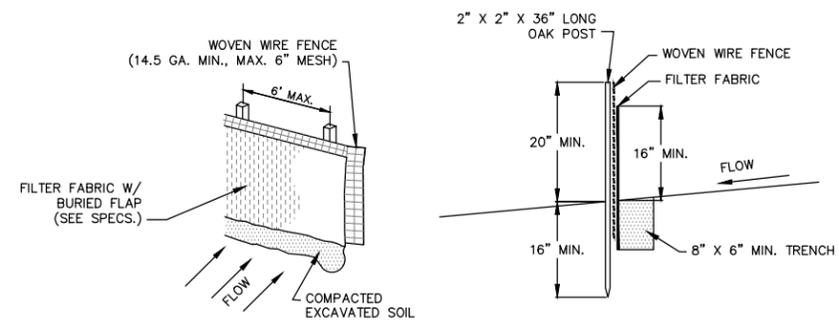
DEPARTMENT OF PUBLIC WORKS  
GOFFSTOWN, NEW HAMPSHIRE

PROJ MANAGER: AC CHECKED BY: MET DRAWN BY: EG  
DATE: 11-29-12 DWG#: S1 SHEET #3 OF 4

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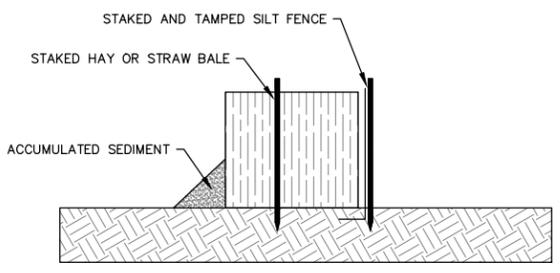


**STONE OUTLET PAD**  
NOT TO SCALE

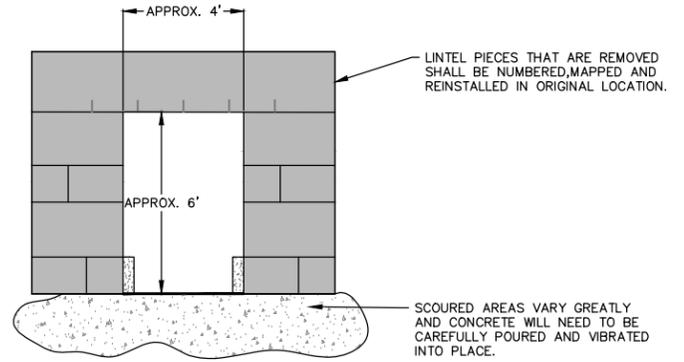


- NOTES:**
1. SPACING OF WOOD FENCE POSTS NOT TO EXCEED 6'-0".
  2. SILT FENCE SHALL BE INSTALLED BEFORE ANY EARTH REMOVAL OR EXCAVATION TAKES PLACE.
  3. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO POSTS WITH WIRE TIES OR STAPLES AT TOP, MID-POINT AND BOTTOM.
  4. FILTER FABRIC TO BE FASTENED SECURELY TO WOVEN WIRE FENCE.
  5. OVERLAP BY 6", FOLD AND STAPLE ADJOINING SECTIONS OF FILTER FABRIC.
  6. EXTEND FILTER FABRIC 8' TO 12' INTO EXCAVATED TRENCH.
  7. MAINTENANCE SHALL BE PERFORMED AS NEEDED, AND THE MATERIAL REMOVED WHEN "BULGES" DEVELOP. DO NOT DEPOSIT MATERIAL NEAR WETLANDS OR WATERCOURSES.
  8. SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH ONE-HALF (1/2) THE ABOVE GROUND HEIGHT OF THE FENCE.

**SILT FENCE DETAIL**  
NOT TO SCALE

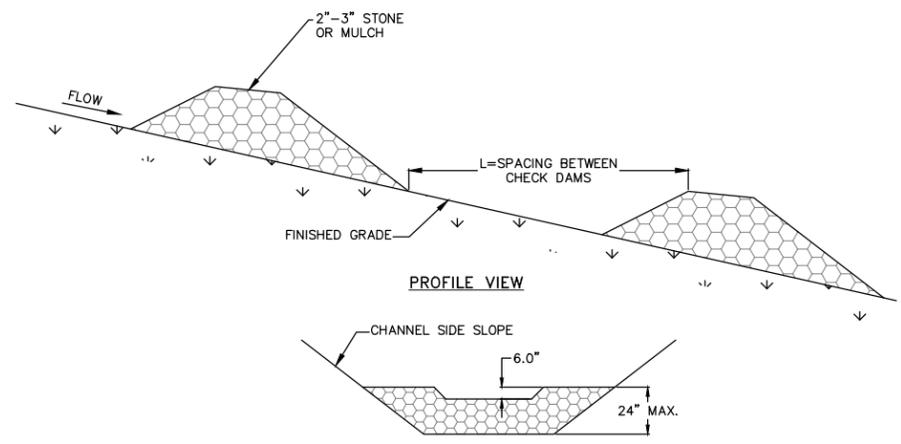


**SEDIMENT RETENTION BASIN - CROSS SECTION**  
NOT TO SCALE



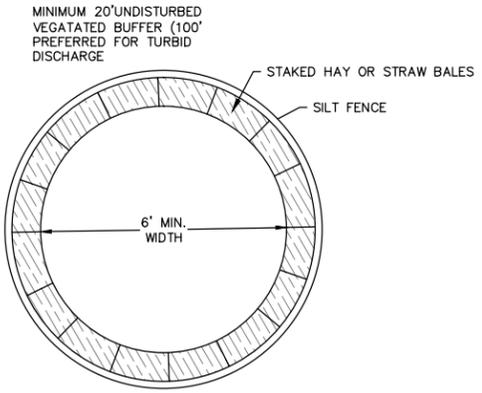
- NOTES FOR PROPOSED CULVERT WORK:**
1. REMOVE MATERIAL AROUND CULVERT TO EXPOSE STONE WORK.
  2. DISASSEMBLE CULVERT WORKING TOWARDS FAILURE POINT.
  3. REMOVE ALL INTERNAL DEBRIS.
  4. FORM AND POUR CONCRETE ALONG INVERT AND UNDER BASE BLOCKS FOR ENTIRE LENGTH OF CULVERT. VIBRATE CONCRETE UNDER BASE BLOCKS.
  5. REASSEMBLE BASE BLOCKS NEAR INLET WITH STEEL REBAR AND CONCRETE.
  6. REINSTALL LINTELS ACROSS TOP ONCE BASE BLOCKS ARE SET AT INLET END.
  7. WRAP TOP AND SIDES OF CULVERT WITH FABRIC.
  8. REPLACE AND STABILIZE MATERIAL AROUND CULVERT.
  9. PLEASE NOTE BOX CULVERT HEIGHT AND WIDTH VARY GREATLY.
  10. CONCRETE FLOOR MAY NEED TO BE EXTENDED UP SIDES OF GRANITE TO ENSURE VOIDS ARE FILLED (APPROX. 6").

**GRANITE BOX CULVERT**  
NOT TO SCALE

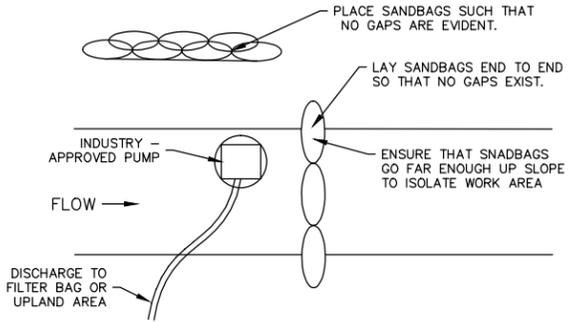


- NOTES:**
1. THE CONTRIBUTING DRAINAGE AREA TO THE CHANNEL OR SWALE BEING PROTECTED SHOULD NOT EXCEED 1 ACRE.
  2. MULCH CHECKDAMS SHALL BE COMPOSED OF COMPOST, BARK MULCH AND/OR CHIPPED WOOD. COMPOST FILTER SOCKS ARE AN ALTERNATIVE AND SHOULD BE INSTALLED PER MANUFACTURER RECOMMENDATIONS.
  3. THE CENTER OF THE CHECK DAM SHOULD BE 6 INCHES LOWER THAN THE OUTER EDGES.
  4. THE MAXIMUM SPACING BETWEEN CHECK DAMS SHOULD BE SUCH THAT THE TOW OF THE UPSTREAM CHECK DAM IS THE SAME ELEVATION OF THE DOWNSTREAM CHECK DAM.
  5. STONE CHECK DAMS SHOULD BE CONSTRUCTED OF 2-3 INCH STONE, PLACED IN ACCORDANCE WITH THE FIGURE ABOVE.
  6. CHECK DAMS SHOULD BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED STORMS. ANY NECESSARY REPAIRS SHOULD BE MADE IMMEDIATELY. PARTICULAR ATTENTION SHALL BE GIVEN TO END RUN AND EROSION AT THE DOWNSTREAM TOE OF THE CHECK DAM.
  7. ONCE SEDIMENT REACHES 1.5 FEET HIGH, THE SEDIMENT SHALL BE COMPLETELY REMOVED AND STOCKPILED AWAY FROM WETLANDS IN AN UPLAND AREA.
  8. CHECK DAMS SHALL BE REMOVED ONCE THEIR USEFUL LIFE HAS BEEN COMPLETED OR WHEN PERMANENT VEGETATION HAS BEEN ESTABLISHED. WHERE STONE CHECK DAMS HAVE BEEN PLACED IN GRASS LINED SWALES OR CHANNELS, CARE SHOULD BE TAKEN TO REMOVE ALL THE STONE.
  9. WHEN CHECK DAMS ARE REMOVED, THE DISTURBED PORTION SHALL BE BROUGHT TO THE EXISTING CHANNEL GRADE AND THE AREA LOAMED, SEEDED AND MULCHED.

**TEMPORARY STONE OR MULCH CHECK DAM DETAIL**  
NOT TO SCALE



**SEDIMENT RETENTION BASIN - PLAN VIEW**  
NOT TO SCALE



**SANDBAG COFFERDAM**  
NOT TO SCALE

**CONSTRUCTION SEQUENCE:  
& EROSION CONTROL**

1. CUT AND CLEAR TREES AND BRUSH: CLEARING THE SITE SHALL INCLUDE THE REMOVAL AND DISPOSAL OF DOWN TIMBER, RUBBISH AND DEBRIS FOUND EXISTING WITHIN THE AREA BEING CLEARED.
2. CONSTRUCT TEMPORARY AND PERMANENT SEDIMENT, EROSION AND SEDIMENTATION CONTROL FACILITIES. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF EARTHWORK.
3. THE CONTRACTOR SHALL MAINTAIN SEDIMENT AND EROSION CONTROL DEVICES THROUGHOUT THE PROJECT SITE FOR THE DURATION OF THE PROJECT.
4. ALL SLOPES GREATER THAN 3:1 SHALL BE TREATED WITH JUTE MATTING, SEEDED AND MULCHED IMMEDIATELY AFTER THEIR CONSTRUCTION.
5. ALL SWALES GREATER THAN 5% SHALL BE TREATED WITH JUTE MATTING OR AS DIRECTED BY THE ENGINEER.
6. CONSTRUCT PAVED AREAS: ALL ROADWAY AREAS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING, BEGIN TEMPORARY AND PERMANENT SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED IMMEDIATELY AFTER THEIR CONSTRUCTION.
7. DAILY OR AS REQUIRED: CONSTRUCT TEMPORARY BERMS, DRAINAGE DITCHES, SILT FENCES, SEDIMENT TRAPS, MULCH AND SEED AS REQUIRED.
8. INSPECT AND MAINTAIN ALL EROSION CONTROL MEASURES DAILY.
9. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
10. REMOVE TEMPORARY CONTROL MEASURES AND ACCOMPLISH FINAL CLEAN UP.
11. THE EROSION CONTROL AND STORM WATER MEASURES UTILIZED HEREON MEET OR EXCEED THE MINIMUM DESIGN CRITERIA OF THE EROSION AND SEDIMENT CONTROL DESIGN HANDBOOK FOR DEVELOPING AREAS OF NEW HAMPSHIRE.

**HISTORIC GRANITE BOX CULVERT RESTORATION  
DETAIL SHEET**

PLAN VIEW - MAST ROAD, GOFFSTOWN, NH

PREPARED BY:  
TOWN OF GOFFSTOWN

DEPARTMENT OF PUBLIC WORKS  
GOFFSTOWN, NEW HAMPSHIRE

PROJ MANAGER: AC CHECKED BY: MET DRAWN BY: EG  
DATE: 11-29-12 DWG#: S2 SHEET #4 OF 4

NO.	DATE	DESCRIPTION	BY

**ATTACHMENT “D”**

**CULTURAL RESOURCES AFFECT MEMO**

**Cultural Resources Effect Memo**  
(Local Public Agency Projects)

Project Town: **Goffstown**

Date: **January 16, 2013**

State No.: **N/A**

Federal No. (as applicable): **N/A RPA 4395**

Pursuant to meetings on **January 10, 2013**, and for the purpose of compliance with the regulations of National Historic Preservation Act and the Advisory Council on Historic Preservation's *procedures for the Protection of Historic Properties* (36 CFR 800), the NH Division of Historical Resources and, when applicable, the NH Division of the Federal Highway Administration or the US Army Corps of Engineers have coordinated the identification and evaluation of cultural resources relative to (project description):

*Restoration of a c. 1850 granite box culvert, located behind Hillsborough County Farm. The box culvert, originating as part of the NH Central Railroad system and now associated with Goffstown's pedestrian Rail Trail, drains an unnamed stream that eventually outlets to the Piscataquog River. A staging area and temporary access road will need to be constructed on Hillsborough County Farm property. The Town will remove the slope material to expose the granite slabs and then the stone work will carefully be disassembled back beyond the failure point. Debris will be removed from inside the culvert. Concrete will then be poured along the base of the culvert extending the entire length, filling voids under sidewalls and creating a new invert floor to prevent future undermining. The removed blocks will then be reassembled using methods recommended in NHDOT Historic Stone Highway Culverts in New Hampshire Asset Management Manual and other engineering publications as required. After rehabilitation of the box culvert, debris will be removed upstream and downstream of the culvert. Upon completion of debris removal and culvert repair, the Town will restore the staging area and access road to its original condition with loam and seed.*

Based on a review of the project, as presented on this date, it has been determined that:

**No Historic or Archaeological Properties will be Affected**

**There will be No Adverse Effect on Historic or Archaeological Properties**

Describe any outstanding commitments: The Town agreed to not use mortar or rebar in the restoration of the culvert. It was agreed that the staging area is not archaeologically sensitive.

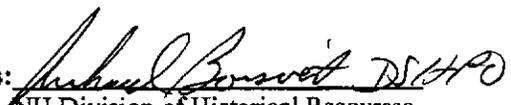
**There will be an Adverse Effect on Historic or Archaeological Properties or Resources**

describe the effect, measures to minimize harm and proposed mitigation \_\_\_\_\_

\_\_\_\_\_  
(attach pages as Necessary).

In accordance with the Advisory Council's regulations, we will continue to consult, as appropriate, as this project proceeds.

The NH State Historic Preservation Officer concurs with these findings:

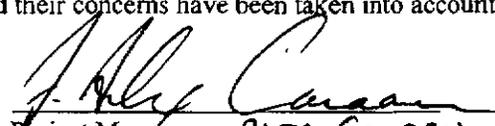
  
NH Division of Historical Resources

1-24-13

There Will Be: No 4(f) ; Programmatic 4(f) ; Full 4 (f) ; or

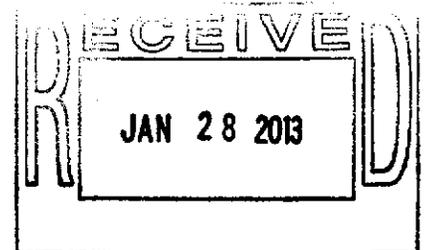
**A finding of de minimis 4(f) impact as stated:** In addition, with NHDHR concurrence of no adverse effect for the above undertaking, and in accordance with Section 6009(a) of the 2005 SAFETEA-LU transportation program reauthorization, FHWA intends to, and by signature below, does make a finding of *de minimis* impact. NHDHR's signature below represents concurrence with both the no adverse effect determination and the *de minimis* findings. Parties to the Section 106 process have been consulted and their concerns have been taken into account. Therefore, the requirements of Section 4(f) have been satisfied.

\_\_\_\_\_  
Federal Highway Administration

  
Project Manager **ALEX CANNAAN**

\_\_\_\_\_  
US Army Corps of Engineers

Cc: FHWA, NHDHR, ACOE (← as applicable ↑)



**ATTACHMENT "E"**

**COUNTY & TOWN AGREEMENT**

## **TOWN OF GOFFSTOWN HISTORICAL CULVERT REPAIR AGREEMENT**

This agreement made this \_\_\_\_\_ day of May 2013 by and between Hillsborough County (hereinafter the LESSOR), a body corporate and County in the State of New Hampshire duly established pursuant to RSA 22:7 with a principal address of 329 Mast Road, Suite 114, Goffstown, NH 03045 and the Town of Goffstown, New Hampshire (hereinafter "LESSEE"), a municipal corporation in the State of New Hampshire, with a principal address of 404 Elm Street, Goffstown, New Hampshire 03045.

Hillsborough County and the Town of Goffstown hereby agree, recite and declare as follows:

1. LESSEE seeks and LESSOR agrees to allow the repair of a historic box culvert owned by LESSEE and located on and between parcels identified on Goffstown Tax Map 6 Lots 33 and 3 as outlined in the in the plan entitled "Rail Trail Historic Granite Box Culvert Restoration Plan View" prepared by the Town of Goffstown and dated 1-29-13,(the "Plan") attached hereto as Attachment 1 and incorporated herein .

2. In order to access the historic box culvert and perform the repairs referenced in Paragraph 1, above, LESSOR will allow LESSEE to cross property owned by LESSOR, install a temporary access road and create a temporary staging area on LESSOR'S land in compliance with Attachment 1 (the "Plan"), the Indemnification Agreement attached hereto as Attachment 2 and incorporated herein and this Agreement.

3. LESSEE will identify and receive approval from LESEE'S agent, the County Administrator, prior to removal of any trees or brush necessary to install the temporary access road and temporary staging area.

4. LESSEE shall limit its use of LESSOR'S land to a period not to exceed six (6) months from commencement to conclusion, and to less than 1 acre of property as outlined in Attachment 1. Should LESSEE conclude the restoration project prior to the expiration of six (6) months, this agreement shall terminate.

5. LESSEE agrees that all personnel working on the project and at the site shall be agents and/or employees of the LESSEE and that LESSEE shall be solely responsible for any claims or liabilities by or in any way related to said agents/ employees. LESSEE further agrees that standard construction practice shall be employed and access to the work zone will be restricted and the work zone will be kept in a safe condition, as best as practical, at all times.

6. LESSEE shall restore LESSOR'S property to the near the same condition that existed prior to this agreement, grading, loaming and seeding the area as required by LESSOR .

7. The LESSEE hereby agrees to protect, defend, indemnify and hold the LESSOR, its employees, agents, officers and servants free and harmless from any and all loses, claims, liens, demands and causes of action of every kind and character including but not limited to, the amounts of judgments, penalties, interest, court cost, legal fees and all other expenses incurred by the LESSOR, arising in favor of any party, including injuries sustained by employees of the LESSOR, death, damages to property without limitation by enumeration, all other claims or demands of every character occurring in any way incident to, in connection with or arising directly or indirectly out of this agreement. The LESSEE agrees to investigate, handle, respond to, provide defense for and defend any such claims demands or suits at LESSEE'S sole expense. The LESSEE also agrees to bear all other costs and expenses related thereto, even if the claim or claims alleged are groundless, false or fraudulent. This provision is not intended to create any cause of action in favor of any third party against LESSEE or the LESSOR or to enlarge in any way LESSEE'S liability but is intended solely to provide for indemnification of the County from liability for damages or injuries arising from LESSEE'S use of the premises.

8. The term of this agreement is May 30, 2013 through November 30, 2013. Notwithstanding the recited term, either party may terminate this agreement without cause upon thirty (30) days written notice.

9. It is agreed and acknowledged that Hillsborough County receives no benefit by virtue of this agreement.

10. This agreement is void ab initio absent approval by the Hillsborough County Board of Commissioners, Executive Committee and Delegation pursuant to RSA 28:8-d.

Hillsborough County

\_\_\_\_\_  
Witness

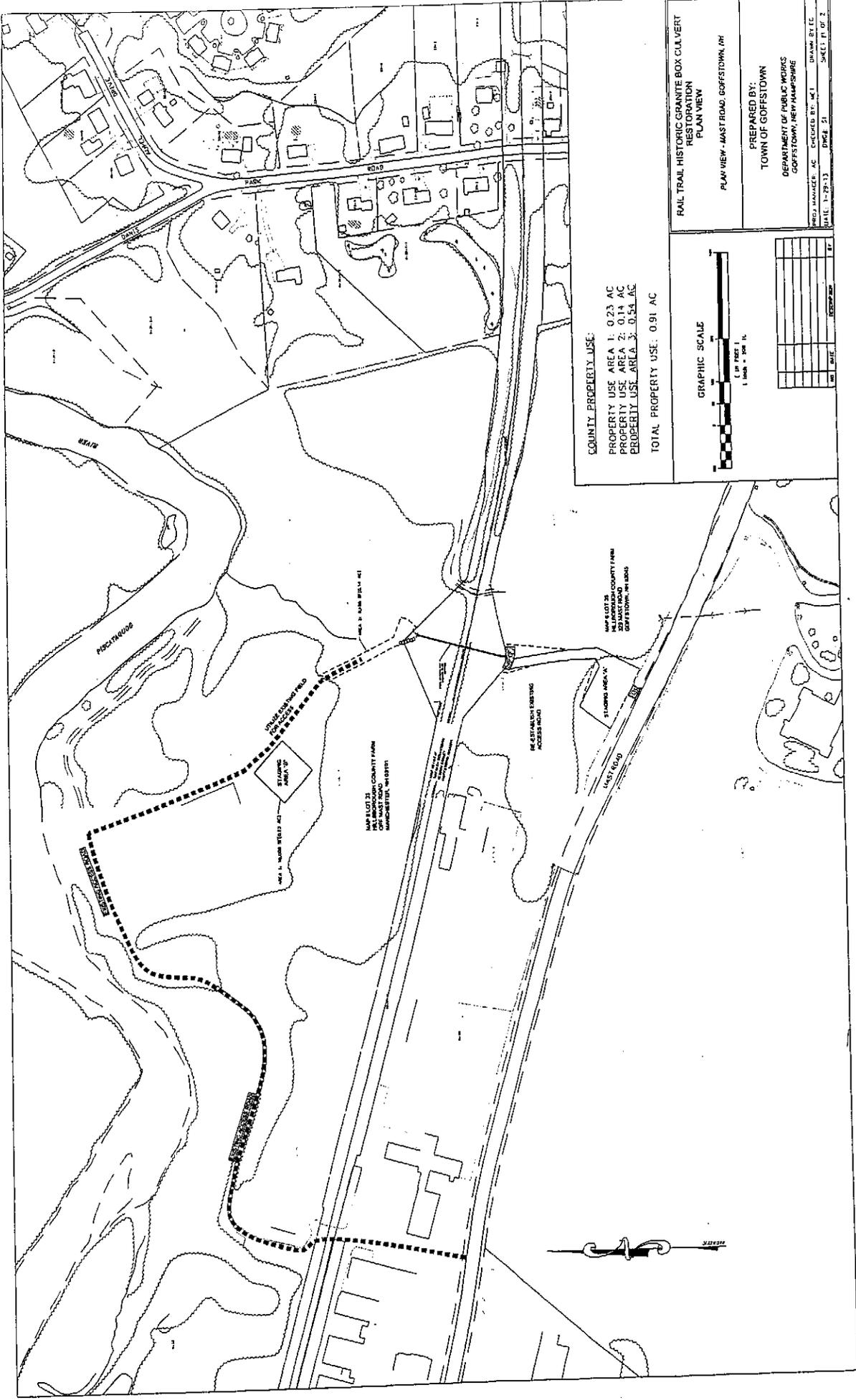
\_\_\_\_\_  
By: Toni Pappas, Chairman  
Board of Commissioners

Town of Goffstown

\_\_\_\_\_  
Witness

\_\_\_\_\_  
By: Carl Quiram, P.E.

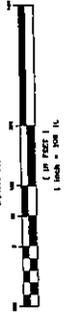




COUNTY PROPERTY USE:  
 PROPERTY USE AREA 1: 0.23 AC  
 PROPERTY USE AREA 2: 0.14 AC  
 PROPERTY USE AREA 3: 0.54 AC  
 TOTAL PROPERTY USE: 0.91 AC

RAIL TRAIL HISTORIC GRANITE BOX CULVERT  
 RESTORATION  
 PLAN VIEW

PREPARED BY:  
 TOWN OF GORFTOWN  
 DEPARTMENT OF PUBLIC WORKS  
 GORFTOWN, NEW HAMPSHIRE



NO.	DATE	DESCRIPTION	BY

REG. DRAWER: AC CHECKED BY: MCI DRAWN BY: JC  
 DATE: 1-29-13 DWG. NO.: SHEET NO. OF 2

## **Indemnification Agreement**

**Between**

**Goffstown Board of Selectmen (Town) and**

**Hillsborough County**

**Whereas**, the Town is planning on repairing a failed slope and historic granite box culvert located under and adjacent to the rail trail crossing county land;

**Whereas**, the Town through its Department of Public Works or Contractors needs to access the site through county land;

**Whereas**, the Town also needs to create an access road and laydown area as shown on plans titled "Rail Trail Historic Culvert Restoration Plan" dated, January 29, 2013;

**Whereas**, the Town wishes to facilitate timely repairs of its infrastructure to minimize potential damage to County land;

**Now be it resolved** that, the Town of Goffstown agrees that all personnel working on the site shall be considered Goffstown employees or agents and that Goffstown shall be responsible for payment of all unemployment, social security and other payroll taxes including contributions from them when required by law.

The Town of Goffstown hereby agrees to protect, defend, indemnify and hold Hillsborough County and its employees, agents, officers and servants free and harmless from any and all losses, claims, liens, demands and causes of action of every kind and character including but not limited to, the amounts of judgments, penalties, interests, court costs, legal fees and all other expenses incurred by Hillsborough County arising in favor of any party. Goffstown agrees that standard construction practices will be employed. Access to the work zone will be restricted and the workzone will be kept in a safe condition, as best as is practical, at all times. The Town of Goffstown will be solely responsible for the restoration of County land in a like condition to its original state to the approval of the County.

The Town of Goffstown agrees to investigate, handle, respond to, provide defense for any such claims, demands or suits at the sole expense of the Town of Goffstown. The Town of Goffstown also agrees to bear all other costs and expenses related thereto, even if the claim or claims alleged are groundless, false or fraudulent.

This agreement is not intended to create any cause of action in favor of any third party against the Town of Goffstown or Hillsborough County, or to enlarge in any way the Town of Goffstown's liability, but is intended solely to provide for indemnification of Hillsborough County from liability for damages or injuries to third persons or property

arising from the construction activities conducted by the Town of Goffstown on Hillsborough County land.

Signed this Date By:

Goffstown Board of Selectmen:

David Wilkins  
Scott Green  
Philip D'Amico  
Adam  
Mark Thayer

County Commission:

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