

**Commonwealth of Massachusetts**  
 Executive Office of Energy and Environmental Affairs  
 Massachusetts Environmental Policy Act (MEPA) Office

**RECEIVED**

**MAY 31 2013**

**Environmental Notification Form**

*For Office Use Only*

**MEPA**

EEA#: 15059

MEPA Analyst: Rick Bourré

*The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.*

Project Name: **Environmental Remediation at 100 Bridge Street (Former New England Log Homes Site)**

Street Address: **100 Bridge Street, Great Barrington, MA 01230**

Municipality: <b>Great Barrington</b>	Watershed: <b>Housatonic</b>
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Universal Transverse Mercator Coordinates: <b>46:72:123 N 6:35:541 E (Zone 18 meters)</b>	Latitude: <b>42° 11' 30" N</b> Longitude: <b>73° 21' 29" W</b>
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Estimated commencement date: <b>Jul 2013</b>	Estimated completion date: <b>Fall 2014</b>
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Project Type: <b>Environmental Remediation</b>	Status of project design: <b>50 %complete</b>
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Proponent: **Community Development Corp. of South Berkshire**

Street Address: **PO Box 733**

Municipality: <b>Great Barrington</b>	State: <b>MA</b>	Zip Code: <b>01230</b>
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Name of Contact Person: **Robert Hoogs**

Firm/Agency: <b>Foresight Land Services, Inc</b>	Street Address: <b>1496 West Housatonic St</b>
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Municipality: <b>Pittsfield</b>	State: <b>MA</b>	Zip Code: <b>01201</b>
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Phone: <b>413-499-1560</b>	Fax: <b>413-499-3307</b>	E-mail: <b>rhoogs@foresightland.com</b>
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Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?  Yes  No

If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting:

- a Single EIR? (see 301 CMR 11.06(8))  Yes  No
- a Special Review Procedure? (see 301 CMR 11.09)  Yes  No
- a Waiver of mandatory EIR? (see 301 CMR 11.11)  Yes  No
- a Phase I Waiver? (see 301 CMR 11.11)  Yes  No

(Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?

**301 CMR 11.03 (3) (b) 1. d. Alteration of 5,000 or more sf of bordering or isolated vegetated wetlands.**  
**301 CMR 11.03 (2) (b) 2. Greater than two acres of disturbance of designated Priority Habitat possibly resulting in a take of a state-listed endangered or threatened species of species of special concern. (A No Take Letter has already been issued for the Bio-Remediation)**

Which State Agency Permits will the project require? The project will require the following state and federal permits: **WPA Order of Conditions – Great Barrington Conservation Commission (OOC already issued); MESA Review for Rare and Endangered Species (No Take Letter already issued); USACE Section 404 Mass. General Permit Category II; Mass DEP Section 401 Water Quality Certification; Mass. Historical Commission Project Notification Form; USEPA NPDES Construction General Permit; Mass DEP Bureau of Waste Site Cleanup Tier I Permit and compliance with the Mass. Contingency Plan.**

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres:

**MassDevelopment: \$2 million grant for remediation**

Summary of Project Size & Environmental Impacts	Existing	Change	Total
<b>LAND</b>			
Total site acreage	8.0 acres		
New acres of land altered		1.6± Ac	
Acres of impervious area	2.1 acres(a)	-2.1 acres (a)	0
Square feet of new bordering vegetated wetlands alteration		17,428 SF(b)	
Square feet of new other wetland alteration		N/A	
Acres of new non-water dependent use of tidelands or waterways		N/A	
<b>STRUCTURES</b>			
Gross square footage	69,000± (a)	-69,000± (a)	0
Number of housing units	0	0	0
Maximum height (feet)	35'± (a)	-35'± (a)	0
<b>TRANSPORTATION</b>			
Vehicle trips per day	0	10 (c)	10 (c)
Parking spaces	0	0	0
<b>WASTEWATER</b>			
Water Use (Gallons per day)	0	0	0
Water withdrawal (GPD)	0	30,000± (d) (temporary irrigation)	72,000(d)
Wastewater generation/treatment (GPD)	N/A	N/A	N/A
Length of water mains (miles)	N/A	N/A	N/A
Length of sewer mains (miles)	N/A	N/A	N/A
Has this project been filed with MEPA before? <input type="checkbox"/> Yes (EEA # _____) <input checked="" type="checkbox"/> No			
Has any project on this site been filed with MEPA before? <input type="checkbox"/> Yes (EEA # _____) <input checked="" type="checkbox"/> No			

Notes:

- (a) Existing includes the footprint of the former New England Log Homes buildings and sitework; these buildings were demolished during 2012 in preparation for environmental remediation; the footprint of the historic mill complex was reserved for future redevelopment of the site.
- (b) The wetland alteration is required in order to remediate the hazardous materials; the wetlands are proposed to be restored/replicated on site upon completion of the cleanup. An Order of Conditions has been issued for this Limited Project Wetland Alteration and Restoration/Replication.
- (c) The traffic estimate is for the remediation work only;

- (d) Temporary Irrigation Water will be used during the remediation process to maintain soil moisture content and to control dust.

## **GENERAL PROJECT INFORMATION – all proponents must fill out this section**

### **Project Description**

The former New England Log Homes property consists of 8.0 acres bounded northerly by Bridge St, easterly by Bentley Ave, southerly by the Great Barrington Wastewater Treatment Plant and westerly by the Housatonic River.

This “brownfield” site was used industrially for most of the 20<sup>th</sup> century but has been vacant for approximately 20 years. A fire in March 2001 destroyed approximately half of the vacant New England Log Homes buildings; the remaining buildings were demolished in 2012. The historical industrial activities performed at the site released dioxins, pentachlorophenol (PCP), metals, and/or petroleum hydrocarbons to the upper layer of the soil and/or to groundwater. The site is subject to the Massachusetts Contingency Plan (RTN 1-0682). The currently proposed project is intended to remediate the contamination on the site and allow it to be redeveloped in the future for a Mixed Use Development.

Most of the site is a flat compacted gravel industrial yard which was used by New England Log Homes for storage and laydown area; some young second growth trees have grown up since the site was abandoned. A line of mature trees encircles the site. The site is bounded on the west by the Housatonic River and includes a total of 3.56 acres of Riverfront area. The buildings removed in 2012 from the site within the historic mill complex occupied a total of 43,929 sf within the Riverfront area: 14,671 sf in the inner 100 foot zone and 29,258 sf in the outer 100 foot zone. Several other structures, driveways, and other impervious surfaces were also removed, some within the riverfront area, others outside the riverfront. The Order of Conditions #167-0354 approved for the demolition reserved this demolished area for future redevelopment. Most of the site is within the 100 year floodplain of the Housatonic River; the demolition removed 2,864 cubic feet of structure from the floodplain. This volume was also reserved for future redevelopment.

A portion of the property along the Housatonic River is mapped as Priority Habitat for Rare Species and Estimated Habitat for Rare Wildlife. No Potential or Certified Vernal Pools are identified on or near the property. The proponents have consulted with NHESP about the project. (NHESP Tracking #09-27464 has been assigned to the New England Log Homes project.) NHESP has issued a No Take Determination for the site remediation work.

There are two wetland areas on the project site: a bordering vegetated wet meadow wetland in the southeast quadrant of the site with an area of 12,996 s.f.; a manmade ditch forms an intermittent stream outlet to the river. A second linear ditch wetland measuring 4,432 s.f. carries runoff from Bentley Avenue and its uphill drainage area to a culvert the runs beneath the site and discharges to the river. Testing on the site indicates that the soils in both of the wetlands are contaminated with dioxins and must be remediated. Order of Conditions #167-0373 has been issued by the Great Barrington Conservation Commission for the proposed Remediation project including the unavoidable alteration of the wetland and restoration/ replication of the wetlands. The Order of Conditions was issued as a Limited Project under 310 CMR 10.53 (3)(Q) “Mitigation and Remediation of, or other response to, a release or threat of release of oil and/or hazardous materials”.

### **Proposed Project Description for Bio-Remediation**

The Remediation of the Former New England Log Homes Site is proposed to be accomplished primarily through an innovative *in-situ* bio-remediation process – essentially a farming operation – which will stimulate the indigenous bacteria in the soils to break down the contaminants (which are generally concentrated in the upper 12” of the soils). The shallow soils across the entire site area are required to be remediated, including the two wetland areas. (Fortunately, the river bank is not required to be remediated.) As noted above, the Great Barrington Conservation Commission has issued Order of Conditions #167-

0373 for the limited project alteration of the wetlands that will be necessary for the bio-remediation and the restoration/replication of the wetlands. Any future redevelopment on the site will be subject to a new Notice of Intent.

The site will be prepared for the Bio-Remediation process by installing erosion and sedimentation controls, decommissioning existing monitor wells, capping catch basins, and removing trees and stumps within the Work Limits. Trees and other vegetation and stumps will be cleaned, chipped, and disposed of off-site. Trees along the river bank will remain with the exception of some dead trees, hazard trees or invasives which will be flush cut and carefully removed leaving the stumps in place. Low earthen berms will be installed at low points along the top of the river bank to retain surface water runoff on the site. Several existing stockpiles of bricks, concrete and wood chips will either be relocated to a section of the property that which can be remediated in a later phase of the work, or cleaned, crushed, and removed from the site for proper off-site disposal. The brick, concrete and wood chip stockpiles have been tested and are not considered to be remediation waste; residual soil on the stockpiled material will be cleaned off before crushing and off-site disposal. The soils surrounding the old main building will be tested to confirm that residual asbestos does not remain from the demolition. If any asbestos is found, the soil in the affected area will be segregated for proper handling.

A temporary "farm-type" irrigation system will be installed around the perimeter of the property, drawing water from a temporary intake float in the Housatonic River. The irrigation system will be used for dust control and to maintain adequate soil moisture content. It is expected that an average of 30,000 gallons per day will be withdrawn during the 10-12 week bio-remediation process in 2013. The withdrawal is expected to be much less in 2014 due to the anticipated smaller surface area requiring bio-remediation treatment. An irrigation monitoring and operation plan has been developed in consultation with NHESP and Great Barrington Conservation Commission (see narrative in appendix).

The soils on the site will be broken up with a 'ripper' to a depth of about 18". Large rocks and any remaining concrete foundations will be removed, cleaned of soil, crushed and properly disposed of as construction debris at an off-site location. Upon completion of the site preparation, the area within the Work Limits – including the two wetland areas on the site – will be tilled/plowed by a tractor making multiple passes. When needed, the irrigation system will be periodically cycled to control dust and to optimize the moisture content of the soil.

Soil amendments in the form of compost, manure, urea nitrogen and lime will be surface-applied across the site and tilled into the soil to increase total organic carbon (TOC) and promote rapid reproduction of the indigenous soil bacteria and facilitate effective bio-degradation of the contaminants. Then an enzymic "Factor" will be applied. This is a proprietary formulated product designed and prepared by BioTech Restorations LLC to separate the chlorine bonds of the contaminants in the soil and allow the natural bacteria to digest the organic material and break down the chemical compounds. The factor will be incorporated into the soil by multiple passes of the cultivator/tiller and the site irrigated to maintain levels that are optimum for the soil bacteria. At 7 to 10 day intervals following the initial treatment, the site will be tilled/plowed to maintain aerobic conditions. Monitoring and testing will occur prior to and during the treatment period which is estimated to run for about 10 to 12 weeks from August through mid-October of 2013.

At the end of the growing season the treated soil will be sampled to determine concentrations of dioxin, PCP, etc., remaining in the treated soils. Should the concentrations remain above the risk-based cleanup goal, a determination will be made about which follow-up alternative(s) to implement during 2014. Follow-up alternatives include: continue bio-remediation during a second growing season; move affected soils to the southern portion of the site where redevelopment is expected to be several years in the future and continue bio-remediation there; or move soils with concentrations exceeding the cleanup goal to location(s) on site where future permanent structures (pavement and/or building slabs) or clean soil cover will prevent contact or exposure.

Biotech Restorations LLC has recently completed a “bench study” of the bioremediation process on a sample of the soil from the site to verify the formulation and volumes of Factor, compost, manure, nitrogen, lime and water, and the estimated duration of treatment that is likely to be required. Ransom Consulting, Inc., the project’s LSP, is in the process of updating the previously submitted Phase III Remedial Action Plan and Phase IV Remedy Implementation Plan for resubmittal to the MA DEP. These documents provide the detailed analysis of applicable remedial approaches, the results of the feasibility study, the results of the bench study and design details for the full-scale implementation of the proposed Bio-Remediation process and potential follow-up alternatives.

The future Mixed Use Redevelopment plans have not been formulated sufficiently to enable a detailed description but are expected to include some or all of the following elements:

1. Commercial/Retail/Offices building in the northwest quadrant (approximately within the footprint of the historic mill complex;
2. Riverside Green Space: Open space and public “River Walk” along the entire westerly side of the site along the top of the river bank; the restoration areas for the wetlands and meadow habitat for state-listed dragonfly species will also be within this area.
3. Apartment/townhouse buildings in the southern section; most of the rental apartments are expected to be affordable with a small percentage of market rate units mixed in.
4. A Retirement Community, Elder Housing or similar development in the northeastern quadrant.

At this point, we do not expect that the redevelopment project would, by itself, require MEPA review.

#### Alternatives Analysis

The remediation of the contaminated soils on the site is mandated by the Mass. Contingency Plan (MCP). Studies and analyses have been conducted on the site for over 10 years, and many alternatives have been studied and reported to Mass DEP. As recently as the fall of 2012, DEP agreed that no permanent on-site treatment was feasible and the only feasible alternative for a temporary solution was to install a 2-foot thick cap on the site to prevent exposure. Phase III and Phase IV Plans for the full capping were submitted to MassDEP in 2011. Since the capped site includes wetlands and floodplains, the capping alternative would require wetland replication and compensatory flood storage at another off-site location, triggering another round of investigations, permitting, impacts and mitigation.

Since the fall of 2012, the Proponent has been investigating an innovative process for bio-remediation of the dioxins, PCP, and other contaminants as described above. Recent bench studies of the process have been favorable. This methodology is expected to allow the contaminated soils in the wetlands to be remediated and ultimately restored and replicated on site. The floodplain filling that would have been required by the 2-foot thick cap will also be significantly reduced. It is expected that a cap (building pad, pavement, soil cover, etc.) will still be required to prevent exposure to any residual contamination, but that the cap thickness can be reduced by lowering the residual concentrations and incorporating the cap elements into the proposed redevelopment. .

The design of the future redevelopment project will have to take special account of grading within the floodplain. Some on-site compensatory flood storage is available near the southeast corner of the site, and some was reserved from the previous demolition. It is expected that the final cover would be constructed at a later date as part of the future mixed use redevelopment on the site. In the interim, the site will be fenced and vegetated to prevent exposure. The bioremediation process will not address contaminated groundwater but a Permanent Solution is anticipated for soil at the Site. A Temporary Solution is anticipated for groundwater at this time. An Activity and Use Limitation will be placed on the completed site.

Mitigation Measures

The construction impacts of the Bio-Remediation Process will be mitigated by installation of erosion and sedimentation control measures, storm water runoff control measures, and irrigation to control dust. The irrigation water will be drawn from the Housatonic River and a monitoring and operation plan has been developed in consultation with Natural Heritage and Endangered Species Program to avoid adverse impacts on the riparian system. Once the remediation of the contaminated soils on the site – including the wetland areas – is completed, the wetland areas will be replicated and restored. It is proposed to create one 18,000 s.f. restoration/replication area to compensate for the temporary alteration of the two existing wetlands. The larger 13,000± s.f. wetland will be restored in place as a wet meadow. The smaller 4,400± s.f. linear wetland is proposed to be replicated adjacent to the larger wetland and planted with a mix of shrubs and trees. The combined 18,000 s.f. wetland restoration/replication area and surrounding open space meadow area of the site will also be seeded with a high percentage of goldenrods and other plants suitable for foraging by the several species of state-listed dragonflies that have been identified in the Priority Habitat area on the site.

Phasing

The bioremediation of the site will occur during the summer and fall of 2013; it is likely the bioremediation on the southern end of the site will extend into a second growing season in 2014 to remediate residual contamination remaining at the end of the first growing season.

The Proponent is beginning the process of preparing redevelopment plans for the future mixed use redevelopment of the site for town permitting in late 2013, with the goal of beginning construction on the commercial/office building and open space area during 2014. Construction of the remaining redevelopment would probably occur within the next three to five years.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:

Is the project within or adjacent to an Area of Critical Environmental Concern?

- Yes (Specify \_\_\_\_\_)  
 No

if yes, does the ACEC have an approved Resource Management Plan? \_\_\_ Yes \_\_\_ No;  
If yes, describe how the project complies with this plan.

Will there be stormwater runoff or discharge to the designated ACEC? \_\_\_ Yes \_\_\_ No;

If yes, describe and assess the potential impacts of such stormwater runoff/discharge to the designated ACEC.

RARE SPECIES:

Does the project site include Estimated and/or Priority Habitat of State-Listed Rare Species? (see [http://www.mass.gov/dfwele/dfw/nhosp/regulatory\\_review/priority\\_habitat/priority\\_habitat\\_home.htm](http://www.mass.gov/dfwele/dfw/nhosp/regulatory_review/priority_habitat/priority_habitat_home.htm))

- Yes (Specify Priority Habitat #PH 1346, Estimated Habitat #EH971)  No

HISTORICAL /ARCHAEOLOGICAL RESOURCES:

Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

- Yes (Specify \_\_\_\_\_)  No

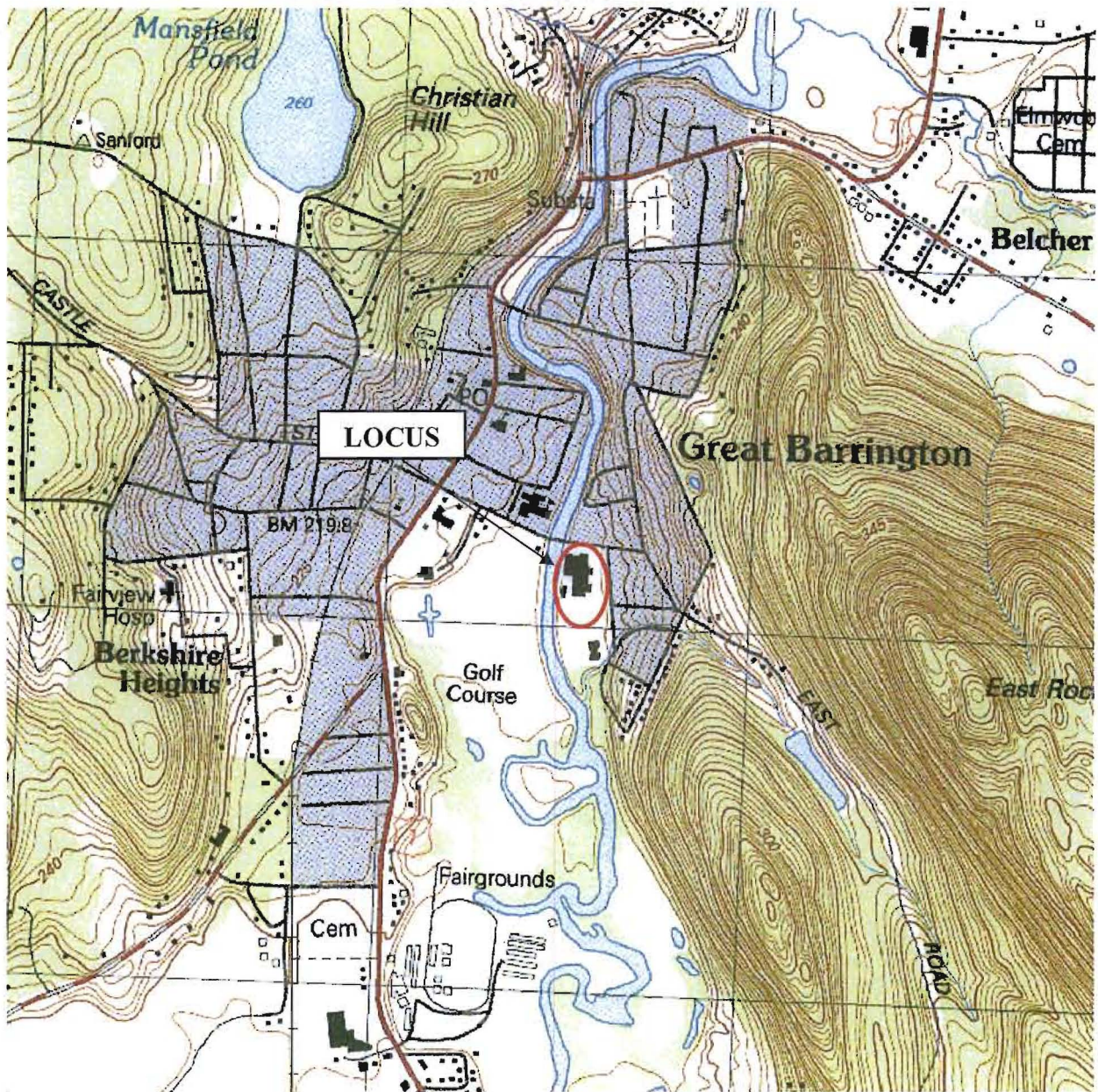
If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?  Yes (Specify \_\_\_\_\_)  No

WATER RESOURCES:

Is there an Outstanding Resource Water (ORW) on or within a half-mile radius of the project site? \_\_\_ Yes

X No;

UNITED STATES GEOLOGICAL SURVEY MAP



N.T.S.

**FORESIGHT LAND SERVICES**  
ENGINEERING • SURVEYING • PLANNING  
1496 West Housatonic Street  
Pittsfield, MA 01201

Exhibit A-1  
USGS Great Barrington QUAD, 1988 ed.  
Source MASSGIS

Former New England Log Homes  
100 Bridge Street  
Great Barrington, MA