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Exhibit B
Project Narrative
Notice of Intent under Mass. Wetlands Protection Act
And Great Barrington Wetland Bylaw
Proposed Bio-Remediation
Former New England Log Homes Site
100 Bridge Street, Great Barrington, MA
March 2013

GENERAL

The property is located at 100 Bridge Street in Great Barrington, MA (the former New England Log Homes site). The applicant proposes to use *in-situ* bio-remediation to remediate soil contaminated principally by dioxins, with lesser impacts associated with pentachlorophenol (PCP), petroleum hydrocarbons and metals, as required by the Massachusetts Contingency Plan (MCP) 310 CMR 40.0000. Demolition of the buildings was completed in 2012 under Wetlands Order of Conditions # 167-354; a Certificate of Compliance was issued after completion, closing out the Order of Conditions.

The ultimate goal is to redevelop this "brownfield site" for a mixed-use commercial, residential and open space "Riverwalk" project. However, this Notice of Intent does not include the redevelopment and is intended solely to address the cleanup and post-cleanup restoration work. A subsequent Notice of Intent will be submitted with the redevelopment plans and any necessary on-site and off-site mitigation measures.

EXISTING CONDITIONS

The project site is rectangular and consists of approximately 8 acres bounded by Bridge Street to the north, Bentley Street to the east, land of Great Barrington occupied by the Town's wastewater treatment plant to the south and the Housatonic River to the west. An off-site intermittent stream flows into a town culvert on the east side of Bentley Street southeast of the project site and flows through a town culvert across the town property to the south, outflowing to the Housatonic River.

The property was formerly the site of New England Log Homes, which manufactured log home components, and previous industrial facilities dating back to the early 1900s. The historic industrial activities on the site released dioxins, PCP, metals and petroleum hydrocarbons into the soil and groundwater. Environmental response actions are being undertaken under this Notice of Intent pursuant to the MCP. Ransom Consulting, Inc. (Ransom) is in charge of coordinating the environmental response actions.

In March 2001 a fire at the site significantly damaged the main building on the site, burning more than half of it to the ground. The damaged main building and the other four remaining buildings on the site were demolished in 2012 in accordance with Order of Conditions # 167-354 issued in May 2011. A small portion of the smokestack was allowed to remain as an historic icon. Several piles of crushed concrete, brick and wood chips remain on-site for ultimate reuse. The previous Order of Conditions included conditions allowing the area of the Historic Mill Complex and the volume of Compensatory Flood Storage created on site by the demolition activities to be credited for future development on the site. Those 'credits' are also reserved by this Notice of Intent for the future development.

WETLAND RESOURCE AREAS

The wetland resource areas on the property were previously delineated by Haines Hydrogeologic Consulting of Belchertown, Massachusetts, and approved by the Great Barrington Conservation Commission as part of the previous Order of Conditions issued in May 2011. Resource areas include: Bank, Bordering Vegetated Wetlands (BVW), Bordering Land Subject to Flooding, and Riverfront Area, as well as 100-foot Buffer Zones. As noted above, the site has been documented as having an Historic Mill Complex. The wetland resource areas are shown on Existing Conditions Plan C-100.

Two areas of BVW have been delineated. BVW "A" is a wet meadow area measuring approximately 13,000 square feet located near the southwest corner of the property and draining to the Housatonic River by a narrow ditch. The boundaries of BVW "A" were redelineated and surveyed onto the "As Built" existing conditions plan after completion of the demolition activities as required by the Order of Conditions.

BVW "B" is a narrow strip (generally between 4 and 8 feet wide) located along a roadside ditch downhill of Bentley Street along the eastern side of the property. The area receives stormwater from culverts discharging from two town catch basins on the uphill side of Bentley Street as well as sheet flow from a small off-site uphill drainage area. Although delineated as wetland, a field review of this area by Foresight Land Services indicates that it has essentially no herbaceous vegetation. The bottom is covered with leaf litter and the sideslopes are mostly exposed earth from previous maintenance. There is also virtually no shrub or tree layer within the flagged limits. The area is shaded by a mix of native and non-native evergreen and deciduous trees. (Refer to site photos in Exhibit D.)

Buffer zone on the property is measured from Bank of the Housatonic River and the two delineated BVW areas. Approximately half of the property is located within the 200-foot Riverfront Area of the Housatonic River. Most of the property is located within the 100-year floodplain.

RARE WETLAND WILDLIFE AND HABITAT:

According to the most recent Natural Heritage and Endangered Species Program (NHESP) atlas (October 1, 2008), a portion of the property is located within an area of 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.) This Notice of Intent for site remediation is being submitted to NHESP for their review.

SOILS

Soils mapping according to the USDA Web Soil Survey are Hadley Silt Loam (0 to 3 percent slopes), Udorthents (smoothed) and Peru-Marlow Association (rolling, extremely stony).

PROPOSED WORK

The work proposed under this Notice of Intent is limited to cleanup of the contamination on the project site and restoration of the resulting disturbance to wetland areas on the site. As previously noted, proposed redevelopment of the site will be the subject of a future Notice of Intent. Bio-remediation is proposed to remediate the top 30 inches of soils across the site. The remediated upper profile soils will limit exposure to any remaining contaminated soils with concentrations of dioxins and PCP above the Upper Concentration Limits (UCL) established in the MCP. It is possible that some areas of contaminated soils that are not fully bio-remediated may have to be capped to prevent potential future exposures.

BIO-REMEDIATION PROCESS

The Cleanup Work Limits (Work Limits) include approximately 7.9 acres within the property lines (generally the fences on the northerly, easterly, and southerly sides) and up to the top of embankment along the Housatonic River. Fortunately, MA DEP has agreed that remediation work will not have to be done on the river embankment itself.

Briefly, the Bio-Remediation Process consists of 'farming' the site to stimulate the naturally occurring indigenous bacteria in the soil to break down the contaminants, as described in more detail by Biotech Restorations. (Refer to the attachments to this narrative: "The Remedial Process," and the MSDS sheet for the bio-remediation "factor.") The site will be prepared by installing erosion and sedimentation controls, decommissioning or temporarily capping monitor wells, catch basins, removing remaining portions of underground foundations and other impediments, and removing trees and stumps within the Work Limits. Several existing stockpiles will be relocated to a section of the property that is either already 'clean' or which can be remediated in a later phase of the work.

Throughout the estimated six month remediation work schedule, the site will be watered to prevent dust from being carried off site. A temporary "farm-type" irrigation system will be installed around the perimeter, drawing water from the Housatonic River. The irrigation system will be used for dust control and to maintain adequate soil moisture content during dry periods. (Refer to Irrigation System below for more details.)

Once the site is prepared, the soils on the site will be broken up with a 'ripper' to a depth of about 30"; large rocks and any remaining concrete foundations will be removed and stockpiled. Upon completion of the site preparation the soil ripper will be replaced with a tractor with a Power-Take-Off (PTO) driven tiller. The area within the Work Limits will be tilled/plowed making multiple passes. When needed, the irrigation system will be periodically cycled to reduce dusting and to raise the moisture content of the soil to adequate level (currently estimated to be about 25%).

When the soil has been adequately conditioned, amendments in the form of compost, manure, urea nitrogen and lime will be surface-applied across the site and tilled into the soil. The addition of the soil amendments will increase total organic carbon (TOC) and promote rapid reproduction of the indigenous soil bacteria to facilitate effective bio-degradation of contaminants. The specific volumes of the amendments are being determined in the bench study currently underway at Biotech Restoration's Clemson SC soil lab.

Two days following the application of the amendments, a "Factor" will be applied. (The "Factor" is Biotech's proprietary formulated product designed to overcome the chlorine bonded to the contaminants in the soil and allow the natural bacteria to break down the compounds. Refer to Biotech's process description and MSDS sheet for more details.) Prior to the Factor's application, the site will be lightly irrigated and the product will be applied at a rate of approximately 1 ton per acre through a calibrated drop spreader. The product will be incorporated into the soil by multiple passes of the cultivator/tiller and the site irrigated.

At 7 to 10 day intervals following the initial treatment, the site will be tilled/plowed to maintain aerobic conditions. The soil will be tested weekly to maintain a pH of 8 and lime added as necessary to increase pH.

At 12 weeks post treatment, soil samples will be collected from the site to determine the rate of PCP and dioxin degradation. A second application of soil amendments and Factor will be applied to the site at 12 weeks to accelerate the degradation of the dioxin isomers.

The cultivation and irrigation cycles will continue to the end of the growing season at which time the treated soil will be sampled to determine dioxin concentrations remaining in the treated soils. Should the dioxin concentrations remain above a risk-based cleanup goal (currently being evaluated), a determination will be made about how to proceed. Alternatives may include: continuing bio-remediation during a second growing season; moving 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 dioxin concentrations exceeding the cleanup goal to location(s) on site where future permanent structures (pavement and/or building slabs) will prevent contact or exposure.

As noted above, Biotech Restorations is in the process of conducting "bench tests" of samples of the soils 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 is in the process of updating the previous Phase III Remedial Action Alternative Plan and Phase IV Remedy Implementation Plan for submittal to the MA DEP. These documents provide the detailed analysis of applicable remedial approaches, the results of a feasibility study, the results of the bench study and design details for the full-scale implementation of the proposed remedial approach.

IRRIGATION SYSTEM

As mentioned above, the bio-remediation process will require irrigation for both dust control and to maintain adequate soil moisture. The irrigation suction intake pipe is proposed to be located at the far southwest corner of the site. (Refer to Site Plan C-200.) A suction strainer inlet will be

suspended by floats above the river bottom. The pump will be located beyond the top of the river embankment. Where the irrigation pipe runs down the river embankment, temporary wooden steps will be laid on the surface to protect against wear from foot traffic and from the irrigation piping. Upon completion, the piping and steps will be removed and any affected area shall be reseeded.

Prior to installing the intake pipe, the river bed area will be field-reviewed by either an NHESP biologist or a qualified mussel biologist to assure that rare species habitat will not be affected. A qualified environmental monitor shall be engaged by the proponent to review the operation of the irrigation system. The monitor shall visit the site at least weekly during periods when the irrigation system is operating to be sure that the water withdrawal volume or flow rate from the river is not excessive. The water flow records from the USGS gaging station at Division Street shall also be reviewed to determine the low flow base rate during the dry season and the irrigation withdrawal flow rate and/or daily withdrawal volume shall be reduced to avoid adverse impacts.

EROSION AND SEDIMENTATION CONTROLS AND OTHER PREPARATIONS

Erosion controls will be installed as shown on the plans and as evidently needed to prevent silt-laden water from leaving the site. Erosion controls will remain in place and be maintained until the soils have been stabilized and re-vegetated. These measures represent the minimum needed to control sediment on the site and to provide a limit of work barrier. The Site Contractor will be responsible for the implementation of additional measures, if needed, to achieve compliance with the Order of Conditions and other applicable permits, and to prevent negative impacts to resource areas. All work will conform to the "Construction-Phase Measures for the Control of Sediments and the Protection of Wetlands" included with this Notice of Intent. The area within the Work Limits, and any other areas disturbed by the work, will be reseeded with erosion control seed mix and straw mulch. See exhibits C-1 Construction-phase Measures for the Control of Sediment and the Protection of Wetlands and C-2 Erosion and Sediment Controls.

Additional requirements prior to beginning the plowing and treatment:

- Sitework Contractor shall prepare a Stormwater Pollution Prevention Plan for the proposed work and submit a notice of intent to US EPA for coverage under the Construction General Permit. At a minimum, SWPPP shall include all of the erosion sedimentation and stormwater control measures contained in this NOI.
- Fueling of vehicles, generators, or other equipment shall only be conducted on portions of the site that are outside of the 200' riverfront area and beyond the 100' buffer zone. No fuel shall be stored on the site.
- Sitework Contractor shall protect the river bank from disturbance during the work, including but not limited to during tree removals, invasives removals, etc. Any inadvertent disturbance beyond the Work Limits shall be restored as soon as practicable and the area re-seeded and mulched.
- Temporary intake piping for the irrigation system shall be removed from the river bank when not in use. The suction intake valve and piping shall be supported by a float and kept away from the river bottom. (Refer to Irrigation System for additional requirements for Field Review and Monitoring of the Irrigation Intake and Flow Rates.)
- The existing tracking pad at the existing driveway entrance off Bridge Street will be reused and maintained. If the soil beneath the tracking pad needs to be remediated, it will be

excavated out, respread on the site for remediation, and the tracking pad replaced with clean materials from the onsite stockpile.

- Prior to leaving the site, construction vehicles will have mud and dirt removed or washed off at the tracking pad. A Sediment Trap will be installed immediately west of the tracking pad to catch wash water. Accumulated soils should periodically be removed from the sediment trap and respread on-site for remediation.
- The existing catch basins on the site will be capped below grade; the top 2 to 3 feet of the structure will be removed and the opening covered with an impervious membrane and steel plate to prevent water from entering the underground culvert that passes through the site, and to allow the plowing operations needed for remediation to occur above the structures and pipes.
- If the tops of any existing drain pipes are found to be less than 30 inches below existing ground surface, the earth will be mounded over the structure so the plowing operations are not interrupted.
- The inlet of the culvert near Bentley Street will be protected with an inlet sediment trap consisting of an up-turned elbow extending about 3 feet high (approximately to elevation 673.4), surrounded by a cone of crushed rock and silt fence. This will allow water from the site to pond and settle prior to overflowing into the top of the up-turned culvert.
- A compacted earth and stone berm will be constructed using clean soil across the swale at the outlet of BVW "A" with the top elevation at 671. A silt fence will be installed downstream of the berm. The combination of the berm and silt fence will contain sediment on the site.
- Silt fence toed-in and backed with wire fencing will be installed around the perimeter of the Work Limits as shown on the plans. The existing grading of the site along the top of the river embankment generally slopes away from the river back toward the site. Sitework Contractor is directed to take special care to prevent direct runoff from the site into the Housatonic River.
- No new impervious surfaces or new point source discharges will be created.
- Existing Monitor Wells that are to remain will be cut off approximately 3 feet below ground surface, and plated over, and upon completion of the work, the Monitor Well barrels and locking tops will be replaced to extend above grade. Alternatively, the Monitor Wells could be decommissioned and replaced upon completion.
- Monitor Wells that are damaged or otherwise no longer serviceable or necessary will be properly decommissioned.
- If the soil under the existing perimeter fences needs to be treated, the fences will be removed and properly disposed off site, and temporary chain link construction fencing will be used to secure the site.

REMOVAL OF TREES, STUMPS AND INVASIVE PLANTS

The remediation of the site requires the removal of virtually all trees on the site. This would also be the case if the originally planned Capping alternative was implemented.

- Within the Work Limits, all trees and shrubs will be cut and carefully lowered by machines with grappling arms, and chipped into trucks for off-site disposal.

- Stumps will be excavated, soil in the stumps will be shaken and/or washed off, and the stumps will be ground into trucks for off-site disposal.
- Certain trees along or near the top of the embankment of the river are dead, leaning, or located so close to the Work Limits that root damage from the plowing operations will compromise the health and structure of the trees. These trees are proposed to be flush cut, leaving the stumps and root masses in place to stabilize the river bank. These trees have been flagged in the field with blue flagging for review by the Conservation Commission.
- Along the riverbank, most of the trees are infested with non-native invasive vines (Bittersweet). There are also areas with other invasive plants such as Euonymus and Japanese Knotweed. There is also a small area of Reed Canary Grass in BVW "A".
    - Bittersweet is proposed to be cut off flush and removed by hand from the tree branches to the extent practical using a bucket truck. The cut stems of the bittersweet are proposed to be chemically treated with a systemic herbicide applied by a licensed applicator to kill the root system and minimize resprouting.
    - Euonymus, Japanese Knotweed, Reed Canary Grass, and other invasives will be cut flush and bagged for offsite disposal. Systemic herbicide will be applied by a licensed applicator as necessary.

RESTORATION OF THE SITE AND WETLANDS; MONITORING AND INVASIVES CONTROL

Once the soils on the site have been satisfactorily remediated, the site will be smoothed out to recreate the existing topography of the site. The area within the Work Limits will be seeded with erosion control seed mix and covered with straw mulch. Depending on the weather conditions during the fall, the seed mix may need be adjusted to contain annual rye grass to establish vegetation prior to winter. During the following spring, the site will be reviewed for satisfactory establishment of grassy vegetation, and reseeded as necessary. (Refer to Wetland Restoration/Replication Procedures in Exhibit C-3 for more details.)

The grading of the existing shallow depression forming BVW "A" will remain essentially unchanged during the remediation work. Any minor changes to the topography of the shallow depression will be adjusted during the final grading performed during the restoration. The soils within Wetland area "A" will be smoothed out and graded as needed to match existing conditions. It is expected that the organic soil amendments from the bio-remediation process will provide an adequate soil profile for the wetland restoration. The actual soil profile will be reviewed by the proponent's Engineer prior to final grading and additional soil amendments added if necessary. Once fine grading of BVW "A" has been accomplished under the direction of the Engineer, the wet meadow restoration area will be replanted with wetland seed mix, including goldenrods (for foraging by dragonflies), and covered with straw mulch. (Refer to Planting Plans and Plant List for more detail.)

BVW "B is presently a wooded roadside ditch with steep excavated sides and little or no vegetation. The plowing and remediation of this area will substantially change the existing topography. Upon completion of the work, a drainage swale will be regraded to carry existing storm drainage from the Bentley Street drainage system to the existing culvert through the site, but this is not proposed to be considered wetland restoration.

Rather than restoring BVW "B" in place, it is proposed that BVW "A" be expanded from its existing 13,000 square feet to 18,000 square feet to include the restoration area for BVW "B." The restoration area will be excavated down slightly below existing grades to provide the hydrology for the wetland restoration, and the soil profile will reviewed by the Engineer. After fine grading under the direction of the Engineer, the wetland restoration area will be planted with wetland seed mix and goldenrod, with some trees and shrubs planted along the south side. (See Details on Plan C-300 for more details.) We believe this combined wetland restoration area will provide an enhanced functional wetland area compared to the existing conditions.

The temporary alterations of existing BVW "A" and "B" are unavoidable results of being plowed to remediate the contaminated soil on the site. (The on-site wetlands would be permanently lost if the alternative Capping remediation was implemented.) A goal of the future redevelopment planning should be to avoid further alterations of the restored wetland to the maximum extent practicable.

The wetland restoration areas will be monitored to assure at least 75% reestablishment of native wetland vegetation within two growing seasons. The monitoring program will include aggressively monitoring and controlling non-native invasive vegetation throughout the site – both wetlands and uplands. This is expected to include weeding during the growing season, and use of herbicides, applied by a licensed applicator, where necessary.

PROPOSED SCHEDULE

Preparatory work is proposed to begin as soon as possible in late April or Early May, and the bio-remediation work to begin soon thereafter.

Week 1	Begin Installing Erosion Controls and other Preparatory Measures – 1 week
Week 2	Install Irrigation/Dust Control System, Begin Soil Conditioning – 1 week
Week 3	Soil Amendments – compost, manure, nitrogen, lime, "factor" – 1 week
Weeks 4-16	Begin regular tilling at 7 to 10 day intervals; test pH and moisture content weekly; add lime as required for pH; irrigate as required to control dust and maintain optimum moisture control;
Week 16	Test soils to determine interim results; apply second application of "factor" and other soil amendments as required
Week 16-Fall	Continue regular tilling at 7 to 10 day intervals; test pH and moisture content weekly; add lime as required for pH; irrigate as required to control dust and maintain optimum moisture control;
Fall 2013	Final Soil Testing to determine achievement of remediation goals
Nov 2013	Temporarily grade off site and seed with erosion control seed mix to revegetate site for winter-spring. Spread light layer of straw mulch as required.
2014	
Spring	Monitor revegetation of the site; reseed as required to establish erosion resistant surface. Monitor for invasive species and implement control measures as needed throughout grow-in period. If necessary, begin second growing season of remediation on portions of the site. Fine grade wetland restoration area "A" to restore existing topography and to expand the area by approximately 5,000 square feet to form replacement for altered

wetland area "B." Replant wetland restoration area with native indigenous wetland plant species, wetland seed mix, goldenrods, shrubs and trees).

Sept — Monitor revegetation of site and implement invasive control measures as needed. Remove silt fences and other erosion, sediment, and stormwater control measures after revegetation of the site has been satisfactorily completed (except for wetland restoration area).
Monitor revegetation of wetland restoration area; implement invasive control measures as needed; reseed and replant as required.

2015 — Monitor wetland restoration area; reseed and replant as required to achieve a minimum 75% reestablishment of wetland vegetation within two growing seasons; implement invasive control measures as needed;

2016 — Monitor and report results of restoration to Conservation Commission.

GENERAL PERFORMANCE STANDARDS REVIEW PER 310 CMR 10

310 CMR 10.53(3)(q) General Provisions

This project is proposed as a limited project under 310 CMR 10.53(3)(q):

"Assessment, monitoring, containment, mitigation, and remediation of, or other response to, a release or threat of release of oil and/or hazardous material in accordance with the provisions of 310 CMR 40.0000 and the following general conditions (although no such measure may be permitted which is designed in accordance with the provisions of 310 CMR 40.1020 solely to reduce contamination to a level lower than that which is needed to achieve "No Significant Risk" as defined in 310 CMR 40.0006(10)):"

1. *There are no practicable alternatives to the response action being proposed that are consistent with the provisions of 310 CMR 40.0000 and that would be less damaging to resource areas. The alternatives analysis shall include, at a minimum, the following:*
   a. *An alternative that does not alter resource areas, which will provide baseline data for evaluating other alternatives.*
      The only alternative that would not alter the resource areas would be to do nothing. This is not an acceptable option since it does not meet the needs of the project. The other alternative remedial action would be total capping of the soils on the site, including filling and capping the wetland areas and substantial fill within the floodplain, with offsite restoration and compensatory flood storage provided to the maximum extent practicable. The proposed alternative will allow the site grades to remain the same as existing, with no filling of floodplain, and the wetlands can be restored on site.

   b. *An assessment of alternatives to both temporary and permanent impacts to resource areas.*
      A "do nothing" approach would leave the site contaminated which will mean that the resource area would remain contaminated which may cause damage to plant and wildlife within the resource area, and would prevent future use of the property. Also refer to response to 1.a. regarding impacts of capping.

2. *Such projects shall be designed, constructed, implemented, operated, and maintained to avoid or, where avoidance is not practicable, to minimize impacts to resource areas, and shall meet the following standards to the maximum extent practicable (emphasis added):*

   a. *Hydrological changes to resource areas shall be minimized;*
   Applicant proposes to restore existing topography of the site. No change to the hydrology of the site is proposed.

   b. *Best management practices shall be used to minimize adverse impacts during construction, including prevention of erosion and siltation of adjacent water bodies and wetlands in accordance with standard U.S.D.A. Soil Conservation Service methods;*
   Erosion control measures are proposed to prevent erosion and siltation of the Housatonic River and the surrounding area. Tree removal is limited along the top of the steep embankment immediately adjacent to the Housatonic River in order to prevent erosion of the bank area.

   c. *Mitigating measures shall be implemented that contribute to the protection of the interests identified in M.G.L. c. 131, § 40;*
   The interests identified in M.G.L. c. 141 § 40 will be protected to the maximum extent practicable. The work cannot occur outside of the resource area and wetlands must be altered as a result of the cleanup activities; however the topography of site and the wetlands will be restored on site.

   d. *Compensatory storage shall be provided in accordance with the standards of 310 CMR 10.57(4)(a)1. for all flood storage volume that will be lost;*
   The existing topography will remain unchanged. There will be no change in flood storage volume.

   e. *No access road, assessment or monitoring device, or other structure or activity shall restrict flows so as to cause an increase in flood stage or velocity;*
   There will be no structures or activities that will restrict flows or cause an increase in flood stage or velocity.

   f. *Temporary structures and work areas in resource areas, such as access roads and assessment and monitoring devices, shall be removed within 30 days of completion of the work. Temporary alterations to resource areas shall be substantially restored to preexisting hydrology and topography. At least 75% of the surface of any area of disturbed vegetation shall be reestablished with indigenous wetland plant species within two growing seasons and prior to said vegetative reestablishment any exposed soil in the area of disturbed vegetation shall be temporarily stabilized to prevent erosion in accordance with standard U.S.D.A. Soil Conservation Service methods.*
   Temporary structures and work areas within the resource area will be removed within 30 days of completing the work. The topography of the site will be restored to its existing condition once the bio-remediation is complete. Wetland restoration will be achieved within two growing seasons.

310 CMR 10.58(4) Riverfront General Performance Standards

The proposed work is within the Riverfront Area. All other resource area performance standards have been met to the maximum extent practicable.

The proposed work will be within priority habitat of rare species and estimated habitat of rare wetland wildlife. As part of the 2011-12 demolition phase, NHESP determined the work could proceed as a "No Take," and our recent consultation has led us to conclude that, since there is no feasible alternative to the cleanup activities, NHESP will agree to allow the cleanup work to proceed as proposed.

In the event that the project was to stop after completion of the previous phase 1 demolition, and the proposed phase 2 remediation and restoration of vegetation, the MESA habitat values would be protected and achieved. This NOI is intended to be a "fail safe" in case no future development or restoration takes place.

However, as noted earlier, the applicant intends to submit a future NOI for a final phase consisting of redevelopment of the site for mixed use commercial, residential, and riverside open space. We expect that the future NOI and MESA process will demonstrate that the habitat values of the future site will be restored to create a net benefit to the environment compared to the baseline pre-demolition and remediation conditions.

There is no practicable and substantially equivalent economic alternative to the proposed project with less adverse effects on the interests identified in M.G.L. c. 131 § 40.
The site must be remediated per the MCP.

The proposed work shall not impair the capacity of the Riverfront Area to provide important wildlife habitat functions.
The Riverfront area will be revegetated upon completion of the remediation.

Stormwater shall be managed...Ground water and surface water quality shall not be impaired...
Erosion and sedimentation controls and stormwater management are proposed during the remediation.

310 CMR 10.57(4) Land Subject to Flooding General Performance Standards

Bordering Land Subject to Flooding:
The site will be restored to its original topography, therefore no flood storage volume will be lost and no compensatory flood storage is required. The proposed work will not restrict flows or cause an increase in flood velocity or flood stage.

BIOTECH RESTORATIONS LLC

The Remedial Process

Implementing an On-Site Factor Based Remedy

Christopher Young

7/15/2011

A description of the basic elements of a Factor based site remediation effort, the process of qualifying a candidate site, the development of a site specific treatment remedy and the steps taken to insure that a treatment remedy developed for the site will achieve the mandated cleanup goals.

Biotech Restorations Remedial Process

Biotech's Factor biotechnology is designed to treat the indigenous bacteria in soils and de-watered sediments. Biotech works solely with the indigenous bacterial population. No cultured "bugs" are added. The Factor treatment repairs a chemically induced impairment within the bacterial DNA caused by exposure to persistent organic chemical pollutants. This impairment prevents the indigenous bacteria from expressing the enzymes necessary for the bacteria to reduce organic carbon for mineralization and reproduction. The most basic criteria therefore are that any soil/sediment being treated must have bacterial activity. Basically, if a site is impacted by an organic chemical compound and there is biological activity in the soil/sediment/groundwater, Biotech can develop a remedy for the site.

Site Specific Treatment Criteria

Biotech utilizes three on-site remedial approaches for treating contaminated media. If the target pollutant impacts are limited to the top 2' of soil (surface to 24" bgs), the soil can be treated in-situ. Soil amendments to increase biological activity are surface applied and incorporated into the impacted soil using conventional farming equipment. The granular Factor product is applied and incorporated in the same way. Sub-surface structures (utilities, piping, foundations and stormwater conveyance) require special attention.

Some treatments may require excavation and an on-site ex-situ approach to treatment. Usually deeper lying contaminants impacts (> 30" bgs) must be excavated and treated in windows or if sufficient space is available, the soil can be laid down in a single lift and treatment as described above.

In limited confined zones of impacts, one can drill down into the subsurface zones and inoculate the soil bacteria by packing the bore hole with a granular Factor formulation that slowly disperses into the surrounding soils to treat the indigenous bacterial populations. A grid-work of bore holes is typically necessary to perform this treatment and knowledge of soil porosity is essential.

Water

Factor treatments require elevated and sustained levels of biological activity and water is an essential element of a successful treatment. Water must be available to irrigate the treated soil/sediment during the entire course of treatment. In order to maintain an optimal 25% to 30% moisture level, the soil typically requires irrigation every 7 to 10 days following treatment. Wherever possible, treatment can be timed to take advantage of seasonal rainfall, this is especially useful in semi-arid conditions encountered in the southwest United States. The water need not be potable, and in some cases brackish water can be utilized. On sites where a concurrent groundwater remediation effort is underway, contaminated groundwater can be utilized for treatment. As the water passes through the soil, the organic contaminants will bond to the organic components of the soil becoming available to for bacterial utilization.

Temperature

The bacteria that the technology relies upon to degrade the target pollutants are exothermic. These organisms consume food in the form of organic carbon and produce heat during metabolism. As soil

temperatures decline, bacterial activity will slow down and eventually stop when soil temperatures fall below 40 degrees Fahrenheit. However, based upon a site's geographic location, temperature may not be a significant or limiting issue..

Soil Amendments

Any site's soils/sediments are commonly deficient in organic carbon. The biotechnology will amend the soil by ~1% by volume to increase total organic carbon (TOC), aid in moisture retention and to increase microbial populations. Common sources of amendments include compost, manure or bio-solids if the solids meet the state's criteria for land application. Urea nitrogen and lime are used to create and maintain optimal conditions within the soil for the treated bacteria to reproduce.

Treatment Timelines

As a rule, the more recalcitrant an organic compound is the longer it will take to degrade. As an example, common petroleum hydrocarbon compounds are the quickest to eliminate. Gasoline, diesel, heating fuels, jet fuel and aviation gas and oils can be eliminated in as few as 6 to 8 weeks.

Pesticides (DDT, chlordane, toxaphene, etc.) can take 3 to 6 months to eliminate, whereas PAHs and PCBs can take from 6 to 9 months depending upon the initial concentrations in the soil or sediment. Dioxins in soil can take up to a year, again depending upon the initial dioxin concentration.

Unique mixtures or organic chemicals and metals are routine at any site however a baseline analysis will provide the necessary data needed to design a site specific remedial approach.

Scalable Treatments

The treatment technology is scalable to meet any size site's remedial needs. At present this technology is being vetted as the remedy provider at contaminated sites where millions of cubic yards of impacted soil and dredged de-watered sediments require treatment.

Economic benefits most typically accrue for Factor treatments on soil volumes in excess of 1,000 cu/yd. However, to implement this biotechnology on a site where less than 1,000 cubic yards of impacted soil exist, one up side is that the technology can be promoted as a green remedy as the contaminants are digested on-site and the previously impacted soils can be beneficially re-used.

Potential Savings

The use of the Biotech Factor approach can save from 30% to 50% in remedial costs. However, the referenced site specific conditions must be considered and addressed. In instances where multiple areas of concerns are noted on a site, this approach could be coupled with other technologies to optimize available remedial funds.

Materials Not Remedied By a Factor Treatment

Finally, it should be noted that there are instances where the biotechnology alone won't be effective. Because the Factor remedy relies upon bacterial reduction and utilization of the contaminant mass, the treatment is not effective in reducing (to any significant degree) metals in the soil/sediment. Treatment to fix, stabilize or remove metals in the soil can be performed, however, as these treatments often involve pH adjustments that may be adverse to the soil's

biological consortia, metals treatments are performed following treatment to remove the organic contaminant mass.

The First Steps

In order to evaluate whether or not this technique will be applicable to a candidate site, additional information regarding the sites, the characterization work completed to date, etc. and some of the variables/questions listed below will have to be defined/answered.

- What are the specific contaminants of concern and contaminant ranges associated with the site or sites?
- In general, what soil types are associated with the site or sites?
- What is the projected volume of soil requiring treatment at the site or sites?
- Is ground water, surface water, or municipal water available to maintain optimal moisture content in treated soils?
- Has the site or sites been adequately characterized?
- Has a Record of Decision been issued for the site or sites that may allow an alternate remedial technology?

There are number of other more specific questions that may need to be answered in order to complete the analysis of the applicability of this technology for a specific site, however, this will get us started down the road to the goal of a clean and closed site.

Should you determine this remedial approach is of interest, a bench scale study may be recommended. The bench study will identify the bacterial populations that will be performing the bulk of the remedial "heavy lifting" during the course of a full scale field remediation treatment. Having knowledge of the chemical and biological characteristics of the soil/sediment will facilitate the formulation of a site specific product custom formulated for each site's unique chemistry and microbiology. The cost of the pilot study varies depending upon the contaminants of concern however, Biotech will rebate the full cost of any preliminary bench study if the remedy developed and successfully tested at bench, is selected as the site remedy. Once the variables listed are more clearly defined, Biotech can accurately project costs for the bench study and the full scale application of the remedy.

WETLAND RESTORATION/REPLICATION PROCEDURES

Exhibit C-3

The wetland restoration/replication work will be done in the following manner.

1. The boundaries and grading of the existing BVW and proposed replication area will be staked out prior to beginning restoration work. T

2. The construction of the wetland restoration areas will be supervised by a qualified wetland specialist (Wetland Monitor) with at least five years of experience, identified prior to construction.

3. The Site Contractor will be responsible for maintaining, repairing or replacing, as needed, the silt fence and other erosion and sedimentation control measures prior to beginning the restoration work. The sedimentation barriers will be checked and maintained until all soils have stabilized and all danger of siltation has passed. Before any work begins on the soils, the contractor will stockpile extra straw bales and other materials for reinforcing, replacing or supplementing the silt fence, check dams, and other erosion, sedimentation, and stormwater control measures.

4. An on-site meeting will be held between the Sitework Contractor, Site Engineer, and Wetland Monitor prior to the commencement of work. The Conservation Commission will be notified in writing at least five business days before the meeting. The purpose of the meeting is to review sediment and erosion control measures, construction methods, and wetland replacement procedures. The contractor and site engineer will have and be familiar with copies of the Order of Conditions and these Wetland Restoration/ Replication Procedures.

5. The soil profile in the wetland restoration areas will be reviewed in the field and a determination made by the Engineer and Wetland Monitor about whether the existing (remediated) soil is adequate, and whether any additional soil amendments or supplemental imported soils are needed. The design goal is to have the soil profile have at least a one foot layer of organic soil (or mixture of equal parts of good quality topsoil, manure, and peat moss) in the bottom of the replacement area. Enough A and B-Horizon material shall be provided to create a suitable rooting medium, and to approximate the conditions at the existing wetland. If offsite soils are to be imported, the Site Contractor shall provide documentation to the Engineer and Conservation Commission regarding the source, preparation, and adequacy of imported replacement soil. No woodchips shall be used, and organic material shall be well or partially decomposed.

6. Wetland restoration area "A" will be regraded to match the existing topography and surface drainage patterns. Wetland replacement area "B" will be regraded to be slightly lower in elevation than existing, as shown on the Wetland Restoration. The

surface of soils in the wetland replacement area should be left rough and somewhat irregular with some isolated shallow depressions and hummocks, similar to the existing conditions, to allow surface water and wetland plants to create a variety of micro-habitats. Side slopes will be graded a slope no greater than 4:1.

7. The entire surface of the wetland restoration/replacement area shall be seeded with New England Erosion and Restoration Seed Mix at the rate of 1200 square feet/pound. The seed mix will be modified as necessary to provide at least 10% goldenrod to provide foraging for dragonflies. The seeded surface will be covered with a light layer of straw and kept moist during germination and grow in.

8. Additional trees and shrubs will be planted as shown generally on the planting plan, and as staked in the field by the Engineer. Final plant species will be selected to mimic existing wetland conditions regarding species (except invasive species if any exist), dominant plants, relative cover, and wetland indicator status for each vegetative layer proposed.

9. On going monitoring and maintenance of the wetland restoration area (and other seeded upland areas of the site) will need to be aggressively pursued to prevent invasive species from becoming established. See Invasive Species List below, (provided by DEP)
   a. Purple Loosestrife (Lythrum salicaria);
   b. Phragmites (Phragmites australis);
   c. Buckthorn, (Rhamnus Frangula alnus);
   d. Honeysuckles (Lonicera spp.);
   e. Garlic Mustard (Alliaria petiolata);
   f. Japanese Knotweed (Polygonum cuspidatum or Fallopia Japonica);
   g. Japanese Stilt Grass (Microstegium vimineum);
   h. Reed Canary Grass (Phalaris arundinacea);
   i. Bittersweet nightshade (Celastrus Orbiculatus);
   j. Black Swallow-wort (Cynanchum nigrum);
   k. Pale Swallow-wort (Cynanchum rossicum).

10. During and after the first and second growing seasons, the success of the vegetative growth will be evaluated by the Engineer and Wetland Monitor. Additional vegetation will be planted as necessary to replace stressed or missing vegetation and to achieve the 75% vegetative density specified in the Performance Standards (310 CMR 10.55(4b). A survey of finished elevations will be included as part of the monitoring sequence as well as post construction soil characteristics, colored photos from established reference points, and inspection of embankment to ensure they are stable, properly vegetated, and constructed as designed.

11. In the case of replication area failure the Wetland Monitor and Engineer shall asses the failure(s) and develop a contingency plan to be implemented.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 - Order of Conditions
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
MassDEP File #:167-0373
eDEP Transaction #:549976
City/Town:GREAT BARRINGTON

A. General Information

1. Conservation Commission: GREAT BARRINGTON
2. Issuance: a. ☑ OOC b. ☐ Amended OOC
3. Applicant Details

a. First Name	TIMOTHY		b. Last Name	GELLER	
c. Organization	CDC OF SOUTH BERKSHIRE				
d. Mailing Address	P.O. BOX 733 / 17 BRIDGE STREET				
e. City/Town	GREAT BARRINGTON	f. State	MA	g. Zip Code	01230

4. Property Owner

a. First Name	TIMOTHY		b. Last Name	GELLER	
c. Organization	CDC OF SOUTH BERKSHIRE				
d. Mailing Address	P.O. BOX 733 / 17 BRIDGE STREET				
e. City/Town	GREAT BARRINGTON	f. State	MA	g. Zip Code	01230

5. Project Location

a.Street Address	100 BRIDGE STREET		
b.City/Town	GREAT BARRINGTON	c. Zip Code	01230
d. Assessors Map/Plat#	20	e. Parcel/Lot#	61
f. Latitude	42.19185N	g. Longitude	73.3583W

6. Property recorded at the Registry of Deed for:

a. County	b. Certificate	c. Book	d. Page
SOUTHERN BERKSHIRE		1780	278

7.Dates

a. Date NOI Filed : 3/8/2013 b. Date Public Hearing Closed: 4/24/2013 c. Date Of Issuance: 5/2/2013

8.Final Approved Plans and Other Documents

a. Plan Title:	b. Plan Prepared by:	c. Plan Signed/Stamped by:	d. Revised Final Date:	e. Scale:
PROPOSED BIO-REMEDIATION AND SITE RESTORATION	FORESITE LAND SERVICE		March 2013	

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 - Order of Conditions
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
MassDEP File #:167-0373
eDEP Transaction #:549976
City/Town:GREAT BARRINGTON

SHEET INDEX: C-0 COVER SHEET C-100 EXISTING CONDITIONS PLAN C-200 SITE PLAN, PROP. BIOREMEDIATION C-300 DETAILS

FORESITE LAND SERVICES ROBERT E. HOOGS

03/08/2013

B. Findings

1.Findings pursuant to the Massachusetts Wetlands Protection Act

Following the review of the the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act.

Check all that apply:

a. ☑ Public Water Supply
b. ☑ Land Containing Shellfish
c. ☑ Prevention of Pollution
d. ☑ Private Water Supply
e. ☑ Fisheries
f. ☑ Protection of Wildlife Habitat
g. ☑ Ground Water Supply
h. ☑ Storm Damage Prevention
i. ☑ Flood Control

2. Commission hereby finds the project, as proposed, is:

Approved subject to:

a. ☑ The following conditions which are necessary in accordance with the performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.

Denied because:

b. ☐ The proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect interests of the Act, and a final Order of Conditions is issued. **A description of the performance standards which the proposed work cannot meet is attached to this Order.**

c. ☐ The information submitted by the applicant is not sufficient to describe the site, the work or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the interests of the Act , and a final Order of Conditions is issued. **A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).**

3. ☐ Buffer Zone Impacts:Shortest distance between limit of project disturbance and the wetland resource area specified in 310CMR10.02(1)(a). _____ a. linear feet

Inland Resource Area Impacts:(For Approvals Only):

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement

4. ☐ Bank	a. linear feet	b. linear feet	c. linear feet	d. linear feet
5. ☑ Bordering Vegetated Wetland	18000 a. square feet	18000 b. square feet	18000 c. square feet	18000 d. square feet
6. ☐ Land under Waterbodies and Waterways	a. square feet	b. square feet	c. square feet	d. square feet
	e. c/y dredged	f. c/y dredged		
7. ☑ Bordering Land Subject to Flooding	32350 a. square feet	32350 b. square feet	32350 c. square feet	32350 d. square feet
Cubic Feet Flood Storage	80875 e. cubic feet	80875 f. cubic feet	80875 g. cubic feet	80875 h. cubic feet
8. ☐ Isolated Land Subject to Flooding	a. square feet	b. square feet		
Cubic Feet Flood Storage	c. cubic feet	d. cubic feet	e. cubic feet	f. cubic feet
9. ☑ Riverfront Area	154900 a. total sq. feet	154900 b. total sq. feet		
Sq ft within 100 ft	75300 c. square feet	75300 d. square feet	75300 e. square feet	75300 f. square feet
Sq ft between 100-200 ft	79600 g. square feet	79600 h. square feet	79600 i. square feet	79600 j. square feet

Coastal Resource Area Impacts:

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
10. ☐ Designated Port Areas	Indicate size under Land Under the Ocean. below			
11. ☐ Land Under the Ocean	a. square feet	b. square feet		
	c. c/y dredged	d. c/y dredged		
12. ☐ Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes below			
13. ☐ Coastal Beaches	a. square feet	b. square feet	c. c/y nourishment	d. c/y nourishment
14. ☐ Coastal Dunes	a. square feet	b. square feet	c. c/y nourishment	d. c/y nourishment
15. ☐ Coastal Banks	a. linear feet	b. linear feet		
16. ☐ Rocky Intertidal Shores				

a. square feet b. square feet

17. ☐ Salt Marshes

a. square feet b. square feet c. square feet d. square feet

18. ☐ Land Under Salt Ponds

a. square feet b. square feet

c. c/y dredged d. c/y dredged

19. ☐ Land Containing Shellfish

a. square feet b. square feet c. square feet d. square feet

20. ☐ Fish Runs

Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above

c. c/y dredged d. c/y dredged

21. ☐ Land Subject to Coastal Storm Flowage

a. square feet b. square feet

22.

☐ Restoration/Enhancement (For Approvals Only)

If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.5.c & d or B.17.c & d above, please entered the additional amount here.

a. square feet of BVW b. square feet of Salt Marsh

23.

☐ Streams Crossing(s)

If the project involves Stream Crossings, please enter the number of new stream crossings/number of replacement stream crossings.

a. number of new stream crossings b. number of replacement stream crossings

C. General Conditions Under Massachusetts Wetlands Protection Act

The following conditions are only applicable to Approved projects

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
   a. the work is a maintenance dredging project as provided for in the Act; or
   b. the time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.

5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order.
6. If this Order constitutes an Amended Order of Conditions, this Amended Order of Conditions does not exceed the issuance date of the original Final Order of Conditions.
7. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.
8. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.
9. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work..
10. A sign shall be displayed at the site not less then two square feet or more than three square feet in size bearing the words,
" Massachusetts Department of Environmental Protection"
[or 'MassDEP"]
File Number :"167-0373"
11. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before Mass DEP.
12. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.
13. The work shall conform to the plans and special conditions referenced in this order.
14. Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.
15. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.
16. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.
17. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.
18. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.

NOTICE OF STORMWATER CONTROL AND MAINTENANCE REQUIREMENTS

19. The work associated with this Order(the "Project") is (1) ☐ is not (2) ☑ subject to the Massachusetts Stormwater Standards. If the work is subject to Stormwater Standards, then the project is subject to the following conditions:

a) All work, including site preparation, land disturbance, construction and redevelopment, shall be implemented in accordance

with the construction period pollution prevention and erosion and sedimentation control plan and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollutant Discharge Elimination System Construction General Permit as required by Stormwater Standard 8. Construction period erosion, sedimentation and pollution control measures and best management practices (BMPs) shall remain in place until the site is fully stabilized.

b) No stormwater runoff may be discharged to the post-construction stormwater BMPs unless and until a Registered Professional Engineer provides a Certification that: *i.* all construction period BMPs have been removed or will be removed by a date certain specified in the Certification. For any construction period BMPs intended to be converted to post construction operation for stormwater attenuation, recharge, and/or treatment, the conversion is allowed by the MassDEP Stormwater Handbook BMP specifications and that the BMP has been properly cleaned or prepared for post construction operation, including removal of all construction period sediment trapped in inlet and outlet control structures; *ii.*, as-built final construction BMP plans are included, signed and stamped by a Registered Professional Engineer, certifying the site is fully stabilized; *iii.* any illicit discharges to the stormwater management system have been removed, as per the requirements of Stormwater Standard 10; *iv.* all post-construction stormwater BMPs are installed in accordance with the plans (including all planting plans) approved by the issuing authority, and have been inspected to ensure that they are not damaged and that they are in proper working condition; *v.* any vegetation associated with post-construction BMPs is suitably established to withstand erosion.

c) The landowner is responsible for BMP maintenance until the issuing authority is notified that another party has legally assumed responsibility for BMP maintenance. Prior to requesting a Certificate of Compliance, or Partial Certificate of Compliance, the responsible party (defined in General Condition 19(e)) shall execute and submit to the issuing authority an Operation and Maintenance Compliance Statement ("O&M Statement") for the Stormwater BMPs identifying the party responsible for implementing the stormwater BMP Operation and Maintenance Plan ("O&M Plan") and certifying the following: i.) the O&M Plan is complete and will be implemented upon receipt of the Certificate of Compliance, and ii.) the future responsible parties shall be notified in writing of their ongoing legal responsibility to operate and maintain the stormwater management BMPs and implement the Stormwater Pollution Prevention Plan.

d) Post-construction pollution prevention and source control shall be implemented in accordance with the long-term pollution prevention plan section of the approved Stormwater Report and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollutant Discharge Elimination System Multi-Sector General Permit.

e) Unless and until another party accepts responsibility, the landowner, or owner of any drainage easement, assumes responsibility for maintaining each BMP. To overcome this presumption, the landowner of the property must submit to the issuing authority a legally binding agreement of record, acceptable to the issuing authority, evidencing that another entity has accepted responsibility for maintaining the BMP, and that the proposed responsible party shall be treated as a permittee for purposes of implementing the requirements of Conditions 19(f) through 19(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 19(f) through 19(k) with respect to that BMP shall be a violation of the Order of Conditions or Certificate of Compliance. In the case of stormwater BMPs that are serving more than one lot, the legally binding agreement shall also identify the lots that will be serviced by the stormwater BMPs. A plan and easement deed that grants the responsible party access to perform the required operation and maintenance must be submitted along with the legally binding agreement.

f) The responsible party shall operate and maintain all stormwater BMPs in accordance with the design plans, the O&M Plan, and the requirements of the Massachusetts Stormwater Handbook.

g) The responsible party shall:

1. Maintain an operation and maintenance log for the last three (3) consecutive calendar years of inspections, repairs, maintenance and/or replacement of the stormwater management system or any part thereof, and disposal (for disposal the log shall indicate the type of material and the disposal location);
2. Make the maintenance log available to MassDEP and the Conservation Commission ("Commission") upon request; and
3. Allow members and agents of the MassDEP and the Commission to enter and inspect the site to evaluate and ensure that the responsible party is in compliance with the requirements for each BMP established in the O&M Plan approved by the issuing authority.

h) All sediment or other contaminants removed from stormwater BMPs shall be disposed of in accordance with all applicable

federal, state, and local laws and regulations.

i) Illicit discharges to the stormwater management system as defined in 310 CMR 10.04 are prohibited.

j) The stormwater management system approved in the Order of Conditions shall not be changed without the prior written approval of the issuing authority.

k) Areas designated as qualifying pervious areas for the purpose of the Low Impact Site Design Credit (as defined in the MassDEP Stormwater Handbook, Volume 3, Chapter 1, Low Impact Development Site Design Credits) shall not be altered without the prior written approval of the issuing authority.

l) Access for maintenance, repair, and/or replacement of BMPs shall not be withheld. Any fencing constructed around stormwater BMPs shall include access gates and shall be at least six inches above grade to allow for wildlife passage.

Special Conditions:
SEE ATTACHED

D. Findings Under Municipal Wetlands Bylaw or Ordinance

1. Is a municipal wetlands bylaw or ordinance applicable? ☐ Yes ☑ No

2. The Conservation Commission hereby(check one that applies):

   a. ☐ DENIES the proposed work which cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw specifically:

      1. Municipal Ordinance or Bylaw _____ 2. Citation _____

   Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order or Conditions is issued. Which are necessary to comply with a municipal ordinance or bylaw:

   b. ☐ APPROVES the proposed work, subject to the following additional conditions.

      1. Municipal Ordinance or Bylaw _____ 2. Citation _____

3. The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.

The special conditions relating to municipal ordinance or bylaw are as follows:

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 - Order of Conditions
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
MassDEP File #:167-0373
eDEP Transaction #:549976
City/Town:GREAT BARRINGTON

E. Signatures

This Order is valid for three years from the date of issuance, unless otherwise specified pursuant to General Condition #4. If this is an Amended Order of Conditions, the Amended Order expires on the same date as the original Order of Conditions.

Please indicate the number of members who will sign this form. This Order must be signed by a majority of the Conservation Commission.

05/02/2013
1. Date of Original Order

6
2. Number of Signers

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

Signatures:

Andrew Mailler
Bruce Gore
Jessica Dezack

X by hand delivery on

05/02/2013
Date

Jennifer Connell
Jennifer Connell
Lisa Bozzuto
Dave Shairman

☐ by certified mail, return receipt requested, on

Date

F. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate MassDEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request for Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order, or providing written information to the Department prior to issuance of a Superseding Order.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40), and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.

G. Recording Information

This Order of Conditions must be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land subject to the Order. In the case of registered land, this Order shall also be noted on the Land Court Certificate of Title of the owner of the land subject to the Order of Conditions. The recording information on this page shall be submitted to the Conservation Commission listed below.

GREAT BARRINGTON
Conservation Commission

Detach on dotted line, have stamped by the Registry of Deeds and submit to the Conservation Commission.

To:

GREAT BARRINGTON
Conservation Commission

Please be advised that the Order of Conditions for the Project at:

100 BRIDGE STREET — Project Location
167-0373 — MassDEP File Number

Has been recorded at the Registry of Deeds of:

County — Book — Page

for:

Property Owner TIMOTHY GELLER

and has been noted in the chain of title of the affected property in:

Book — Page

In accordance with the Order of Conditions issued on:

Date

If recorded land, the instrument number identifying this transaction is:

Instrument Number

If registered land, the document number identifying this transaction is:

Document Number

Signature of Applicant

Rev. 4/1-2010

Special Conditions
Conservation Commission
100 Bridge Street
Great Barrington, MA 01230
NOI 167 – 0373

I. GENERAL

1. In case of emergencies, problems, or the need to discuss site conditions with the Conservation Commission, please contact the Commission during business hours at (413) **528-1619 ext. 122.**

2. The term "**Act**" as used in the Order of Conditions (hereinafter the "Order"), shall refer to the Massachusetts Wetlands Protection Act (M.G.L. Chapter 131, Section 40) and Massachusetts Wetlands Regulations (310 CMR 10.00).

3. The term "**Applicant**" as used in the Order shall refer to the owner, any successor in interest or successor in control of the property referenced in the Notice of Intent, supporting documents and the Order. The Order shall apply to all successors in interest and successors in control.

4. The term "**Plans**" as used in the Order shall refer to the site plans. The Order permits only the work as shown on the approved Plans. Approved plans are as follows:
   Prepared By: Robert E. Hoogs Foresite Land Services, Dated: 03/08/2013
   - C-0 Cover Sheet & Index
   - C-100 Existing Conditions Plan
   - C-200 Site Plan
   - C-300 Site Details

5. The Commission reserves the right to impose additional conditions on any portion of this project that causes impact to any area of jurisdiction under the Act or the Ordinance.

6. Unless otherwise specified in the Notice of Intent and/or accompanying plans, all plantings and seed mixes shall consist of native species only, shall emphasize the natural flora and be of proven value to local wildlife. **All plantings and seeding shall be watered as necessary to ensure growth.**

7. It is the responsibility of the applicant to complete any review required by all agencies with jurisdiction over the activity that is the subject of the Order, and to procure all required permits or approvals. These reviews, permits and approvals may include but are not limited to the following:
   a. Review by the U.S. Army Corps of Engineers for any Category 2 or Individual Permit Activity, and procurement of any permits or approvals identified by the Corps.
   b. Review by the Department of Environmental Protection (the "DEP") and procurement of any permits or approvals identified by the DEP.

c. Review by the Massachusetts Natural Heritage and Endangered Species Program for any projects within estimated and/or priority habitat and any permits or approvals identified by the program.
d. Review by local planning boards, boards of health, zoning boards, and building inspectors, and procurement of any permits or approvals required by these boards or agencies.

8. Erosion control measures shall not be removed and shall remain intact until removal is approved by the Commission and/or the Coordinator. The sediment collected by these devices shall be removed and placed at an upland location and in a manner that will prevent its later erosion to any resource area.

9. Unless another limit of work line has been noted on the Plans and approved by the Commission, the geotextile/sedimentation/siltation barriers shall constitute a limit-of-work. ***Under no circumstances is any work allowed to take place on the down-gradient side (the wetland/resource side) of the limit of work. This includes stockpiling of any and all materials, vegetation waste and extra erosion controls.***

10. At no time shall sediments be allowed to flow into or accumulate in any wetland or resource area on or off the property.

11. The Order shall be included with all construction-related documents. All contractors working at the site shall be made aware of the provisions contained within the Order and adhere to all Special Conditions herein. At all times, the site foreman, supervision engineer or construction manager shall have a copy of the Order at the site and direct compliance with the requirements of the Order.

12. The applicant and any person involved in the activity that is the subject of the Order shall notify the Commission or its Coordinator immediately upon discovery of any matter related to the Order that may affect any area within the jurisdiction of the Commission.

13. Unless otherwise noted on approved plans, any fill, whether from off site or on site, used in connection with this project shall be clean granular material essentially free of masonry, stumps, frozen clumps of earth, wood, trees branches, trash and waste material.

14. In the event that this property/project is sold or conveyed, the new owner(s) shall meet with the Conservation Commission or its Coordinator prior to commencing or continuing any work permitted by this order.

II. PRIOR TO CONSTRUCTION:

15. (EC's) **Prior to the initiation of any work**, unless otherwise agreed upon by the applicant and Commission or its Coordinator, all erosion control measures shall be constructed and installed as shown on the approved Plans. The erosion control specifications provided in the Notice of Intent and the erosion control provision in the Order will be the minimum standards for this project; additional measures may be

required. ***No work shall begin until the Commission has inspected and approved of all erosion controls.***

16. (pre-construction meeting) **Prior to the initiation of any work, other than erosion control measures,** a pre-construction meeting shall be held (other than of an emergency nature) between the Commission and/or its Coordinator and the applicant and his/her environmental consultant, contractor, site foreman or construction manager. The applicant shall notify the Commission in writing (email) the week before the desired meeting in order to arrange for a mutually agreed upon time and date. Prior to the agreed meeting date and time, all erosion control measures shall be installed as shown on the approved Plans unless otherwise agreed upon by the applicant and Commission. **No work shall begin until the Commission has inspected and approved of all erosion controls.**

17. (excavator copy of OOC) Prior to the commencement of any earth moving activities, whoever shall be employed to execute earth-moving activities must be provided a copy of the Order.

18. (emergency contact information) **Prior to initiation of any work**, emergency contact phone numbers, including cell phone numbers of the applicant, their environmental consultant, contractor, site foreman and construction manager shall be furnished to the Commission.

III. DURING CONSTRUCTION:

19. (vegetation removal) Only vegetation within mapped areas and tagged trees approved by the Commission shall be removed. All limbs, branches, slash and deadwood shall be removed from the area of statutory interest.

20. (run-off) Grading shall be accomplished so that runoff shall not be directed towards the property of others. This project shall not increase runoff, nor cause flood or storm damage, to abutters or the property of others.

21. (over-winter stabilization) If construction continues into autumn and winter months, all disturbed areas, other than wetland replication areas, shall be graded, seeded, and mulched prior to November 30, of each year.

IV. EROSION AND SEDIMENT CONTROL REQUIREMENTS:

22. (stockpile of ECs) An adequate stockpile of erosion control materials shall be on site at all times for routine and emergency replacement and shall include materials to repair or replace silt fences, straw bales, erosion control blankets, riprap, filter berms or other devices planned for use during construction.

23. (EC inspection) It is the responsibility of the applicant to ensure that erosion controls are inspected after every rainfall greater than ½" in 24 hours to assure that maximum control has been provided and to repair and replace them as necessary. The applicant shall also

remove any sediments that accumulate at the erosion control line and shall properly dispose of those sediments outside all jurisdictional areas.

24. (fix erosion) The applicant shall immediately control or correct any erosion problems that occur at the site and shall also immediately notify the Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary.

25. (site in stable condition) The areas of construction shall remain in a stable condition at the close of each construction day. Erosion control measures shall be inspected at this time, and maintained or reinforced as necessary. All such devices shall be inspected, cleaned or replaced during construction and shall remain in place until such time as stabilization of all areas that may impact resource areas is permanent. These devices shall also be inspected to assure that the maximum control has been provided. Any entrapped silt shall be removed to an area outside the buffer zone and resource areas, and maintained or reinforced as necessary. **EROSION AND SEDIMENTATION CONTROLS SHALL BE CONTINUALLY MONITORED TO ENSURE PROPER OPERATION.**

VI. ENVIRONMENTAL MONITOR REQUIREMENT:

26. (monitor approval) **Prior to initiation of wetland replication work**, and throughout the life of the replication process, the applicant shall designate and retain a qualified wetland's specialist/environmental consultant. Such consultant shall have at least 5 years experience in wetlands and compliance with the Act, and is subject to approval by the Commission. ***No work shall begin until such consultant is approved by the Commission.***

27. (monitor contact information) **Prior to initiation of any work**, the name, work phone and cell phone number of such consultant shall be provided to the Commission so that in the event of any emergency at the site this person can be contacted.

28. (monitor responsibilities) Such environmental consultant shall directly and visually monitor on-site operations as necessary and recommend any emergency placement or maintenance of erosion controls and/or monitor inspection or replacement of erosion and sedimentation control devices, and wetland replication. Said environmental consultant shall keep a monthly written log of compliance with the Order, and shall make monthly written reports to the Commission. Reports shall also be furnished to the Commission upon request of the Commission.

29. (monitor authority) The applicant and all other parties subject to the Order shall comply with all orders and instructions of the environmental monitor, including orders to cease all activity within the Commission's jurisdiction when non-compliance with the Order is observed. The applicant and all other parties subject to the Order shall not resume activity until such time as the Commission has authorized the resumption of activity, which authorization may be written or verbal, direct or through the environmental monitor.

30. (growing seasons) The wetland replication shall be performed in accordance with the Notice of Intent, the Plans and any supplemental documents. The Commission reserves the right to require additional plantings to ensure achievement of 75% cover of wetland plant species within two full growing seasons, as specified in 310 CMR 10.55(4)(b). Two years begins for the date of final planting. **Please call Conservation Commission Agent within 48 hours of final planting for site visit and documentation.**

X. UPON COMPLETION OF CONSTRUCTION:

31. (permanent stabilization) Within 30 days of final grading, (or within 30 calendar days after the commencement of the following growing season if the project is completed after November 30st), all disturbed areas shall be permanently stabilized with rapidly growing cover. **Disturbed area does not include the re-graded wetland replication area where no seed except wetland specific seed will be sown.** Maintenance of these areas shall be in a manner that assures permanent stabilization and precludes any soil erosion and shall be the responsibility of the owner of record of the property or the responsibility of the applicant. ***This condition is ongoing and does not expire upon completion of this project or the issuance of a Certificate of Compliance.***

32. Only upon completion of the project, when all soils are permanently stabilized and with approval by the Commission or its Coordinator shall all erosion controls be removed.

33. Upon completion of the project, catch basins shall be re-commissioned as necessary.

34. (COC requirements) Upon completion of construction and final soil stabilization, the applicant shall submit the following to the Conservation Commission to request a Certificate of Compliance (COC):
    a. A Completed Request for a Certificate of Compliance form (WPA Form 8A).
    b. As-Built plans signed and stamped by a registered professional engineer, architect, landscape architect or land surveyor and a written statement from such professional certifying substantial compliance with the Plans and describing what deviation, if any, exists from the Plans approved in the Order.

XI. THE FUTURE OF THESE ORDERS:

35. (future buyer) A copy of the Order shall be provided to any future buyer of the property.