

Polatin Ecological Services

Habitat Restoration & Management of Natural Areas, Invasive Plant Control, Native Plant Revegetation

May 1st, 2007

Ellen Cushman
McLean Open Space Land Management Committee
133 Brookside Avenue
Belmont, MA 01773

RE: *Proposal for Field Mowing, Brush Clearing, and Native Plant Revegetation at McLean Open Space, Belmont, MA.*

Dear Ms. Cushman,

Polatin Ecological Services and Heritage Fields are pleased to offer the following proposal for habitat restoration activities at the McLean Open Space in Belmont, MA. Bruce Scherer and I met with you and members of the McLean Land Management Committee on March 28th, 2007 to visit the site and discuss project details. The project is well described and mapped in a report entitled *Recommendations for Field Management at the McLean Open Space* produced by Jeffrey Collins of Mass Audubon's Ecological Extension Service (5/15/2006). We have integrated Mass Audubon's recommendations and have keyed our proposal to fit the descriptions and acreage calculations submitted in their report.

PROJECT TASKS:

Specifically, we propose to accomplish the following tasks:

- Task 1. Field mowing will be done to the 10 acres of fields in the Great Field and the Heart-Shaped Field. Areas of mowing will include those areas that were cleared by Bruce Scherer in 2006. These activities should be conducted after August 1st in order to protect the nesting needs of birds and other wildlife species that are known to use the resources in the area between May 1st and August 1st.
- Task 2. Brush mowing to management units 6, 14, and portions of 25 (Great Field) will also be done after August 1st. We recognize that the goal for area 25 is to improve access and wildlife viewing opportunities and our intention is not to suggest clearing this area altogether, but simply to open select areas in the eastern portion. Any buckthorn in these management units will be cut and the stumps will be treated/painted with a 25% solution of Garlon 4.
- Task 3. Removal of brush piles created in 2006. If desired, we will haul the previously cut and piled material away on a trailer for proper disposal.
- Task 4. Native plant revegetation. We have provided you with an assortment of native shrubs that will tolerate the varying conditions where the knotweed is currently

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growing (Table 1). The shrubs cost between \$10 and \$12 for plant material that is 3-4' high. In addition we recommend planting 3 pounds of New England Wildflower seed mix appropriate for the area and have included information on Page 7. We have provided costs and labor for 30 native shrubs to be delivered, planted, watered, fertilized, and protected from herbivory with wire planting cages. These plants will eventually perform a similar screening service that the knotweed currently provides, however it will take several years for the plants to reach their potential size. In addition these plants have been selected for their abilities to provide food for wildlife. Please consider this planting plan as a starting point. We can make changes to the quantity of the plants to fit your needs. Another option would be to simply let natural revegetation processes take place over a longer period of time to give the site the desired screening.

Please feel free to call either Bruce or I to discuss our proposed approach and budget. We will remain receptive to your feedback, questions, or concerns. We look forward to working with you to make this project a success. Thank you for your consideration.

Sincerely Yours,



Chris Polatin
Habitat Restoration Specialist

PROJECT COSTS: The following are lump-sum costs for each task. The costs for labor, equipment transportation, day to day transportation, equipment use, and materials are included in these totals:

<u>2007</u>	<u>Management Practice</u>	<u>Timing</u>	<u>Management Units</u>	<u>Acres</u>	<u>Total</u>
	TASK 1. Field mowing	August 2007	Field mowing: Great Field Heart-Shaped Field	8 2 Total = 10	\$1,900.00
	TASK 2. Brush clearing/heavy mowing	August 2007	Great Field: 6/14/25	5.70	\$400.00
	TASK 3. Removal of brush piles from 2006 work.	August 2007	NA	NA	\$400.00
	TASK 4. Native plant revegetation (30 shrubs)	Fall 2007	Knotweed Areas	NA	\$1,600.00
	PROJECT TOTAL				\$4,300.00

Table 1. Recommended shrub plantings for MacLean Open Space, Belmont, MA

Common Name	Latin Name	Mature Height	Wetland Indicator Status*
Gray Dogwood	<i>Cornus racemosa</i>	6-9'	FAC
Red Osier Dogwood	<i>Cornus sericea</i>	4-8'	FACW+
Silky Dogwood	<i>Cornus amomum</i>	4-10'	FACW
Shadblow/Serviceberry	<i>Amelanchier spp.</i>	18'	FAC
Red Chokeberry	<i>Aronia arbutifolia</i>	2-8'	FACW
Winterberry	<i>Ilex verticillata</i>	5-15'	FACW+
American Elder	<i>Sambucus canadensis</i>	6-12'	FACW-
Highbush Blueberry	<i>Vaccinium corymbosum</i>	6-15'	FACW
Mapleleaf Viburnum	<i>Viburnum acerifolium</i>	3-6'	UPL
Wild Raisin	<i>Viburnum cassinoides</i>	6-12'	FACW
Nannyberry	<i>Viburnum lentago</i>	10-20'	FAC

***Wetland Indicator categories**

Indicator Code	Wetland Type	Comment
FACW	Facultative Wetland	Usually occurs in wetlands (estimated probability 67%-99%), but occasionally found in non-wetlands.
FAC	Facultative	Equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%).
UPL	Obligate Upland	Occurs in wetlands in another region, but occurs almost always (estimated probability 99%) under natural conditions in non-wetlands in the regions specified. If a species does not occur in wetlands in any region, it is not on the National List.

The New England Wildflower Mix contains a selection of native wildflowers and grasses that ensures a variety of the species will survive in all conditions from dry to moist. It is an appropriate seed mix for areas undergoing ecological restoration. **Species:** Creeping Red Fescue (*Festuca rubra*), Little Bluestem (*Schizachyrium scoparium*), Indian Grass (*Sorghastrum nutans*), Partridge Pea (*Chamaecrista fasciculata*), Wild Blue Lupine (*Lupinus perennis*), Canada Wild Rye (*Elymus canadensis*), Zigzag Aster/New York Aster Mix (*Aster prenanthoides*/novi-belgi mix), New England Aster (*Aster novae-angliae*), Wild Senna (*Cassia hebecarpa*), Common Milkweed (*Asclepias syriaca*), Golden Alexanders (*Zizia aurea*), Butterfly Milkweed (*Asclepias tuberosa*).

Polatin Ecological Services and Heritage Fields offer habitat restoration contracting services as a joint venture in which we work with private landowners, community organizations, nonprofit conservation organizations and land trusts, municipalities, state natural resource agencies, and federal agencies on small or landscape-scale stewardship projects. We work in a variety of natural settings including agricultural lands, early-successional grasslands, shrublands, oldfields, riparian zones, sensitive wetland habitats (including estuaries and salt marshes), and forested uplands. We are committed to providing an environmentally sound, cost effective and practical approach to land management. We are licensed and insured to provide the following habitat restoration contracting services throughout the New England region:

- Habitat Management (Ecological mowing, early successional habitat creation and maintenance, land clearing, warm and cool season grassland establishment and maintenance)
- Native Plant Revegetation (installation, plant salvage, seeding)
- Erosion Control/Streambank Stabilization (We use soil bioengineering principles: the use of native plants and biodegradable erosion control materials to stabilize and protect unstable slopes and streambanks)
- Invasive Plant Control (manual, mechanical, judicious use of herbicides)

ACCEPTANCE OF ESTIMATE:

The above prices, specifications and conditions are hereby accepted. The contractor is authorized to execute the project as outlined in this agreement. Payment will be made at the completion of the project.

Client signature _____ Date _____
Ellen Cushman, McLean Open Space Committee

Contractor signature _____ Date _____
Chris Polatin, Polatin Ecological Services