



Notice of Project Change

EEA No. 12393

Nine Hole Golf Course Expansion at Miacomet Golf Course Nantucket, Massachusetts



December 2025

Prepared for:
Nantucket Islands Land Bank
22 Broad Street
Nantucket, MA 02554

Prepared by:
Avalon Consulting Group, LLC
41 Cal's Court
Taunton, Massachusetts 02780



December 23, 2025

Secretary Rebecca Tepper
Executive Office of Energy and Environmental Affairs
ATTN: MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: Notice of Project Change
Nine Hole Golf Course Expansion at Miacomet Golf Course
Somerset Road and West Miacomet Road, Nantucket, Massachusetts
EEA No. 12393

Dear Secretary Tepper,

On behalf of the Nantucket Islands Land Bank (NLB), Avalon Consulting Group is pleased to submit this Notice of Project Change (NPC) pursuant to the Massachusetts Environmental Policy Act (MEPA), 301 CMR 11.10, for the expansion of the existing driving range at Miacomet Golf Course, Nantucket, MA. The driving range expansion constitutes a modification to the previously approved *Nine Hole Golf Course Expansion at Miacomet Golf Course* project (EEA No. 12393).

The Nine Hole Golf Course Expansion at the Miacomet Golf Course was previously reviewed under MEPA through an Environmental Notification Form, Draft Environmental Impact Report, and Final Environmental Impact Report, culminating in a Secretary's Certificate dated May 17, 2002. That review approved the expansion of the course from 9 holes to 18 holes subject to long-term mitigation and management commitments, including implementation of a Division of Fisheries and Wildlife Conservation and Management Permit issued under the Massachusetts Endangered Species Act, placement of a permanent Conservation Restriction, and management of the Smooth Hummocks Coastal Preserve for the benefit of rare species and globally rare natural communities over a 25 year term.

The proposed project involves expansion of the existing driving range at the golf course by approximately 1.9 acres to the south within Priority Habitat of Rare Species to improve containment and retrieval of golf balls and to reduce off-range ball deposition. The project does not include new buildings, utilities, irrigation, or lighting, and does not result in an increase in water use, wastewater generation, or impervious area beyond what was previously reviewed. The project does not meet or exceed MEPA review thresholds.

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NLB has coordinated with Division of Fisheries Natural Heritage and Endangered Species (NHESP) staff regarding the impacts to rare species and mitigation obligations and has conducted NHESP-approved rare species surveys in the proposed expansion area in 2023, 2024, and 2025. Based on these surveys, the size of the expansion area has been reduced by approximately 69% to avoid several state-listed species. As described in the enclosed NPC and supporting materials, the project has been designed to avoid and minimize impacts and will be implemented in coordination with NHESP through an amendment to the existing Conservation and Management Permit issued for the construction of the golf course.

NLB respectfully submits this NPC to document the proposed change and to confirm that the project remains consistent with the prior MEPA findings and ongoing mitigation commitments established under EEA No. 12393.

Please feel free to contact me if you have any questions regarding this submission.

Sincerely,
Avalon Consulting Group, LLC



Kelly Durfee Cardoza
Principal

cc: Rachael Freeman, Executive Director, Nantucket Islands Land Bank

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- Appendix C – Miacomet Golf Course Driving Range Expansion Permit Amendment Request, Final Survey Report, and Translocation, Management and Monitoring Plans

Notice of Project Change

The information requested on this form must be completed to begin MEPA Review of a NPC in accordance with the provisions of the Massachusetts Environmental Policy Act and its implementing regulations (see 301 CMR 11.10(1)).

EEA # 12393		
Project Name: Nine Hole Golf Course Expansion at Miacomet Golf Course		
Street Address: Somerset Road and West Miacomet Road		
Municipality: Nantucket	Watershed: Cape & Islands	
Universal Transverse Mercator Coordinates: 405897.04 E 4567792.21 N	Latitude: 41.254335 N	Longitude: -70.124016 W
Estimated commencement date: Spring 2026	Estimated completion date: Summer 2026	
Project Type: Recreational Facility-Outdoor	Status of project design: 100 %complete	
Proponent: Nantucket Islands Land Bank		
Street Address: 22 Broad Street		
Municipality: Nantucket	State: MA	Zip Code: 02554
Name of Contact Person: Kelly Durfee Cardoza		
Firm/Agency: Avalon Consulting Group, LLC	Street Address: 41 Cals Court	
Municipality: Taunton	State: MA	Zip Code: 02780
Phone: 508-880-2905	Fax: 508-880-2745	E-mail: kdc@avaloncon.com

With this Notice of Project Change, are you requesting:

a Single EIR? (see 301 CMR 11.06(8))	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
a Special Review Procedure? (see 301CMR 11.09)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
a Phase I Waiver? (see 301 CMR 11.11)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Which MEPA review threshold(s) does the revised project meet or exceed (see [301 CMR 11.03](#))? Identify any new or modified review threshold(s) associated with the project change.

No review threshold is met or exceeded.

Which Agency Permits does the revised project require?

Amendment to Conservation & Management Permit (02-021.DFW) under Mass Endangered Species Act (MESA)

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

PROJECT INFORMATION

In 25 words or less, what is the project change? The project change involves . . .
expanding the existing driving range by 1.9 acres to facilitate collection of golf balls by a mechanical ball picker.

See full project change description beginning on page 3.

Date of publication of availability of the ENF in the Environmental Monitor: (Date: **Dec 23, 2000**)

Was an EIR required? **Yes** No; if yes,

was a Draft EIR filed? **Yes** (Date: **Aug 22, 2001**) No

was a Final EIR filed? **Yes** (Date: **Apr 10, 2002**) No

was a Single EIR filed? Yes (Date:) **No**

Have other NPCs been filed? Yes (Date(s):) **No**

If this is an NPC solely for lapse of time (see 301 CMR 11.10(2)) proceed directly to
ATTACHMENTS & SIGNATURES.

PERMITS / FINANCIAL ASSISTANCE / LAND TRANSFER

List or describe all new or modified Agency permits, financial assistance, or land transfers not previously reviewed: **include list of Agency Actions (e.g., Agency Project, Financial Assistance, Land Transfer, List of Permits)**

Are you requesting a determination that this project change is insignificant such that an EIR should not be required (***note that the Proponent may also seek an advisory ruling under 301 CMR 11.10(6)***)? A change in a Project is ordinarily insignificant if it results solely in an increase in square footage, linear footage, height, depth or other relevant measures of the physical dimensions of the Project of less than 10% over estimates previously reviewed, provided the increase does not meet or exceed any review thresholds. A change in a Project is also ordinarily insignificant if it results solely in an increase in impacts of less than 25% of the level specified in any review threshold, provided that cumulative impacts of the Project do not meet or exceed any review thresholds that were not previously met or exceeded. (see 301 CMR 11.10(6))

Yes **No; if yes, provide an explanation of this request in the Project Change Description below.**

Yes. The proposed 1.9-acre driving range expansion represents approximately 6.6 percent of the 29 acres of land alteration previously reviewed and approved under EEA No. 12393, and therefore constitutes less than a ten percent increase in project impacts, consistent with 301 CMR 11.10(6).

FOR PROJECTS SUBJECT TO AN EIR N/A

If the project requires the submission of an EIR, are you requesting that a Scope in a previously

issued Certificate be rescinded?

Yes No; if yes, provide an explanation of this request _____.

If the project requires the submission of an EIR, are you requesting a change to a Scope in a previously issued Certificate?

Yes No; if yes, provide an explanation of this request _____.

SUMMARY OF PROJECT CHANGE PARAMETERS AND IMPACTS

Summary of Project Size & Environmental Impacts	Previously reviewed	Net Change	Currently Proposed
LAND			
Total site acreage	152	0	153.9
Acres of land altered	29	1.9	30.9
Acres of impervious area	1.03	0	1.03
Square feet of bordering vegetated wetlands alteration	-	-	-
Square feet of other wetland alteration	-	-	-
Acres of non-water dependent use of tidelands or waterways	-	-	-
STRUCTURES			
Gross square footage	16,500	No Change	16,500
Number of housing units	1+12 bedrooms (seasonal)	No Change	1+12 bedrooms (seasonal)
Maximum height (in feet)	22	No Change	22
TRANSPORTATION			
Vehicle trips per day	1,000	No Change	1,000
Parking spaces	108	No Change	108
WATER/WASTEWATER			
Gallons/day (GPD) of water use	60,784	No Change	60,784
GPD water withdrawal	60,384	No Change	60,384
GPD wastewater generation/ treatment	1,830	No Change	1,830
Length of water/sewer mains (in miles)	0.01	No Change	0.01

Note: The Previously Reviewed column reflects existing conditions. Since the FEIR certificate was issued the maintenance facility and storage buildings were reduced in size and several small outbuildings have been constructed, and the parking lot has been paved. By letter dated Oct 4, 2002, the Secretary determined these changes do not significantly increase the environmental consequences of the project and no further MEPA review is required. An additional structure, a seasonal administrative, housing and storage facility, which includes 12 bedrooms was later constructed over existing impervious area.

Does the project change involve any new or modified:

1. conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97? Yes No
2. release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction? Yes No
3. impacts on Rare Species? Yes No
4. demolition of all or part of any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth? Yes No
5. impact upon an Area of Critical Environmental Concern? Yes No

If you answered 'Yes' to any of these 5 questions, explain below:

PROJECT CHANGE DESCRIPTION (attach additional pages as necessary). The project change description should include:

- (a) a brief description of the project as most recently reviewed,
- (b) a description of material changes to the project as previously reviewed,
- (c) if applicable, the significance of the proposed changes, with specific reference to the factors listed 301 CMR 11.10(6), and
- (d) measures that the project is taking to avoid Damage to the Environment or to minimize and mitigate unavoidable environmental impacts. If the change will involve modification of any prior mitigation commitments or previously issued Section 61 Finding, include a description of any such changes and a draft of the modified Section 61 Finding (or it will be required in Supplemental EIR).

The project change description should include a comprehensive description of the proposed project change, including a description of any work or activities associated with the original project that have occurred to date. At the discretion of the MEPA Office, an alternatives analysis for the changed component(s) of the project may be required, including a summary of alternatives considered and associated environmental impacts at a level of detail commensurate with the scope and scale of the proposed change. In addition to the required attachments, the filing should include supporting technical data (e.g., a Traffic Impact and Access Study, Stormwater Report, etc.) as appropriate. It should include a full list of mitigation commitments that remain unchanged from the previously reviewed project.

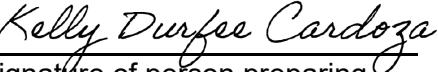
See Attached Narrative

ATTACHMENTS & SIGNATURES

Attachments:

1. Secretary's most recent Certificate on this project
2. Plan showing most recent previously reviewed proposed build condition
3. Plan showing currently proposed build condition
4. Original U.S.G.S. map or good quality color copy (8-1/2 x 11 inches or larger) indicating the project location and boundaries
5. List of all agencies and persons to whom the proponent circulated the NPC, in accordance with 301 CMR 11.10(7)

Signatures:

	12/23/25	
Date	Date	Signature of person preparing NPC (if different from above)
Rachael Freeman, Exec Director Name (print or type)	<u>Kelly Durfee Cardoza</u>	
<u>Nantucket Islands Land Bank</u>	<u>Avalon Consulting Group, LLC</u>	
Firm/Agency	Firm/Agency	
<u>22 Broad Street</u>	<u>41 Cals Court</u>	
Street	Street	
<u>Nantucket, MA 02554</u>	<u>41 Cals Court, Taunton, MA 02780</u>	
Municipality/State/Zip	Municipality/State/Zip	
<u>508.228.7240</u>	<u>508.880.2905</u>	
Phone	Phone	

PROJECT NARRATIVE

1.0 INTRODUCTION

The Miacomet Golf Course was previously reviewed under the Massachusetts Environmental Policy Act (MEPA) as the *Nine Hole Golf Course Expansion at Miacomet Golf Course* (EEA No. 12393) (Figure 1). That review included the filing of an Environmental Notification Form, a Draft Environmental Impact Report, and a Final Environmental Impact Report, and culminated in the Secretary's Certificate issued on May 17, 2002. The Secretary's Certificate approved the project subject to long-term mitigation and management commitments, including placement of a permanent conservation restriction and implementation of a Conservation and Management Permit issued by the Division of Fisheries and Wildlife under the Massachusetts Endangered Species Act.

This Notice of Project Change is filed by the Nantucket Islands Land Bank (NLB) and addresses a discrete modification to the previously approved Nine Hole Golf Course Expansion at Miacomet Golf Course (EEA No. 12393) project, limited to expansion of the existing driving range by \pm 1.9 acres. The purpose of the modification is to improve golf ball containment and retrieval while limiting unmanaged incursion into adjacent Priority Habitat. No other components of the previously reviewed project are modified. As described herein, the proposed project change is ordinarily insignificant pursuant to 301 CMR 11.10(6), as it represents less than a ten percent increase in land alteration relative to that previously reviewed under EEA No. 12393 and does not meet or exceed any MEPA review thresholds.

The NPC has been filed through the MEPA Environmental Review Portal and distributed electronically in accordance with 301 CMR 11.10 and 301 CMR 11.16 to the MEPA Office, affected state agencies, and municipal boards and officials in the Town of Nantucket, consistent with the original MEPA review of the Nine Hole Golf Course Expansion at Miacomet Golf Course (EEA No. 12393). The document is posted on the NLB website at

<https://www.nantucketlandbank.org/mission/recreation/driving-range-extension/>.

Previous commenters whose email addresses were not available will receive notice by mail, including a link to the document and information on how to obtain paper copies or access the materials in alternative formats and additional languages. The distribution list and a copy of the notice are provided in Appendix A.

The Miacomet Golf Course was expanded from nine holes to 18 holes through a MEPA-reviewed process that evaluated the impacts associated with disturbance of \pm 29 acres. Mitigation required under the Secretary's Certificate included placement of a permanent conservation restriction; long-term management of substantial portions of the Smooth Hummocks Coastal Preserve for the benefit of rare species and globally rare natural communities; creation of a Scientific Advisory Committee; and establishment of a dedicated funding mechanism to support habitat management and monitoring.

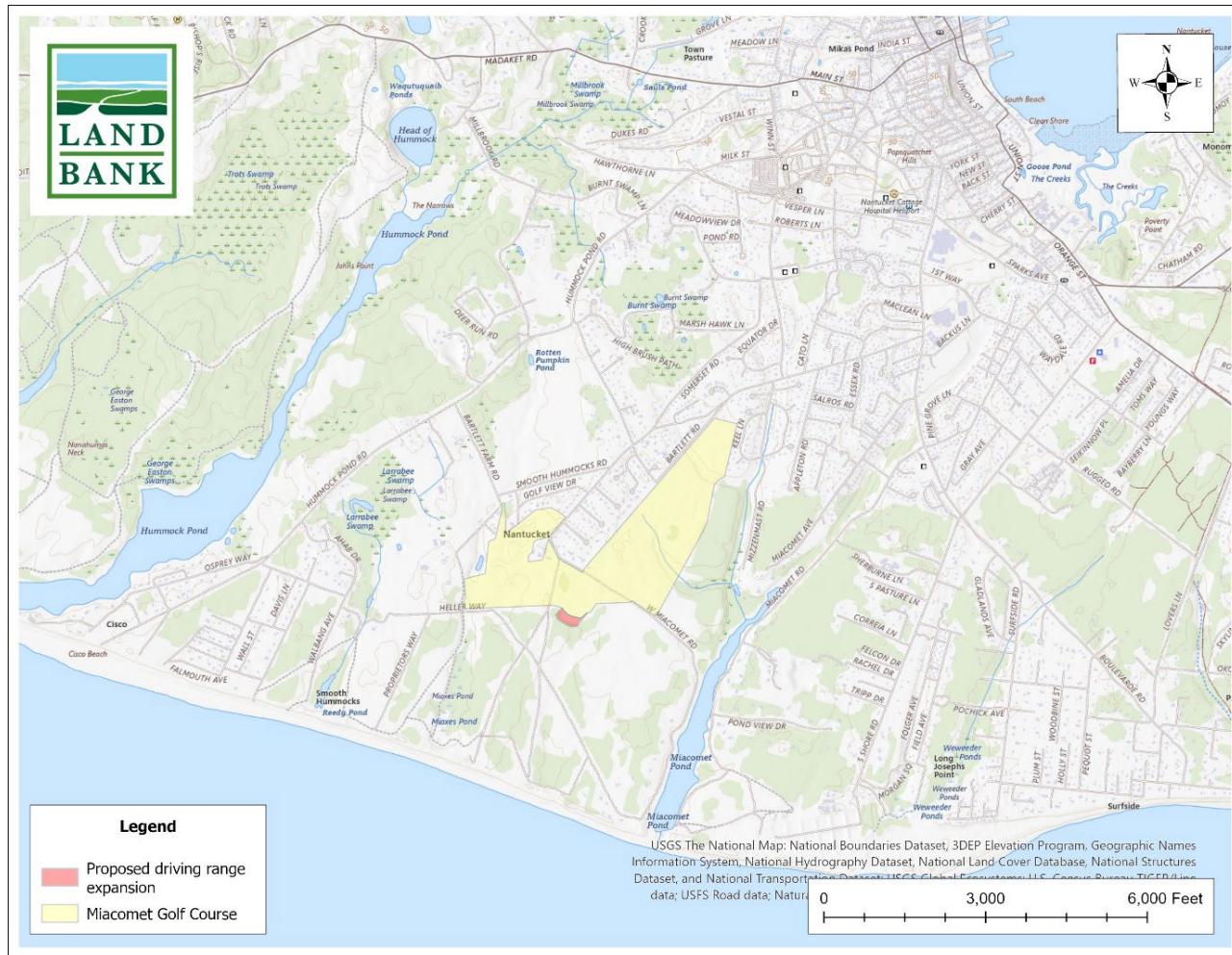


Figure 1. Project Locus

Following certification of the Final EIR in May 2002, refinements were made to the project design, and the Secretary determined that the proposed changes did not significantly increase the environmental consequences of the project (Appendix B). With these refinements, the golf course was constructed substantially in accordance with the approved plans and opened in 2003. In 2019, the NLB constructed a Seasonal Administrative, Housing, and Storage Facility within the existing maintenance facility parking area, providing administrative space, storage, and seasonal workforce housing in 12 bedrooms.

2.0 BACKGROUND AND PREVIOUS MEPA REVIEW

The Nine Hole Golf Course Expansion at Miacomet Golf Course project (EEA No. 12393) included expansion of an existing nine-hole public golf course to 18 holes, along with

construction of a golf course maintenance facility and expanded parking areas. The project encompassed ± 152 acres, with disturbance of ± 29 acres (Figure 2).

The project was reviewed under MEPA through the filing of an Environmental Notification Form, a Draft Environmental Impact Report, and a Final Environmental Impact Report, culminating in issuance of the Secretary's Certificate on May 17, 2002 (Appendix B). The Certificate concluded that the project avoided, minimized, and mitigated damage to the environment to the maximum extent feasible.

The project is subject to ongoing mitigation commitments under the Massachusetts Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program Conservation and Management Permit (CMP 02-021.DFW). These commitments include placement of a permanent conservation restriction over ± 67 acres and management of $\pm 2,400$ acres within the Smooth Hummocks Coastal Preserve over a 25-year term to support rare species and globally rare natural communities, as well as maintenance of a dedicated funding mechanism for habitat management and monitoring.

In addition to MEPA review, the Secretary of Environmental Affairs approved the project under Section 6 of the Nantucket Islands Land Bank Act (Chapter 669 of the Acts and Resolves of 1983) by letter dated August 12, 2002. That approval confirmed that the project and its associated mitigation were consistent with the NLB's statutory purposes and authorized the improvements reviewed under MEPA (EEA No. 12393), as conditioned in the Secretary's May 17, 2002 Certificate.

In October 2002, MEPA reviewed refinements to the project design, including reductions in the size of the maintenance facility and storage buildings; expansion of the existing pump house; addition of two rain shelters, a starter shack, and a golf ball sales shed; and paving of the parking lot on the south side of West Miacomet Road. The Secretary determined that these refinements did not significantly increase the environmental consequences of the project and that no additional MEPA review was required.

3.0 DESCRIPTION OF PROJECT CHANGE

The existing driving range is located south of West Miacomet Road and occupies ± 6.3 acres (Figure 3). Golf balls are hit from tees near West Miacomet Road to the south, sometimes going over the existing fence into sandplain grassland and coastal heathland habitat south of the driving range. By expanding the driving range by ± 1.9 acres to the south and relocating the existing split rail fence, balls can be retrieved using a mechanized ball picker. The proposed ± 1.9 -acre driving range expansion represents approximately 6.6 percent of the ± 29 acres of land alteration previously reviewed and approved under EEA No. 12393, and therefore constitutes less than a 10 percent increase in project impacts, consistent with 301 CMR 11.10(6).

Construction

Work to establish the driving range will consist of relocating the existing split rail fence (backed with chicken wire) and gradually mowing the habitat to a height of $\pm 2.5"$ that will allow the golf ball picker vehicle to perform its duties. Woody plants and trees that are too large to mow, primarily concentrated in the southeastern section of the expansion, will be removed manually and these areas will be reseeded with a mix of native grasses. Reseeded areas will be watered as needed to promote establishment; automatic irrigation will not be installed.

Operation and Maintenance

The golf ball picker is generally attached to the front of a golf cart. The golf cart pushes a roller that collects golf balls and conveys them into a wire basket. During the height of the golf season, the driving range is typically picked 2 – 3 times per day and during the winter months, November through March, approximately 2 – 3 times per week.

The expanded portion of the driving range will be minimally maintained. It will be mowed regularly and will not be irrigated, nor will pesticides, or fertilizers be applied. The Golf Course operations staff reports that the existing driving range is generally mowed every 10 - 14 days during times of active rainfall and not mowed during times of drought. We anticipate that the driving range may be mowed about 6 - 8 times a year.

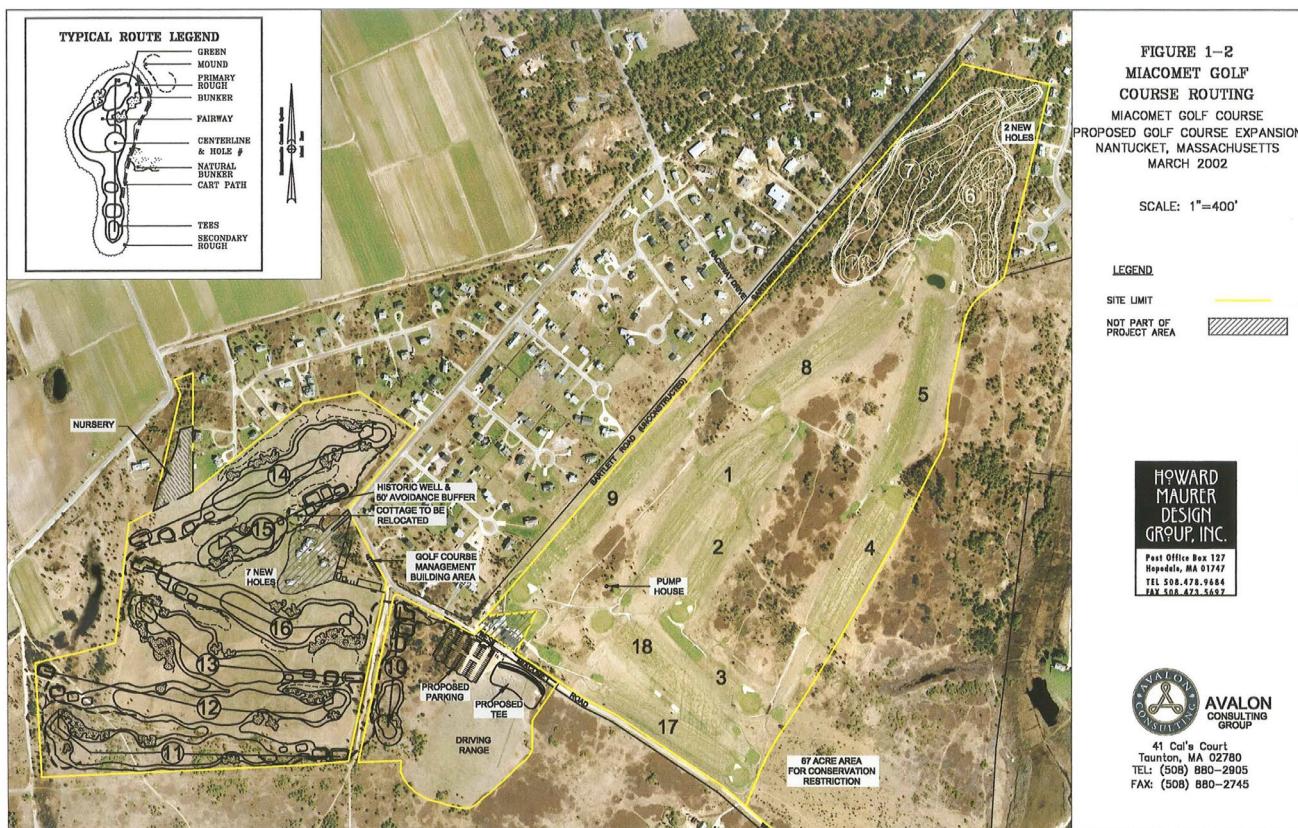


Figure 2. Proposed Build Condition from Final EIR EEA No. 12393

4.0 EXISTING ENVIRONMENTAL CONDITIONS

The project area lies within mapped Priority Habitat of Rare Species and supports habitat suitable for state-listed vascular plants and lepidoptera associated with sandplain grassland and coastal heathland systems. This area was identified by NHESP as being Priority Habitat for the species identified in Table 1.



Figure 3. Proposed Driving Range Expansion Area on 2023 Aerial Base

South of the project site is the Smooth Hummocks Coastal Preserve (SHCP), a large, contiguous expanse of sandplain grassland and coastal heathland. These communities are characterized by low-stature shrubland, and grassland vegetation adapted to nutrient-poor, well-drained soils and periodic disturbance. Much of this habitat is actively maintained under CMP 02-021.DFW by the NLB to support state-listed vascular plants, lepidoptera associated with sandplain grassland and coastal heathland systems, and the foraging habitat for grassland birds, including Northern Harrier. Management includes periodic mowing and vegetation control, which generally maintains the open habitat structure favored by many of these rare species.

Table 1: State Listed Species at Driving Range Expansion Site

Scientific Name	Common Name	Taxonomic Group	State Status
<i>Sisyrinchium fuscum</i>	Sandplain Blue-eyed Grass	Plant	Special Concern
<i>Liatris novae-angliae</i>	New England Blazing Star	Plant	Special Concern
<i>Nabalus serpentarius</i>	Lion's Foot	Plant	Endangered
<i>Circus hudsonius</i>	Northern Harrier	Bird	Threatened
<i>Cingilia catenaria</i>	Chain Dot Geometer	Butterfly/Moth	Special Concern
<i>Abagrotis benjamini</i>	Coastal Heathland Cutworm	Butterfly/Moth	Special Concern
<i>Psectraglaea cariosa</i>	Pink Sallow Moth	Butterfly/Moth	Special Concern
<i>Symphyotrichum concolor</i>	Eastern Silvery Aster	Plant	Endangered
<i>Heterocampa varia</i>	Sandplain Heterocampa	Butterfly/Moth	Threatened
<i>Chaetraglaea cerata</i>	Waxed Sallow Moth	Butterfly/Moth	Special Concern
<i>Metarranthis pilosaria</i>	Heath Metarranthis	Butterfly/Moth	Special Concern

The area south of the driving range has been surveyed for rare species including plants, lepidoptera (moths), and birds, in 2023, 2024 and 2025. The findings are summarized below and the Miacomet Golf Course Driving Range Expansion Final Survey Report, is included in Appendix C. The survey concluded that the site is occupied by New England Blazing Star (*Liatris novae-angliae*) Sandplain Blue-eyed Grass (*Sisyrinchium fuscum*) and provides Northern Harrier (*Circus hudsonius*) habit.

5.0 RARE SPECIES SURVEY RESULTS

NHESP-approved rare species surveys were conducted within the proposed driving range expansion area during the 2023, 2024, and 2025 growing seasons. The surveys focused on the species mapped by NHESP as potentially occupying the site listed in Table 1. After the 2025 survey, the size and shape of the proposed expansion area was reduced to avoid individuals of Lion's-foot (*Nabalus serpentarius*), listed as endangered by NHESP. This reduction in size is described in Section 6.0, below.

5.1 Plants

Two state-listed plant species are present within the area of proposed expansion: seven individuals of New England Blazing Star (*L. novae-angliae*), and nine individuals of Sandplain Blue-eyed Grass (*S. fuscum*), both listed as special concern by NHESP. No individuals of the two endangered plants that are found further to the south, Lion's-foot (*N. serpentarius*) and Eastern Silvery Aster (*Symphyotrichum concolor*), were observed within the proposed expansion footprint during the 3 years of survey.

5.2 Lepidoptera

Suitable host plant assemblages for the state-listed lepidoptera mapped by NHESP (Table 1) were observed within the survey areas on site.

5.3 Bird

A female Northern Harrier (*Circus hudsonius*), which is listed as threatened, was observed foraging in the vicinity of the project area during the 2023 survey season. No nesting activity was documented within or adjacent to the proposed work area.

6.0 ALTERNATIVES ANALYSIS

The NLB performed rare plant surveys over three growing seasons (2023, 2024 and 2025) in the planned expansion area and used this data to inform the proposed driving range expansion. Three alternates were considered as shown on Figure 4:

Alternate 1 - Pre 2023 Driving Range Expansion - The driving range was initially proposed to occupy ± 6.1 acres as shown on Figure 4 in a black outline.

Alternate 2 - Post 2023 Survey Modification – Following completion of the 2023 rare plant survey, the area of the proposed expansion was decreased in width and length to avoid as many rare plants as possible. This proposed driving range expansion alternate is shown in a blue line and occupied ± 2.1 acres.

Alternate 3 (Preferred Alternate) - Post 2024 Survey Modification - Following completion of the 2024 rare plant survey, the area of the proposed expansion was refined to avoid as many rare plants as possible. This preferred alternate is shown in a red line, occupies ± 1.9 acres and avoids all Lion's Foot (*N. serpentarius*), minimizes impacts to Sandplain Blue-eyed Grass (*S. fuscatum*) and New England Blazing Star (*L. novae-angliae*), and incorporates limited translocation where approved by NHESP.

The total area of disturbance has been reduced from ± 6.1 acres to ± 1.9 acres and represents approximately a 69 percent reduction from the originally evaluated driving range expansion area and constitutes less than a 10 percent increase in land alteration previously reviewed, consistent with 301 CMR 11.10(6).

7.0 IMPACT ANALYSIS

Sixteen state-listed plant individuals occur within the proposed work area and will be avoided through pre-construction translocation approved by NHESP. Translocation will occur during NHESP-approved seasonal windows and under an active Scientific Collection Permit issued by

NHESP. All work will occur outside the Northern Harrier breeding season (March 1–June 30) unless otherwise approved in writing by NHESP following completion of protocol-level surveys.

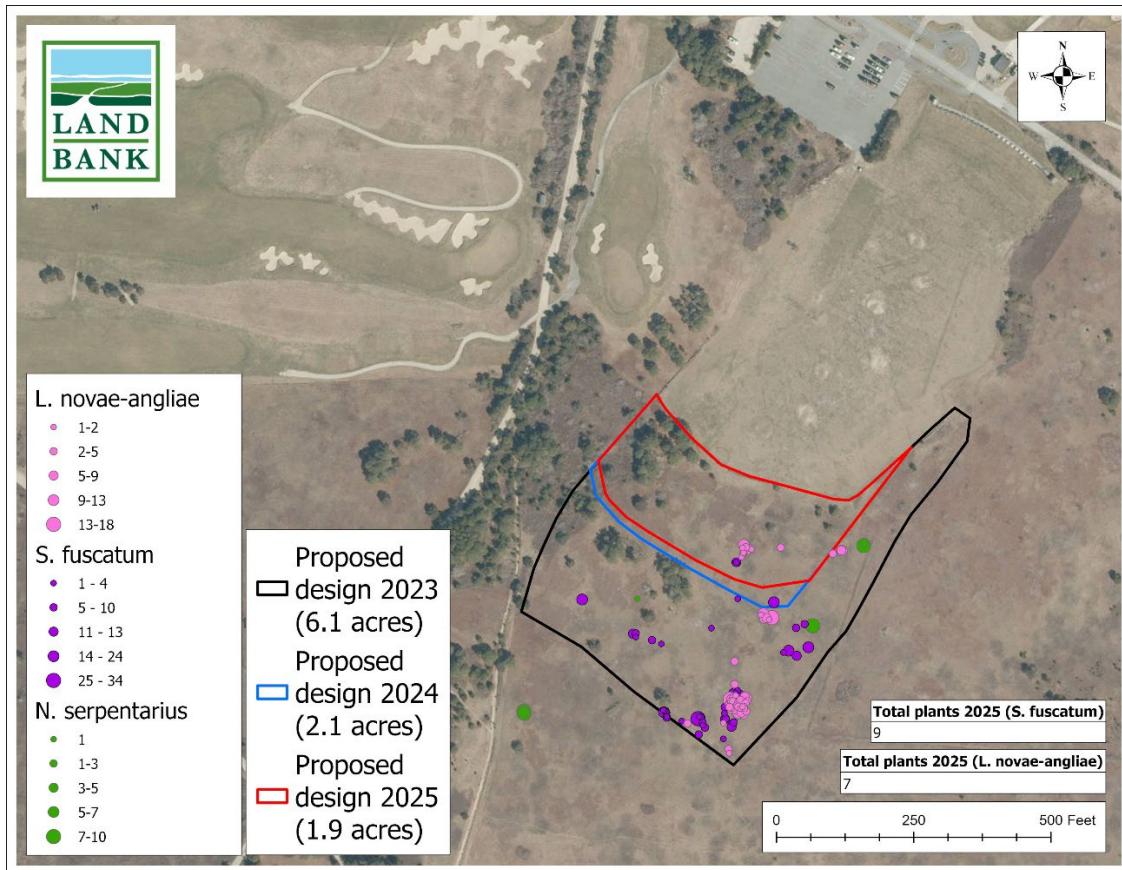


Figure 4. Alternative Expansion Areas and Results of Rare Plant Surveys

8.0 AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

8.1 Avoidance

Avoidance by Design

The driving range expansion area was reduced from a proposed ± 5.9 acres to ± 1.9 acres, approximately a 69 percent reduction in area as a result of rare species surveys and the current design avoids several state-listed species. Where avoidance is not possible, the impact to state listed species will be minimized by translocating individuals of New England Blazing Star (*L. novae-angliae*) and Sandplain Blue-eyed Grass (*S. fuscatum*) to equivalent microhabitats, proposing work be conducted outside the Northern Harrier breeding season, seeding this area with native seed, and maintaining the expansion area without irrigation or chemicals.

Avoidance by Timing

If site disturbance or construction is planned to start within the harrier breeding season (March 1 – June 30), a NHESP qualified biologist will perform northern harrier nest surveys within 500m of the disturbance area before work starts. The survey protocol will be submitted to and approved by NHESP before the survey is conducted. If nesting activity is confirmed within 500m of the disturbance area, work schedules may be altered in consultation with NHESP. If work is planned outside of the harrier breeding season, then nest surveys will not be necessary. Prior to the start of work symbolic fencing will be installed along the limit of work to avoid encroachment into habitat.

8.2 Minimization

Translocation

The NLB proposes to transplant seven individuals of New England Blazing Star (*L. novae-angliae*), and nine individuals of Sandplain Blue-eyed Grass (*S. fuscatum*), identified in the project disturbance area survey as sods, encompassing the individual plants, to adjacent habitat outside of the fence of the driving range expansion area. Transplantation will occur when the species is not flowering or not setting seed. If needed, transplants will be covered by white 5-gallon buckets, white PVC silage tarps (staked and supported to provide airflow), or similar, for no more than two days post-translocation to allow roots to establish without risk of desiccation. Alternatively, a period of several days of foggy or overcast weather will provide the same opportunity for root establishment. Transplants will be watered as needed in the first and second year.

The translocation area will be staked or symbolically fenced to prevent foot and vehicle traffic in the restoration area, as necessary. Signage will be used to remind the public to keep off restoration areas.

The translocation area will be managed to support the establishment of the translocated plants or sods, with watering as required and weeding, trimming, or mowing to enhance survival of the translocated species and target sandplain grassland habitat.

Translocation monitoring and reporting to NHESP will be conducted for a 5 year period, after which this area will be managed as detailed in the Habitat Management Plan associated with CMP 02-021.DFW, working to prevent encroachment by shrubs, pines, and invasives and to maintain conditions to support state-listed species.

Mitigation

Mitigation is intended to achieve a measurable net benefit under MESA, consistent with CMP 02-021.DFW issued for the Nine Hole Expansion at Miacomet Golf Course. It will include permanent protection via a conservation restriction of 3.8 acres of habitat for the impacted species. This is based on a 2:1 ratio (3.8 acres of mitigation land for 1.9 acres of disturbance)

due to the surveyed presence of one species of vascular plant of special concern, presence of one threatened species of bird and presence of suitable host-plant assemblages for state-listed Lepidoptera mapped by NHESP, including one threatened and five species of special concern. The NLB proposes to satisfy the obligation for permanent protection by withdrawing credit from the Heller Way Mitigation Bank (CMP 86043/NHESP #24-18497). No modifications are proposed to long-term habitat management, monitoring, or funding obligations under CMP 02-021.DFW beyond the specific amendment requested.

9.0 CONSISTENCY WITH PRIOR SECTION 61 FINDINGS

The proposed project change does not involve a disposition or change in use of land subject to Article 97 of the Massachusetts Constitution and does not modify or otherwise affect the permanent conservation restriction approved under the Secretary's May 17, 2002 Certificate.

The project change does not alter the existing Section 61 Findings from the Nine Hole Golf Course Expansion at Miacomet Golf Course project (EEA No. 12393). The prior MEPA review and Final EIR continue to provide sufficient information for state agencies to carry out their Section 61 obligations. Discussion with NHESP staff indicates that a CMP amendment is appropriate for the 1.9 acre expansion and that the proposed translocation and mitigation commitments will satisfy the requirements of the Massachusetts Endangered Species Act. The project does not affect long-term habitat management, monitoring, or funding obligations established under CMP 02-021.DFW, which remain fully in effect.

10.0 REQUIRED PERMITS

The project requires an Amendment to CMP 02-021.DFW under the Massachusetts Endangered Species Act. No additional state permits or funding sources are associated with the modified project.

11.0 CONCLUSION

The proposed 1.9-acre expansion of the driving range is a minor modification to the previously approved Nine Hole Golf Course Expansion at Miacomet Golf Course that will improve operational efficiency while protecting sensitive ecological resources through rare plant translocation, seasonal construction protections, and low-impact maintenance. The project remains fully consistent with the Massachusetts Environmental Policy Act (MEPA) and the Massachusetts Endangered Species Act (MESA).

Accordingly, the proposed project change is appropriately reviewed as a Notice of Project Change and constitutes an ordinarily insignificant modification pursuant to 301 CMR 11.10(6). As such, it is our opinion the project does not require preparation of an Environmental Impact Report or further MEPA review.

12.0 ENVIRONMENTAL JUSTICE AND LANGUAGE ACCESS

Consistent with the MEPA Environmental Justice Public Involvement Protocol (January 2023), this document is available in alternative formats and in languages other than English upon request. Reasonable accommodations, including translation or interpretation services, will be provided to ensure meaningful public access. Requests for assistance may be directed to Kelly Durfee Cardoza, Avalon Consulting Group, at kdc@avaloncon.com or 508-880-2905.12.0

APPENDIX A

Distribution List

Notice of Availability – Notice of Project Change

Nine Hole Golf Course Expansion at Miacomet Golf Course (EEA No. 12393)

A Notice of Project Change (NPC) has been filed under the Massachusetts Environmental Policy Act (MEPA) for the Nine Hole Golf Course Expansion at Miacomet Golf Course, Somerset Road and West Miacomet Road, Nantucket, Massachusetts.

The project change includes expansion of the driving range by 1.9 acres.

The NPC and supporting materials are available for public review on the Nantucket Islands Land Bank website at:

<https://www.nantucketlandbank.org/mission/recreation/driving-range-extension/>

Paper copies are available upon request.

Consistent with the MEPA Environmental Justice Public Involvement Protocol (January 2023), this document is available in alternative formats and in languages other than English upon request. Reasonable accommodations, including translation or interpretation services, will be provided to ensure meaningful public access. Requests for assistance may be directed to Kelly Durfee Cardoza, Avalon Consulting Group, at kdc@avaloncon.com or 508-880-2905.

Notice of Project Change EEA # 12393
Distribution List

Agencies

Massachusetts Environmental Policy Act ATTN: MEPA Office 100 Cambridge Street, Suite 900 Boston, MA 02114 MEPA@mass.gov	Massachusetts Historical Commission The Massachusetts Archives Building 220 Morrissey Boulevard Boston, MA 02125 Hard copy mailed
Department of Environmental Protection – Boston Office ATTN: Commissioner's Office One Winter Street Boston, MA 02108 Helena.boccadora@mass.gov	Nantucket Conservation Commission ATTN: William Dell'Erba, Conservation Agent 131 Pleasant Street, 2nd Floor Nantucket, MA 02554 wdellerba@nantucket-ma.gov
DEP / Southeastern Regional Office ATTN: MEPA Coordinator 20 Riverside Drive Lakeville, MA 02347 George.zoto@mass.gov Jonathan.hobill@mass.gov	Nantucket Health Department ATTN: Roque Miramontes 131 Pleasant Street Nantucket, MA 02554 health@nantucket-ma.gov
Massachusetts Department of Transportation ATTN: Public/Private Development Unit 10 Park Plaza, Suite 4150 Boston, MA 02116 MassDOTPPDU@dot.state.ma.us	Nantucket Historic District Commission ATTN: Cathy Flynn 2 Fairgrounds Road Nantucket, MA 02554 cflynn@nantucket-ma.gov
Massachusetts Department of Transportation – District 5 ATTN: MEPA Coordinator 1000 County Street Taunton, MA 02780 Cindy.McConarty@dot.state.ma.us	Nantucket Planning & Economic Development Commission (NPEDC) ATTN: Leslie Woodson Snell, Director of Planning 2 Fairgrounds Road Nantucket, MA 02554 avorce@nantucket.ma.gov lsnell@nantucket-ma.gov
Nantucket Atheneum (Public Library) 1 India Street Nantucket, MA 02554 info@nantucketantheneum.org	

Nantucket Planning Board ATTN: Megan Trudel, Senior Planner 2 Fairgrounds Road Nantucket, MA 02554 mtrudel@nantucket-ma.gov	MEPA Office – Environmental Justice ATTN: EEA EJ Director 100 Cambridge Street, Suite 900 Boston, MA 02144 MEPA-EJ@mass.gov
Nantucket Water Department ATTN: Mark Willett 1 Milestone Road Nantucket, MA 02554 mwillett@nantucket-ma.gov	Coastal Zone Management ATTN: Project Review Coordinator 251 Causeway Street, Suite 900 Boston, MA 02114 Patrice.bordonaro@mass.gov Sean.duffey@mass.gov
Town of Nantucket Select Board 16 Broad Street Nantucket, MA 02554 townadministration@nantucket-ma.gov bmohr@nantucket-ma.gov mfee@nantucket-ma.gov tdixon@nantucket-ma.gov dhillholdgate@nantucket-ma.gov mmacnab@nantucket-ma.gov	Division of Marine Fisheries – South Shore ATTN: Environmental Reviewer 836 South Rodney French Blvd. New Bedford, MA 02744 DMF.EnvReview-South@mass.gov
Town of Nantucket 16 Broad Street Nantucket, MA 02554 townmanager@nantucket-ma.gov rsears@nantucket-ma.gov emooney@nantucket-ma.gov	Natural Heritage and Endangered Species Program Division of Fisheries & Wildlife 1 Rabbit Hill Road Westborough, MA 01581 Melany.cheeseman@mass.gov Emily.holt@mass.gov Jesse.leddick@mass.gov

Previous Commentors (Organizations)

Nantucket Land & Water Council, Inc. 6 Ash Lane Nantucket, MA 02554 ATTN: Emily Molden, Executive Director emily@nantucketlandwater.org	Mass Audubon 208 South Great Road Lincoln, MA ATTN: Heidi Ricci, Director of Policy hricci@massaudubon.org
---	--

Previous Commentors (Individuals)

A letter with a link to the website where the document can be downloaded and information on how to speak with a project representative and obtain paper copies was sent via mail to each person or person listed below, unless an email was provided.

Stephen Albright 77 Fairgrounds Road Nantucket, MA 02554	Richard Glidden 37 Centre Street Nantucket, MA 02554
Robert & Caroline Applegate 11 Darling Street Nantucket, MA 02554	Herbert Goldberg PO Box 915 18 Capaum Pond Road Nantucket, MA 02554
Jane E. Bonvini 3 Alexandria Drive Nantucket, MA 02554	Kenneth Holdgate 8 Vesper Lane Nantucket, MA 02554
Brenda A. Brady 4 Halyard Lane Nantucket, MA 02554	David Holdgate, no address provided
Eugene F. Briskman 65 Sumner Road Brookline, MA 02445	Bette Ann Huyser 27 Tashama Lane Nantucket, MA 02554
Richard Burns 14 Gosnold Road Nantucket, MA 02554	Philip Iuliano 34 Wigwam Road PO Box 2853 Nantucket, MA 02554
Lucy M. Cobb 10 Golfview Drive Nantucket, MA 02554	Sandra Jackson 34 Pleasant Street Unit 2 Wellesley, MA 02482
John Devaney 10 Pond View Drive Nantucket, MA 02554	James Jackson 34 Pleasant Street Unit 2 Wellesley, MA 02482
Derry and Greg Foster PO Box 3201 Nantucket, MA 02554	Gilbert Kaplan Hale and Dorr LLP 1455 Pennsylvania Ave NW Washington, DC 2004-1008
Jack Gallagher, no address provided	

Jeffrey J. Kaschuluk
PO Box 2890
Nantucket, MA 02584

Barbara Kotalac
Richard Kotalack no address provided

Peter D. Kyburg, P.C.
18 Broad Street, PO Box 3383
Nantucket, MA 02584

James A. LeBlanc
PO Box 3146
6 Newtown Road
Nantucket, MA 02584

Brian W. & Kathleen H. Legg
17 Keel Lane
Nantucket, MA 02554

Milt Lehto
11 Farm View Dr
Nantucket, MA 02554

Daniel Lyons
334-336 Main Street
PO Box 463
West Haven, CT 06516

Sandy MacDonald
10 Pond View Drive
Nantucket, MA 02554

William Q. MacLean, Jr.
PO Box 230
Fairhaven, MA 02719

Kenneth and Paula McAuley
20 Derrymore Road
Nantucket, MA 02554

Frederick P. McClure, no address
provided

Nancy R. McLauchlan
20 Golf View Drive
Nantucket, MA 02554

William Medeiros
35 Vesper Lane
Nantucket, MA 02554

Polly Miller
Mallow Hill Farm
9 Old Quidnet Milk Route
Nantucket, MA 02554

Patrick Murphy
320 23rd St. South Apt 122
Arlington, VA 22202

William T. Muehling
13 Keel Lane, PO Box 2453
Nantucket, MA 02554

Nancy A. Newhouse
23 Madaket Road PO Box 333
Nantucket, MA 02554

Stephen Paradis
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Nantucket, MA 02554
paradis@nantucket.net

Blair Perkins
Rachael Silin
PO Box 2095
18 Golf View Drive
Nantucket, MA 02584

John & Gretchen Penrose
9 Bishops Rise
Nantucket, MA 02554

Elizabeth Perici
11 Vestal Street
Nantucket, MA 02554

Claire Raneri and Phillip Raneri
1 Sheep Commons Lane
Nantucket, MA 02554

Buzz Williams
52 Cliff Road
Nantucket, MA 02554

Karsten Reinemo
PO Box 1444
Nantucket, MA 02554

Joel & Judy Weinstein
127 Eel Point Road
Nantucket, MA 02554

Ben Rowles & Sally Rowles
10 Farmview Drive
Nantucket, MA 02554

Timothy Russert
4001 Nebraska Ave NW
Washington DC 20016

John Salvaggio
5 Meadow Lane
Nantucket, MA 02554

Hercules Segalas
11 Pond View Drive
Nantucket, MA 02554

Glen M. Shriberg
60 West Chester Street
Nantucket, MA 02554

Peter Stein
1340 Fairway Dr
Los Altos, CA 94024

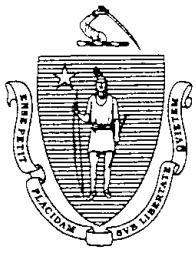
Scott M. Sterns, Jr.
15 Union Street
Nantucket, MA 02554

James Stoltz
12 Henderson's Drive
Nantucket, MA 02554

Michael Sullivan
4 West Miacomet Road
Nantucket, MA 02554
Msulliv12@aol.com

APPENDIX B

Secretary's Certificate on FEIR, May 17, 2002
Secretary's Determination on Project Refinements, October 4, 2002



*The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
251 Causeway Street, Suite 900
Boston, MA 02114-2119*

JANE SWIFT
GOVERNOR

BOB DURAND
SECRETARY

May 17, 2002

Tel. (617) 626-1000
Fax (617) 626-1181
<http://www.magnet.state.ma.us/envir>

**CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
FINAL ENVIRONMENTAL IMPACT REPORT**

PROJECT NAME	:	Nine Hole Golf Course Expansion at Miacomet Golf Course
PROJECT MUNICIPALITY	:	Nantucket
PROJECT WATERSHED	:	Cape & Islands
EOEA NUMBER	:	12393
PROJECT PROPONENT	:	Nantucket Land Bank Commission
DATE NOTICED IN MONITOR	:	April 10, 2002

As the Secretary of Environmental Affairs, I hereby determine that the Final Environmental Impact Report submitted on this project **adequately and properly complies** with the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00).

As described in the Environmental Impact Report (EIR), the proposed project involves the nine-hole expansion of an existing golf course on an additional 75 acres of land and development of associated golf course infrastructure and supporting facilities. The project also includes the implementation of a Conservation Plan described in the Final EIR and outlined below.

The project is undergoing review pursuant to Section 11.03 (1) (b) (1) and (3) (b) (1) of the MEPA regulations, because the project will result in the direct alteration of more than 25 acres of land and the "take" of a state-listed rare species. The project will require a Conservation Permit from the Division of Fisheries and Wildlife (DFW), a Water Management Act Permit from the Department of Environmental Protection (DEP), and approval of the Secretary of Environmental Affairs pursuant to Section 6 of the Land Bank Act (Chapter 669 of the Acts of 1983). The project will also require approval of the Secretary of Environmental Affairs under Section 32 of Chapter 184 of the General Laws for the grant of a proposed conservation restriction (CR) to the Town of Nantucket, under the care of its conservation commission.



MEPA jurisdiction extends to the subject matter of the required state permits and approvals. In this case, the subject matter of the required agency actions is sufficiently broad to confer MEPA jurisdiction over all aspects of the project that may cause significant Damage to the Environment.

The major outstanding issues from the review of the Draft EIR centered on rare species and water withdrawal impacts. After review of the Final EIR and the comments received, I find that the Final EIR has adequately resolved the issues remaining from the Draft EIR review. I find that the proponent has avoided, minimized, and mitigated Damage to the Environment to the maximum extent feasible. I further find that the EIR contains sufficient information for the state permitting agencies to execute their Section 61 obligations. The proponent can resolve any remaining issues during the state permitting process. I note that the state permitting agencies have generally indicated satisfaction with the information presented in the Final EIR. The Massachusetts Audubon Society has commented that the proposed mitigation plan is appropriate, and I have received numerous comments from the local community in support of the project.

The Final EIR includes a detailed discussion of rare species impacts and mitigation. The proponent has developed a Conservation Plan containing the following elements:

- Active management of 560 acres of land (for the primary benefit of rare species and rare ecosystems) within the Smooth Hummocks Coastal Preserve (SHCP) for a period of 25 years;
- Placement of a Conservation Restriction on approximately 67 acres of the proponent's land east of the existing golf course and within the SHCP¹;
- Creation of an independent Scientific Advisory Committee (with at least annual meetings) to provide input to the proponent on the land management activities; and
- Creation of a dedicated fund and golf surcharge fee to be used for the land management activities.

¹ I note that the development of a CR on Land Bank land will require authorization from the General Court, as the grant of the CR to the Town of Nantucket constitutes the disposition of an interest in land subject to Article 97 of the Massachusetts Constitution. (Authorization from the General Court does not constitute a state agency action for purposes of MEPA review.) If the proponent does not receive legislative authorization for the CR on the 67-acre parcel, I require the proponent to submit a timely Notice of Project Change that analyzes the feasibility of substitute mitigation.

The project results in the "take" of the state-endangered Eastern Silvery Aster (*Aster concolor*), state-threatened Northern Harrier (*Circus cyaneus*), and four state Species of Special Concern (the Sandplain Blue-eyed Grass, *Sisyrinchium fuscatum*; the Bushy Rockrose, *Helianthemum dumosum*; the Nantucket Shadbush, *Amelanchier nantucketensis*; and the New England Blazing Star, *Liatrus scariosa* var. *novae-angliae*).

The Final EIR has detailed the potential impacts on rare species, and includes a mitigation program designed to create a net benefit to the locally endangered populations, pursuant to the requirements of the Massachusetts Endangered Species Act. DFW has requested that the acreage subject to the CR be increased to 480 acres, to cover most of the non-golf land within the SHCP. DFW has also requested more details about the final Conservation Plan.

The Land Bank Act requires that the proponent retain any real property interest acquired under the Act predominantly in its natural, scenic and open condition. However, the Act allows the proponent to develop and operate recreational facilities (including golf facilities) on its land, subject to approval by the Secretary of Environmental Affairs, applicable law, and the state constitution. Over the past eight years, the proponent has been refining its plans for the 8-hole expansion to meet the requirements of MEPA and other applicable statutes. The project design has evolved substantially from the original expansion proposal (EOEA #9957), leading to a project that has significantly less environmental impact than the earlier proposal. While the impacts of the project are still significant, the proponent has met its burden under MEPA to disclose impacts and to avoid, minimize, and mitigate environmental impacts to the maximum feasible extent. I note that the ratio of acreage managed for rare species/ ecosystems benefit to acreage disturbed for golf-related activities for the 8-hole expansion is approximately the same as the ratio I determined to constitute acceptable mitigation for the Nantucket Golf Club (EOEA #10471), which had similar impacts on rare species and rare ecosystems.

As noted above, the Land Bank Act places a high degree of protection on lands owned by the proponent. In fact, the restrictions contained in Section 6 of the Land Bank Act virtually mirror the restrictions enumerated in Section 31 of Chapter 184 of the General Laws, which generally defines a CR (including the one proposed for this project) that I would approve under Section 32 of Chapter 184. The SHCP thus already

enjoys a level of protection at least equal to the level afforded by a tightly crafted Conservation Restriction.

If the proponent and DFW negotiate a larger area subject to the CR as part of the process of obtaining a Conservation Permit, I have no objections. I would not require any further MEPA review of such an expanded CR (although the proponent should notify the MEPA office if such an expansion of the CR emerges from the permitting process). I am comfortable that the proponent has met its obligations under MEPA with the proposed 67-acre CR on the most ecologically sensitive areas east of the existing course. I thus consider the MEPA review of the project concluded with the commitment for a CR on the 67 acres east of the existing course, in addition to the commitments described in this Certificate and in the EIR.

The proponent should continue to work with DFW on the details of the Conservation Plan and Conservation Permit. The final plan should articulate specific management objectives for each of the rare species, and contain justification for the chosen management strategy. The final plan and/or permit should include details on the transplantation of rare species, and should include provisions to maintain patches of tall, dense shrubs for the benefit of the Northern Harrier. The plan and/or permit should also ensure a formal role for the Natural Heritage Program in project monitoring, and in any adjustments that may be made to the management plan in response to monitoring.

The Final EIR contains additional information on water withdrawal impacts and water quality. The Final EIR contains appropriate analysis of drawdown impacts, and the document also demonstrates that nitrogen loading from the course under worst-case conditions will not cause an exceedence of the 5 parts per million planning limit for concentration of nitrates in groundwater.

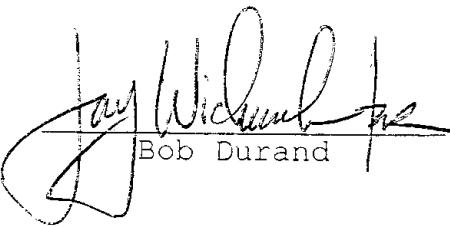
The Massachusetts Historical Commission (MHC) has determined that the project will have "no adverse effect" on historic resources provided that the proponent provides specifications on the capping of the historic well to MHC for review and comment. The proponent should continue to consult with MHC to ensure avoidance of impacts to historic resources.

The proponent and state agencies should forward copies of the Section 61 Findings to the MEPA Office for completion of the file. I remind the proponent that if the project should change (including any changes to the basic elements of the proposed Conservation Plan as described above), I will require the filing

of a timely Notice of Project Change that evaluates impacts and potential mitigation.

May 17, 2002

Date



Bob Durand

Comments received (continues on next page):

04/09/02 Mark Willert
04/09/02 Jane Bonvini
04/10/02 Stephen Albright
04/11/02 Jack Gallagher
04/12/02 Nancy Newhouse
04/16/02 Claire Raneri
04/16/02 Phillip Raneri
04/18/02 Karsten Reinemo
04/18/02 Daniel Lyons
04/18/02 William Medeiros
04/23/02 Peter Stein
04/24/02 William MacLean
04/24/02 James LeBlanc
04/23/02 Mell Lehto
04/23/02 Scott Stearns
04/23/02 Bette Ann Huyser
04/23/02 James Jackson
04/23/02 Sandra Jackson
04/25/02 Timothy Russert
04/25/02 Eugene Briskman
04/26/02 Buzz Williams
04/26/02 Elizabeth Perici
04/26/02 Richard Glidden
04/26/02 John Salvaggio
04/29/02 Frederick McClure
04/29/02 Kenneth Holdgate
04/29/02 Brian & Kathleen Legg
04/29/02 Nantucket Conservation Commission
04/30/02 Paula and Ken McAuley
05/01/02 Joel & Judy Weinstein
05/01/02 Barbara and Richard Katalec
05/01/02 Robert and Caroline Applegate
05/02/02 Patrick Murphy
05/02/02 Richard Burns
05/03/02 Stephen Paradis
05/03/02 Coastal Zone Management Office
05/06/02 Herbert Goldberg

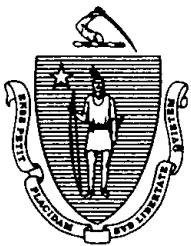
EOEA #12393

Final EIR Certificate

05/17/02

05/06/02 Polly Miller
05/06/02 James Stoltz
05/07/02 John and Gretchen Penrose
05/07/02 Glenn Shriberg
05/07/02 Nantucket Planning and Economic Development Commission
05/08/02 Hercules Segalas
05/08/02 Philip Iuliano
05/08/02 Nantucket Conservation Commission
05/09/02 Nantucket Board of Selectmen
05/10/02 Department of Environmental Protection SERO
05/10/02 Massachusetts Audubon Society
05/10/02 Derry Foster
05/10/02 Greg Foster
05/10/02 David Holdgate
05/13/02 Jeffrey Kaschuluk
05/14/02 Division of Fisheries and Wildlife (NHESP)
05/14/02 Massachusetts Historical Commission

BAD/ASP/asp



The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
251 Causeway Street, Suite 900
Boston, MA 02114-2119

JANE SWIFT
GOVERNOR

BOB DURAND
SECRETARY

Tel. (617) 626-1000
Fax (617) 626-1181
<http://www.magnet.state.ma.us/envir>

October 4, 2002

Ms. Kelly Durfee Cardoza
Avalon Consulting Group
41 Cal's Court
Taunton, MA 02780

Re: EOEA #12393, Miacomet Golf Course Expansion, Nantucket

Dear Ms. Cardoza:

By letter received September 27, 2002 you requested a determination as to whether the Secretary would consider design refinements to the above-referenced project to be material changes to the project. If the Secretary were to deem the changes material, you have requested that the Secretary deem the changes insignificant in accordance with Section 11.10 (6) of the MEPA regulations.

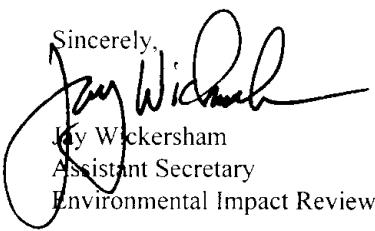
The Secretary certified the adequacy of the Final EIR for this project on May 17, 2002. As described in the EIR, the project involves the nine-hole expansion of an existing golf course on an additional 75 acres of land and development of associated infrastructure.

Since the certification of the Final EIR, the proponent has made refinements to the project design. The proponent has reduced the size of the maintenance facility and storage buildings, expanded the existing pump house, and added two rain shelters, a starter shack, and a shed to sell golf balls. The proponent now also proposes to pave the parking lot on the south side of West Miacomet Road.

The Secretary has determined that the reduction in size of the maintenance and storage buildings do not constitute material changes to the project. The addition of the various outbuildings, expansion of the pump house, and paving of the parking area do constitute material changes.

Based on your letter, and the factors specified in Section 11.10 (6) of the MEPA regulations, the Secretary hereby finds that the proposed changes do not significantly increase the environmental consequences of the project. No further MEPA review is required.

Sincerely,



Jay Wickersham
Assistant Secretary
Environmental Impact Review

JHW/ASP/asp

cc: Eric Savetsky, Nantucket Land Bank



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APPENDIX C

***Miacomet Golf Course Driving Range Expansion Permit Amendment
Request and Supporting Documents
December 22, 2025***

Miacomet Golf Course Driving Range Expansion Permit Amendment Request

CMP: 02.021.DFW
Other NHESP File Numbers: 23-1164
Heritage Hub ID: IR-55023

Prepared by:

Emily Goldstein Murphy PhD, Director of Environmental and Agricultural Resources
egmurphy@nantucketlandbank.org



22 Broad St, Nantucket, MA, 02554

December 22nd, 2025

Mr. Jesse Leddick
Assistant Director
Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road,
Westborough, MA 01581

12/22/25

Re: Conservation Management Permit 02.021.DFW proposed modifications and amendments. Other reference numbers: 23-1164 and IR-55023.

Dear Mr. Jesse Leddick,

The Nantucket Islands Land Bank (NLB) wishes to submit a request to amend the Conservation Management Permit (CMP) 02.021.DFW “Nine Hole Golf Course Expansion at Miacomet Golf Course Nantucket, Massachusetts” to expand the driving range south to facilitate mechanical collection of golf balls (Figure 1).

Driver technology improvements since the design and construction of the driving range have resulted in a significant number of golf balls overshooting the boundary of the driving range and landing in the surrounding habitat. The golf course cannot collect the balls outside of the mowed driving range with their golf ball collector vehicle resulting in an accumulation of golf balls in the habitat outside of the driving range. We propose to move the fence back and, through brush/tree removal and sequential mowing, gradually reduce the height of the grassland so that the ball picker vehicle can effectively collect balls in the affected area (approximate vegetation height of 2.5”). See the attached Expansion, Translocation, Management and Monitoring Plan for a project work plan from the Miacomet Golf Course.

This Driving Range Expansion project has been in development since 2022 and NLB has discussed this project with NHESP staff members (Mr. Leddick and Ms. Echandi) several times since then. NLB staff surveyed the expansion area in the growing seasons of 2023, 2024 and 2025 for rare plants, Lepidoptera habitat and rare bird habitat (see attached 2023, 2024, and 2025 survey reports). As a result of these surveys, we reduced the planned area for the driving range expansion by 69% from 6.1 ac to 1.9 ac. This reduction allows the project to now *avoid* impacts to endangered plants and *minimize* impacts to special concern plants. Likewise, impacts to birds and Lepidoptera species mapped for the area are *minimized*.



Figure 1. Sketch of the planned 1.9 ac expansion of the Miacomet Golf Course driving range.

We request to amend CMP 02-021.DFW so that we may expand the driving range to the south. This project will result in a work/impact area of ± 1.9 ac. We would like to accomplish this driving range expansion as soon as possible.

We respectfully request to withdraw the required mitigation credit from the 1 Heller Way mitigation bank created by CMP 86043/NHESP# 24-18497 issued for the Cisco Beach Parking Lot Expansion. Of the ± 13.75 ac protected under this CMP, ± 12.05 ac remains available to be used as mitigation credit towards the net benefit requirement of future projects proposed by the permit holder. Please see the attached Expansion, Translocation, Management and Monitoring Plan for a detailed description of methods that are summarized below.

We plan to relocate the *Liatriis novae-angliae* and *Sisyrinchium fuscum* in the project area to nearby suitable habitat outside of the fence of the driving range expansion project area. Plants will be moved by hand as small sods and watered as needed in the first and second

season if needed to promote establishment. NLB has experience in performing similar translocations (e.g. Cisco parking lot translocation project).

The expanded driving range will be surrounded by a split rail fence with chicken wire – similar to the current driving range boundary fence.

In preparation for this permit amendment request we have prepared and submitted the following:

1) Botanical surveys:

NLB staff surveyed the project area several times between May 2023 and September 2025. Please see the attached botanical survey reports dated 9/23/24, 3/19/25, and 12/8/2025.

2) Impact calculations based on a sketch plan:

Please see the attached project plan. This plan shows that ± 1.9 ac of habitat will be impacted by the project. We respectfully request to withdraw 3.8 acres of required mitigation credit from the ± 12.05 acres available in the 1 Heller Way mitigation bank.

3) Collection Permit

We received Scientific Collection Permit 1174.25SWP to transplant *L. novae-angliae* and *S. fuscatum* pending approval of a CMP or CMP amendment. No collection or transplantation has taken place to date and we will be renewing this permit in January.

4) Progress on tasks in the Memorandum of Understanding

We have continued to make progress on the tasks outlined in the MOU and are happy to schedule a call to update you on these details.

I hope this information is sufficient to allow you to approve this permit amendment request. If you need any additional information, please do not hesitate to contact me.

Respectfully submitted,

Emily Goldstein Murphy, PhD.
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Miacomet Golf Course Driving Range Expansion

Final Survey Report

NHESP Tracking Number 23-1164

December 8th 2025



Original 2023 report prepared by Guthrie Diamond, Field Ecology Coordinator

2025 survey updates Emily Goldstein Murphy PhD, Director of Environmental and Agricultural Resources, Molly Cahill, Field Ecology Coordinator, and Rachael Freeman, Executive Director

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Existing Conditions

Miacomet Golf Course is a public 18-hole golf course located on Nantucket Land Bank Property, just north of the Smooth Hummocks Coastal Preserve along the south shore (Figure 1). The entire golf course occupies approximately 204 acres, and is surrounded by pockets of sandplain grassland and coastal heathland. The golf course is situated on an outwash plain, with soil types of Evesboro sand 0-3% slopes, Evesboro sand 3 – 8% slopes, Riverhead-Nantucket complex 3 – 8% slopes, and a small area of Berryland Variant loamy sand 0 – 3% slopes (Figure 2).

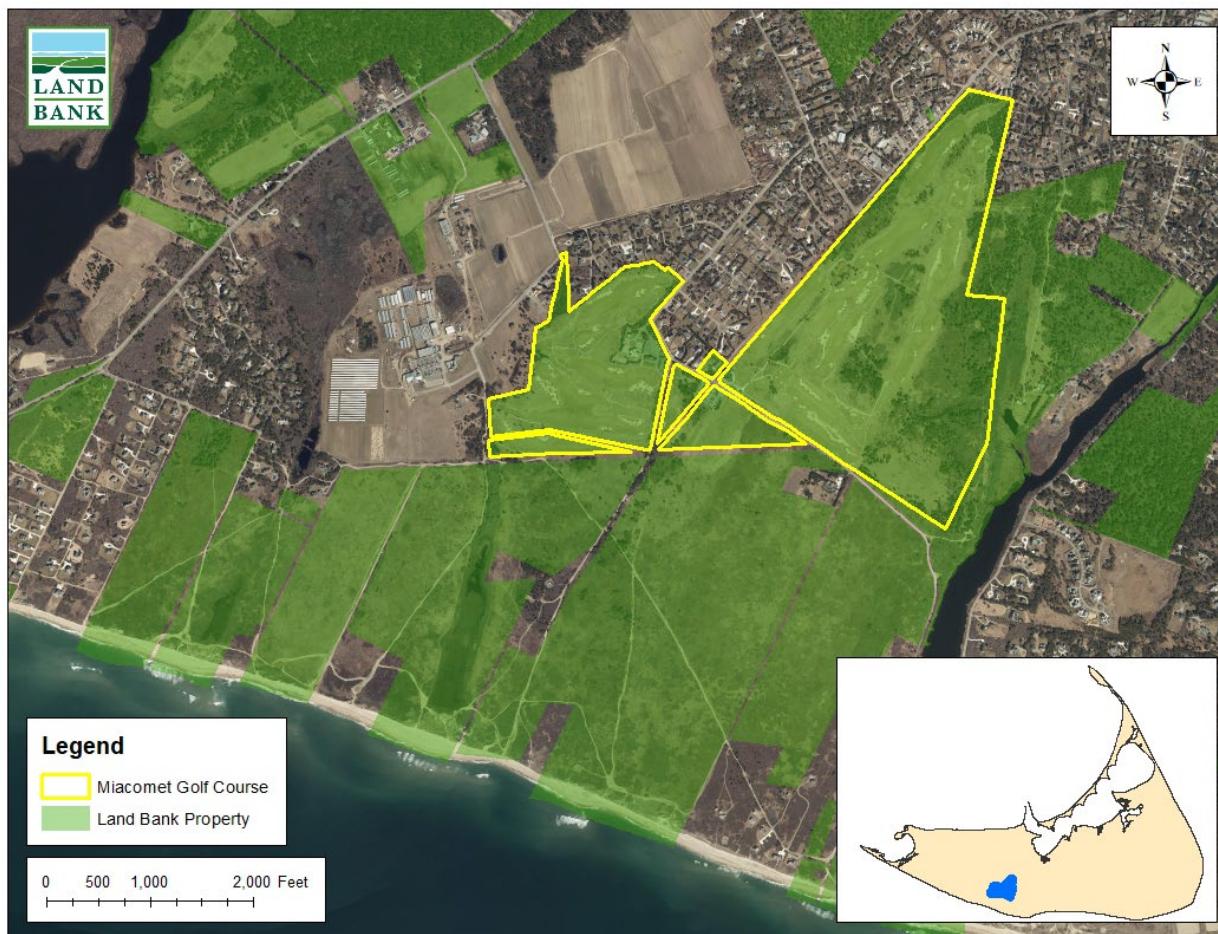


Figure 1. Miacomet Golf Course highlighted in yellow, situated just north of the Smooth Hummocks Coastal Preserve.

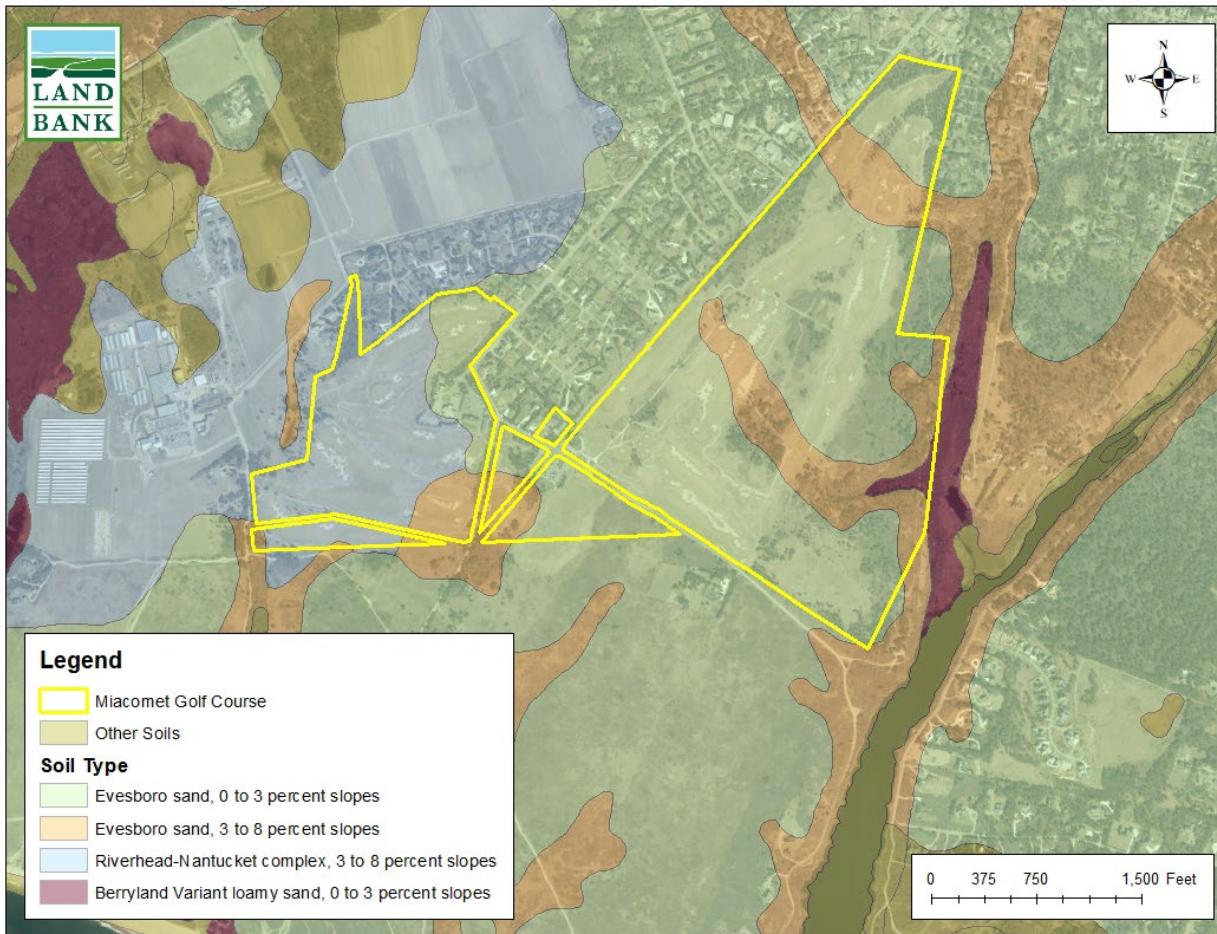


Figure 2. Soil types present within Miacomet Golf Course.

The existing driving range at Miacomet Golf Course measures approximately 6.27 acres (Figure 3). Currently, golf balls are frequently hit to the south of the driving range and into the sandplain grassland and coastal heathland. Because of this, Miacomet Golf Course is seeking to expand the driving range further south to utilize ball picker carts to collect balls.



Figure 3. Existing Driving Range.

The driving range sits on the northern edge of the Smooth Hummocks Coastal Preserve, which is made up of sandplain grassland and coastal heathland habitat. Dominant species in the woodier areas south of the driving range include *Gaylussacia baccata*, *Vaccinium angustifolium*, *Carex pensylvanica*, *Quercus ilicifolia*, *Morella caroliniensis*, *Rubus spp.*, *Festuca spp.*, *Rosa virginiana*, and *Prunus serotina*. More open grassland areas south of the driving range include *Hudsonia ericoides*, *Vaccinium angustifolium*, *Baptisia tinctoria*, *Sericocarpus asteroides*, *Schizachyrium scoparium*, *Solidago nemoralis*, and *Euthamia spp.*. The southwest corner of the survey area is primarily *Gaylussacia baccata*, with some areas showing defoliation in 2024.

This area was recorded as being Priority Habitat for the following species.

Scientific Name	Common Name	Taxonomic Group	State Status
<i>Sisyrinchium fuscum</i>	Sandplain Blue-eyed Grass	Plant	Special Concern
<i>Liatris novae-angliae</i>	New England Blazing Star	Plant	Special Concern

<i>Nabalus serpentarius</i>	Lion's Foot	Plant	Endangered
<i>Circus hudsonius</i>	Northern Harrier	Bird	Threatened
<i>Cingilia catenaria</i>	Chain Dot Geometer	Butterfly/Moth	Special Concern
<i>Abagrotis benjamini</i>	Coastal Heathland Cutworm	Butterfly/Moth	Special Concern
<i>Psectraglaea carnosa</i>	Pink Sallow Moth	Butterfly/Moth	Special Concern
<i>Symphyotrichum concolor</i>	Eastern Silvery Aster	Plant	Endangered
<i>Heterocampa varia</i>	Sandplain Heterocampa	Butterfly/Moth	Threatened
<i>Chaetaglaea cerata</i>	Waxed Sallow Moth	Butterfly/Moth	Special Concern
<i>Metarranthis pilosaria</i>	Heath Metarranthis	Butterfly/Moth	Special Concern

Of these species, *Liatris novae-angliae*, was observed within the survey area.

Summary of Survey Methodology

The survey area was searched for state-listed plant species during the 2025 field season (Figure 4) and the 2023 and 2024 seasons (reports previously submitted). The survey was under the direction of Rachael Freeman, Executive Director and NHESP approved botanist, surveyors in addition to Ms Freeman included Molly Cahill, Field Ecology Coordinator, Anna DeCarlo, Field Ecology Technician, and seasonal employee Anya Almeida.



Figure 4. 2025 survey area south of the existing driving range, 1.9 ac.

The 2025 survey area was updated based on the results of the 2023 and 2024 surveys to reduce the size of the expansion area and *avoid* several state-listed species. The survey area was searched by walking linear transects spaced no more than 10 feet apart. A GPS was carried to record a representative track file during the survey (Figure 5). Any state-listed species observed were marked with colored flags and then counted and GPSed. Representative photos were taken of the site, as well as diagnostic characteristics of any state-listed plants. *S. fuscatum* surveys took place on 5/27/25. *L. novae-angliae* and *S. concolor* surveys took place on 9/18/25 and 9/22/25. *N. serpentarius* was searched for during all three survey visits but was not found. Areas where *N. serpentarius* had been found previously were searched especially closely.

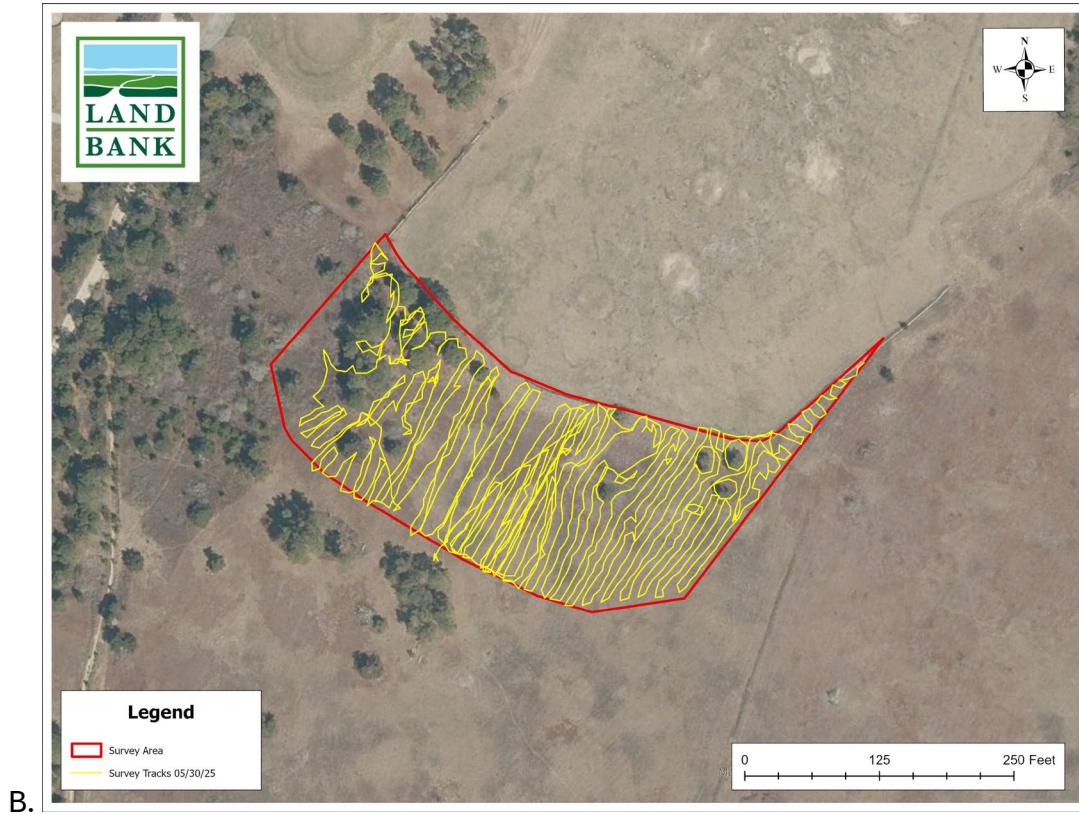
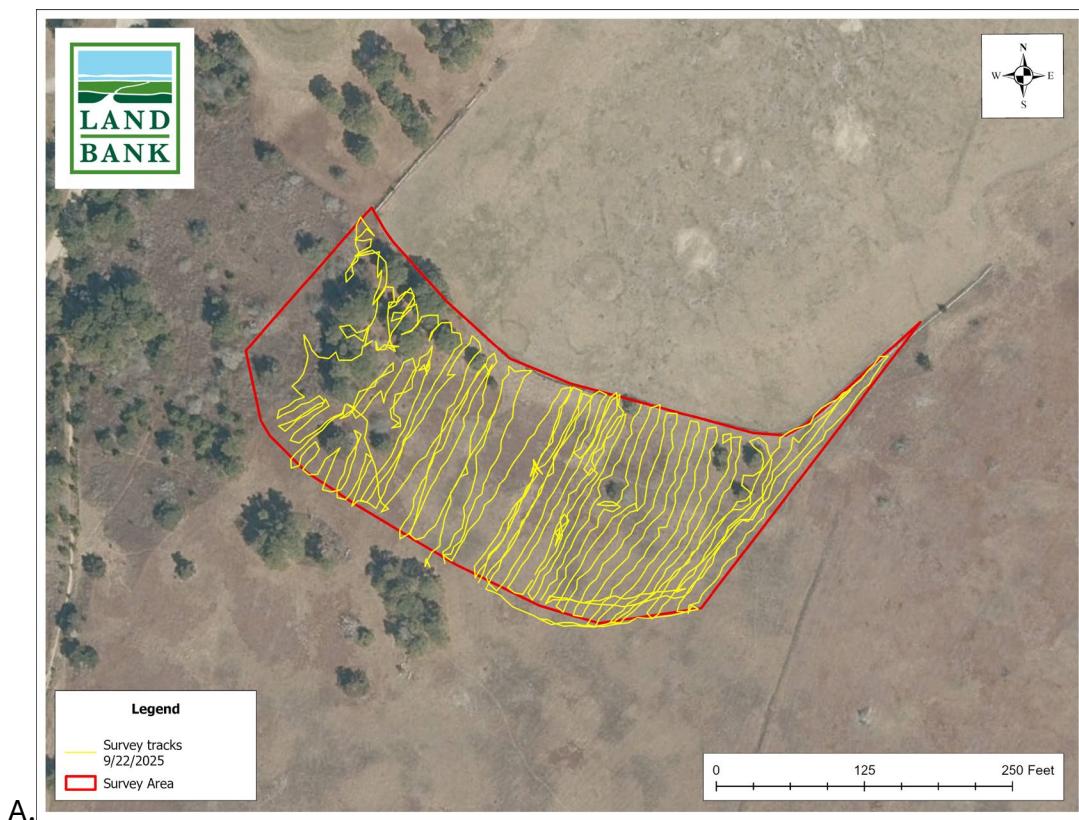


Figure 5. A. Track file recorded during the *L. novae-angliae* survey (habitat with high vegetation was avoided as unsuitable for the target species), B. Track file recorded during the *S. fuscum* survey.

No deviations from the proposed survey protocol were made except that *S. fuscum* was not surveyed for during the flowering period in May/June 2024 due to staff resources. The following botanical references were used in preparation for the plant survey:

- Haines, A. 2011. Flora Novae Angliae – A Manual for the Identification of Native and Naturalized Higher Vascular Plants of New England. New England Wildflower Society. Yale University Press, New Haven, CT.
- Go botany: Native plant trust. Go Botany: Native Plant Trust. <https://gobotany.nativeplanttrust.org/>

Summary of Survey Results

Plant Survey Results

During the survey, 7 individuals of *Liatris novae-angliae* were observed inside the survey area (Table 1, Figure 6A). Field staff found 9 individuals of *S. fuscum* inside the survey area (Table 1, Figure 6B). *N. serpentarius* and *S. concolor* were not found in the survey area.

Table 1. Rare plants surveyed and results from past and current survey.

	2023 survey (5.9 ac)	2024 survey (2.1 ac)	2025 survey (1.9 ac)
<i>L. novae-angliae</i>	972	15	7
<i>N. serpentarius</i>	36	0	0
<i>S. fuscum</i>	365	0	9
<i>S. concolor</i>	0	0	0

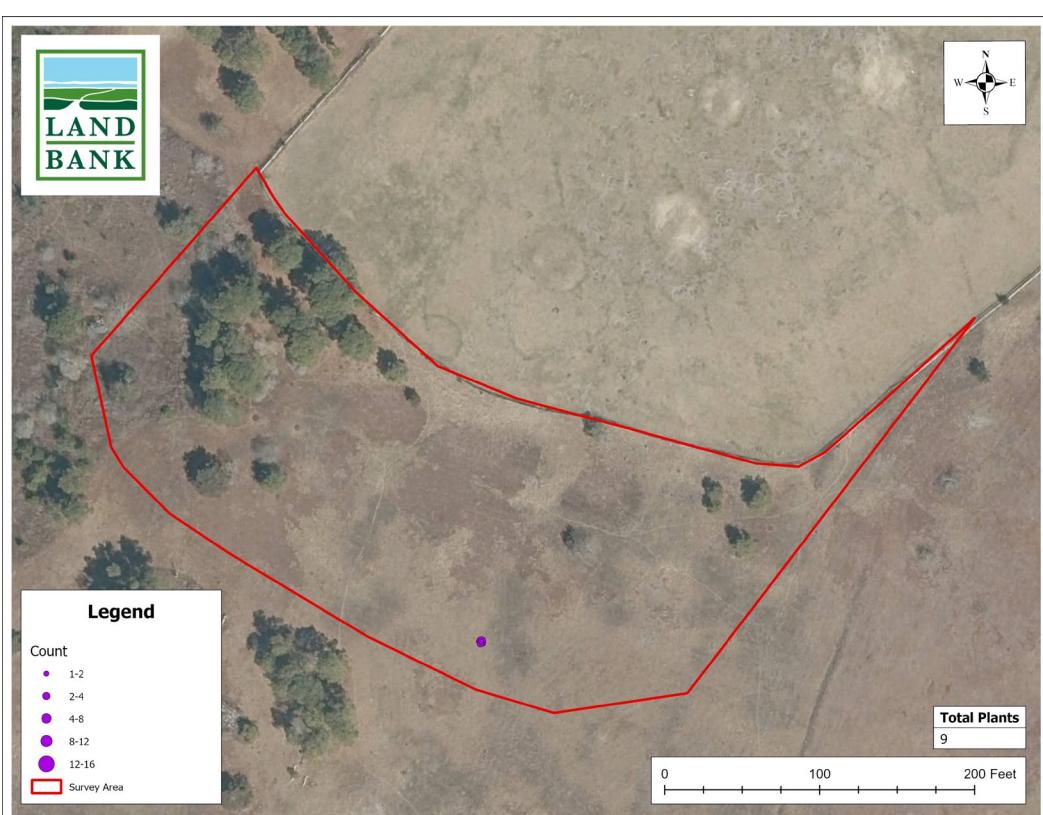
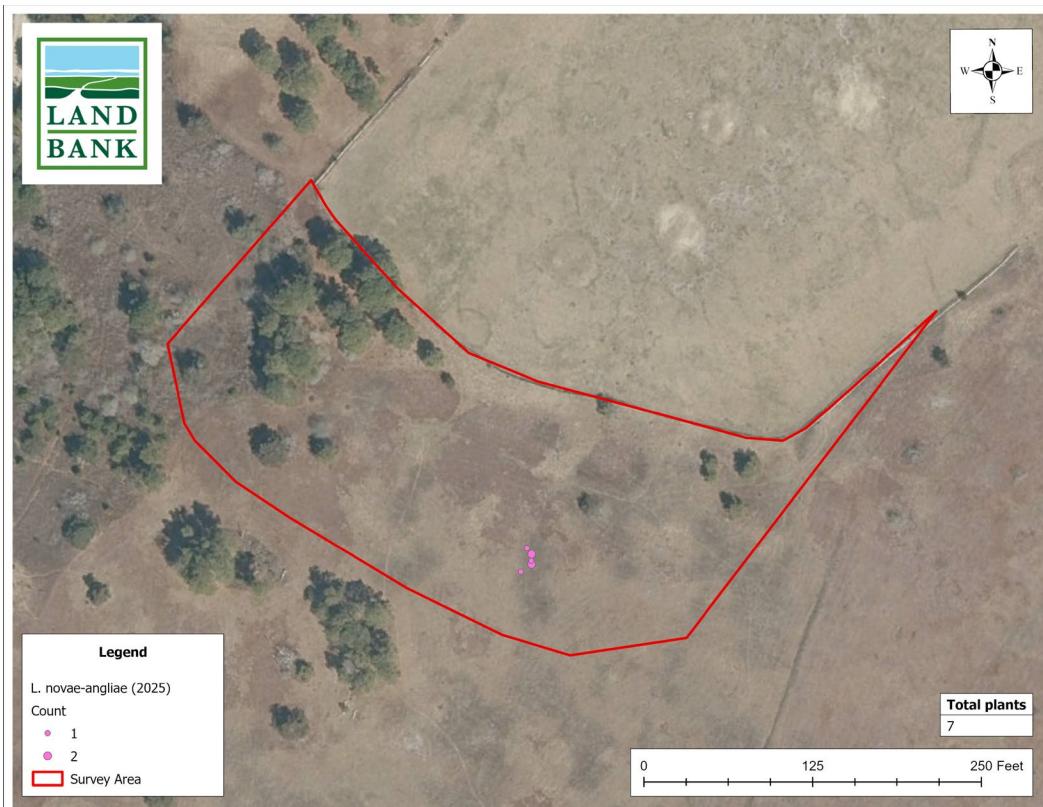


Figure 6. A. 7 *Liatriis novae-angliae* observed within the survey area and B. 9 *Sisyrinchium fuscatum* observed within the survey area.

Lepidoptera and Bird Survey Results

Of the Lepidoptera host plants listed, all were observed within the survey area with the exception of *Myrica gale*. Most prevalent on the site were *Gaylussacia baccata*, *Vaccinium angustifolium*, and *Morella caroliniensis*. Though there are significant grassy portions of the site, these shrubs were all common. Based on availability of host plants within the survey area, we conclude that there is suitable Lepidoptera habitat on site.

A female harrier was observed flying over and near the site during the plant surveys in 2023. Harriers are known to use the Smooth Hummocks Coastal Preserve. We conclude that there is harrier foraging habitat on site.

Impact Analysis

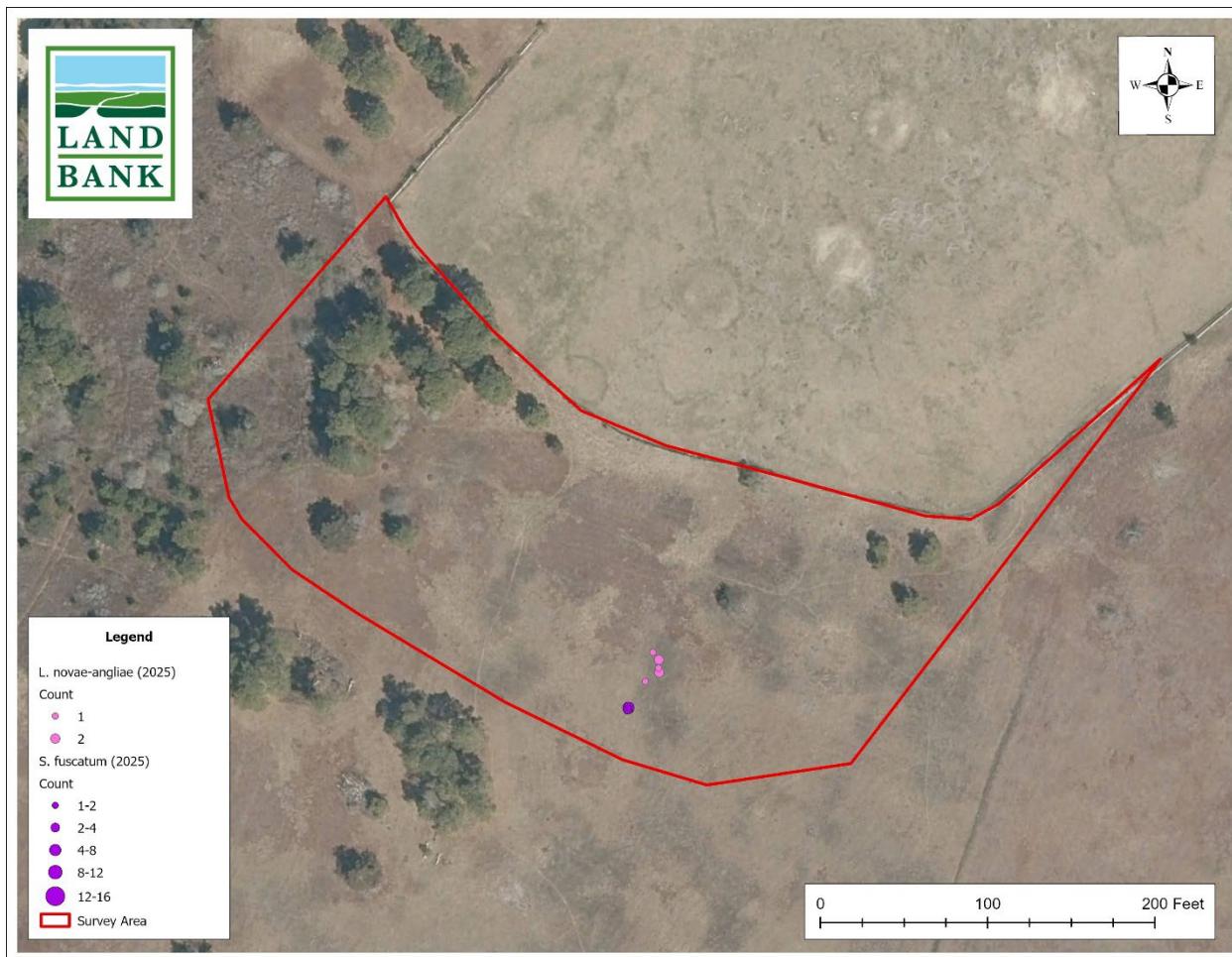


Figure 7. Sketch of the driving range expansion with 2025 *L. novae-angliae* and *S. fuscum* locations.

There are 7 *L. novae-angliae* and 9 *S. fuscum* that are within the planned driving range expansion. NLB will seek permission to translocate these plants out of the active work area to an equivalent microhabitat on the same parcel to be identified in the field just prior to translocation work. The Land Bank has the locations of the plants in Figure 7 currently marked in the field to ensure they are properly located for translocation if the translocation plan is approved.

Due to the observation of harriers in the vicinity of the site, we propose that work to create the expanded driving range should *avoid* the harrier breeding season of March 1 – June 30. If it is not possible to schedule expansion work outside of this time period, then NLB will work with the Division to create a Harrier survey protocol and protection plan if required.

Work to establish the driving range will consist of moving the fence and mowing the habitat gradually to a level that will allow the golf ball picker vehicle to perform its duties (about 2.5"). Woody plants and trees that are too large to mow, primarily concentrated in the northwestern section of the expansion, will be removed manually and these areas will be reseeded with a mix of natives and native grasses. Reseeded areas will be watered as needed to promote establishment. Once the surface is established either through mowing or reseeding, the maintenance will be minimal. This area does not currently have irrigation and the Golf Course does not plan to install any irrigation on it. It will not be fertilized or receive pesticide application and mowing will be on an as needed basis. Currently the rest of the driving range is mowed every 10-14 days during times of active rainfall and not mowed at all during times of drought. On a yearly basis the entire Driving Range Floor may be mowed about 6-8 times a year.

According to Miacomet Golf Course: the primary maintenance to this area will be golf ball collection. This maintenance involves a golf cart with a machine that grabs the golf balls off the turf and puts them in a basket. From Nov - Mar the area is picked 2-3x a week, and Apr - Oct can be picked as much as 2-3X a day.

Representative Photographs

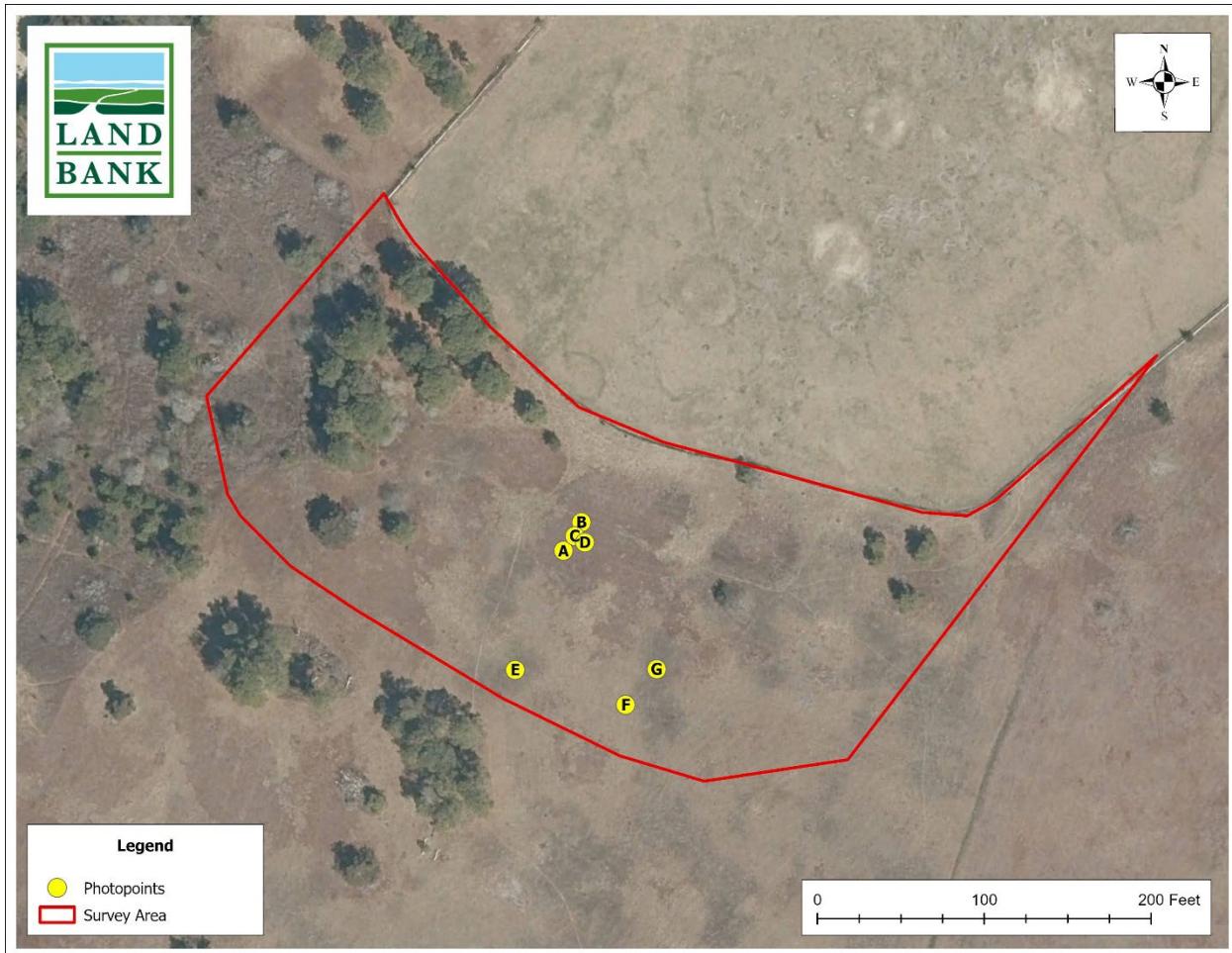


Figure 11. Photopoint map for the following associated photographs.



Photopoint A. Looking west from the middle of the survey area towards Somerset Road; vegetation is predominately *Gaylussacia baccata* and *Vaccinium angustifolium*. A stand of *Pinus rigida* with an understory of *Baccharis halimifolia* and *Morella caroliniensis* appears in the western side of the survey area.



Photopoint B. Looking north towards the current driving range; the vegetation is primarily *Gaylussacia baccata*, *Morella caroliniensis* and *Vaccinium angustifolium*. The small forest stand is composed of *Pinus rigida* with an understory of *Quercus ilicifolia* and *Juniperus virginiana*.



41.254221° N 70.123950° W

Photopoint C. Looking east towards Miacomet Pond; vegetation composition is similar



Photopoint D. Looking south towards the shoreline; vegetation composition is similar



Photopoint E. Grassier habitat at the southern end of the survey area; *Vaccinium angustifolium*, *Festuca* spp., *Hudsonia ericoides*, *Gaylussacia baccata*, *Rosa virginiana*, *Solidago* spp., *Euthamia* spp., *Morella carolinensis*, *Rubus* spp., and *Carex pensylvanica*



Photopoint F. *Sisyrinchium fuscum* found within the proposed expansion area; plants were found among *Schizachyrium scoparium*, *Gaylussacia baccata*, *Carex pensylvanica*, *Rubus* spp., *Vaccinium angustifolium*, *Lilium philadelphicum*, *Rhus* spp., and *Rosa virginiana*



Photopoint G. Basal leaves of *Liatris novae-angliae*

Miacomet Golf Course Driving Range Expansion, Translocation, Management, and Monitoring Plans

Amendment to: Miacomet Golf Course Permit

NHESP tracking number: 23-1164, IR-55023, CMP 02-021.DFW

Version: December 22nd 2025



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1.0 Project Summary and Plans

The Nantucket Islands Land Bank (NLB) and their licensee Miacomet Golf Club plan to extend the length of the driving range at Miacomet Golf Course (± 1.9 ac disturbance area) to facilitate mechanical golf ball collection (attached). Driver technology improvements since the design of the driving range have resulted in a significant number of golf balls overshooting the boundary of the driving range and landing in the surrounding habitat. The golf course cannot collect the balls outside of the mowed driving range with their golf ball picker vehicle resulting in a significant accumulation of golf balls outside of the driving range in habitat. We propose to move the fence back and mow the grassland so that the ball picker vehicle can effectively collect balls in the affected area (approximate vegetation height of 2.5"). Rare plants were surveyed in the expansion area during the growing and flowering seasons of 2023, 2024, and 2025 and *Liatris novae-angliae* and *Sisyrinchium fuscum* were found within the project area.

1.1 Work Plan

Miacomet Golf Course provided NLB with this description of the work plan to expand the current driving range into the area to the south.

The conversion will simply require moving back the current fence and mowing the brush in a manner that gradually reduces the height until we have a mowing height of about 2.5". Depending on the amount of woody plants/trees that we end up with after this mowing, we may do either some manual removal of the plants or a renovation or rototill of the top 2-3" of soil. We will then put down some native grass seed to match the rest of the driving range floor. This area will be watered manually if necessary to aid in turf establishment.

Once the surface is established either through mowing or renovation the maintenance will be minimal. This area does not currently have irrigation and we do not plan to install any irrigation on it. It will not be fertilized or receive pesticide application and mowing will be on an as needed basis. Currently the rest of the driving range is mowed every 10-14 days during times of active

rainfall and not mowed at all during times of drought. On a yearly basis the entire Driving Range Floor may be mowed about 6-8 times a year.

The primary maintenance to this area will be golf ball collection. This maintenance simply involves a golf cart with a machine that grabs the golf balls off the turf and puts them in a basket. From Nov-Mar the area is picked 2-3x a week, and Apr- Oct can be picked as much as 2-3X a day.

2.0 Impact Avoidance, Minimization, and Mitigation Plans

The parcel at 1 Heller Way was protected under the MOU signed by the NLB and the Division wherein the NLB undertook to work toward the permanent protection of a large area of rare habitat in the Smooth Hummocks area and, in return for working toward that long term goal, could use some mitigation credit from 1 Heller Way for projects that had an immediate need, See also CMP 86043/NHESP# 24-18497. We respectfully seek to withdraw further mitigation from the mitigation bank at 1 Heller Way under an amendment to CMP 02.021.DFW (Golf Course Permit). In addition to permanently protecting mitigation acreage in a 2:1 ratio (1.9 ac disturbance = 3.8 ac of mitigation) in the 1 Heller Way parcel, we plan to perform the following mitigation actions for the rare plants and habitat found in the expansion area for the Driving Range Expansion project. This mitigation ratio is due to the surveyed presence of two species of vascular plant of Special Concern, presence of one Threatened species of bird, and presence of host habitat for six moth species (one Threatened and five Special Concern).

2.1 Avoidance: expansion reduction and adjustment

The NLB performed rare plant surveys over three growing seasons (2023, 2024, 2025, see attached survey reports and Heritage Hub submissions) in the planned expansion area. Following the 2023 and 2024 surveys, we worked with the Miacomet Golf Course to reduce the area of the expansion project and to adjust the borders to avoid as many rare plants as possible. The final proposed expansion area avoids all *Nabalus serpentarius* and minimizes the impact to *L. novae angliae* and *Sisyrinchium fuscum*. The total area has been reduced from approximately 6.1 ac to 1.9 ac – a 69% reduction in area (Figure 1).

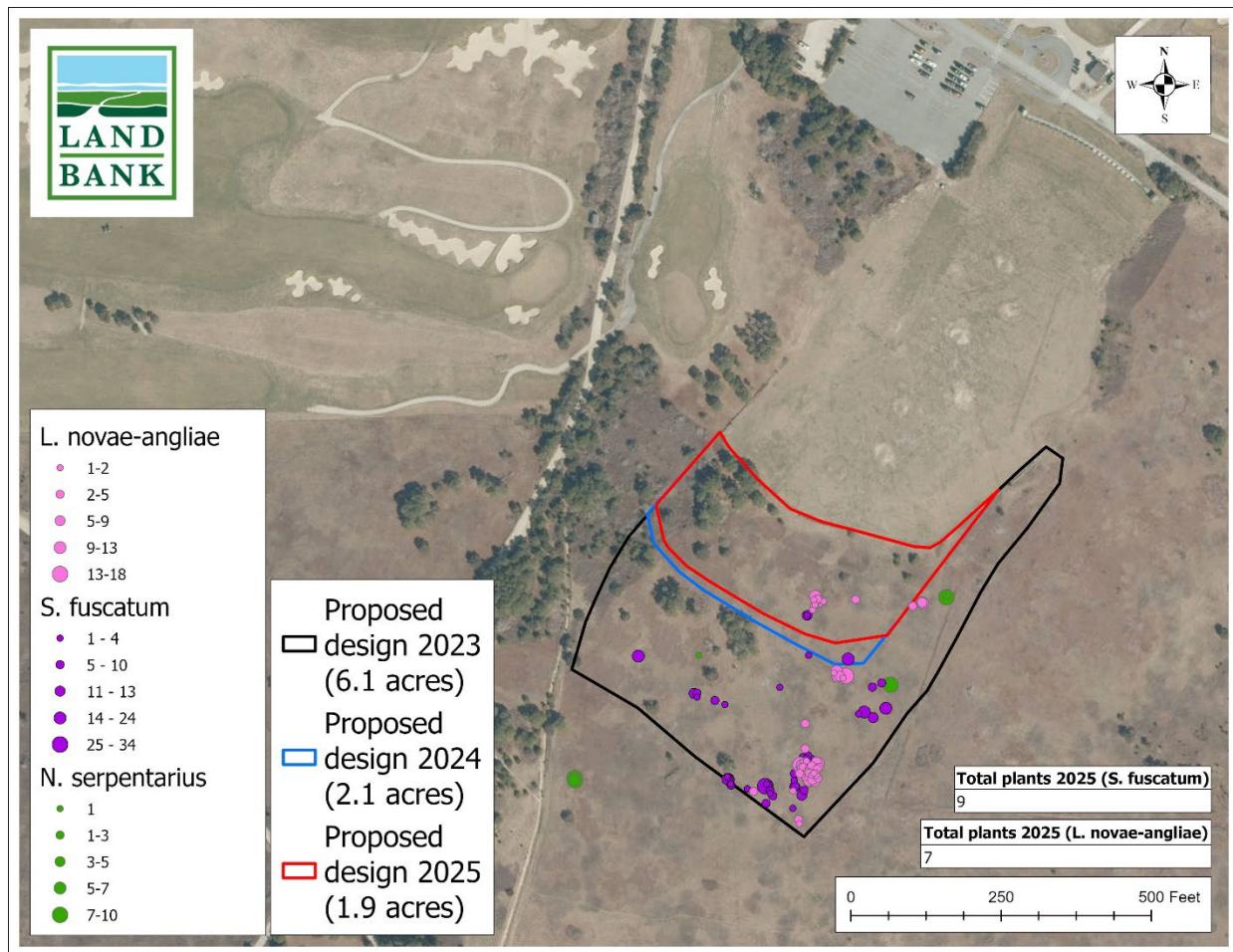


Figure 1. Map showing the sequential minimization of the planned project area following rare plant surveys. The 2025 planned project area now avoids *N. serpentarius* and minimizes impact to *L. novae-angliae* and *S. fuscum*.

2.2 Avoidance: Northern Harrier Survey

If site disturbance or construction is planned to start within the harrier breeding season (March 1 – June 30), a NHESP qualified biologist will perform northern harrier nest surveys within 500m of the disturbance area before work starts. The survey protocol will be submitted to and approved by NHESP before the surveys. If nesting activity is confirmed within 500m of the disturbance area then work schedules may be altered in consultation with NHESP. If work is planned outside of the harrier breeding season then nest surveys will not be necessary. Prior to the start of work, symbolic fencing shall be installed along the limit of work to avoid encroachment into habitat. Emily Goldstein Murphy PhD, NLB Director of Environmental and Agricultural Resources, was approved by NHESP to carry out these surveys on 27 February 2024.

2.3 Minimization: Transplantation of *Liatris novae-angliae*

NLB proposes to transplant all *L. novae-angliae* identified in the project disturbance area during the 2025 survey as sods, encompassing the individual plants, to adjacent equivalent habitat outside of the fence of the driving range expansion area. NLB will search the project area prior to the initiation of any clearing work for any additional *L. novae-angliae*, and if additional individuals are found they will also be transplanted. Transplantation can occur at any time of the year except when the species is flowering or setting seed. If needed, transplants will be covered by white 5-gallon buckets, white PVC silage tarp (staked and supported to provide airflow), or similar for no more than two days post-translocation to allow roots to establish without risk of desiccation. Alternatively, a period of several days of foggy or overcast weather could provide the same opportunity for root establishment. Transplants will be watered in the first and second year as needed.

The translocation area will be staked or symbolically fenced to prevent foot and vehicle traffic in the restoration area if necessary. Habitat restoration signs will be used to remind the public to keep off restoration areas.

The translocation area will be managed to support the establishment of the translocated plants or sods, with watering as required and weeding, trimming, or mowing to enhance survival of the translocated species and target sandplain grassland habitat. Following the completion of the transplant establishment phase, NLB staff will manage the site with mowing and/or prescribed fire and/or conservation grazing and/or scraping or other methods detailed in the Habitat Management Plan associated with the original permit in association with the rest of the Smooth Hummocks area at the landscape scale – working to prevent encroachment by shrubs, pines, and invasives and to maintain ideal conditions for state-listed species. Maintenance management will be performed at varying times across the calendar year to avoid selective pressure on certain species assemblages as might occur if mowing or other management always occurred at a specific time of year. In general, mowing will take place on this site every 3 to 5 years.

2.4 Minimization: Transplantation of *Sisyrinchium fuscatum*

The NLB proposes to transplant all *S. fuscatum* identified in the project disturbance area during the 2025 survey as sods, encompassing the individual plants, to adjacent equivalent

habitat outside of the fence of the driving range expansion area. NLB will search for *S. fuscum* prior to initiation of clearing work and if additional individuals of this species are found then NLB proposes to transplant all *S. fuscum* identified in the project disturbance area. Transplantation can occur at any time of the year except when the species is flowering or setting seed. If needed, transplants will be covered by white 5-gallon buckets, white PVC silage tarp (staked and supported to provide airflow), or similar for no more than two days post-translocation to allow roots to establish without risk of desiccation. Alternatively, a period of several days of foggy or overcast weather could provide the same opportunity for root establishment. Transplants will be watered as needed in the first and second year as needed.

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2.5 Mitigation Management

Mitigation management at the 1 Heller Way parcel will continue as in the approved Habitat Management Plan for CMP 86043/NHESP# 24-18497 (Cisco Parking Lot). We seek to withdraw 3.8 ac of mitigation credit from the mitigation bank at 1 Heller Way.

3.0 Translocation and Management Monitoring and Reporting

The names and contact information for the individuals responsible for supervising the translocation and habitat management activities referenced in the plan shall be given to NHESP prior to the implementation of management strategies.

Translocation monitoring and reporting timeline for the project:

Year 0:

- Translocation performed, frequent watering as needed. If disturbance is noted on site at watering visits, implement stronger habitat protection measures.
- Post translocation report to include: number of each target transplant species, map of GPS locations of transplants. Final methods and review of what went well/poorly
- Representative photos

Year 1:

- Frequent watering as needed. If disturbance is noted on site at watering visits, implement stronger habitat protection measures.
- Survey for target translocated species during their most visible time (generally flowering season: *S. fuscatum* mid-May – end June, *L. novae-angliae* mid-August – mid-September)
- Post survey report to include existing conditions, number and map of locations of target transplant species, management performed on the site this year, representative photos.

Year 2:

- Frequent watering as needed. If disturbance is noted on site at watering visits, implement stronger habitat protection measures.
- Survey for target translocated species during their most visible time.
- Post survey report to include existing conditions, number and map of locations of target transplant species, management performed on the site this year, representative photos.

Year 3:

- Survey for target translocated species during their most visible time.
- Remove habitat restoration signs and symbolic/split rail fencing if anthropogenic disturbance is not an issue.

-Determine success or failure of translocation project. If 90% of the number of transplanted *S. fuscum* and *L. novae-angliae* survive at this site then the project will be deemed a success.

-Post survey report to include existing conditions, number of target transplant species, success/failure determination, seed sowing plan or other plan if transplant failed under guidance and consultation with NHESP, management performed on the site this year, representative photos. Final translocation report if project is successful. Management of this site going forward will reflect management of the surrounding habitat.

Year 5 (if translocation project failed):

- Survey for target sown species during their most visible time.

-Post survey report to include existing conditions, number and map of locations of target transplant species, management performed on the site this year, representative photos. Final translocation report. Management of this site going forward will reflect management of the surrounding habitat.

Year 5 (if translocation project succeeded):

- Survey for translocated species during their most visible time.

-Post survey report to include existing conditions, number and map of locations of target transplant species, management performed on the site this year, representative photos. Final translocation report. Management of this site going forward will reflect management of the surrounding habitat.

Future reports to align with reporting schedule and requirements for CMP 02-021.DFW