

ENF Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs

EOEA No.: 13339
 MEPA Analyst: Rick Bourée
 Phone: 617-626-1130

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Redevelopment and Renovations at MacDougalls' Cape Cod Marine Services, Inc.		
Street: 145 Falmouth Heights Road		
Municipality: Falmouth	Watershed: Falmouth Harbor on Vineyard Sound	
Universal Transverse Mercator Coordinates: n.a.	Latitude: 41° 32.7' N	Longitude: 70° 35.9'
Estimated commencement date: 11/01/04	Estimated completion date: 4/30/06	
Approximate cost: \$6 million	Status of project design: 95% complete	
Proponent: MacDougalls' Cape Cod Marine Services, Inc.		
Street: 145 Falmouth Heights Road		
Municipality: Falmouth	State: MA	Zip Code: 02540
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Jo Ann Muramoto		
Firm/Agency: Horsley Witten Group	Street: 90 Route 6A	
Municipality: Sandwich	State: MA	Zip Code: 02563
Phone: (508) 833-6600	Fax: (508) 833-3150	E-mail: hwgroup@cape.com

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
 See 301 CMR 11.03(3)(b)(6) requiring ENF Yes No

Has this project been filed with MEPA before? Yes (EOEA No. _____) No

Has any project on this site been filed with MEPA before? Yes (EOEA No. _____) No

Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:

a Single EIR? (see 301 CMR 11.06(8))	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
a Special Review Procedure? (see 301 CMR 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

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres): None (not applicable)

Are you requesting coordinated review with any other federal, state, regional, or local agency?
 Yes (Specify _____) No

List Local or Federal Permits and Approvals: 1) Army Corps of Engineers Section 404 Individual Permit; 2) Congressional approval of Federal Navigation Project Amendment; 3) Order of Conditions under Falmouth Wetlands Bylaw; 4) Special Permit, Board of Selectmen; 5) Special Permit, Zoning Board of Appeals; 6) Variance, Board of Health, for septic system components located within building setbacks.

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- | | | |
|---------------------------------|---------------------------------------|--|
| <input type="checkbox"/> Land | <input type="checkbox"/> Rare Species | <input checked="" type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input type="checkbox"/> Water | <input type="checkbox"/> Wastewater | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air | <input type="checkbox"/> Solid & Hazardous Waste |
| <input type="checkbox"/> ACEC | <input type="checkbox"/> Regulations | <input type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
LAND				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input checked="" type="checkbox"/> Chapter 91 License <input checked="" type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i>
Total site acreage	4.72 acres			
New acres of land altered		0 (existing site is largely already altered)		
Acres of impervious area	2.54 acres (1.23 acres structures, 1.31 acres pavement). An additional 2.06 acres is gravel (semi-pervious).	Reduction of 0.09 acres of structures; reduction of 0.06 acres of pavement; total reduction of 0.15 acres of impervious structures and pavement. Reduction of 0.91 acres of gravel.	2.39 acres of impervious cover (1.14 acres structures, 1.25 acres pavement) and 1.15 acres of gravel (semi-pervious).	
Square feet of new bordering vegetated wetlands alteration		None (0)		
Square feet of new other wetland alteration		0.49 acres of Land Under Ocean proposed for dredging		
Acres of new non-water dependent use of tidelands or waterways		None (all water-dependent uses; no change in use)		

STRUCTURES

Gross square footage	Approx. 53,767 sq. ft (1.23 acres)	Reduction of approx. 3,989 sq. ft. (0.09 acres)	Approx. 46,189 sq. ft. (1.17 acres) to be rebuilt, + 3589 sq ft building to remain = 49,778 sq ft total
Number of housing units	0	0	0
Maximum height (in feet)	Approx. 46' for tallest structure.	No change	18'4", 40'9" and 46' above grade for repair building, storage building and customer pavilions, respectively.

TRANSPORTATION

Vehicle trips per day	Oct 15 – April 30: approx. 80 trips/day (staff); May 1 – Oct 15: approx. 160 trips/day (staff + customers)	Same or fewer (due to overall reduction in boat slips)	Same or fewer
Parking spaces	149	No change	149 are provided, of which 100 are allocated for boat slips. Of the 149 spaces, 92 will serve as boat storage area (not vehicle parking) from October to May.

WATER/WASTEWATER

Gallons/day (GPD) of water use	Approx. 1,500 gpd	No change	Approx. 1,500 gpd
GPD water withdrawal	0	0	0
GPD wastewater generation/ treatment	Title 5 onsite septic system	No change required	No change required

Length of water/sewer mains (in miles)	0	0	0
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CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

Yes (Specify _____) No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify _____) No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes (Specify _____) No

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

Yes (Specify _____) No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify _____) No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify _____) No

PROJECT DESCRIPTION: The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (You may attach one additional page, if necessary.)

See Attached Project Narrative and narrative below:

a) Existing Conditions. MacDougalls currently maintains 13 separate buildings, utility sheds, trailers and other structures on approximately 4.8 acres, as part of their marine service facility on the eastern edge of Falmouth Inner Harbor. The site is bounded by Falmouth Heights Road to the east, Grand Avenue to the south, a condominium complex to the north, and the harbor to the west. Nearly the entire site is paved, surfaced with gravel, built upon, or otherwise altered. The original coastal landforms in the harbor have been greatly altered from their natural condition, and coastal engineering structures, such as the existing permitted filled tidelands, bulkheads, and the riprap revetment at MacDougalls, have been in place for years, providing man-made protection against storm damage and flooding. The engineered structures that separate the tidal waters of the harbor from the land on which MacDougalls operates its facility include bulkhead and riprap revetment. Bulkheads are “relatively low and small seawalls designed not to protect buildings from waves, but to keep land from eroding from behind them.” The approximate length of all bulkheads at the site equals 630 feet. Portions of these bulkheads were constructed decades ago to contain fill placed at the margin of the harbor on which either structures were placed or from which piers were constructed. The riprap revetment along the margin of the North Basin is approximately 550 feet in length.

There are four existing dock systems, as well as a travel lift support system. The existing docks include the 227-foot A-dock and the 291-foot B-dock in the South Basin, the 195-foot C-dock in the middle of the waterfront, the travel lift support system, which measures approximately 90 feet by 35 feet, and the existing North Basin dock system, which consists of two long docks (230 feet and 367 feet long) parallel to the shoreline, connected by an 80-foot dock perpendicular to the shoreline, with an additional L-shaped dock that is 117 feet long. Docks are typically floats measuring six feet wide that are held in place by 12-inch diameter

timber pilings. The exception is C dock, which consists of floats that are approximately eight feet wide.

b) Proposed work. MacDougalls Cape Cod Marine Services, Inc. (MacDougalls) proposes to renovate and improve their boat repair, maintenance, and storage facility located on Falmouth Inner Harbor on Vineyard Sound. MacDougalls has operated a full-service marine service facility for private and commercial customers on this site since 1938. The original facility was established nearly a century ago. The existing facilities have become deficient and obsolete and are much in need of repair or replacement if the boatyard is to continue to provide marine services. Furthermore, improvements in infrastructure and site efficiency are needed to ensure that MacDougalls can continue to operate as a full-service marina into the second half of this century. Without site improvements and upgrades, in particular the North Basin dock system expansion, MacDougalls will not be in a financial position to undertake site-wide renovation and repairs (i.e., the proposed North basin dock system is an economic driver for the renovation of the entire site).

MacDougalls' proposes to reorganize and consolidate service operations by constructing three buildings to replace approximately 13 existing buildings and structures. Only two existing structures will remain. The new buildings will include a two-story customer service pavilion, a heated off-season boat storage, repair, and refinishing building, and a retail outlet building. These new buildings will provide a needed and currently lacking separation between the boat service and customer service areas.

MacDougalls proposed site redevelopment project would result in dramatic improvements in site-wide stormwater management, a much-needed consolidation of service buildings, an increased capacity for dockage of larger vessels that leads to no increase in the number of vessels, and improved services. The area is zoned for marine use, and there will be no change in use or intensity of use. Renovation will allow MacDougalls' to conduct necessary repairs and maintain and improve recreational boating services. Proposed project components include the following:

- Demolition of existing buildings and reconfiguration and reconstruction of buildings to provide more efficient working areas and to improve the aesthetic appearance of MacDougalls;
- Remove existing 80' x 20' travel lift and construct a new 73' x 24' travel lift in Falmouth Harbor and install two 6'x12' working floats totaling 144 sq ft at the end of the travel lift and ladder for access; work floats will not be used for boat slips but for marine repair work. A total of 24 12-inch diameter greenheart timber pilings will support the travel lift, covering an area of approximately 38 sq ft.
- Remove existing fill and two marine railways, increasing the area of Land Under the Ocean by approximately 2,531 sq ft and reconstruct approximately 630 linear feet of existing bulkhead using vertical sheet piles;
- Dredging in the South Basin dockage area (the South Basin) to achieve a depth of -6 feet below Mean Low Water (MLW) over an area not to exceed 0.49 acre and a volume not to exceed approximately 3,010 cubic yards (cy). The purpose of dredging is to allow boats to continue to use the existing docks in the South Basin, which is difficult at present due to the shallow depth. Dredged materials will be dewatered onsite and used as part of the backfill for the reconstructed bulkhead. Dredging is not being done for the purpose of providing backfill, but rather to allow continued use of the existing permitted docks for recreational navigation.
- Remove existing North Basin docks and northern travel lift dock and reconstruct, reorient and extend North Basin dock system comprising three main anchor dock systems of 192 ft., 175 ft, and 105 / 70 ft. in length, respectively, with 16 finger piers as shown on plans, totalling 7,545 sq ft of float area (pending Federal approval of Federal Navigation Project amendment). Floats to be held by 53 12" pipe pilings, spaced 30 feet apart (bottom area covered by pilings is 41.6 sq ft). The proposed extension of the dock system into the existing Federal Navigation Project boundary requires an amendment in the boundary, which has been supported by the Town, reviewed and passed by the Army Corps of

Engineers, and included in the 2003 federal waterways reauthorization bill currently before the U.S. Senate;

- Construct two short (6' x 42') working docks off reconstructed bulkheads, totaling 504 sq ft, for the purpose of conducting marine repair on boats in the water and not intended as boat slips;
- Remove existing 6' x 20' timber dock in Southern Basin.
- Improve stormwater drainage and provide treatment of stormwater runoff not provided under existing conditions (See attached **Stormwater Management Summary, below**). Grade site to eliminate runoff entering the Harbor directly and orient stormwater runoff towards center of site and away from Falmouth Harbor, and install stormwater management (stormwater collection, water quality swales, filtration, and treatment consisting of bioretention basins and Vortech system) to treat runoff from the entire site and a portion of the adjacent Boatyard Condominiums site. Removes TSS, bacteria, pollutants and nutrients according to DEP Stormwater Policy and Falmouth Wetlands Bylaw, prior to discharge to Falmouth Harbor. Pervious area will increase from existing.
- Demolish approximately 13 existing buildings and reconfigure and reconstruct 3 buildings, with associated clearing, excavation, grading, paving, utilities and landscaping.

Stormwater Management Summary

Existing Conditions:

- Currently all stormwater from the site flows untreated to the harbor either via overland flow or is directly discharged through an existing Town 10-inch diameter pipe.
- The area contributing to the site's drainage system is approximately 6.2 acres, of which 89% is currently impervious. Proposed conditions will reduce the percentage of impervious to 79%.

Proposed Stormwater Management:

- Grading changes will eliminate the existing direct discharges via sheet flow into the harbor, and will allow nearly all of the site runoff to be collected and passed through the stormwater treatment system.
- The proposed stormwater systems will be sized to contain the 1.25-inch storm ("water quality" storm). For all other storms (2-, 10-, 25-, 100-year events), the post-development peak flow rates and volumes for the entire site will be reduced due to the decrease of impervious area.
- The proposed stormwater treatment systems will reduce total suspended solids (TSS), nutrients, pathogens, metals and hydrocarbons, and other stormwater pollutants.
- The proposed stormwater system is designed to treat a water quality volume of 1.25 inches of runoff and consists of:
 - Bioretention, or "rain-garden" facilities, that treat 34% of the site runoff
 - Dry water quality swales that treat 12% of the site runoff
 - A proprietary stormwater treatment system device (Vortechs), that treats 47% of the site runoff
 - Vegetated open space areas and grass channels for pretreatment that treat 7% of the site runoff
 - Stormwater collection inlets
 - A closed storm drainage piping system to convey runoff from open channels, dry swales,

bioretention systems, drainage inlets, and the proprietary stormwater treatment device to the outfalls, following treatment.

- The overall total suspended solids (TSS) removal rate for the site is calculated to be 81%, and the overall total nitrogen (TN) removal rate is calculated to be 19%.
- The proposed system will utilize butterfly valves to provide spill containment in the event of a hazardous materials spill.

Erosion and Sediment Controls during Construction (*also see Erosion and Sediment Control Plan*)

- *Erosion Control Barrier* - haybales and silt fence will be installed on site prior to construction
- *Stabilized Construction Entrance* – stone entrance will be installed prior to construction
- *Inlet Protection* – all existing and new inlets on site will be protected with haybales and/or “silt sack” inserts
- *Slope Stabilization* – controls will be installed immediately following final grading
- *Surface Stormwater Management Systems* – will not be constructed until contributing drainage area to each has been stabilized. Systems will not be used as temporary sediment traps.

Long-Term Operation and Maintenance

- *Bioretention Systems*
 - Inspected semi-annually for the first year, annually thereafter, and after major storm events.
 - Planting soil bed will be monitored semi-annually for pH, erosion, and aeration.
 - Minor soil erosion gullies should be repaired when they occur.
 - Pruning or replacement of vegetation should occur when dead or dying vegetation is observed.
 - Separation of herbaceous vegetation root shock should occur when over-crowding is observed, or approximately once every 3 years.
 - The mulch layer should also be replenished (to the original design depth) every other year as directed by inspection reports.
 - If at least 50 percent vegetation coverage is not established after two years, a reinforcement planting should be performed.
 - If the surface of the bioretention system becomes clogged to the point that standing water is observed on the surface 48 hours after precipitation events, the surface should be roto-tilled or cultivated to breakup any hard-packed sediment, and then revegetated.
- *Dry Swales*
 - General inspection annually, and after major storm events
 - Trash/debris removed when build-up is greater than 3 inches
 - Grass mowed at least 4 times/year to a height of 6 inches
 - Erosion gullying and reseeding as necessary
 - If standing water observed after 48 hours, bottom to be cultivated to remove hard-packed sediment and underdrain system to be flushed
- *Vortechs System*
 - Inspection and maintenance intervals vary, but are recommended quarterly for the first year.
 - Clean out is required once the stored volume reaches 15% of the device’s capacity, or immediately in the event of a spill.

- *Riprap at Outfalls*
 - Inspected annually, cleaned and repaired as necessary
- *Other Routine Maintenance*
 - Removal of trash and litter from paved and pervious areas
 - Annual street sweeping in the Spring
 - Annual inspection of inlets/pipes and cleaned and repaired as necessary

Construction will be done in two phases, commencing in November of 2004 (following issuance of required authorizations), beginning with Phase I (dredging, bulkhead reconstruction, travel lift reconstruction, North Basin dock construction, demolition of near-bulkhead buildings, and filling and grading), and concluding in the spring of 2006 with the completion of Phase II (construction of buildings and landscaping), with a majority of the work occurring in the off-seasons. No related activities will be developed as a result of the project. This project is a proposed Single and Complete Project (314 CMR 9.02).

c) Alternatives. Alternatives for this project include a) Repair and reconstruction of the bulkhead only, and maintenance dredging of the North and South Basin. This is required, at a minimum, in order to allow boats to continue to use the existing facility for docking, maintenance and repair. b) No-action-alternative. This alternative would not allow MacDougalls' to either repair or renovate or improve its facility, which would result in disrepair and loss of its customer base over time. The Alternatives analysis is further described in the Project Narrative (attached).

d) Mitigation. Construction mitigation measures are described below.

- Floating debris boom and siltation curtains will be used during dredging / bulkhead reconstruction work to prevent/minimize sediment resuspension. Debris boom will be cleared of debris on a daily basis. Silt curtains will be inspected daily and maintained to prevent dispersal of sediments outside the dredging area.
- Erosion control measures on land during construction will include double row of staked straw bales and silt fencing, to be maintained in effective condition during project.
- Dredged materials to be dewatered inside a filter fabric-lined basin created by staking straw bales, with drainage water to be passed through a second filtering basin prior to discharge into Falmouth Harbor; will be monitored continually to ensure untreated water and sediments do not enter Harbor.
- Boat sanding, washing, and painting are carried out indoors, over an impervious tarp, which is then disposed of at an approved hazardous waste disposal facility.
- Oil spill response kit is on hand at all times.
- Shellfish mitigation plan was developed in consultation with the Town of Falmouth Shellfish Warden, and will consist of constructing a shellfish seed growing tank ("shellfish upweller") which will be used to grow commercial shellfish species from seed to a suitable size for dispersal.
- Construction debris will be taken offsite to an approved disposal facility as soon as feasible.
- Construction equipment will be kept in a designated staging area. Newer biodegradable oils will be used in hydraulic pile-driving equipment, instead of hydraulic and motor oils used in past.
- Native plant species used in stormwater bioretention basins and in landscape plantings. Area of native

plantings in bioretention basins will increase by approximately 3,000 sq ft over existing.

e) Benefits. The project will greatly improve the water quality in Falmouth Harbor by treating stormwater runoff, which constitutes a significant public benefit of the project as a whole. Other benefits include a reduction in the number of customer slips for boats, improvement of the aesthetic appearance of the waterfront, shellfish habitat mitigation developed in consultation with the Town of Falmouth Shellfish Warden, Town of Falmouth Department of Natural Resources, and the Division of Marine Fisheries (i.e., shellfish upweller / growing tank for shellfish seed), an increase in the area of Land Under the Ocean through removal of fill from flowed tidelands, removal of failing metal bulkhead components which may be a source of pollutants to nearby sediments in the Harbor and replacement with non-polluting materials, an increase in pervious cover area, an increase in the area of native vegetation on the site (including vegetated bioretention basins for stormwater management and other plantings to create vegetated habitat that currently does not exist on the site), and improved accessibility to emergency personnel.

MacDougalls' will continue to provide other environmental and public benefits which they have provided for years, including operating a septic pumpout boat, maintaining a small beach on the southern end of the parcel, employing BMPs in managing boat service and repair operations to avoid water pollution and minimize water use, and allowing public passage to the waterfront subject to safety and liability constraints associated with marina work. The renovation will allow MacDougalls' to continue to provide marine services for the next several decades, helping to maintain a maritime character that is in keeping with the historical and traditional maritime nature of Falmouth.