Ocean Spray

File No.: 198700113

City and State: Middleboro, MA

General Impacts: 0.35 acre non-tidal scrub-shrub

Functions and Values Lost: Wildlife habitat

Year(s) Mitigation Constructed: October 1988

Size and Type of Mitigation as Proposed: 0.37 acre

Proposed Functions and Values of Mitigation: Wildlife habitat (see specifics below)

Mitigation Special Condition(s) (per 1/23/91 memo as permit could not be located):

4. Approximately 16,250 s.f. of wetlands shall be created to compensate for the loss of 15,105 s.f. of wildlife habitat due to parking lot construction. Replacement wetlands shall be designed to replace lost wildlife habitat of the isolated depressions. The wildlife habitat that is established should support typical wildlife species of shrub wetland and open water areas in Massachusetts including marbled and Jefferson salamanders, wood frogs, northern spring peepers, wood and black ducks, yellow rumped warblers, tree swallows, winter wrens, and yellow throats, mike, and raccoons.

5. The wetlands replacement area shall contain 1 to 2 feet of standing water surrounded by a band of wetland shrubs to approximate those conditions lost by the parking lot fills.

6. Construction of the 16,250 s.f. replacement wetland area shall take pace in one phase as follows:

- a. The replacement area shall be excavated to a depth of 6" to 12" below the final grade, to the elevation of adjacent wetland U-4 to simulate the same groundwater conditions.
- b. Stockpiled soils from the lost wetland areas and supplemental plants of indigenous wetland species shall be utilized to revegetate the replacement wetland.
- c. Plantings shall occur from April 1 to September 30 and will consist of placement woody shrubs such as Highbush Blueberry, Black Alder, Swamp Azalea, and Sweet Pepperbush approximately 6' apart in a band around the upper edge of the basin.
- d. A temporary stabilization program for exposed areas shall be implemented which shall include broadcast seeding or hydromulching and placing staked hay bales between the perimeter of work areas and the existing wetland.

7. The replacement wetland shall be located south of impacted wetland U-4 and will be hydrologically fed by its proximity to groundwater.

8. The activities described above will be carried out by the permittee or his representative. The permittee will be responsible for maintenance and management of the area. After implementation, all sites shall be monitored annually during the first three growing seasons by the permittee. Monitoring shall include observation of the extent of standing water in the area, the amount and type of plant growth in each vegetation zone, and observable changes in the amount and type of wildlife. At the end of each growing season the replacement wetland will be photographed to provide a visual record of changes in vegetation, and the permittee will walk a transect through the site to record water levels, plant species, and vegetative density, until planted materials are successfully established. A progress report will be forwarded to the Corps of Engineers annually for three growing seasons. It is expected that the replacement wetland will be fully revegetated and stable in approximately three years.

Mitigation Plan:

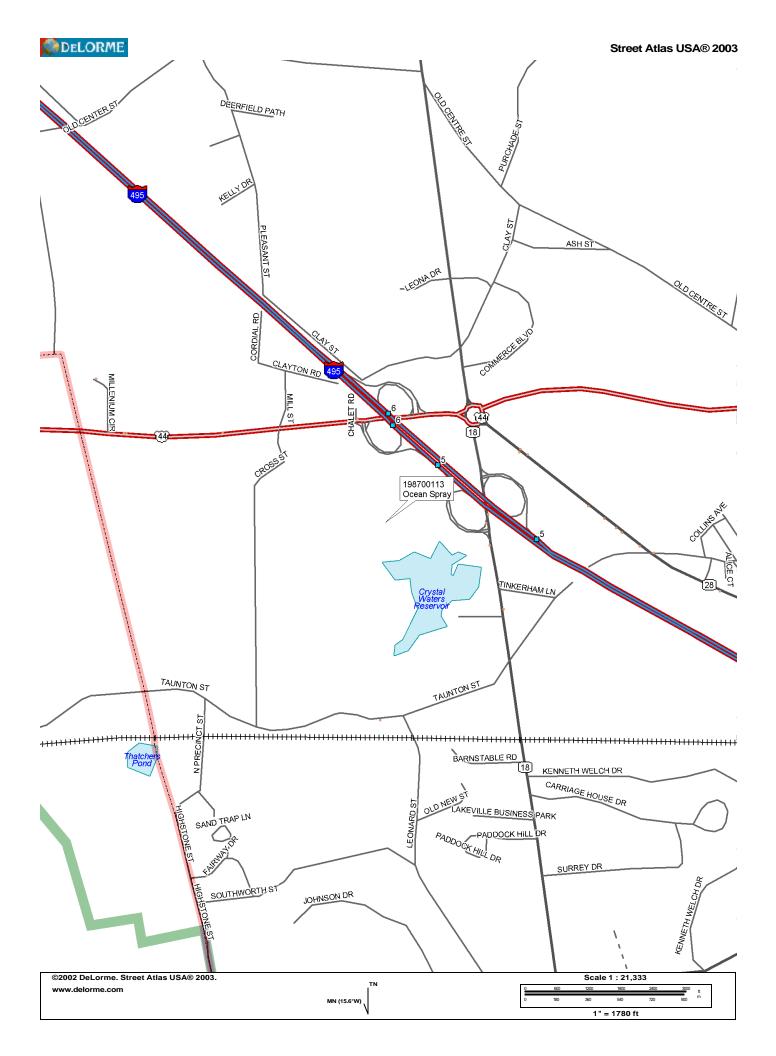
Figure 4 dated July 1986, revised 1/30/97 shows "isolated wetland replacement". Figure 10A dated 1/30/97 entitled, "Proposed wetland/bog replacement".

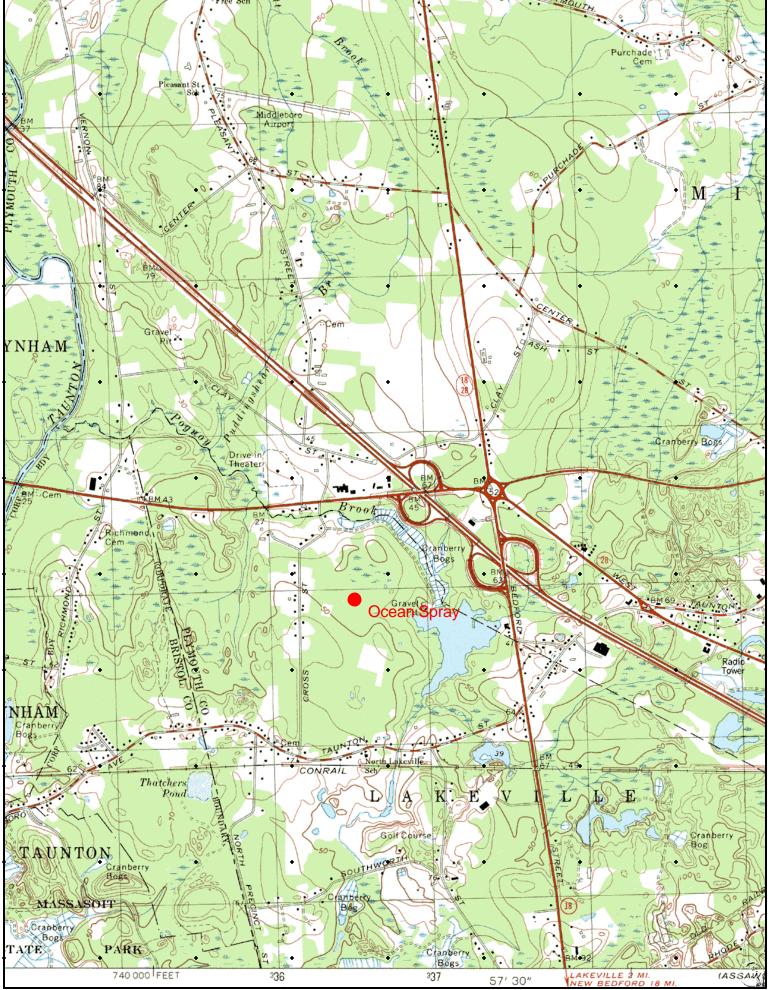
Remarks:

File is not complete; unable to find full information on microfilm.

Directions:

Take I-95/128 south to I-93 north to Route 24 south. Stay on Route 24 for approximately 19 miles to Route I-495 south. Take exit 5, Route 18 in Lakeville. Go down the hill and Ocean Spray will be on right. (Note: when see exit 6, Route 44, make sure are in the right hand lane because exit 5 comes very quickly.) Drive into the parking lot past headquarters and the visitor parking that is on the right. Turn right after the visitor parking, pass the pond on right, and then turn left. Park in the corner ahead and on the left. The site is near that corner and visible through the trees.





Copyright (C) 1997, Maptech, Inc.

MITIGATION SITE FIELD DATA FORM

Site Name:	Ocean Spray	File No. 198700113			
City/Town:_	Lakeville/Middleboro	State: MA	Waterbody:	N/A	
Monitor(s):_	Keith Wright, Ruth Ladd,	Kathleen McKee	Date: 7-10-02		
Was site con	structed? yes				
Is site wetlar	nd? yes				
Size of propo	osed wetland: 0.37 acre (16				
Actual size o sf (based on p	f wetland: approximately 1 pacing)		rubrum la populifolia		
	oosition: approx. 2 miles ea River adjacent to forested we	st of Ceph etland Cleth	n sp. palanthus occidentalis pra alnifolia ptonia peregrina		
Lat/Long Po	ints: N 41.89636 W070.967	07 Corn	chium arundinaceum		
Saved GPS V	Waypoint name: OCS	Gayl	ussacia sp. us effusus		
GPS Trackir	ng Log Name: N/A	Lysin	nachia quadrifolia nachia terrestris		
Perimeter:	ГВD	Nupl	nar lutea unda cinnamomea		
	g land use: ides, mowed grass leading to nd office park on one side.	o Pinu. Poly	s strobus trichum sp. ıs hispidus		
Is wetland fu surrounding No	inction compromised by land use?	Salix Salix	discolor		
Plant health: Healthy	:	Spha Spirc	gnum sp. gea tomentosa inium corymbosum		
Invasive spec	cies:	Vacc	inium corymbosum inium macrocarpon rnum dentatum		

Invasive species: None

Wildlife use: None observed

Soils data:

Pit located in northwest portion of the site.

DEPTH 0.5" - 0	HORIZON O	MATRIX	REDOX	COMMENTS
0 - 10.5	A	10YR2/1	starts near surface 5-10% 2.5YR3/4	ribbons out to 1" medium sandy clay loam
10.5 – 12	Bw	2.5Y5/4	10YR4/6	mostly sand and loamy fine sand very abrupt change from A
12->27	С	2.5Y6/3		fine sand; saturated (water table at 28")

Sketch approximate mitigation site, noting areas and types of wetlands, waters, other features, landscape position, landmarks, etc., and data and photo point(s)

See field notes.

Overall Description of site:

Site is very mossy (*Sphagnum* spp. and haircap moss). A mowed grass lane leads to site from parking lot. A pile of grass clippings sits on the border of the lane and the site. The northern 2/3 of the site is seasonally saturated to surface while the southern 1/3 is inundated for an extended period during the growing season with several inches as evidenced by *Sphagnum* spp., hummocks, and marks left behind by water. There is an upland 'island' in the center near the western limit of the site.

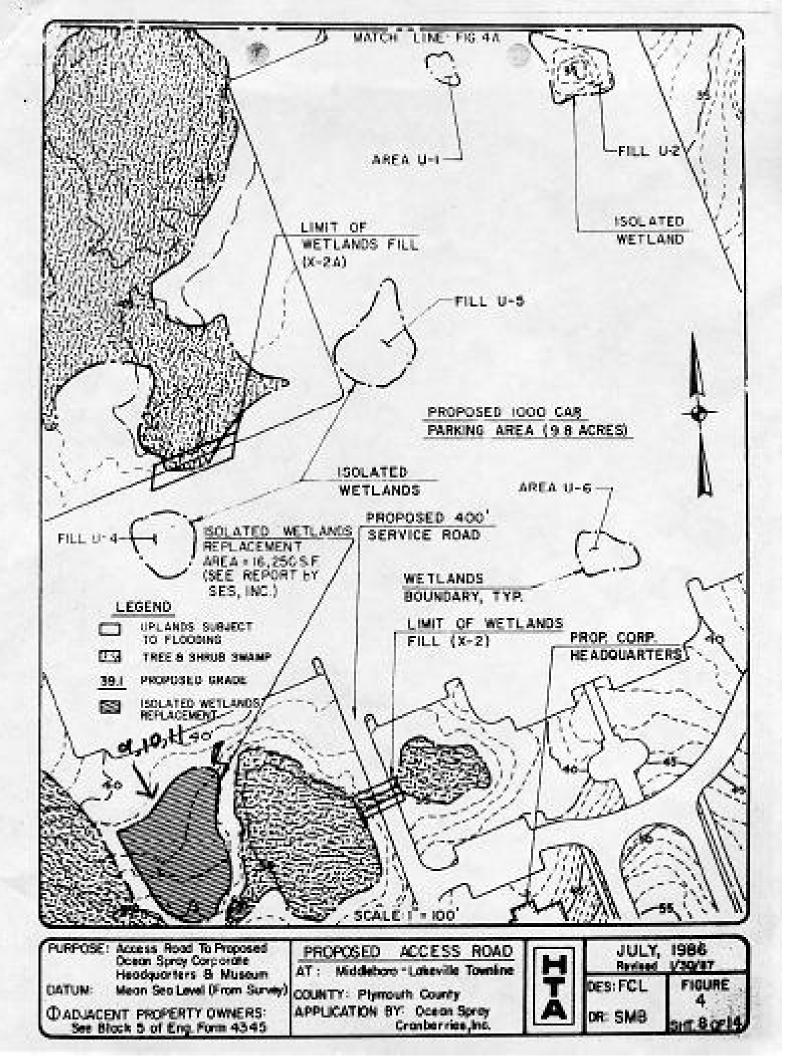
Comments, problems, recommendations:

Site was supposed to be a scrub-shrub wetland. The northern part of the site is gradually moving toward that designation but the majority of the site is a shallow marsh or wet meadow.

Water table was 28" below surface on north side and 18" on south side at the time of the site visit.

There are probably vernal pools in the forest down slope and to the east. We saw many water-stained leaves in the adjacent wetland that probably would be under 18" of water in the spring, based on the position and size of woody plant hummocks.

A 24" deep monitoring well was installed 20' in front of the pile of grass clippings. The lower 14" of the well was slotted. The top of the well is about five inches above the ground.



			Ocean Spray 198700113	
0.25 ac yes	no?	no	N41.89636	W070.96707
forested upland and wetland; lawn		50'	Wright	7/10/02
PEM		yes		
no				
0			Х	
			X Distinct bo	ındary
X	Х	recharge due to sands		
	Х			
	Х			
X		Dense vegetation. Currently no known sources.		
Х		Dense vegetation. Currently no known source.		
Х		Food for wildlife.		
	Х			
Х	Х	Food sources; next to large forested area.		
	Х	Private property		
	Х	Private property		
	Х			
	Х			
	Х	None known		

198700113 Ocean Spray Cranberry Middleboro, MA 7/10/02



View looking southeasterly from near the northwest corner of the site. The upland "island" is on the right.



Looking easterly towards the middle of the eastern side of the site.



Close-up of area at southern end of the site with evidence of ponding.



Close-up of *Sphagnum* sp. mat with *Nuphar luteum* (yellow pond lily) in the area which is inundated for a portion of the growing season.



EUSGS 4 km W of Middleboro, Massachusetts, United States 03 Apr 1995

Image courtesy of the U.S. Geological Survey © 2003 Microsoft Corporation. All rights reserved.