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July 7, 2005

GeoInsight Project 3871-000

Richard Packard  
Massachusetts Department of Environmental Protection  
Southeast Regional Office  
Bureau of Waste Site Cleanup  
20 Riverside Drive  
Lakeville, Massachusetts

Re: IRA Plan Modification  
Shoreline Segment W2A-11 West Island West, Fairhaven  
DEP RTN 4-17786  
Barge B120 Spill  
Buzzards Bay, Massachusetts

Dear Mr. Packard:

GeoInsight, Inc. (GeoInsight) prepared this Immediate Response Action (IRA) Plan Modification to remove a small area (measuring approximately 7 feet by 10 feet) of sediment impacted by residual oil along the western side of West Island in Fairhaven, Massachusetts. An IRA Plan dated September 15, 2003 for the Buzzards Bay shoreline was submitted to the Massachusetts Department of Environmental Protection (MADEP) for shoreline inspections and limited oil removal. Subsequent modifications to the IRA Plan were prepared in April and July 2004 to remove residual oil at Hoppy Landing on Long Island in Fairhaven. The Bureau of Waste Site Cleanup (BWSC) transmittal form 105 is attached.

The small area of impacted sediment at this location on West Island consists primarily of sand-size sediment with oil present on the particle surfaces, and a small amount of oil in the interstitial pore spaces. The impacted sediment is not visible on the surface as it is covered with approximately one inch of unoiled sediment. This IRA Plan modification proposes to remove the impacted sediment using hand tools (e.g., shovels). Refer to Figure 1 for the approximate location of the proposed work area. The residual oil is believed to be from the release of No. 6 fuel oil from Bouchard Barge #120 (B120) in Buzzards Bay, Massachusetts on April 27, 2003.



## 1.0 BACKGROUND

Under the direction of Unified Command, which was comprised of representatives from the United States Coast Guard, MADEP, and the responsible party (Bouchard Transportation Company, Inc.), initial response actions were conducted between April 23 and September 3, 2003. The maximum degree of initial oiling at this segment was characterized as relatively heavy, and cleanup activities were conducted under the direction of Unified Command. Because the shoreline consists primarily of rocks and cobbles, initial cleanup activities at this segment consisted primarily of high pressure, hot water (“hotsy”) rinsing of oil from rock surfaces. On August 13 and 14, 2003 this segment was inspected by members of the Unified Command and was found to meet the cleanup endpoints established in the May 23, 2003 Immediate Response Action: Treatment and Completion Guidelines Plan (IRATCGP) that was developed for the release by Unified Command.

After September 3, 2003, response actions were continued as part of the IRA Plan dated September 15, 2003 IRA Plan. As part of IRA activities to evaluate the potential for residual oil impacts at segments adjacent to closed shellfish beds, inspections at selected segments, including segment W2A-11 (West Island West), were performed in July, August, and September 2004. On September 9, 2004 field personnel visited segment W2A-11 and found a small area of oil-impacted sediment below a layer of unoiled sand approximately one inch thick. Delineation of the approximate extent of the impacted soil was conducted on September 22, 2004 and the oil-impacted sediment was found to be in a layer approximately three to four inches thick, and was located primarily in an area measuring approximately seven feet by ten feet. Three smaller, localized oil-impacted areas, measuring less than approximately four inches in diameter and less than approximately three inches thick, were also encountered within 15 feet of the larger area. The oil-impacted area is located on the west side of West Island at approximately N41° 35.554 W70° 50.188 and is shown on Figure 2. The shoreline substrate in the cleanup area is composed primarily of sand and cobbles. For reference, this area is located to the northwest of the intersection of Fisherman’s Road and Balsam Street.

## 2.0 SENSITIVE RECEPTORS

The area of proposed work is located in the middle to upper intertidal zone adjacent to Buzzards Bay (Figure 2). To evaluate potential sensitive receptors in the Buzzards Bay area, GeoInsight obtained information from the MADEP Massachusetts Geographic Information System (MassGIS) website (Figure 3). Additionally, the Proposed Cleanup Area Map (Figure 2) includes priority habitat (as of 2003) information obtained from Natural Heritage & Endangered Species Program (NHESP).

Review of the MassGIS Map indicated that the proposed work area is not in a protected open space or an Area of Critical Environmental Concern. Mapped wetlands are not located in the proposed work areas, although the cleanup activities will be conducted in the intertidal zone. The segment is not located within a Zone II, an interim wellhead protection area, a potentially-productive aquifer or a sole-source aquifer. Schools are not located within 500 feet of the



proposed work area. The nearest residence is located approximately 100 feet northeast of the proposed work area.

Typically, the intertidal zone of the shoreline provides habitat for various species, such as shorebirds and marine invertebrates that are common in the Buzzards Bay area. Information obtained from the NHESP indicates that the proposed work area is not located within threatened or endangered species habitat.

### **3.0 PROPOSED CLEANUP ACTIVITIES**

Cleanup activities will be conducted by 3 to 5 workers using hand tools (e.g., buckets, hand shovels, large shovels, wire brushes); mechanized equipment will not be used to remove the residual oil. The impacted sediment is located in an area without marsh vegetation, and the cleanup activities are not expected to cause adverse impacts to nearby vegetation.

The removed sediment will be placed in polyethylene bags for transport out of the work area. Waste material will be transported under Bill of Lading to the SEMASS facility in

Rochester/West Wareham, Massachusetts for disposal in accordance with legal requirements.

During the cleanup activities, absorbent pads and/or “sweep” (rolls of oil absorbent material) will be placed within the work areas to contain sheen that may be released by sediment removal.

It is anticipated that the cleanup activities will be completed in one day. A post-cleanup inspection will be conducted approximately one week after cleanup activities have been completed to evaluate the effectiveness of cleanup operations. The inspections will consist of visual observations of shallow test pits excavated in the cleanup area.

GeoInsight estimates that less than 2 tons of oiled sediment and absorbent materials will be generated by this operation. The proposed activities are not expected to pose disruption to recreational activities because this area is composed mostly of rocks and cobbles and relatively few people use this area.

### **4.0 SCHEDULE**

Because the oil observed is present primarily in the intertidal zone, cleanup will be conducted within the 6-9 hour low tide work window (approximately 3 to 4 hours before and after low tide). GeoInsight anticipates that the proposed cleanup will be completed in one day, and the proposed cleanup is scheduled to be conducted on Friday, July 22, 2005. The post-cleanup inspection will be conducted approximately one week after the cleanup. GeoInsight will evaluate alternative or further cleanup strategies, in consultation with the MADEP, if the post cleanup inspection indicates that additional cleanup activities are necessary under this IRA.

Please feel free to call me at (978) 692-1114 if you have any questions or if you would like to discuss this project.

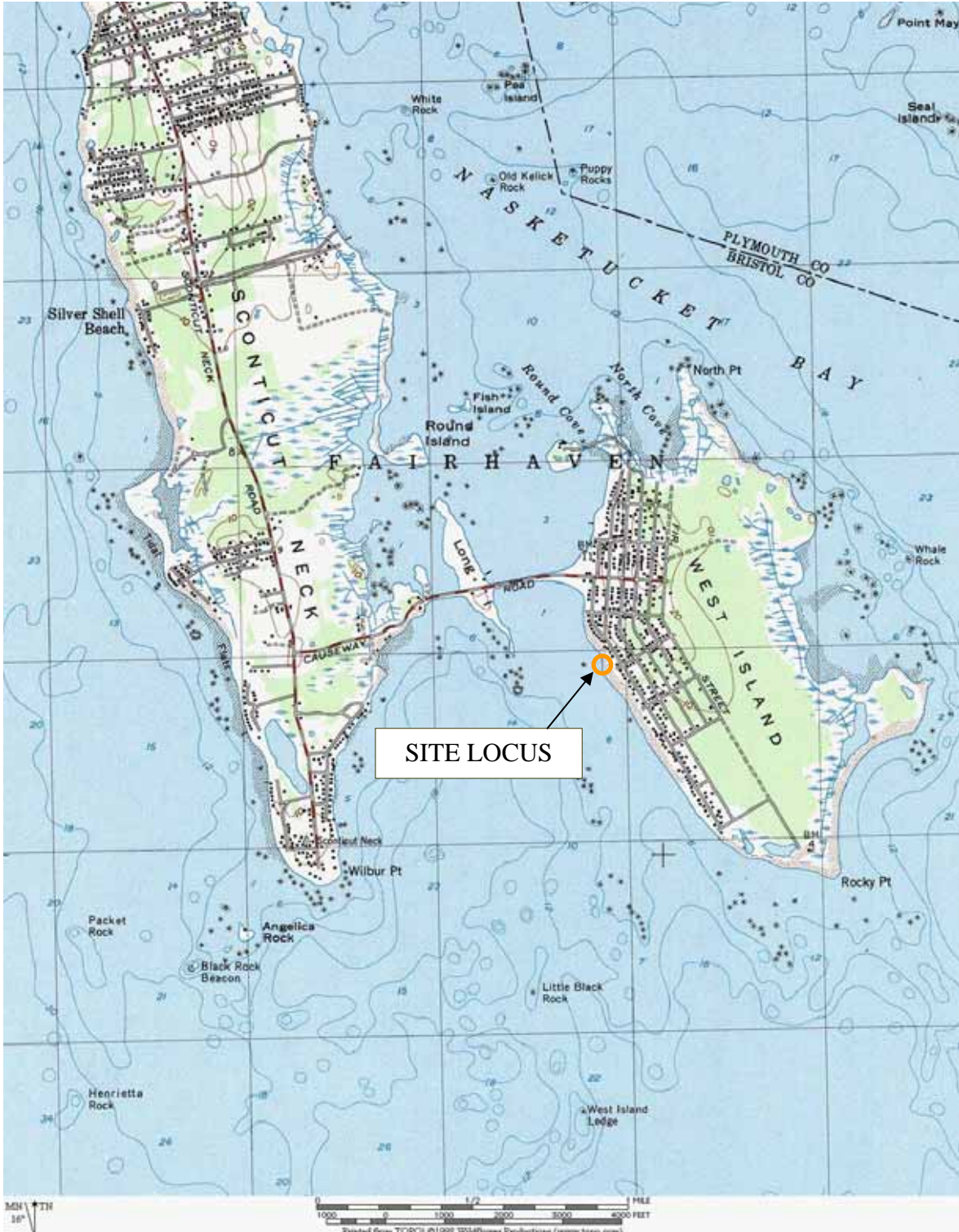


Sincerely,  
GEOINSIGHT, INC.

Kevin D. Trainer, P.G., C.P.G., L.S.P.  
Senior Project Geologist

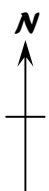
Attachments: Figure 1 – Site Locus  
Figure 2 – Proposed IRA Cleanup Location  
Figure 3 – MassGIS Map  
BWSC Form 105


cc: Victor Corso, Bouchard Transportation Company, Inc.  
Andrew Davis, LeBoeuf, Lamb, Greene & MacRae LLP  
Rick Wozmak

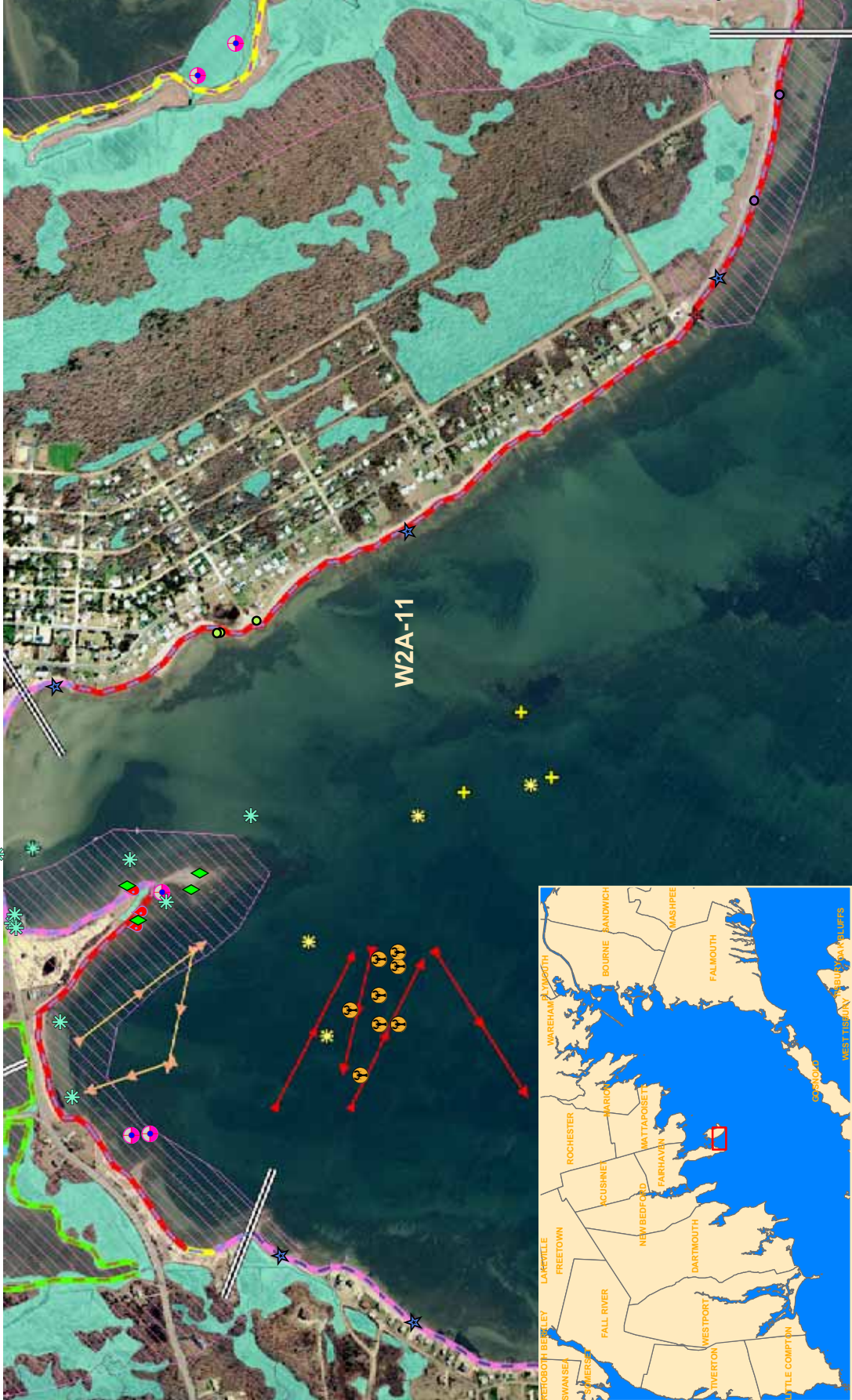


SITE LOCUS

SOURCE:  
USGS Sciticut Neck Quadrangle dated 1978



		PROJECT: Bouchard B120 Oil Spill Buzzards Bay, Massachusetts		
		LOCATION: West Island Fairhaven, Massachusetts		
TITLE: SITE LOCUS				
CONTOUR INTERVAL: 10 Feet	DRAWN: KDT	CHECKED: KDT	APPROVED: MJW	FIGURE: <b>1</b>
SCALE: AS SHOWN	DATE: 5/25/05	FILE NO.: 3871SL	PROJECT NO.: 3871-000	



**Trench Location**

- 11/2004
- 10/2004
- 09/2004
- 08/2004
- 07/2004
- 06/2004
- 04/2004
- 03/2004
- 01/2004
- 12/2003
- 11/2003
- 10/2003
- 09/2003

**IRAC ESI**

- Public-Private Sand Beach (1A/1B)
- Mixed Sand and Gravel (1C)
- Marsh (1F)
- Rocky Shoreline (1E)
- Riprap, Groin, Jetty (1D)

**OILING**

- NO DATA
- CLEAN
- VERY LIGHT
- LIGHT
- MEDIUM
- HEAVY

**Shellfish Sampling Location**

- Shellfish Sampling Location 2004
- Chain Drag Location 2003
- Chain Drag Location 2004
- Lobster Pot Sampling Location 2003
- Absorbent Pad Sampling Location 2003
- Dive Sites
- Wetlands
- Nests
- Vernal Pool
- NHESP 2003 Priority Habitats for State-Protected Rare Species

**Nearshore Subtidal Sediment Sampling Location 2004**

- Nearshore Subtidal Sediment Sampling Location 2004
- Deep Subtidal Sediment Sampling Location 2004
- Subtidal Sediment Sampling Location 2003
- Qualitative Shellfish Surveys 2004
- Marsh Sampling Location 2004
- Marsh Core Sampling Location 2004
- Water Sampling Location 2004
- Water Sampling Location 2003
- Intertidal Sediment Sampling Location 2003
- Intertidal Sediment Sampling Location 2004

**Scale and Orientation**

0 500 1,000 Feet

North Arrow

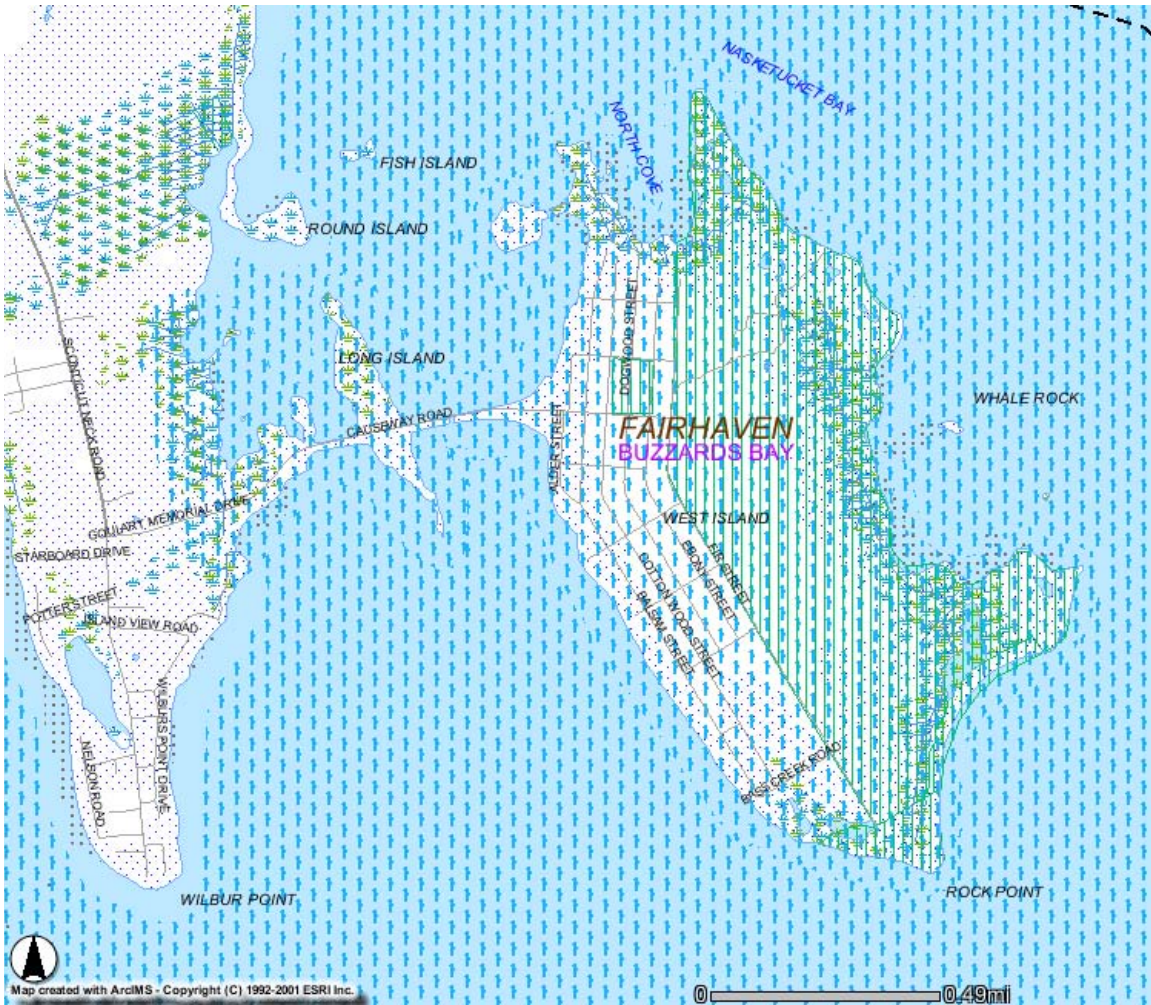
**W2A-11**

**Shoreline Segment Summary**

**Bouchard B No. 120 Oil Spill**

**Buzzards Bay, MA**

**E N T R I X**



Map created with ArcIMS - Copyright (C) 1992-2001 ESRI Inc.

DEP MCP 21e Map Legend

- Zone IIs
  - IWPAs
  - Zone A
  - Sole Source Aquifers
  - Solid Waste Sites
  - Protected Openspace
  - ACECs
  - NHESP Estimated Habitat of Rare Wildlife in Wetland Areas
  - Certified Vernal Pools 2003 NHESP
  - Subbasins
  - Mass Major Basins
  - DEP Region
  - Town Arcs
  - County Boundaries
- COMMUNITY PUBLIC WATER SUPPLY - GROUNDWATER
  - COMMUNITY PUBLIC WATER SUPPLY - SURFACE WATER
  - NON-COMMUNITY PUBLIC WATER SUPPLY
  - HIGH YIELD
  - MEDIUM YIELD
  - HIGH YIELD
  - MEDIUM YIELD
  - 100 YEAR FLOODPLAIN
- WATER
  - RESERVOIR
  - WETLANDS
  - SALT WATER WETLANDS
  - FLATS, SHOALS
  - PERENNIAL
  - INTERMITTENT
  - SHORELINE
  - MAN MADE SHORE
  - DAM
  - AQUEDUCT
- LIMITED ACCESS HIGHWAY
  - MULTILANE HWY, NOT LIMITED ACCESS
  - OTHER NUMBERED HWY
  - MAJOR ROAD - COLLECTOR
  - MINOR STREET OR ROAD, RAMP
  - TRACK
  - TRAIL
  - PIPELINE
  - POWERLINE
  - TRAIN



		PROJECT: Bouchard B120 Oil Spill Buzzards Bay, Massachusetts	
		LOCATION: West Island Fairhaven, Massachusetts	
TITLE: <b>MassGIS Map</b>			
DRAWN: LAC	CHECKED: KDT	APPROVED: KDT	FIGURE:
SCALE: AS SHOWN	DATE: 6/1/05	FILE NO.: 3871-000	<b>3</b>

SOURCE:  
<http://maps.massgis.state.ma.us/21e/viewer.htm>