



SOVEREIGN CONSULTING INC.

August 15, 2024

Town of Hingham Conservation Department
210 Central Street
Hingham, Massachusetts 02043

Via Electronic Submittal (conservation@hingham-ma.gov) and Printed Submittal

Re: Request for Certificate of Compliance (DEP File #034-263)
Former Queen Anne's ARCO
10 Washington Street
Norwell, MA
RTN 4-0134

To the Town of Hingham Conservation Department:

On behalf of Equilon Enterprises LLC dba Shell Oil Products US (Equilon), Sovereign Consulting Inc. (Sovereign) is submitting the attached Request for Certificate of Compliance for the property located at 1220 Main Street in Hingham, Massachusetts (DEP File #034-263).

If you have any questions regarding this submittal, please feel free to contact the undersigned.

Sincerely,
SOVEREIGN CONSULTING INC.

Matthew Duclos
Project Manager

David G. Billo, LSP, LEED AP
Office Manager

Attachments: WPA Form 8A: Request for Certificate of Compliance
Check payable to the Town of Hingham
Letter from Licensed Site Professional
Policy on Receipt of Information
Voluntary 21 Day Waiver (COC)

cc: *With Attachments:*

Edward Henke for Equilon Enterprises, LLC dba Shell Oil Products US
20954 S. Wilmington Ave, Carson, CA 90810
Sovereign File - 2L704

WPA FORM 8A



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Form 8A – Request for Certificate of Compliance
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number:

034-263
 Provided by DEP

A. Project Information

Important:
 When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Upon completion of the work authorized in an Order of Conditions, the property owner must request a Certificate of Compliance from the issuing authority stating that the work or portion of the work has been satisfactorily completed.

1. This request is being made by:

Dave Billo, LSP (Sovereign Consulting Inc.) on behalf of Shell Oil Products U.S
 Name
9 Payson Road (Suite 150)
 Mailing Address
Foxborough MA 02035
 City/Town State Zip Code
508-339-3200
 Phone Number

2. This request is in reference to work regulated by a final Order of Conditions issued to:

Atlantic Richfield Company
 Applicant
September 21, 1987, extended August 27, 1990 034-263
 Dated DEP File Number

3. The project site is located at:

1220 Main Street Hingham
 Street Address City/Town
Book 204 Lot 23
 Assessors Map/Plat Number Parcel/Lot Number

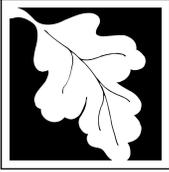
4. The final Order of Conditions was recorded at the Registry of Deeds for:

Geroge and Norma Scothorne
 Property Owner (if different)
Plymouth 8109 81-84
 County Book Page
 Certificate (if registered land)

5. This request is for certification that (check one):

the work regulated by the above-referenced Order of Conditions has been satisfactorily completed.
 the following portions of the work regulated by the above-referenced Order of Conditions have been satisfactorily completed (use additional paper if necessary).

the above-referenced Order of Conditions has lapsed and is therefore no longer valid, and the work regulated by it was never started.



WPA Form 8A – Request for Certificate of Compliance

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. Project Information (cont.)

6. Did the Order of Conditions for this project, or the portion of the project subject to this request, contain an approval of any plans stamped by a registered professional engineer, architect, landscape architect, or land surveyor?

Yes If yes, attach a written statement by such a professional certifying substantial compliance with the plans and describing what deviation, if any, exists from the plans approved in the Order.

No

B. Submittal Requirements

Requests for Certificates of Compliance should be directed to the issuing authority that issued the final Order of Conditions (OOC). If the project received an OOC from the Conservation Commission, submit this request to that Commission. If the project was issued a Superseding Order of Conditions or was the subject of an Adjudicatory Hearing Final Decision, submit this request to the appropriate DEP Regional Office (see <http://www.mass.gov/eea/agencies/massdep/about/contacts/find-the-massdep-regional-office-for-your-city-or-town.html>).

CHECK PAYABLE TO THE TOWN OF HINGHAM



SOVEREIGN CONSULTING INC.

111A NORTH GOLD DR
ROBBINSVILLE, NJ 08691

**UNIVEST
BANK AND TRUST CO.**

60-1343/319

100512

DATE

July 24, 2024

PAY

One Hundred and 00/100 Dollars

AMOUNT

100.00

TO THE
ORDER
OF

Town of Hingham
210 Central Street
Hingham, MA 02043

BUSINESS SERVICES ACCOUNT

~~VOID~~

AUTHORIZED SIGNATURE



SOVEREIGN CONSULTING INC.

100512

Check Date: 7/24/2024

Invoice Number	Date	Voucher	Amount	Discounts	Previous Pay	Net Amount
CKR - MADEP 034-263	7/22/2024	000000205843	100.00			100.00
Town of Hingham		TOTAL	100.00			100.00
Univest Checking Account	4	TOWNHIN				

LETTER FROM LICENSED SITE PROFESSIONAL



August 15, 2024

Town of Hingham Conservation Department
210 Central Street
Hingham, Massachusetts 02043

RE: Request for Certificate of Compliance
DEP File #034-263
1220 Main Street
Hingham, MA 02043

To the Town of Hingham Conservation Commission:

Sovereign Consulting Inc. (Sovereign), on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Equilon), is requesting a Certificate of Compliance for the Order of Conditions (OOC) granted to Atlantic Richfield Company c/o Liberty Environmental Systems, Inc., 91 Providence Highway, Westwood, MA on September 21, 1987 during the installation of a temporary groundwater interceptor trench (approx. 3 feet wide by 4 feet deep by 155 feet long) and buried water transmission pipeline in a wetland area located at 1220 Main Street in Hingham, Massachusetts (MA) (the site) (**Figure 1**). On March 3, 1989 Shell Oil Company assumed management of the environmental activities at the site. The OOC was extended on August 27, 1990 on behalf of Shell Oil Company.

The purpose of the trench was to intercept gasoline contaminated groundwater, originating at the former Queen Anne's ARCO site at 10 Washington Street, Norwell, MA (Massachusetts Department of Environmental Protection Release Tracking Number 4-0134), before it discharged to adjacent wetlands and an intermittent tributary to Accord Brook. The contaminated groundwater intercepted by the trench was pumped to a groundwater treatment system (air stripping tower) to remove gasoline components. Following treatment, the groundwater was recharged within the same watershed into an existing groundwater recharge area.

In compliance with the September 21, 1987 OOC, the following specific conditions were required before and during installation of the trench:

- Installation of the trench in such a manner as to result in minimal disturbance of the wetlands;
- No alterations or disturbance more than 8 feet from the centerline of the proposed trench;
- Removal of excess soil from the site beyond or outside of the wetlands or buffer zone;
- Coverage of the top 3 to 6 inches of the trenched area with topsoil excavated from within the wetlands;
- Stabilization of all disturbed areas within the buffer zone with loam and seed, sod, mulch or other appropriate controls;

- Revegetation of all disturbed areas within the wetlands with wetland plant species in accordance with 310 CMR 10.55(4) (6) 6 of the Wetland Regulations;
- Installation of erosion control barriers 8 feet on either side of the trench along its entire length, with no alterations taking place beyond the barrier;
- Inspection of erosion controls by the Town of Hingham Conservation Officer prior to trench installation.

Based on information currently available to Sovereign the interceptor trench was installed around December 1987 in compliance with the Town of Hingham COC and the system was activated in summer 1988.

When Shell Oil Company assumed management of the site on March 3, 1989 they determined that the interceptor trench was not effective in mitigating the migration of dissolved-phase petroleum hydrocarbons into the unnamed tributary to Accord Brook. As a result, on August 4, 1989, Shell Oil Company prepared an emergency response measure for upgrading the system. System upgrades were implemented during late 1989 and 1990. This included removal of the interceptor trench and pumping well.

On July 25, 1990, New England Environmental, Inc. (NEE) submitted a Wetland Restoration Plan for Altered Wetlands on behalf of Shell Oil Company to restore the area of the interceptor trench to the satisfaction of the Town of Hingham Conservation Commission. As part of site visits, NEE noted that the majority of the altered wetlands had been re-vegetated with wetland plants. On August 7, 1990, Shell Oil Company submitted an OOC extension request to continue monitoring for three years.

On August 14, 1990, the Town of Hingham Conservation Commission approved the Wetland Restoration Plan with the stipulation that any work be completed with NEE personnel oversight. In addition, the OOC extension request was approved. Wetland restoration was completed between August 29 and August 31, 1990, and on October 24, 1990.

On October 24, 1990, Groundwater Technology, Inc (GTI) notified The Town of Hingham Conservation Commission that they planned to advance soil borings within the on-site wetlands. It was specified that the borings would be completed using a 4-inch hand-held auger to a maximum of 6 feet below grade. Erosion controls (haybales and/or siltation fences) would be utilized in areas in the vicinity of the wetlands to prevent potential runoff into the wetlands.

A November 15, 1990 letter from the Town of Hingham Conservation Commission stated that during a site inspection it was determined that all work was completed in compliance with the OOC. The letter requested that the recently replanted wetland area be stabilized with mulch or straw. **Figure 2** illustrates the area where the work was completed. In addition, the Commission responded to the request regarding the additional soil borings and determined that the borings could be completed under the current OOC for the site with strict adherence with the procedure and techniques outlined in the October 24, 1990 letter, and further subject to the removal from the wetlands of any spoils not be put back in the holes.

On November 27 and 28, 1990, 13 hand-augured soil borings (SB-35/HA-1 through SB-47/HA-13) were advanced in the wetland area to depths ranging from 2.5 to 8 feet below grade in accordance with conditions set forth in the OOC and October 24, 1990 letter. See **Figure 3** for soil boring locations.

With this letter, Sovereign is providing the above information supporting that the conditions set forth by the Town of Hingham Conservation Commission in the OOC for file number #034-263 were met during interceptor trench installation, subsequent removal and soil boring advancement. In addition, since the site work associated with the OOC was completed in 1990, there has been over 30 years for the area to return to its original condition.

In accordance with the Massachusetts Wetlands Protection Act (WPA) M.G.L. c. 131 §40, the Massachusetts Department of Environmental Protection WPA Form 8A Request for the Certificate of Compliance is attached.

If any further information is requested, please do not hesitate to call us at 508-339-3200.

Sincerely,
SOVEREIGN CONSULTING INC.



Matthew Duclos
Project Manager



David G. Billo, LSP, LEED AP
Office Manager

Enclosure: Figure 1 – Interceptor Trench Area
Figure 2 – Interceptor Trench Details
Figure 3 – Location of 1991 Soil Borings
Historical Documentation

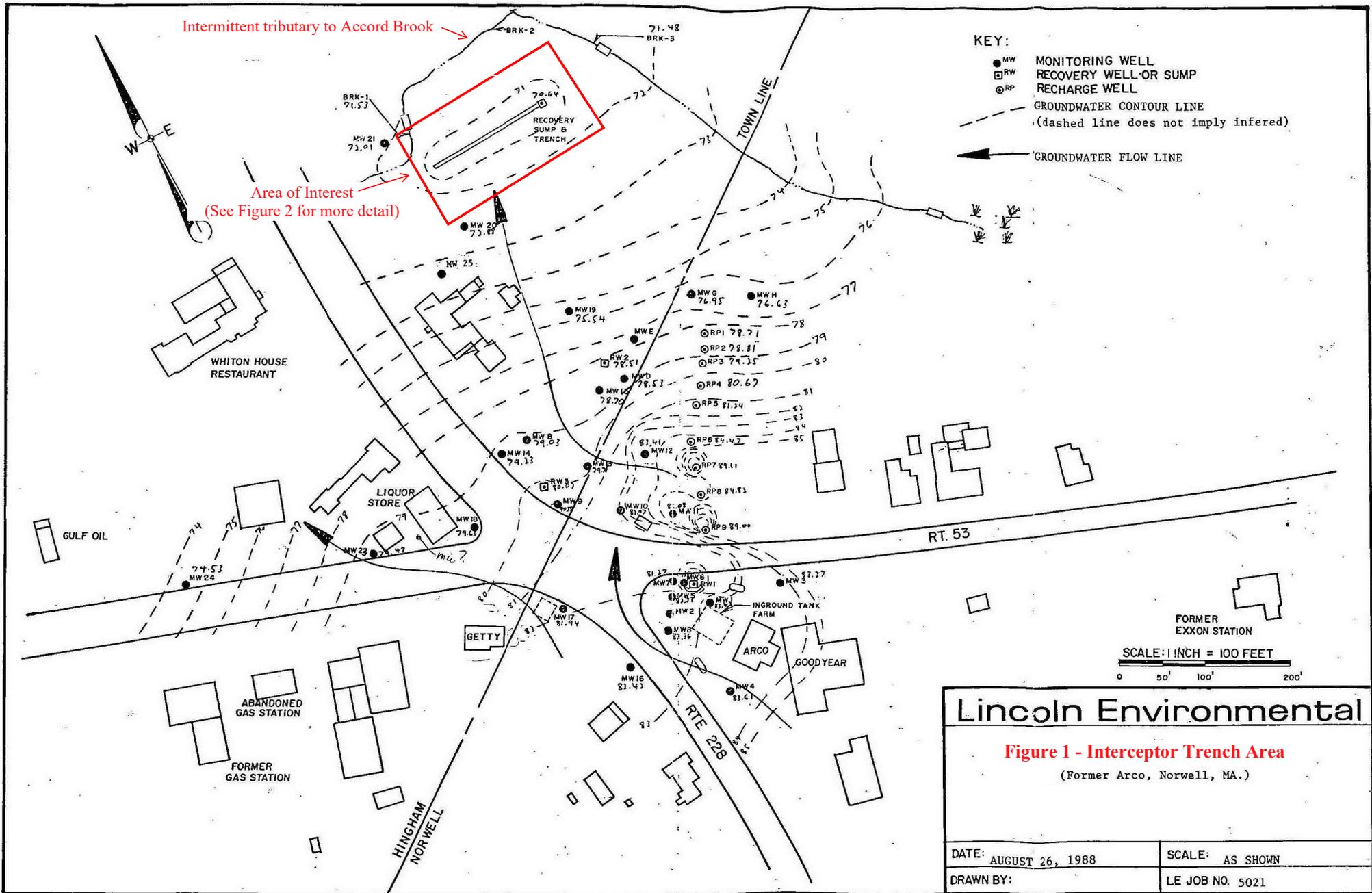
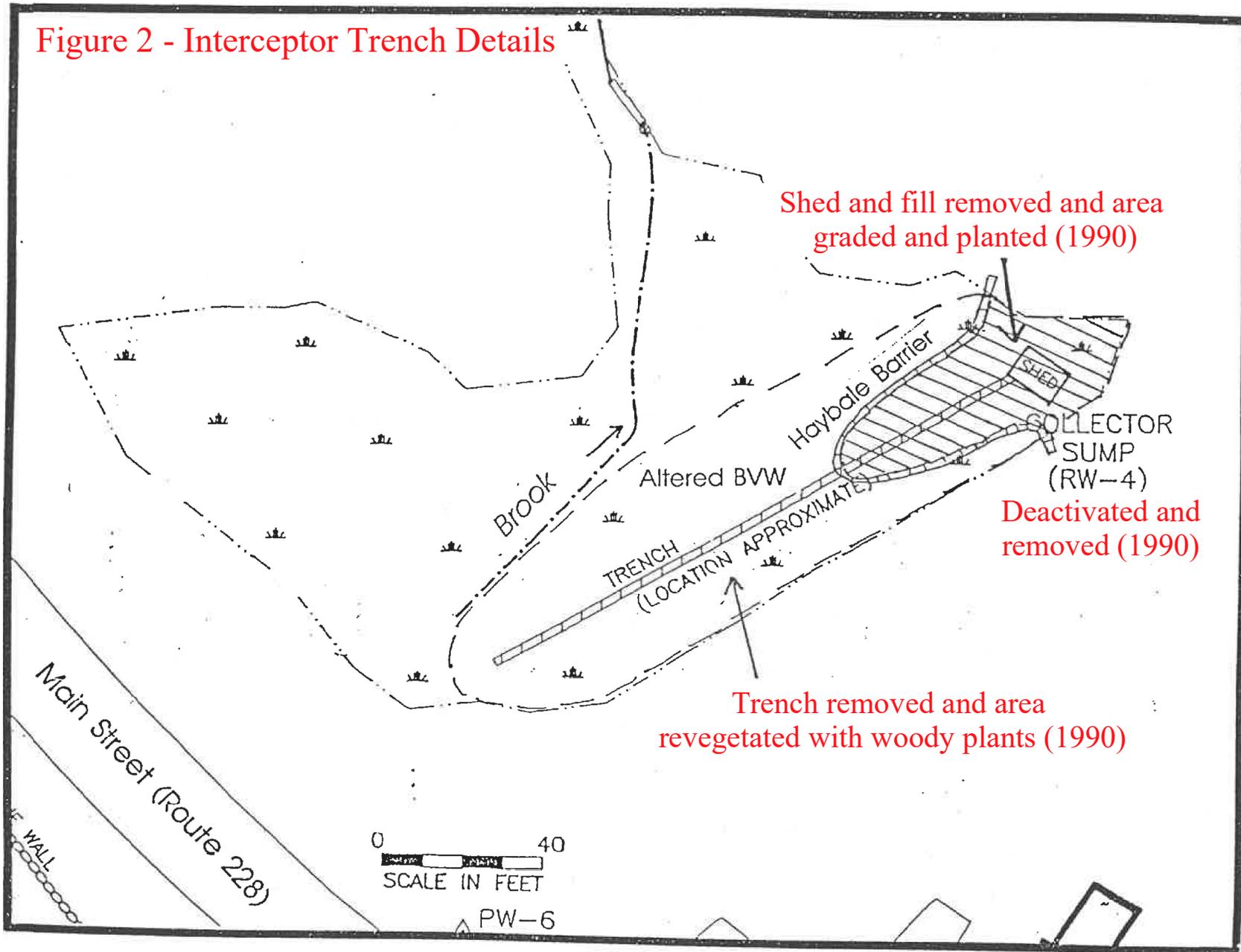


Figure 2 - Interceptor Trench Details

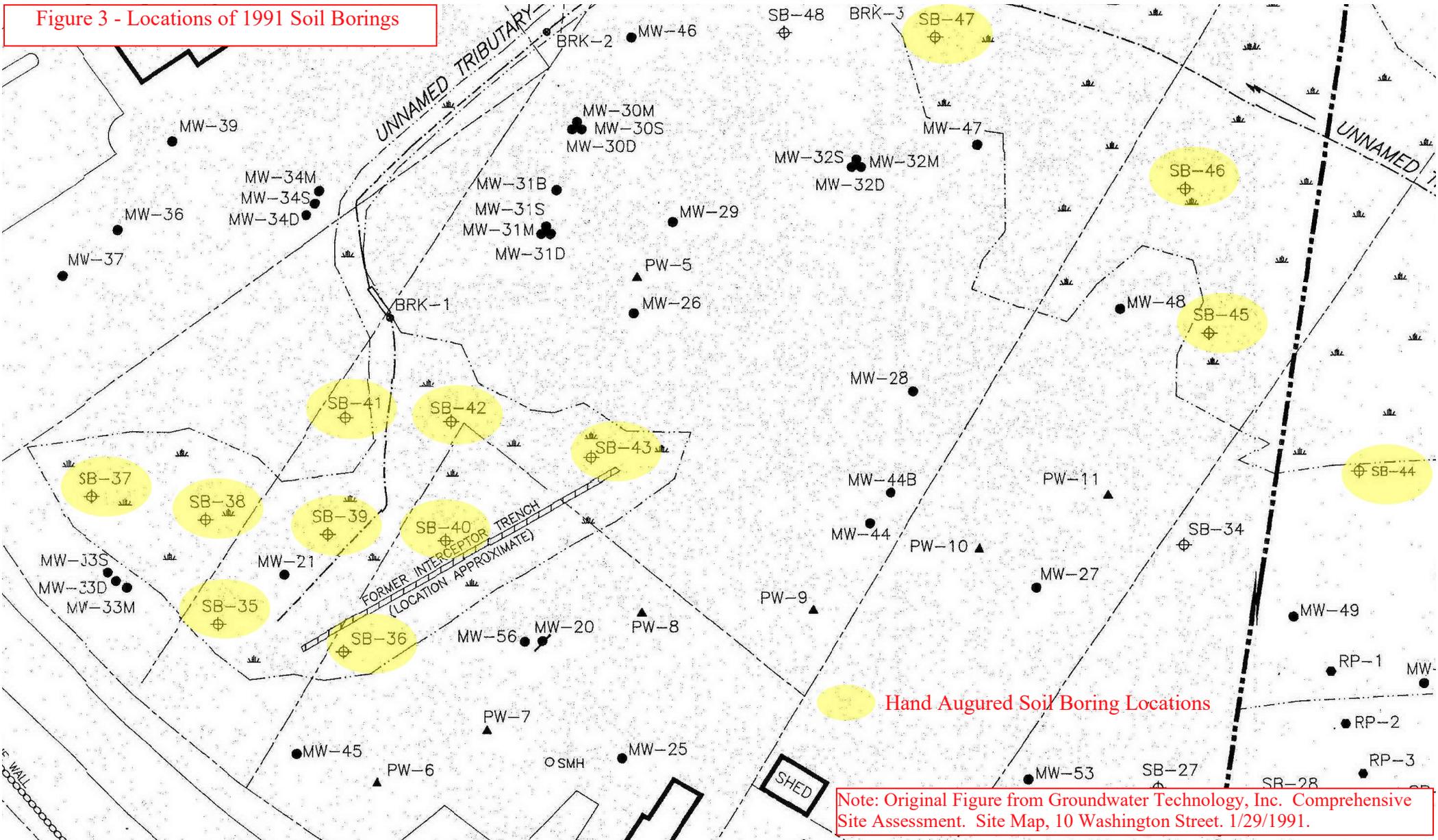


LEGEND:

- | | |
|----------------|------------------------------|
| BVW | Bordering Vegetated Wetlands |
| \\ \\ \\ \\ \\ | Restoration Area |
| - - - - - | Revegetated Area |
| - . - . - . | Edge of Wetlands |

Note: Original figure from New England Environmental, Inc. Wetland Restoration Plan for Altered Wetlands, July 25, 1990.

Figure 3 - Locations of 1991 Soil Borings



Hand Augured Soil Boring Locations

Note: Original Figure from Groundwater Technology, Inc. Comprehensive Site Assessment. Site Map, 10 Washington Street. 1/29/1991.

AUG 10 1987

Form 3



Commonwealth of Massachusetts



DEQE File No.

[Redacted Box]
(To be provided by DEQE)

City/Town Hingham, MA

Applicant Atlantic Richfield Co

NOTICE OF INTENT UNDER THE
MASSACHUSETTS WETLANDS PROTECTION ACT, G.L.c.131,s40
THE TOWN OF HINGHAM'S WETLANDS PROTECTION BY-LAW
and
APPLICATION FOR A DEPARTMENT OF THE ARMY PERMIT

Part I: General Information

1. Location: Street Address 1220 Main Street, Hingham, MA
Lot Number 23
2. Project: Type Remedial action Description Construction of interceptor trench to recover gasoline contaminated groundwater. Intent is to improve the quality of ground and surface waters that have been contaminated by gasoline.
3. Registry: County Plymouth Current Book 7157 & Page 308
Certificate (If Registered Land) _____
4. Applicant Atlantic Richfield Co. Tel. 213-486-2256
Address 515 S. Flower Street, Los Angeles, CA 90051
5. Property Owner George H. and Norma G. Scothorne Tel. 749-3132
Address 1220 Main Street, Hingham, MA
6. Representative Liberty Environmental Systems, Inc. Tel. 326-2345
Address 91 Providence Highway, Westwood, MA 02090
7. Have the Conservation Commission and the DEQE Regional Office each been sent, by certified mail or hand delivery, 2 copies of completed Notice of Intent, with supporting plans and documents?
Yes No

8. Have all obtainable permits, variances and approvals required by local by-law been obtained?
 Yes No

Obtained:	Applied For:	Not Applied For:
Air discharge	Modified air discharge	
Groundwater discharge		

9. Is any portion of the site subject to a Wetlands Restriction Order pursuant to G.L. c. 131, §40A or G.L. c. 130, §105? Yes No

10. List all plans and supporting documents submitted with this Notice of Intent.

Identifying Number/Letter	Title, Date
Fig. 1	Norwell ARCO, Norwell, MA, Location Map (8/87)
Fig. 2	ARCO Station, Norwell, MA, Plan view of off-site area (8/87)
Fig. 3	Proposed Trench Design, Typical Sections (6/87)
Fig. 4	Cutoff Trench C-D-G-E-F, Detail (7/87)
Fig. 5	Cutoff Trench A-B-C, Detail (7/87)
	Attachment "A" - Description of Project (8/87)

11. Check those resource areas within which work is proposed:

(a) Buffer Zone

(b) Inland:

- | | |
|--|------------------------------------|
| <input type="checkbox"/> Bank* | Land Subject to Flooding, |
| <input checked="" type="checkbox"/> Bordering Vegetated Wetland* | <input type="checkbox"/> Bordering |
| <input type="checkbox"/> Land Under Water Body & Waterway* | <input type="checkbox"/> Isolated |

(c) Coastal:

- | | |
|--|---|
| <input type="checkbox"/> Land Under the Ocean* | <input type="checkbox"/> Designated Port Area* |
| <input type="checkbox"/> Coastal Beach* | <input type="checkbox"/> Coastal Dune |
| <input type="checkbox"/> Barrier Beach | <input type="checkbox"/> Coastal Bank |
| <input type="checkbox"/> Rocky Intertidal Shore* | <input type="checkbox"/> Salt Marsh* |
| <input type="checkbox"/> Land Under Salt Pond* | <input type="checkbox"/> Land Containing Shellfish* |
| <input type="checkbox"/> Fish Run* | |

*Likely to involve U.S. Army Corps of Engineers concurrent jurisdiction. See General Instructions for Completing Notice of Intent.

Part II: Site Description

Indicate which of the following information has been provided (on a plan, in narrative description or calculations) to clearly, completely and accurately describe existing site conditions.

Identifying Number/Letter (of plan, narrative or calculations)	
	<u>Natural Features:</u>
<u>Attachment A</u>	<u>Soils</u>
<u>" "</u>	<u>Vegetation</u>
<u>Fig. 1</u>	<u>Topography</u>
<u>N/A</u>	<u>Open water bodies (including ponds and lakes)</u>
<u>Fig. 1, 2</u>	<u>Flowing water bodies (including streams and rivers)</u>
<u>None</u>	<u>Public and private surface water and ground water supplies on or within 100 feet of site</u>
Approx. <u>138 ft. ms1</u>	<u>Maximum annual ground water elevations with dates and location of test</u>
<u>Fig. 2</u>	<u>Boundaries of resource areas checked under Part I, Item 11 above</u>
<u>--</u>	<u>Other</u>
	<u>Man-made Features:</u>
<u>N/A</u>	<u>Structures (such as buildings, piers, towers and headwalls)</u>
<u>Fig. 2</u>	<u>Drainage and flood control facilities at the site and immediately off the site, including culverts and open channels (with inverts), dams and dikes</u>
<u>N/A</u>	<u>Subsurface sewage disposal systems</u>
<u>N/A</u>	<u>Underground utilities</u>
<u>Fig. 2</u>	<u>Roadways and parking areas</u>
<u>Fig. 2</u>	<u>Property boundaries, easements and rights-of-way</u>
<u>--</u>	<u>Other</u>

Part III: Work Description

Indicate which of the following information has been provided (on a plan, in narrative description or calculations) to clearly, completely and accurately describe work proposed within each of the resource areas checked in Part I, Item 11 above.

Identifying Number/Letter (of plan, narrative or calculations)	
	<u>Planview and Cross Section of:</u>
<u>Fig. 2, 3, 4, 5</u>	<u>Structures (such as buildings, piers, towers and headwalls)</u>
<u>N/A</u>	<u>Drainage and flood control facilities, including culverts and open channels (with inverts), dams and dikes</u>
<u>N/A</u>	<u>Subsurface sewage disposal systems & underground utilities</u>
<u>Fig. 2, 3, 4, 5</u>	<u>Filling, dredging and excavating, indicating volume and composition of material</u>
<u>N/A</u>	<u>Compensatory storage areas, where required in accordance with Part III, Section 10:57 (4) of the regulations</u>
<u>--</u>	<u>Other</u>
	<u>Point Source Discharge</u>
<u>N/A</u>	<u>Description of characteristics of discharge from point source (both closed and open channel), when point of discharge falls within resource area checked under Part I, Item 11 above, as supported by standard engineering calculations, data and plans, including but not limited to the following:</u>

1. Delineation of the drainage area contributing to the point of discharge;
2. Pre- and post-development peak run-off from the drainage area, at the point of discharge, for at least the 10-year and 100-year frequency storm;
3. Pre- and post-development rate of infiltration contributing to the resource area checked under Part I, Item 11 above;
4. Estimated water quality characteristics of pre- and post-development run-off at the point of discharge.

Part IV: Mitigating Measures

1. Clearly, completely and accurately describe, with reference to supporting plans and calculations where necessary:
 - (a) All measures and designs proposed to meet the performance standards set forth under each resource area specified in Part II or Part III of the regulations; or
 - (b) why the presumptions set forth under each resource area specified in Part II or Part III of the regulations do not apply.

<input type="checkbox"/> Coastal <input checked="" type="checkbox"/> Inland	Resource Area Type: Bordering vegetative wetlands	Identifying number or letter of support documents
<ol style="list-style-type: none"> 1. All groundwater recovered will be treated and then recharged within this watershed. There will be no net change in water budget. 2. Erosion and silt control measures will be maintained throughout the construction period which is estimated at two days. 		Fig. 2,3,4,5 Attachment A

<input type="checkbox"/> Coastal <input checked="" type="checkbox"/> Inland	Resource Area Type: Buffer zone	Identifying number or letter of support documents
<ol style="list-style-type: none"> 1. No soil will be removed from buffer zone trench excavation. The land surface will be restored to its pre-excavation condition after installation and include replacement of topsoil and vegetation. 2. Erosion and silt control measures will be maintained throughout the construction period. 		Fig. 2,3,4,5 Attachment A

<input type="checkbox"/> Coastal Resource Area Type: <input type="checkbox"/> Inland	Identifying number or letter of support documents

2. Clearly, completely and accurately describe, with reference to supporting plans and calculations where necessary:

- (a) all measures and designs to regulate work within the Buffer Zone so as to insure that said work does not alter an area specified in Part I, Section 10.02(1) (a) of these regulations; or
- (b) if work in the Buffer Zone will alter such an area, all measures and designs proposed to meet the performance standards established for the adjacent resource area specified in Part II or Part III of these regulations.

<input type="checkbox"/> Coastal Resource Area Type Bordered By 100-Foot Discretionary Zone: <input checked="" type="checkbox"/> Inland <u>Bordering vegetative wetlands</u>	Identifying number or letter of support documents
1. Erosion and silt control measures will be maintained throughout construction. 2. Specifications to Contractors specify that area is to be returned to pre-construction conditions.	Fig. 1,2,3,4,5 Attachment A

Part V: Additional Information for a Department of the Army Permit

1. COE Application No. _____ 2. _____ N/A
(to be provided by COE) (Name of waterway)

3. Names and addresses of property owners adjoining your property:

N/A

- 4. Document other project alternatives (i.e., other locations and/or construction methods, particularly those that would eliminate the discharge of dredged or fill material into waters or wetlands).
- 5. 8 1/2" x 11" drawings in planview and cross-section, showing the resource area and the proposed activity within the resource area. Drawings must be to scale and should be clear enough for photocopying.

Certification is required from the Division of Water Pollution Control before the Federal permit can be issued. Certification may be obtained by contacting the Division of Water Pollution Control, 1 Winter Street, Boston, Massachusetts 02108.

Where the activity will take place within the area under the Massachusetts approved Coastal Zone Management Program, the applicant certifies that his proposed activity complies with and will be conducted in a manner that is consistent with the approved program.

Information provided will be used in evaluating the application for a permit and is made a matter of public record through issuance of a public notice. Disclosure of this information is voluntary, however if necessary information is not provided, the application cannot be processed nor can a permit be issued.

I hereby certify under the pains and penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents and supporting data are true and complete, to the best of my knowledge.

Wendy J. Land for Atlantic Richfield Co. _____ 8/24/87
Signature of Applicant Date

Wendy J. Land Liberty Environmental Systems _____ 8/24/87
Signature of Applicant's Representative Date

RED FORM 100 (TEST)
1 MAY 82

"Exception to ENC Form 4545 approved by HQUSACE, 6 May 1982".
This document contains a joint Department of the Army and State of Massachusetts application for a permit to obtain permission to perform activities in United States waters. The Office of Management and Budget (OMB) has approved those questions required by the US Army Corps of Engineers. OMB Number 0702-0036 and expiration date of 30 September 1985 applies. This statement will be set in 6 point type.
3-6

ATTACHMENT "A"

Description of Project:

NOTICE OF INTENT UNDER MASSACHUSETTS
WETLAND PROTECTION ACT, G.L.c. 131, s40,
AND THE TOWN OF HINGHAM'S WETLANDS PROTECTION BY-LAW
FOR A SITE ADJACENT TO A FORMER ARCO SERVICE STATION,
NORWELL, MASSACHUSETTS

Prepared for:

TOWN OF HINGHAM CONSERVATION COMMISSION
and
MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING

For:

ATLANTIC RICHFIELD COMPANY
Los Angeles, California

Prepared by:

LIBERTY ENVIRONMENTAL SYSTEMS, INC.
Westwood, Massachusetts

Project No. 870021.0
August 21, 1987

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1.0 INTRODUCTION

This Attachment is to accompany a Notice of Intent under the Massachusetts Wetlands Protection Act (G.L.c. 131, s40) and the Town of Hingham's Wetlands Protection By-Law on behalf of Atlantic Richfield Company (ARCO) by Liberty Environmental Systems, Inc. (LES). The proposed project is relative to continuing efforts by ARCO to clean up soils and groundwater that have been contaminated by past releases of gasoline from a former ARCO Service Station at the intersection of Route 53 (Whiting Street) and Route 228 (Main Street).

ARCO is required by the Massachusetts Department of Environmental Quality Engineering (DEQE) to clean up soils and groundwater affected by the gasoline releases. The proposed project involves the installation of a temporary groundwater cut-off trench and buried water transmission pipeline (Figures 2, 3, 4 and 5) in a wetland area in Hingham downgradient from the gasoline release site. The purpose of the cut-off trench is to prevent gasoline-contaminated groundwater from discharging to the wetland and an intermittent tributary of Accord Brook (shown on Figure 2), during the estimated 6-month to 2-year period required for final clean-up.

2.0 SOILS AND VEGETATION

Test drilling indicates that this site is underlain by a silty, sandy and bouldery glacial till soil. In the wetland area (Figure 2) the glacial till soil is covered by between 0.5 and 2 feet of dark organic mucky soil. The water table always seems to be at or near the land surface in the wetland. In the Spring and during storms the water table rises and flooding occurs in the wetland area.

This wetland is of the forrested type, containing many medium to large trees in addition to wetland shrubs and bushes.

3.0 WORK DESCRIPTION (Part III)

3.1 DRAINAGE AREA (Part III, Item 1)

An upslope watershed of approximately 3 acres will contribute run-off to the proposed cut-off trench. The contributing watershed area is on properties owned by Scothorne, Pratt and Norwell House, Inc. from the wetland southward to Route 53.

Using an average annual run-off rate of 24.5 inches (Knox, 1955) and groundwater recharge estimates based on curves developed by Thomas, et al (1967) a hydrologic budget was developed for flow from the area of gasoline contamination south of the proposed cut-off drain.

Figure 1. Hydrologic Budget for Area Affected by Gasoline South of Proposed Cut-off Drain

	<u>Gallons/Day</u>	<u>Gal./Min.</u>
Groundwater outflow (avg. ann.)	3,710	2.6
Surface water run-off (avg. ann.)	1,790	1.2
Est. evapotranspiration (avg. ann.)	<u>4,371</u>	<u>3.0</u>
 Avg. Annual Precipitation	 9,871	 6.8

Additionally, the proposed cut-off trench will produce water which will be induced from the wetland and tributary north of the drain. An estimate of maximum flow from the north of 45.3 gallons per minute (gpm) was made using Darcy's Method, a northward gradient of 0.1 ft./ft. and an aquifer permeability of 97 gallons per day per square foot. Thus, it is estimated that the combined flow into the cut-off trench should range between about 10 and 50 gpm depending on climatic conditions.

3.2 EFFECT ON WATERSHED RUNOFF (Part III, Item 2)

Contaminated groundwater intercepted by the proposed cut-off trench will be pumped to a treatment system (air stripping tower) which will remove gasoline components. After treatment the water will be recharged within the same watershed using an existing groundwater recharge area (Figure 2). Because the water will be recharged in the same watershed, there will be no net change in the existing water budget. There will be no anticipated change in discharge for storms including the 10-year and 100-year frequency storms.

3.3 EFFECT ON RATE OF INFILTRATION (Part III, Item 3)

The rate of infiltration for the land surface will not be significantly affected by this project because the specifications require that top-soil will be replaced and revegetated to return the site to pre-construction conditions. Water-level lowering by the cut-off trench will, however, cause an increase in infiltration from the adjacent wetland area by creating a steeper groundwater gradient near the trench.

3.4 EFFECT ON WATER QUALITY
(Part III, Item 4)

The purpose of the proposed project is to intercept gasoline contaminated groundwater before it discharges to adjacent wetlands and an intermittent tributary of Accord Brook (Figure 2). Ground and surface water monitoring indicate that gasoline-contaminated groundwater exists in the overburden aquifer between the former Arco Station and the tributary. The proposed project is a part of a plan to remove gasoline components from both soils and groundwater in the affected area. It is anticipated that the proposed clean-up plan will result in concentrations of gasoline components in ground and surface waters in the affected area to decline below laboratory detection limits (1 ppb) within a 6-month to 2-year period of initiation.



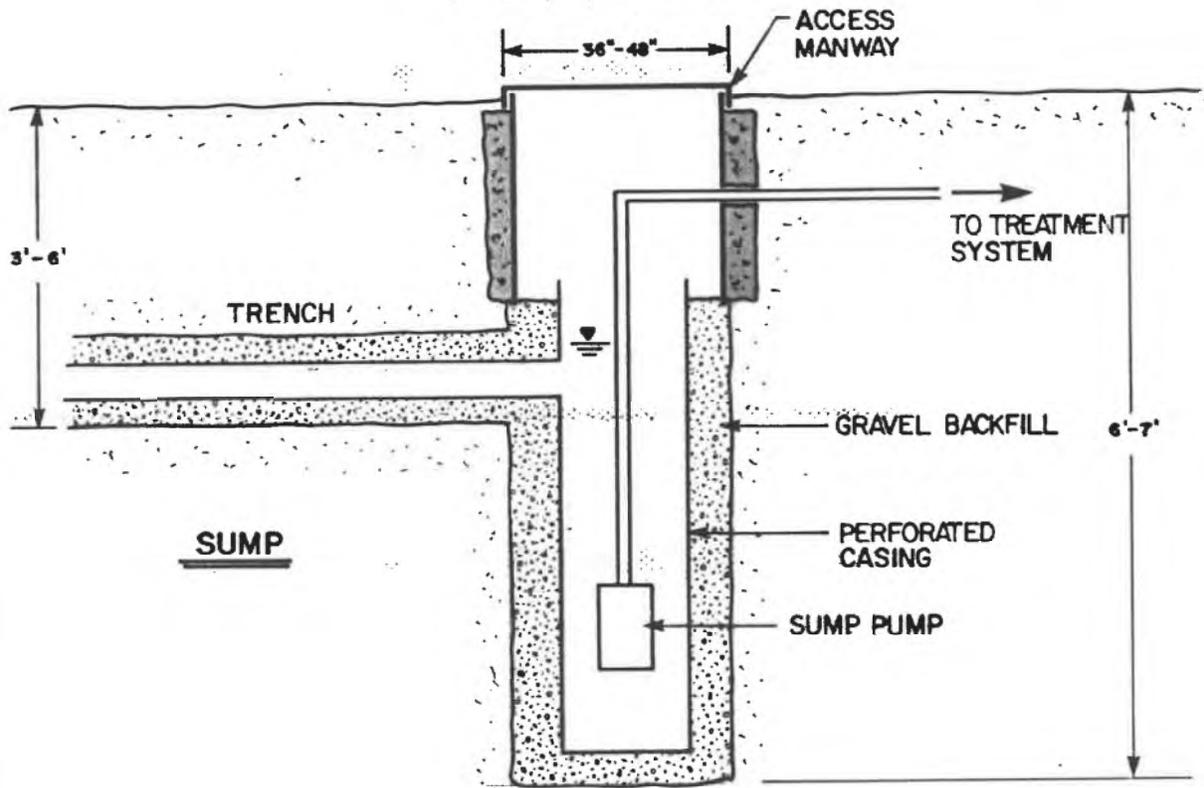
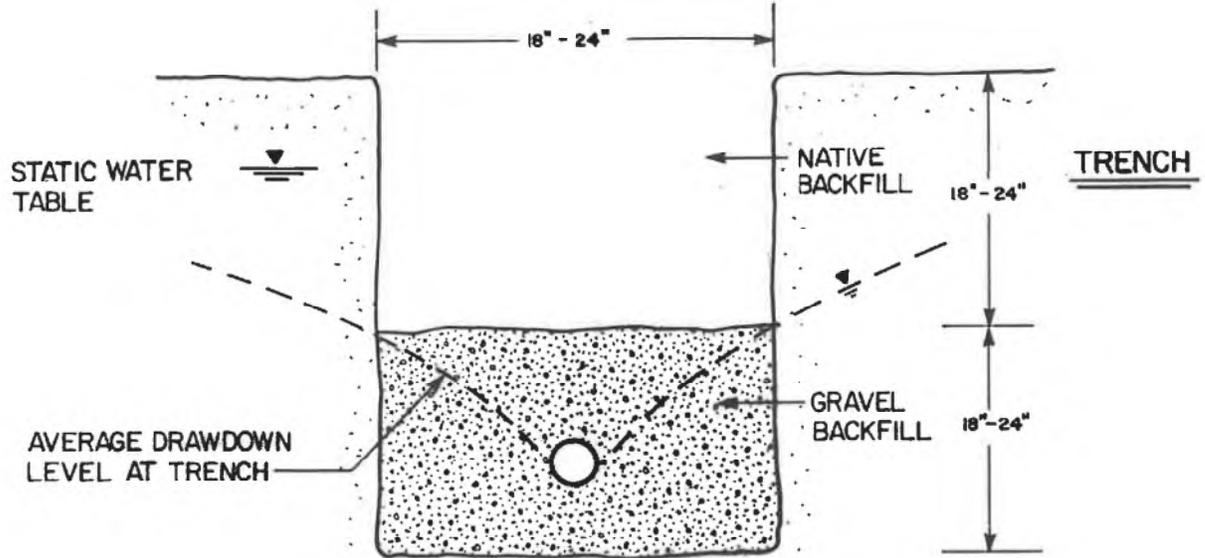
FROM: U.S. GEOLOGICAL SURVEY MAP - WEYMOUTH, MA. 7.5 x 15 min. TOPOGRAPHIC QUADRANGLE, 1984. (CONTOUR INTERVAL = 3 meters)

LIBERTY ENVIRONMENTAL SYSTEMS INC.

NORWELL ARCO - NORWELL, MA

LOCATION MAP

DATE	8/87	SCALE	AS SHOWN
FIGURE	I	JOB No.	870021.0



LIBERTY ENVIRONMENTAL SYSTEMS INC.

NORWELL ARCO - NORWELL, MA

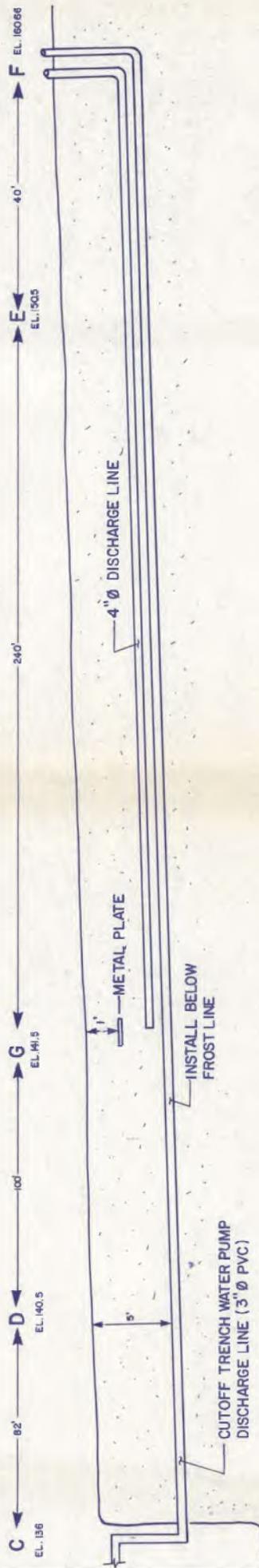
PROPOSED TRENCH DESIGN
TYPICAL SECTIONS

DATE 6/26/87

SCALE NO SCALE

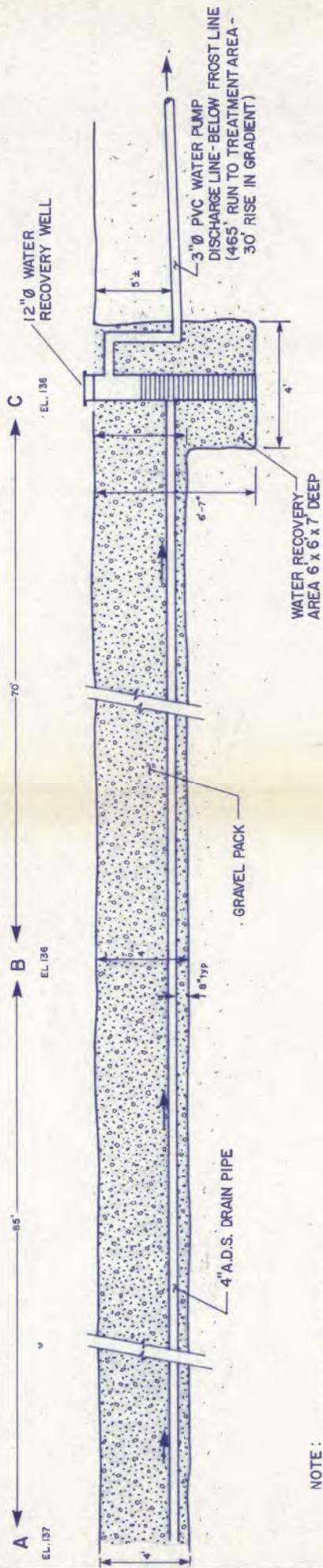
FIGURE 3

JOB No. 870021.0



NOTE:
 A 4" Ø PVC DISCHARGE PIPE, FOR FUTURE USE, WILL BE INSTALLED FROM THE WATER TREATMENT AREA, F, IN THE SAME TRENCH, AND DEPTH, AS THE 3" Ø PVC LINE COMING FROM THE PUMP AT THE CUTOFF TRENCH. C DISCHARGE LINE TO BE CAPPED AT BOTH ENDS. 4" Ø DISCHARGE LINE WILL RUN FROM F" TO E" TO "G". LINE WILL TERMINATE AT (G) - PLACE 2" Ø METAL PLATE ABOVE END OF DISCHARGE LINE AT G ±, BELOW SURFACE SO AS TO ALLOW FOR LOCATING WITH METAL DETECTOR.

LIBERTY ENVIRONMENTAL SYSTEMS, INC.	
ARCO STATION - NORWELL, MA	
CUTOFF TRENCH C-D-G-E-F DETAIL	
DATE: 7/22/87	SCALE: SCHEMATIC
FIGURE No. 4	JOB No. 87-0021.0



LIBERTY ENVIRONMENTAL SYSTEMS, INC.

ARCO STATION - NORWELL, MA

CUTOFF TRENCH A-B-C
DETAIL

DATE: 7/22/87

SCALE: SCHEMATIC

FIGURE No. 5

JOB No. 87-00210

TOWN OF HINGHAM



CONSERVATION COMMISSION 7 East Street Hingham, MA 02043 (617) 749-5445

September 22, 1987

Atlantic Richfield Company Certified Mail #P 436 108 524
c/o Liberty Environmental Systems, Inc.
91 Providence highway
Westwood, MA 02090

Re: D.E.Q.E. FILE #34-263
1220 Main Street, Hingham, MA

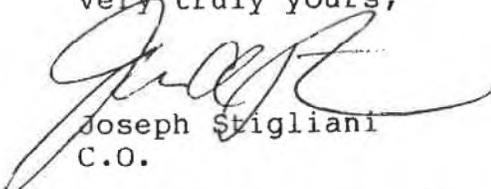
Gentlemen:

Enclosed please find an Order of Conditions issued by the Hingham Conservation Commission pursuant to the requirements of M.G.L. Chapter 131, section 40 and the Town of Hingham's Wetlands Protection By-Law. In preparing this Order, all of the interests of said Act and said By-law were considered, and in the opinion of the Commission, the conditions contained therein are necessary to protect said interests.

Please be sure that each and every person involved with this project has been provided and read a copy of this Order. Failure to comply with any conditions therein shall be deemed cause to revoke the Order.

If you require any clarification of the Order or this letter, please call me at 749-5445.

Very truly yours,


Joseph Stigliani
C.O.

cc: Board of Health, Building Dept., Planning Board, D.E.Q.E.,
George & Norma Scothorne, Clarence Pratt, Mr. Starr



Commonwealth of Massachusetts

DEQE File No. 34-263
(To be provided by DEQE)

City/Town Hingham

Applicant Atlantic Richfield Co.

ORDER OF CONDITIONS
MASSACHUSETTS WETLANDS PROTECTION ACT
G.L.C 131, S40
TOWN OF HINGHAM'S WETLANDS PROTECTION BY-LAW

From Town of Hingham Conservation Commission

To Atlantic Richfield Company George & Norma Scothorne
(Name of Applicant) (Name of property owner)

Address 515 S. Flower St. 1220 Main Street
Los Angeles, CA 90051

This Order is issued and delivered as follows:

- by hand delivery to applicant or representative on _____ (date)
- by certified mail, return receipt requested on _____ (date)

This project is located at 1220 Main Street

The property is recorded at the Registry of Plymouth

Book 7157 Page 308

Certificate (if registered)

The Notice of Intent for this project was filed on August 25, 1987 (date)

The public hearing was closed on September 8, 1987 (date)

Findings

The Commission has reviewed the above-referenced Notice of Intent and plans and has held a public hearing on the project. Based on the information available to the Commission at this time, the Commission has determined that the area on which the proposed work is to be done is significant to the following interests in accordance with the Presumptions of Significance set forth in the regulations for each Area Subject to Protection Under the Act (check as appropriate):

- Public water supply
- Private water supply
- Ground water supply
- Flood control
- Storm damage prevention
- Prevention of pollution
- Land containing shellfish
- Fisheries

Therefore, the Conservation Commission hereby finds that the following conditions are necessary, in accordance with the Performance Standards set forth in the regulations, to protect those interests checked above. The Conservation Commission orders that all work shall be performed in accordance with said conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications or other proposals submitted with the Notice of Intent, the conditions shall control.

General Conditions

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. This Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state or local statutes, ordinances, by-laws or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
 - (a) the work is a maintenance dredging project as provided for in the Act; or
 - (b) the time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance and both that date and the special circumstances warranting the extended time period are set forth in this Order.
5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order.
6. Any fill used in connection with this project shall be clean fill, containing no trash, refuse, rubbish or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles or parts of any of the foregoing.
7. No work shall be undertaken until all administrative appeal periods from this Order have elapsed or, if such an appeal has been filed, until all proceedings before the Department have been completed.
8. No work shall be undertaken until the Final Order has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is to be done. The recording information shall be submitted to the Commission on the form at the end of this Order prior to commencement of the work.
9. A sign shall be displayed at the site not less than two square feet or more than three square feet in size bearing the words, "Massachusetts Department of Environmental Quality Engineering,
File Number 34-263".
10. Where the Department of Environmental Quality Engineering is requested to make a determination and to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before the Department.
11. Upon completion of the work described herein, the applicant shall forthwith request in writing that a Certificate of Compliance be issued stating that the work has been satisfactorily completed.
12. The work shall conform to the following plans except as may be amended by any specific conditions contained herein.

D.E.Q.E FILE 334-263
Atlantic Richfield Co.
1220 Main Street - September 21, 1987

Arco Station - Norwell, MA
Plan View Off-Site Area
Date: 8//19/87
Liberty Environmental Systems, Inc.

Arco Station - Norwell, MA
Cutoff Trench A-B-C Detail
Date: 7/22/87
Liberty Environmental Systems, Inc.

13. To the extent possible, the trench shall be installed in such a manner as will result in the minimum disturbance of the wetlands.
14. No alterations or disturbance shall take place more than 8' from the centerline of the proposed trench.
15. All excess soil shall be removed from the site or disposed of beyond or out of the wetlands or buffer zone.
16. The top 3" to 6" of the trenched area shall be covered with topsoil excavated from within the wetlands.
17. All disturbed areas within the buffer zone shall be stabilized with loam and seed, sod, mulch, or other appropriate controls.
18. All disturbed areas within the wetlands shall be revegetated with wetland plant species in accordance with 310 CMR 10.55(4)(6)6 of the Wetlands Regulations.
19. Prior to any earth moving activities on the site, an erosion control barrier consisting of staked straw bales or enviro silt fence shall be installed 8' north of, and for the entire length of the trench and line where said trench and line crosses through the wetlands. No alterations shall take place beyond, or north of said erosion barrier.
20. Inspection of approval of said barrier shall be obtained from the Conservation Officer prior to any excavations or earth moving activities on the site.
21. This Order does not permit the construction of access roads or the stockpiling of soil within the wetlands.
22. This Order does not grant, authorize, or permit any property rights, privileges, or dispensations.
23. A copy of this Order shall be available at all times on the site and all personnel working on the site shall be familiar with this Order.

D.E.Q.E. File #34-263
Atlantic Richfield Co.
1220 Main Street

September 21, 1987

Issued By Town of Hingham Conservation Commission

Signature(s) *Robert F. Beal, Chairman*

Bernard F. Stearns

John Eisenman

Virginia B. [unclear]

This Order must be signed by a majority of the Conservation Commission.

On this twenty-first day of September 19 87, before me personally appeared Robert F. Beal, Jr., to me known to be the person described in and who executed the foregoing instrument and acknowledged that he/she executed the same as his/her free act and deed.

Roberta L. Meallo June 1, 1990
Notary Public Roberta L. Meallo My commission expires

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land upon which the proposed work is to be done or any ten residents of the city or town in which such land is located are hereby notified of their right to request the Department of Environmental Quality Engineering to issue a Superseding Order, providing the request is made by certified mail or hand delivery to the Department within ten days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and the applicant.

Detach on dotted line and submit to the _____ prior to commencement of work.

To _____ Issuing Authority

Please be advised that the Order of Conditions for the project at _____
File Number _____ has been recorded at the Registry of _____ and

has been noted in the chain of title of the affected property in accordance with General Condition B on _____, 19 _____

If recorded land, the instrument number which identifies this transaction is _____

If registered land, the document number which identifies this transaction is _____

Signature _____ Applicant

NEW ENGLAND ENVIRONMENTAL, INC.

**WETLAND RESTORATION PLAN
FOR ALTERED WETLANDS
1220 Main Street
Hingham, Massachusetts
DEP File No. 34-263
July 25, 1990**

Prepared For:

**Groundwater Technology, Inc.
220 Norwood Park South
Norwood, MA 02062**

and

**Shell Oil Company
P.O. Box 1703
Atlanta, Georgia 30371**

Prepared By:

**New England Environmental, Inc.
12 Dickinson Street
Amherst, MA 01002**

File: 90-783

NEW ENGLAND ENVIRONMENTAL, INC.

Environmental Consulting Services

12 Dickinson Street
Amherst, MA 01002
(413) 256-0202
FAX (413) 256-1092

25 July 1990

Hingham Conservation Commission
Town Hall
7 East Street
Hingham, MA 02043

Re: Wetland Restoration Plan for Altered Wetlands,
Shell Gas Station
Intersection Routes 53 and 228
Hingham, MA
NEE file # 90-783
DEP file # 34-263

Service Station Reference:
Shell Oil Company Service Station
(Former Queen Anne's ARCO)
10 Washington Street
Norwell, Massachusetts
DEP Site No. 4-0134

Dear Commission Members:

On behalf of Shell Oil Company, enclosed for your approval is a Wetland Restoration Plan for the restoration of an area of Bordering Vegetated Wetland. The area, which is located at 1220 Main Street, Hingham, Massachusetts, was altered in December 1987 by Atlantic Richfield Company (ARCO) during the installation of a collector sump and equipment shed.

Pursuant to an agreement between Shell Oil Company and ARCO, Shell Oil Company assumed management of ongoing environmental activities at the subject site on March 3, 1989. As part of the management of remediation activities, Shell Oil Company wishes to restore the altered wetlands (including the removal of the collector sump, and the gravel fill used as a foundation for the former sump shed), in accordance with the requirements stated in the Order of Conditions issued to ARCO and to the satisfaction of the Conservation Commission.

NEW ENGLAND ENVIRONMENTAL, INC.

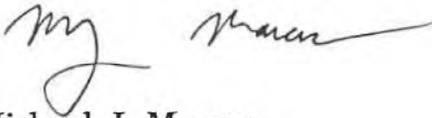
Hingham Con. Com.

-page 2-

25 July 1990

Please contact this office if you have any questions regarding this report.

Sincerely Yours,
New England Environmental, Inc.



Michael J. Marcus
Senior Biologist

MJM/kt

enclosure

copy: Department of Environmental Protection
Northeast Region
5 Commonwealth Avenue
Woburn, Mass. 01801

Mr. Marcel Boelitz
The Commonwealth of Massachusetts
Department of Environmental Protection
Southeast Region
Lakeville Hospital
Lakeville, Mass. 02347

Ms. Sarah King
Groundwater Technology, Inc.
220 Norwood Park South
Norwood, Mass. 02062

Ms. Kathy Kelly, P.E.
Shell Oil Company
P.O. Box 1703
Atlanta, Georgia 30371

NEW ENGLAND ENVIRONMENTAL, INC.

INTRODUCTION

This wetland restoration plan is being submitted to the Hingham Conservation Commission for the restoration of an area of Bordering Vegetated Wetland (DEP File # 34-263). Under this filing a groundwater interceptor trench, collector sump and an equipment shed were installed in an area of Bordering Vegetated Wetland by the Atlantic Richfield Company (ARCO) in December 1987.

The Bordering Vegetated Wetlands to be restored are located at 1220 Main Street, in Hingham, Massachusetts on the property owned by George Scothorne. As part of the restoration, a collector sump, an equipment shed and the gravel fill material used as a foundation for the shed, installed by ARCO in December 1987, will be removed. The existing interceptor trench, also installed by ARCO, will remain and will be utilized in the present groundwater remediation system. The old haybale barrier, used during the 1987 installation, will be removed during the wetland restoration. The equipment storage shed has already been removed.

WETLANDS ALTERED

New England Environmental, Inc. visited the site on May 3, 1990 and again on June 21, 1990 to assess the present conditions of the previously altered wetland area. The wetlands on the site were flagged by another consultant and have been subject to review by the Conservation Commission under a previous Notice of Intent filing (DEP File # 34-263). Although these wetland flags are no longer visible, the plotted wetland area on the site plan (attached as Figure 1) reflects the present conditions.

Our site visits revealed that the majority of the altered wetlands in the vicinity of the interceptor trench have naturally become re-vegetated with wetland plants. Coverage was approximately 100 % and included plants such as spotted jewelweed, tussock sedge, boneset, *Carex* spp. and soft rush. Several red maple and green ash saplings, as well as northern arrowwood and silky dogwood shrubs were also found in this formerly disturbed area. This natural restoration can be attributed to the restoration of the natural grades, and the re-spreading of the organic soils after the trench was installed by ARCO.

NEW ENGLAND ENVIRONMENTAL, INC.

The elevation of the eastern portion of the altered wetlands (in the vicinity of the former shed) is slightly higher than the elevation of the surrounding wetlands. Consequently, this area supports mostly upland plant species such as thistle, milkweed, goldenrods, and dandelions.

WETLAND RESTORATION PLAN

On behalf of Shell Oil Company, we propose to restore the wetlands which have previously been altered so that the site will closely resemble the surrounding wetlands. The gravel fill material in the area of the former shed will be removed and the area graded to the elevation of the surrounding wetlands. Since there is almost complete coverage of herbaceous wetland plants within most of the previously disturbed area, it is proposed to leave these grades intact and add additional woody species. If necessary, additional organic soils will be spread over areas after fill has been removed.

The restored wetland is designed to be similar in both species composition and structure to the Bordering Vegetated Wetlands. Seedlings will be planted to replace the existing trees and shrubs at maturity. It is anticipated that it will take at least one full growing season for the plants within the restoration area to become fully established, and at least two growing seasons before the restored area is performing as a functioning wetland.

WORK DESCRIPTION

Sequence of events

The wetland restoration will proceed under the following sequence:

1. Erosion Control

Prior to restoration, a haybale barrier will be installed around the restoration area as shown on Figure 1. This erosion barrier will remain in place for at least one full growing season and until all exposed earth within and adjacent to the wetland restoration area has been stabilized.

NEW ENGLAND ENVIRONMENTAL, INC.

2. Removal of Fill Material

After the erosion control is in place, the gravel fill around the shed will be removed and the area will be graded to the elevation of the surrounding wetland by earth-moving machinery.

Removal work will take place from the upland side of the wetland, to minimize further disturbance of the adjacent wetland. In addition, the erosion control barrier will serve as a limit of work and shall not be breached by any earth-moving machinery.

3. Fill Removal by Hand

After all materials are removed by earth-moving machinery, the area will be raked by hand to remove additional fill and to smooth the soils.

4. Soil preparation

After removal of the gravel fill, it will be determined whether there are suitable hydric soils still present. If it is determined that hydric soils are insufficient to provide a suitable substrate for the wetland plants, the grade of the area will be lowered to accommodate the placement of an approximate 6" layer of organic soils or top soil mixture obtained from an off-site source.

5. Removal of old haybales

An existing decomposed haybale barrier associated with the original ARCO construction will be removed from the wetlands and stored at least 100 feet from the wetlands.

6. Planting Wetland Trees and Shrubs

Trees and shrubs will be planted throughout the entire wetland restoration area to assure re-vegetation of the area within the first growing season after restoration. The majority of our nursery stock is field grown in wetland conditions and tend to not suffer the transplant shock common in most nursery grown species transplanted to wetland conditions.

The approximately 4,000 square foot area will be planted with the

NEW ENGLAND ENVIRONMENTAL, INC.

following wetland species:

Species	Spacing (feet)	# of Plants
Red Maple	15	9
Green Ash	15	9
Silky Dogwood	6	28
Northern Arrowwood	6	28
Winterberry Holly	6	28
Highbush Blueberry	6	28

Appropriate substitute species may be used if existing plants do not survive, or if species are unavailable.

7. Seeding

Since the area still has some evidence of jewelweed and sensitive fern it is likely that the understory will be re-vegetated with these species. In addition, the site will be seeded with a mixture containing a variety of native wetland plants. The species to be included are: blue vervain, smartweed, jewelweed, spotted joe-pye weed, tussock sedge, dark-green bulrush and millet. These species have been selected to represent varying degrees of drought tolerance, and should establish themselves based on micro-topography and the resulting variation in soil moisture. The rate of application shall be 1 lb per 1,000 square feet.

Although several of these plants are more typical of wet meadows than shrub swamps, the shade intolerant plants such as joe-pye weed and blue vervain will eventually be replaced by other wetland species as the restored area matures into a shrub swamp.

In addition to providing erosion control and wildlife cover, these plants should help discourage the establishment of undesirable alien "weed" species, such as purple loosestrife and phragmites.

NEW ENGLAND ENVIRONMENTAL, INC.

Planting and seeding will take place in either the coming fall or in the spring.

8. Inspection

It has been our experience that even the best state-of-the-art wetland restoration plan will fail if there is no inspection of the wetlands during and after construction. Prior to work commencing, a meeting will be held with the construction crew to explain the work scope and restoration procedures.

During the process of fill removal and restoration of the altered wetland area, personnel from New England Environmental will be present on site to oversee all activities. Planting and seeding of the restoration area shall be performed by New England Environmental.

The wetland vegetative community will be inspected by New England Environmental during and following plantings. Additional planting and seeding will take place if deemed necessary after the first growing season. All plant material shall be guaranteed for a period of one year, and shall be replaced if plants do not survive.

Written reports will be provided by New England Environmental to the Hingham Conservation Commission and the DEP following the completion of the restoration procedure as well as following the first growing season.

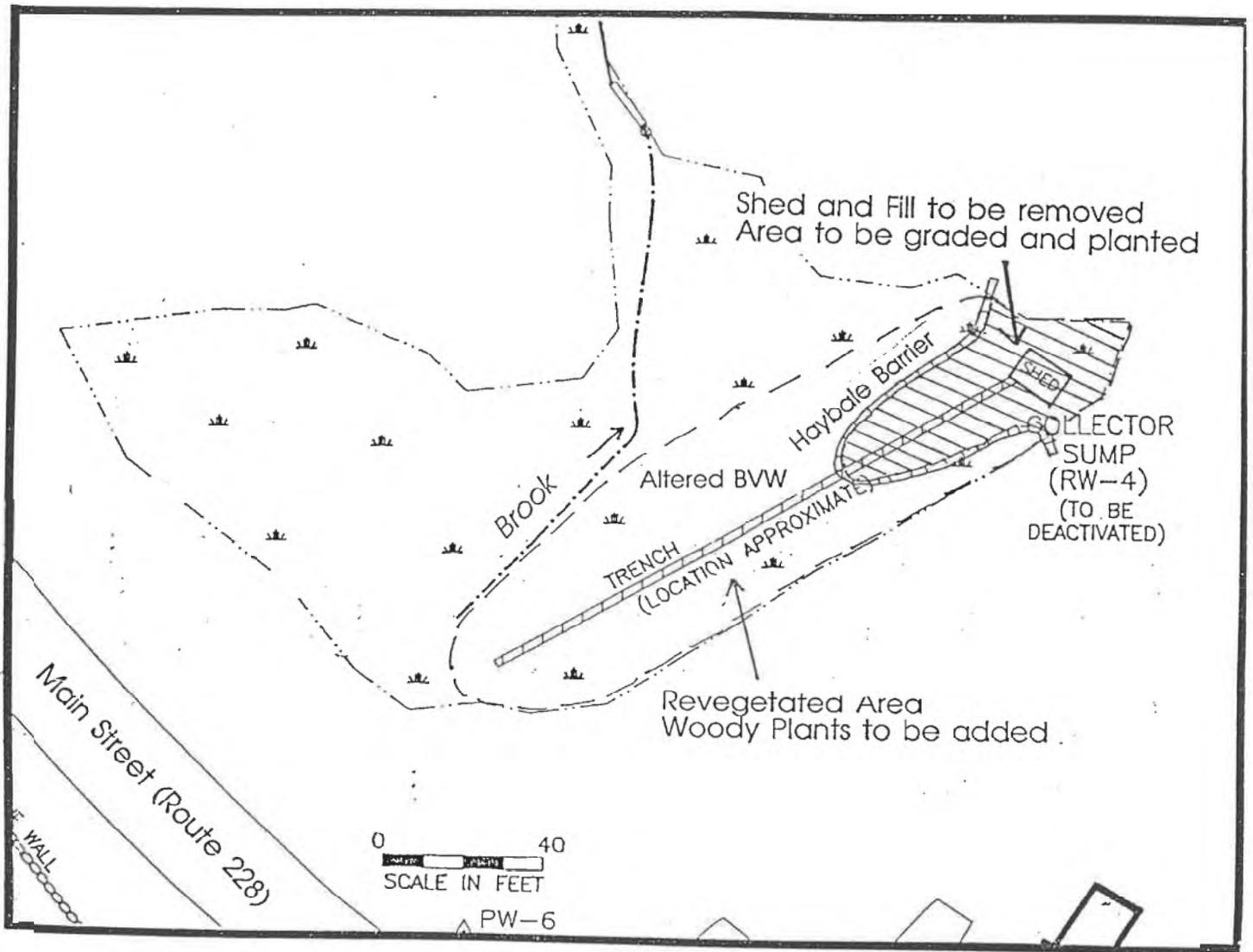
SUMMARY

This wetland restoration plan proposes to remove fill from the Bordering Vegetated Wetlands permitted under the Notice of Intent filed by ARCO. There is a total wetland alteration of approximately 4000 square feet, however, some of this area has become established with herbaceous wetland plants and will need only to have wetland trees and shrubs hand-planted. Fill which has been placed within the wetlands will be removed, hydric soils put into place, and the entire disturbed wetlands will be planted with wetland trees, shrubs and herbaceous plants. An inspection program is incorporated into this restoration plan to provide the Hingham Conservation Commission with written reports regarding this work.

FIGURE 1

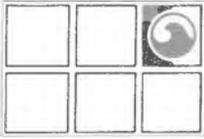
NEW ENGLAND ENVIRONMENTAL, INC.

WETLAND RESTORATION PLAN



LEGEND:

- BVW Bordering Vegetated Wetlands
- \\\\\\\\\\\\\\\\ Restoration Area
- Revegetated Area (trees and shrubs to be added)
- Edge of Wetlands



**GROUNDWATER
TECHNOLOGY, INC.**

220 Norwood Park South, Norwood, MA 02062 U.S.A. (617) 769-7600

Telex: 92-8420 Fax: (617) 769-7992

August 7, 1990

Refer: 01-105-1977

Mr. Joseph Stigliani
Commission Officer
Town of Hingham Conservation Commission
7 East Street
Hingham, Massachusetts 02043

Subject: Order of Conditions Extension
Shell Oil Company Service Station
(Former Queen Anne's ARCO)
10 Washington Street
Norwell, Massachusetts
DEP Site # 4-0134

*Put on agenda
8-27-90*

Dear Mr. Stigliani:

On behalf of Shell Oil Company, Groundwater Technology, Inc. requests an extension of the Order of Conditions for the wetlands area located between 1220 Main Street (property of Mr. George Scothorne) and 1190 Main Street (property of Mr. Richard Starr). This wetlands area has been designated as file number 34-263 by The Commonwealth of Massachusetts Department of Environmental Protection (DEP).

The Order of Conditions was issued to Atlantic Richfield Company (ARCO) in September 1987 and expires on September 8, 1990. A copy of the Order of Conditions is attached. Shell Oil Company assumed management of the environmental activities at the subject site on March 3, 1989, pursuant to an agreement between Shell Oil Company and ARCO. The Order of Conditions was transferred from ARCO to Shell at that time.

Shell Oil Company is currently installing a groundwater pumping and recharge system in the vicinity of the wetlands mentioned above. Shell Oil Company has also submitted a Wetlands Restoration Plan for these wetlands which were disturbed by the installation of an interceptor trench by ARCO in 1987. Shell Oil Company requests a three year extension on the Order of Conditions (to September 8, 1993) in order to complete work in the vicinity of the wetlands and to operate the groundwater pumping and recharge system for the next several years.

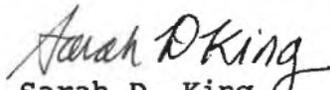
Mr. Joseph Stigliani
Commission Officer
Town of Hingham Conservation Commission

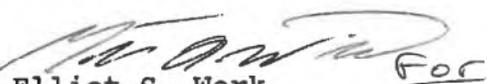
Page 2

If you have any questions or require additional information,
please call us at (617) 769-7600 or Ms. Kathryn Kelly of Shell
Oil Company at (404) 955-4622.

Sincerely,

GROUNDWATER TECHNOLOGY, INC


Sarah D. King
Project Geologist


Elliot S. Werk
Hydrogeologist
Territory Manager

SDK/ESW/dmm

Copy: Ms. Kathryn Kelly, P.E.
Shell Oil Company
P.O. Box 1703
Atlanta, GA 30371



DEOE File No. 34-263
(To be provided by DEOE)
City/Town Hingham
Applicant Atlantic Richfield C

ORDER OF CONDITIONS
MASSACHUSETTS WETLANDS PROTECTION ACT
G.L.C 131, §40
TOWN OF HINGHAM'S WETLANDS PROTECTION BY-LAW

From Town of Hingham Conservation Commission
To Atlantic Richfield Company George & Norma Scothorne
(Name of Applicant) (Name of property owner)
Address 515 S. Flower St. 1220 Main Street
Los Angeles, CA 90051 Address _____

This Order is issued and delivered as follows:
 by hand delivery to applicant or representative on _____ (date)
 by certified mail, return receipt requested on _____ (date)

This project is located at 1220 Main Street
The property is recorded at the Registry of Plymouth
Book 7157 Page 308

Certificate (if registered) _____
The Notice of Intent for this project was filed on August 25, 1987 (date)
The public hearing was closed on September 8, 1987 (date)

Findings
The Commission has reviewed the above-referenced Notice of Intent and plans and has held a public hearing on the project. Based on the information available to the Commission at this time, the Commission has determined that the area on which the proposed work is to be done is significant to the following interests in accordance with the Presumptions of Significance set forth in the regulations for each Area Subject to Protection Under the Act (check as appropriate):

- Public water supply
- Private water supply
- Ground water supply
- Erosion control
- Storm damage prevention
- Prevention of pollution
- Land containing shellfish
- Fisheries

Atlantic Richfield Co.
1220 Main Street

Therefore, the Conservation Commission hereby finds that the following conditions are necessary, in accordance with the Performance Standards set forth in the regulations, to protect those interests checked above. The Conservation Commission orders that all work shall be performed in accordance with said conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications or other proposals submitted with the Notice of Intent, the conditions shall control.

General Conditions

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. This Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state or local statutes, ordinances, by-laws or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
 - (a) the work is a maintenance dredging project as provided for in the Act; or
 - (b) the time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance and both that date and the special circumstances warranting the extended time period are set forth in this Order.
5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order.
6. Any fill used in connection with this project shall be clean fill, containing no trash, refuse, rubbish or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipes, tires, ashes, refrigerators, motor vehicles or parts of any of the foregoing.
7. No work shall be undertaken until all administrative appeal periods from this Order have elapsed or, if such an appeal has been filed, until all proceedings before the Department have been completed.
8. No work shall be undertaken until the Final Order has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is to be done. The recording information shall be submitted to the Commission on the form at the end of this Order prior to commencement of the work.
9. A sign shall be displayed at the site not less than two square feet or more than three square feet in size bearing the words, "Massachusetts Department of Environmental Quality Engineering,
File Number 34-263"
10. Where the Department of Environmental Quality Engineering is requested to make a determination and to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before the Department.
11. Upon completion of the work described herein, the applicant shall forthwith request in writing that a Certificate of Compliance be issued stating that the work has been satisfactorily completed.
12. The work shall conform to the following plans except as may be amended by any specific conditions contained herein.

Exhibit H
Norwell, MA

D.E.Q.E FILE 334-263
Atlantic Richfield Co.
1220 Main Street - September 21, 1987

Arco Station - Norwell, MA
Plan View Off-Site Area
Date: 8//19/87
Liberty Environmental Systems, Inc.

Arco Station - Norwell, MA
Cutoff Trench A-B-C Detail
Date: 7/22/87
Liberty Environmental Systems, Inc.

13. To the extent possible, the trench shall be installed in such a manner as will result in the minimum disturbance of the wetlands.
14. No alterations or disturbance shall take place more than 8' from the centerline of the proposed trench.
15. All excess soil shall be removed from the site or disposed of beyond or out of the wetlands or buffer zone.
16. The top 3" to 6" of the trenched area shall be covered with topsoil excavated from within the wetlands.
17. All disturbed areas within the buffer zone shall be stabilized with loam and seed, sod, mulch, or other appropriate controls.
18. All disturbed areas within the wetlands shall be revegetated with wetland plant species in accordance with 310 CMR 10.55(4)(6)6 of the Wetlands Regulations.
19. Prior to any earth moving activities on the site, an erosion control barrier consisting of staked straw bales or enviro silt fence shall be installed 8' north of, and for the entire length of the trench and line where said trench and line crosses through the wetlands. No alterations shall take place beyond, or north of said erosion barrier.
20. Inspection of approval of said barrier shall be obtained from the Conservation Officer prior to any excavations or earth moving activities on the site.
21. This Order does not permit the construction of access roads or the stockpiling of soil within the wetlands.
22. This Order does not grant, authorize, or permit any property rights, privileges, or dispensations.
23. A copy of this Order shall be available at all times on the site and all personnel working on the site shall be familiar with this Order.

Atlantic Richfield Co.
1220 Main Street

September 21, 1987

Issued By Town of Hingham Conservation Commission

Signature(s) *Robert F. Beal Jr* Chairman

Bernard F. Stearns

Mr. Eisenman

Virginia B. [unclear]

This Order must be signed by a majority of the Conservation Commission.

On this twenty-first day of September 19 87 before me personally appeared Robert F. Beal Jr to me known to be the person described in and who executed the foregoing instrument and acknowledged that he/she executed the same as his/her free act and deed.

Roberta L. Meallo June 1, 1990
Notary Public Roberta L. Meallo My commission expires

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land upon which the proposed work is to be done or any ten residents of the city or town in which such land is located are hereby notified of their right to request the Department of Environmental Quality Engineering to issue a Superseding Order, providing the request is made by certified mail or hand delivery to the Department within ten days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and the applicant.

Detach on dotted line and submit to the _____ prior to commencement of work.

To _____ Issuing Authority

Please be advised that the Order of Conditions for the project at _____

File Number _____ has been recorded at the Registry of _____ and

has been noted in the chain of title of the affected property in accordance with General Condition 8 on _____ 18 _____

If recorded land, the instrument number which identifies this transaction is _____

If registered land, the document number which identifies this transaction is _____

Signature _____ Applicant

TOWN OF HINGHAM



CONSERVATION COMMISSION 7 East Street Hingham, MA 02043 (617) 749-5445

August 14, 1990

Sarah King
Groundwater Technology, Inc.
220 Norwood Park South
Norwood, MA 02062

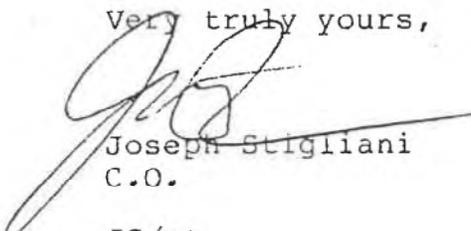
Re: DEP FILE #34-263
1220 Main Street, Hingham

Dear Sarah:

I have reviewed the July 25, 1990 Wetland Restoration Plan prepared by New England Environmental, Inc., on the above referenced project and find Mr. Marcus has adequately addressed all issues concerning restoration of the wetlands affected by the installation of the collector sump and shed. I note his restoration plan details eight separate conditions or events, and I feel that the actual restoration should conform with this sequence of events. In addition, and in particular, I feel it is important that the wetland restoration be performed under the review of personnel from New England Environmental to ensure compliance with the above noted events.

Thank you for your prompt attention to this matter. I hope to be forwarding you an Extension Permit following the Commission's August 27th meeting.

Very truly yours,


Joseph Stigliani
C.O.

JS/et

cc: Michael Marcus

NEW ENGLAND ENVIRONMENTAL, INC.

Environmental Consulting Services

12 Dickinson Street
Amherst, MA 01002
(413) 256-0202
FAX (413) 256-1092

5 September 1990

Hingham Conservation Commission
Town Hall
7 East Street
Hingham, MA 02043

RE: Wetland restoration, Shell Oil Company Service Station,
Routes 53 and 228, Hingham. DEP file # 34-263, NEE # 90-783.

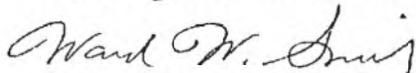
Dear Commission Members:

On August 29, 30, and 31, New England Environmental was present on the above referenced site to supervise the construction of the wetland restoration area. Before construction, a haybale barrier was erected between the wetland restoration area and the adjacent wetlands. The grades were then lowered with machinery to approximately coincide with, or be at a slightly lower elevation than, the adjacent wetland. The majority of the site still retained the original hydric soils, although these were overlain by, and in places mixed with, gravel fill. Although additional soils were not added to the lower portion of the restored area, approximately 30 cubic yards of topsoil were added to the side slopes and the upper portion of the area.

We are planning to begin planting this area in late September, and will inform you by telephone when we have scheduled the actual date.

Please do not hesitate calling if you have any questions or concerns regarding the wetland restoration procedures.

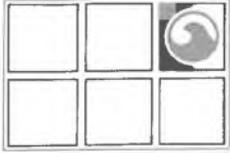
Sincerely yours,
New England Environmental, Inc.



Ward W. Smith
Biologist

WS/if

cc: DEP, Northeastern Region
Ms. Sarah King, Groundwater Technology, Inc.



GROUNDWATER TECHNOLOGY, INC.

220 Norwood Park South, Norwood, MA 02062 U.S.A. (617) 769-7600

Telex: 92-8420 Fax: (617) 769-7785

October 24, 1990

Refer: 01-105-1977

Mr. Joseph Stigliani
Conservation Officer
Hingham Conservation Commission
7 East Street
Hingham, Massachusetts 02043

Subject: Hand Augered Wellpoints in Wetlands
1222 Main Street
Hingham, Massachusetts

Service Station Reference:
Shell Oil Company Service Station
10 Washington Street
Norwell, Massachusetts

Dear Joe:

As part of a Department of Environmental Protection (DEP) approved Phase II Comprehensive Site Assessment, Groundwater Technology, Inc., on behalf of Shell Oil Company, will be drilling soil borings across the subject site at 50-foot intervals. Monitoring wells will be installed in several of these borings. Within the on-site wetlands areas these borings will be completed using a hand-held auger. A 4-inch diameter hole will be hand-augered to a maximum depth of 6 feet below grade and a monitoring well constructed with slotted PVC well screen will be installed within this hole. The purpose of completing these activities is to obtain soil samples and groundwater samples for laboratory analysis and to monitor groundwater elevations in the wells. This information will enable us to characterize the subsurface conditions and to determine the groundwater flow conditions in the wetlands.

The attached Site Map highlights the proposed hand augered boring locations within the wetlands. Please review these locations and call us with your comments. Drilling activities in other areas of the subject site commenced on Wednesday, October 24, 1990. We will await your approval before commencing the hand augered well points.

Mr. Joseph Stigliani
Conservation Officer
Hingham Conservation Commission

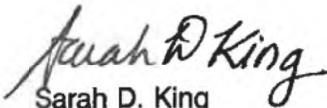
Page 2

Erosion controls (hay bales and/or siltation fences) will be utilized in areas in the vicinity of the wetlands to prevent potential runoff into the wetlands.

Please call me at (617) 769-7600 with any questions and with your approval of these activities.

Sincerely,

GROUNDWATER TECHNOLOGY, INC.



Sarah D. King
Project Geologist
Attachment

SDK/dmm
sh4/1977hand.aug

Copy: Ms. Kathryn Kelly, P.E.
Senior Environmental Engineer
Shell Oil Company
P.O. Box 1703
Atlanta, GA 30371

NEW ENGLAND ENVIRONMENTAL, INC.

Environmental Consulting Services

12 Dickinson Street
Amherst, MA 01002
(413) 256-0202
FAX (413) 256-1092

29 October 1990

Hingham Conservation Commission
Town Hall
7 East Street
Hingham, MA 02043

RE: Wetland restoration, Shell Oil Company Service Station,
Routes 53 and 228, Hingham. DEP file # 34-263, NEE # 90-783.

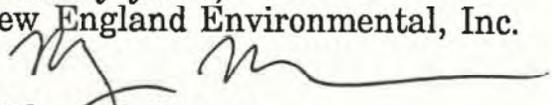
Dear Commission Members:

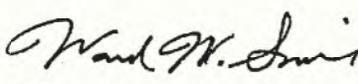
On 24 October 1990, New England Environmental planted the wetland restoration area on the above referenced site in accordance with the "Wetland Restoration Plan for Altered Wetlands" dated July 25, 1990. The following trees and shrubs were planted: 9 red maple; 9 swamp white oak; 32 silky dogwood; 32 northern arrow-wood; 32 winterberry holly; and 24 highbush blueberry. Swamp white oak was substituted for green ash, which was unavailable at the time of planting, in addition, four highbush blueberry shrubs were replaced with a total of twelve of the other species. It should also be noted that these trees and shrubs were reared under wet conditions, and contained a number of incidental wetland species within the transplanted soils including meadowsweet, sensitive fern, marsh fern, cranberry, and sphagnum moss. Subsequent to planting, the area was heavily sown with a wetland seed mixture composed of millet, redtop, tussock sedge, wool grass, blue vervain, boneset, joe-pye weed, smartweed, and cattail.

The contours of the replacement area closely mimic the adjoining undisturbed wetland, with hummock and hollow topography. At the time of planting, the low spots between the hummocks contained standing water, and the trees and shrubs were planted on top of the hummocks within this portion of the restored wetland.

We will continue to monitor the progress of this area and shall periodically send written reports to the Commission.

Sincerely yours,
New England Environmental, Inc.


Michael J. Marcus
Senior Biologist


Ward W. Smith
Biologist

MM/if

cc: DEP, Northeastern Region
Ms. Sarah King, Groundwater Technology, Inc.

TOWN OF HINGHAM



CONSERVATION COMMISSION 7 East Street Hingham, MA 02043 (617) 749-5445

November 15, 1990

Sarah D. King
Groundwater Technology, Inc.
220 Norwood Park South
Norwood, MA 02062

Re: Hand Augered Wellpoints
1222 Main Street, Hingham

Dear Ms. King:

I am in receipt of your letter of October 24, 1990 concerning soil borings at 50 foot intervals on the property referenced above. Within the wetlands, the holes are to be hand augered with a 4" diameter auger to a maximum depth of 6 feet below grade. Further, I understand that this activity is necessary to obtain soil samples and in some areas install pvc groundwater monitoring wells.

According to our files, an Order of Conditions regulating work within wetlands on the above referenced site as needed to remove gasoline contamination from the groundwater was issued on September 22, 1987. On August 27, 1990 this Order was extended to September 21, 1992. The site was inspected on November 14, 1990 and the work completed at this time found to be in compliance with said Order. It is however necessary to mulch or otherwise stabilize the recently replanted area of wetlands preferably with straw from bales surrounding the area in question.

Considering the above, I believe the borings can be done under the current Order of Conditions for the site and no new filing is required. This decision is based upon strict adherence with the procedure and techniques outlined in your October 24, 1990 letter, and further subject to the removal from the wetlands of any spoils not to be put back in the holes.

Please call me at 749-5445 if you have any questions.

Very truly yours,

Joseph Stigliani (et.)
Joseph Stigliani
C.O.

JS/et

POLICY ON RECEIPT OF INFORMATION

HINGHAM WETLAND REGULATIONS

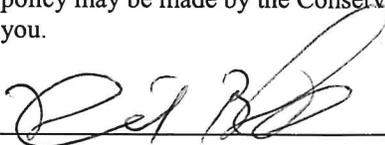
APPENDIX C

Policy on Receipt of Information

(Revised March 4, 2024)

1. New applications/filings must be submitted to the Conservation office (by certified mail or hand delivery) in accordance with the Conservation Commission Meeting Schedule and Submittal Deadlines to facilitate the placement of the legal advertisement and to allow timely review by the Conservation Officer. Conservation staff will review the application for administrative completeness. Upon receipt of a complete application, a hearing or meeting will be scheduled in accordance with the 310 CMR 10.05(5) and the Wetland Regulations, Section 7.6.
2. If deemed necessary, based on the Commission's meeting schedule, Conservation staff may request the applicant *voluntarily* waive the 21 day statutory deadline for holding a public hearing or issuing a Determination of Applicability.
3. Requests for additional information may be made by the Commission members or their agent to clarify the scope of the project or determine compliance with the 310 CMR 10.00 and/or the Hingham Wetland Regulations. Such requests, if not made at the public hearing, will be communicated to the applicant or their representative as promptly as possible.
4. Additional information requested by the Commission or their agent in accordance with No.3, must be submitted to the Conservation office (hard copy and electronic copy) a minimum of 7 days prior to the meeting date, on Monday by 4PM. If the office is closed on Monday due to a holiday, the information is due on the preceding Thursday by 4PM. *Revisions submitted after the established deadline may not receive a timely review, thereby resulting in a continuance to the next available meeting.*
5. The Commission may engage the peer review services of an outside consultant as provided by M.G.L. Ch. 44, § 53G, to be paid for by the applicant, for specific expert review deemed necessary to come to a final decision on a submitted application. Specific consultant services may include but are not limited to, review of a Notice of Intent, Wetland Resource Area Delineation, Stormwater/Drainage Reports, etc. The consultant shall be chosen by the Conservation Commission by vote at the public hearing, and report only to the Commission or its agent. *Requested additional information/revisions by the peer reviewer is required a minimum of two weeks prior to the hearing date.*
5. All supplemental documentation and revised plans must include a revision date and must be date stamped by the Conservation office upon receipt. If this information is not present, the documents may be considered incomplete and may not receive a timely review, thereby resulting in a continuance to the next available meeting.
6. Please note that all supplemental documentation and revised plans submitted to the Commission for a pending application, subject to the MA Wetlands Protection Act, must also be sent to the DEP Southeast Regional Office, 20 Riverside Dr., Lakeville, MA 02347

The Hingham Conservation Commission is committed to a thorough and timely review of each application and an efficient hearing process. Cooperation with this policy is appreciated to facilitate these efforts. Exceptions to this policy may be made by the Conservation staff if deemed warranted. Please sign and include with your filing. Thank you.



Applicant or Applicant's Representative Signature

8/15/24

Date

VOLUNTARY 21 DAY WAIVER (COC)



TOWN OF HINGHAM
CONSERVATION COMMISSION

**VOLUNTARY 21 DAY WAIVER
(Request for COC)**

As set forth under the MA Wetlands Protection Act Regulations, 310 CMR 10.05(9), and the Town of Hingham Wetland Regulations, Section 7.12(a), the Conservation Commission is required to issue a Certificate of Compliance within 21 days of receipt of a WPA Form 8A and statement that work, subject to the Final Order of Conditions, has been satisfactorily completed. The Commission may also refuse to issue a Certificate of Compliance if it determines that the work has not been completed in compliance with the Order.

Due to the Commission's established meeting schedule and increasing number of filings under review, the Hingham Conservation Commission hereby requests the applicant waive the aforementioned 21 day requirement. If you choose to waive this deadline, your request will still be heard and decided upon in a timely manner.

The undersigned hereby waives the 21 day time period for the Commission to issue a Certificate of Compliance until: _____

Meeting Date

For the following application: 1220 MAIN ST.

Address

DEP FILE # 034-263

DEP File No/Local By-Law No.



Applicant Signature

David Billo, LSP
Print

Aug. 15, 2024
Date