Coastline Consulting & Development, LLC
Waterfront Planning, Permitting, and Development

TOWN OF OLD LYME

BLACK HALL RIVER – NAVIGABLE CHANNEL DREDGING PROJECT

Old Lyme, Connecticut

PROPOSED SEDIMENT SAMPLING & ANALYSIS PLAN

January 8, 2014

Prepared For:

Town of Old Lyme

Memorial Town Hall

52 Lyme Street

Old Lyme, CT 06371

Prepared By:

Coastline Consulting & Development, LLC

5-B Old Post Road

Madison, CT 06443

TABLE OF CONTENTS

1.0 **INTRODUCTION**..... 1

2.0 **EXISTING CONDITIONS**..... 2
- 2.1 Black Hall River
- 2.2 Local Outfalls
- 2.3 Spill History

3.0 **SUMMARY OF PERMIT HISTORY**..... 4

4.0 **PROJECT DESCRIPTION**..... 5

5.0 **SEDIMENT SAMPLING INVESTIGATION**..... 6
- 5.1 Sediment Coring & Sampling
- 5.2 Laboratory Testing

PRELIMINARY GRAIN SIZE

1. Preliminary Grain Size Map
2. Grain Size Results

DRAWINGS

Sheet 1 of 9 Site Location Map
Sheet 2 of 9 Site Plan View
Sheet 3 of 9 Site Index Map
Sheet 4 of 9 Proposed Sample Locations
Sheet 5 of 9 Proposed Sample Locations
Sheet 6 of 9 Proposed Sample Locations
Sheet 7 of 9 Proposed Sample Locations
Sheet 8 of 9 Proposed Sample Locations
Sheet 9 of 9 Sampling & Analysis Plan Drawing Notes

PERMITS (1957, 1961, 2001)

1. 1957 - State of Connecticut Flood Control and Water Policy Commission Approval (Black Hall Boat Livery)
2. 1957 - State of Connecticut Flood Control and Water Policy Commission Approval (Various Property Owners)
3. 1961- No Permit Necessary letter (Black Hall Boat Livery)
4. 2001 - DEEP permit #200103084-KZ (Black Hall Marina)

NEARSHORE DISPOSAL LOCATION

Hammonassett Beach, Madison, CT

1.0 INTRODUCTION

The Town of Old Lyme is proposing to create an authorized navigation channel in the Black Hall River. This waterbody provides access to Long Island Sound for recreational boaters throughout the state, many of whom utilize the public launch ramp located on the Back River, and also supports a commercial marina operation. As is typical in any tidally influenced waterbody, siltation has occurred in the Black Hall River, leading to progressively shallower water depths that become particularly problematic at lower portions of the tide cycle. If allowed to persist, this condition threatens both the navigability of the river as well as the economic viability of the marina situated within it.

In an effort to mitigate these concerns, the Town of Old Lyme is proposing to dredge and create a navigable channel within the Black Hall River. The proposed dredge channel footprint is approximately 6,000 feet in length, beginning near the Route 156 bridge and extending south to Long Island Sound. The channel will maintain a width of 50' from the Route 156 bridge until the confluence of the Back and Black Hall Rivers. From that point, the channel will maintain a width of 100' until it terminates in Long Island Sound. The proposed channel will be dredged to a depth of -4.0' MLW (+1.0' overdredge). A total of 13,176 cubic yards of material will be dredged.

Based on preliminary grain size sampling/testing, the dredge material disposal operations are proposed for open water disposal at either the New London Disposal Site or the Central Long Island Sound Disposal Site for the material located north of the former Griswold Point peninsula (silt), and nearshore disposal at the Hammonassett Nearshore Disposal Area for the material located south of the peninsula (sand). The Hammonassett Nearshore Disposal Area was previously approved for sandy material disposal from the outer Patchogue River Federal Navigation dredging project, as well as the Indian Town Association entrance channel dredging project.

This proposed Sediment Sampling & Analysis Plan is being submitted to the US Army Corps of Engineers (USACE) and the Department of Energy & Environmental Protection (DEEP) in preparation to conduct a sediment coring and analytical testing program of the proposed navigation channel. The Plan is designed to evaluate the physical and chemical quality of the marine sediments proposed to be dredged from this area.

2.0 EXISTING CONDITIONS

In order to determine the existing depths present in the Black Hall River, Coastline Consulting & Development, LLC (Coastline) conducted hydrographic and topographic surveys of the predetermined project area. The following is a description of the hydrographic conditions present in the proposed dredge area.

2.1 *Black Hall River*

The proposed dredge channel footprint within the Black Hall River comprises a section of approximately 6,000 linear feet, beginning near the Route 156 bridge and extending south beyond the confluence with the Back River, into Long Island Sound.

Hydrographic Conditions – Hydrographic surveys of this area conducted in January-February 2013 show that the contour of the naturally deepest water meanders for the length of the proposed dredge footprint and is most likely a function of the geology of the river, as well as the strength of the current. Depths immediately south of the confluence of the Black Hall River and Long Island Sound are as shallow as -2.0' MLW at low tide. Depths within the river proper are as shallow as -2.3' MLW at low tide. These shallow areas persist until the river reaches the Route 156 bridge, where the water deepens to -6.0' MLW and greater. The shallow water between the open water in Long Island Sound and the Route 156 bridge present challenges for recreational vessels at low tide, and impair the functionality of the Black Hall River.

The adjacent Back River does not have such tidal constraints, with depths reaching -8.7' MLW at low tide. Therefore, no dredging is necessary within this river at this time. However, the ability of the public launch ramp to facilitate access to Long Island Sound is dependent upon dredging at the confluence of the Back and Black Hall Rivers.

2.2 *Local Outfalls*

At the time of the January-February 2013 hydrographic/topographic surveys of the proposed dredge area, no outfall pipes were observed.

2.3 *Spill History*

In order to determine if any local spills or releases have occurred within the vicinity of the proposed dredge footprint, Coastline Consulting & Development, LLC conducted a search of the United States Coast Guard National Response Center spill database. The search yielded no

reported incidents of spills in the vicinity of the dredge footprint or within the Black Hall River itself. Therefore, based on our review, no known/reported spills or releases have occurred within the immediate vicinity of the project site.

3.0 SUMMARY OF PERMIT HISTORY

Coastline conducted a search of DEEP and USACE records to determine the nature of any dredging that has been authorized in the Black Hall River. The four authorizations are outlined below and are included within the Permit History Section of this report.

On March 11, 1957 the State of Connecticut Flood Control and Water Policy Commission issued an unnumbered certificate to Black Hall Boat Livery to excavate an area approximately 65' x 55'. Sediment disposal was authorized on the property above mean high water.

On March 11, 1957 the State of Connecticut Flood Control and Water Policy Commission issued an unnumbered certificate to several property owners to dredge a portion of the river between the Route 156 bridge and the railroad bridge. Sediment disposal was authorized on the properties above mean high water.

On May 22, 1961 a letter was addressed to Black Hall Boat Livery indicating that no state certificate is needed to maintenance dredge along the existing bulkhead.

On May 6, 2002 the DEP issued permit #200103084-KZ to dredge approximately 480 cubic yards of material from the marina basin and dispose of the material on the upland in the confines of the existing parking area.

Conclusion

The issuance of dredging approvals in the Black Hall River indicates that the regulatory bodies have considered dredging to be an acceptable activity to facilitate recreational boating in this waterbody. The proposed dredge channel is consistent with the intent of past dredging approved in this river, as they facilitate recreational boating use within the waterbody. However, as no dredging has been approved within the proposed channel footprint itself, it is apparent that the proposed channel represents new dredging, which must be authorized through a Structures, Dredging, and Fill individual permit application.

4.0 PROJECT DESCRIPTION

The proposed dredge channel footprint is approximately 6,000 feet in length, beginning near the Route 156 bridge and extending south to Long Island Sound. The channel will maintain a width of 50' from the Route 156 bridge until the confluence of the Back and Black Hall Rivers. From that point, the channel will maintain a width of 100' until it terminates in Long Island Sound. The channel is proposed to a depth of -4.0' MLW (+1.0' overdredge) - this depth was selected based on the needs of typical boat drafts (small boats) and the naturally occurring depths.

A total of approximately 13,176 cubic yards of material will be required for removal from the proposed channel footprint. Dredging and disposal operations are proposed to be conducted using the mechanical clamshell method. Dredge material disposal operations are proposed for open water disposal at either the New London Disposal Site or the Central Long Island Sound Disposal Site for the dredge material located north of the former Griswold Point peninsula (silt), and nearshore disposal at the Hammonassett Nearshore Disposal Area for the dredge material located south of the peninsula (sand). All dredging activities will be conducted within an approved DEEP and ACOE dredging window.

5.0 SEDIMENT SAMPLING INVESTIGATION

The Town of Old Lyme proposes to conduct a Sediment Sampling Investigation within the dredge footprint in order to characterize the physical and chemical quality of marine sediments. This Sediment Sampling Investigation will consist of two components: Sediment Coring and Laboratory Testing. The proposed sediment coring and analytical testing program has been designed to evaluate the suitability of dredged sediments to be disposed of at approved ocean disposal sites. Each of these components is discussed below.

5.1 *Sediment Coring & Sampling*

Coastline Consulting & Development, LLC proposes that sediment coring be performed at a total of five (5) locations within the proposed dredge footprint. The proposed core locations have been located throughout the proposed dredge footprints as shown in Sheets 4 through 8 of 9. Sediment will be collected to a depth of -5.0' mean low water (-4.0' proposed dredge depth + 1.0' overdredge).

It is expected that sediment coring will be performed using a gravity corer. Geologic constraints or other conditions may require the use of the Model 2000 Vibratory Portable Corer, which is capable of penetrating coarser-grained sediments to greater depths.

An experienced environmental scientist will prepare the sediment samples for laboratory submittal. Sediment cores will be photographed and geologic stratigraphy logged prior to sample preparation. Sample collection and transfer to the laboratory for analytical testing will be conducted in accordance with regulatory testing and chain of custody protocols.

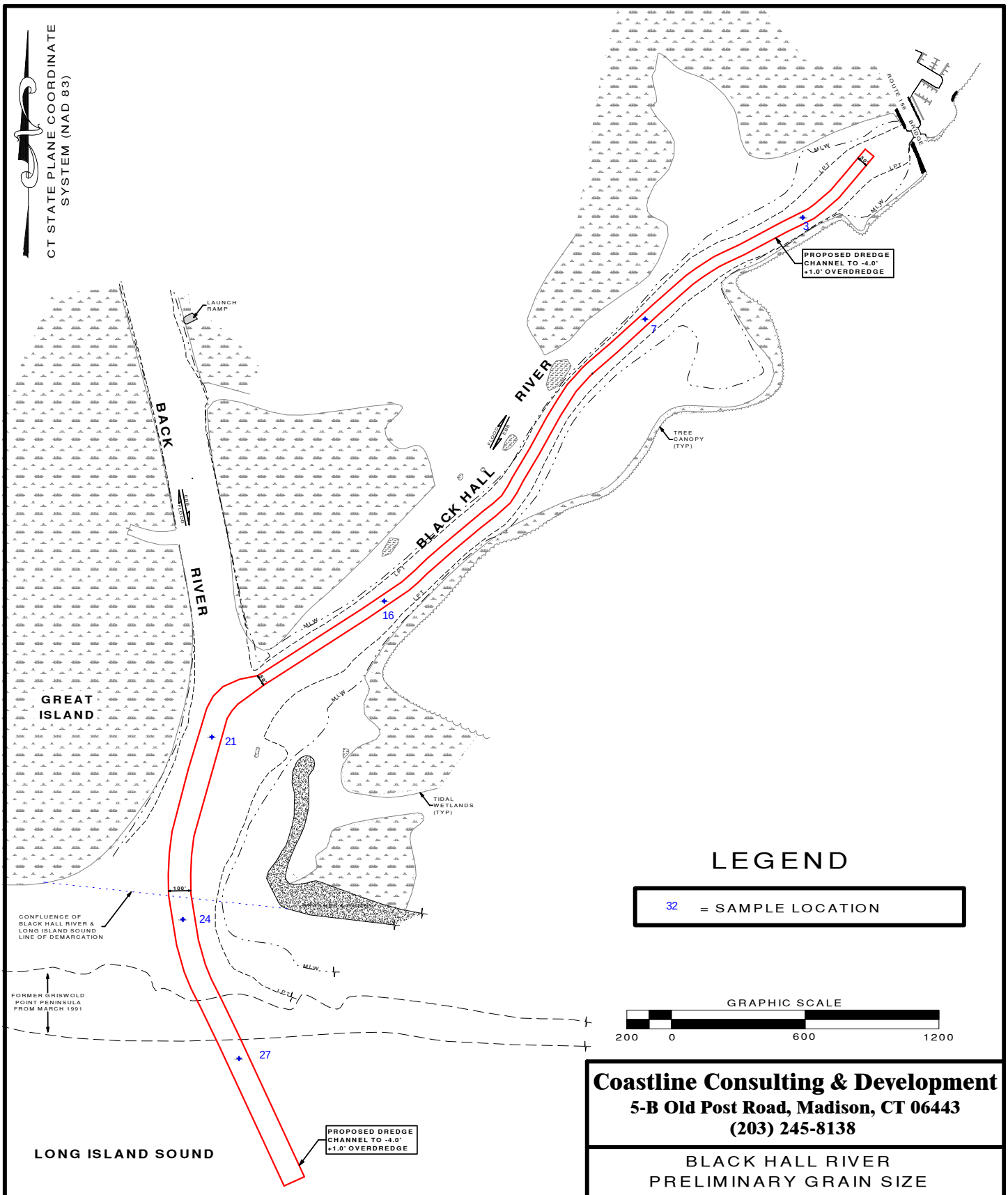
5.2 *Laboratory Testing*

Sediment samples collected during the sediment coring & sampling program will be submitted to a qualified laboratory for analytical testing. The selected laboratory will perform the required/requested physical and chemical analytical testing in accordance with protocols, method detection limits, and analytical methods specified in the 2004 "Regional Implementation Manual for the Evaluation of Dredged Material Proposed for Disposal in New England Waters". The following physical and chemical analyses will be performed on each sediment sample submitted for laboratory testing:

Bulk Sediment Testing Parameters

Parameter		Reporting Limit (ppm)
Metals		
Arsenic		0.4
Cadmium		0.07
Chromium		0.5
Copper		0.5
Lead		0.5
Mercury		0.02
Nickel		0.5
Zinc		1.0
PCBs		
(Total by NOAA summation of congeners)		0.001
Pesticides		0.001
Aldrin	Heptachlor epoxide	
cis- & tran-Chlordane	Hexachlorobenzene	
4,4'-DDT, DDD, DDE	gamma-BHC (Lindane)	
Dieldrin	Methoxychlor	
α & β Endolsulfan	cis- & trans-Nonachlor	
Endrin	Oxychlordane	
Heptachlor	Toxaphene	0.025
Polyaromatic Hydrocarbons (PAHs)		
Acenaphthene	Chrysene	
Acenaphthylene	Dibenzo (a, h) anthracene	
Anthracene	Fluoranthene	
Benzo (a) anthracene	Fluorene	
Benzo (a) pyrene	Indeno (1, 2, 3-cd) pyrene	
Benzo (b) fluoranthene	Naphthalene	
Benzo (k) fluoranthene	Phenanthrene	
Benzo (g, h, i) perylene	Pyrene	0.01
Physical Analyses		
Total Organic Carbon (TOC)		0.1%
Percent Moisture		1.0%
Grain size (Wet Sieve #4, 10, 40, 200)		

PRELIMINARY GRAIN SIZE



LEGEND

32 = SAMPLE LOCATION

GRAPHIC SCALE

200 0 600 1200

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(203) 245-8138

BLACK HALL RIVER
PRELIMINARY GRAIN SIZE
SAMPLE LOCATIONS

PREPARED FOR
THE TOWN OF OLD LYME
NAVIGABLE WATERWAYS STUDY
OLD LYME, CONNECTICUT

OCTOBER 31, 2013 | SCALE: 1" = 600'

Date Samples Received: 09/27/13

Client Name :	**Coastline Consulting**	CTL Lab No. :	0913450
Report Date :	10/02/13	PO/ Job No. :	13-062 Black Hall River

RESULTS OF ANALYSIS

Washed Sieve Analysis

ASTM D-422/ D-1140

Date Analyzed: 09/29/13

Matrix Type :		**S**	**S**	**S**	**S**
CTL Sample No.:		**14612**	**14613**	**14614**	**14615**
Field ID :		**BH #3**	**BH #7**	**BH #16**	**BH #21**
	Sieve Size				
Percent by Wt. Passing	No. 4	99.7	98.7	95.4	99.1
	No. 10	99.2	98.5	93.6	98.2
	No. 40	92.7	94.5	79.3	90.9
	No. 200	65.0	73.0	72.1	65.1

Matrix Type :		**S**	**S**		
CTL Sample No.:		**14616**	**14617**		
Field ID :		**BH #24**	**BH #27**		
	Sieve Size				
Percent by Wt. Passing	No. 4	97.0	83.8		
	No. 10	94.4	77.6		
	No. 40	70.5	44.5		
	No. 200	63.0	14.5		

RL= Reporting Limit **ND**= Not Detected

Matrix Type: W= Water/Aqueous **S=** Soil/Solid **O=** Oil/Hydrocarbon

Connecticut Testing Laboratories, Inc.
165 Gracey Avenue / Meriden, CT 06451
(203) 634-3731 (Fax) 630-1336
Certification CT-PH0547/ MA-CT035

DRAWINGS

GRAPHIC SCALE

1000 0 2000 4000

NOTE: REFER TO NOTES FOR THIS SHEET IN SAMPLING PLAN DRAWING NOTES ON SHEET 9 OF 9.

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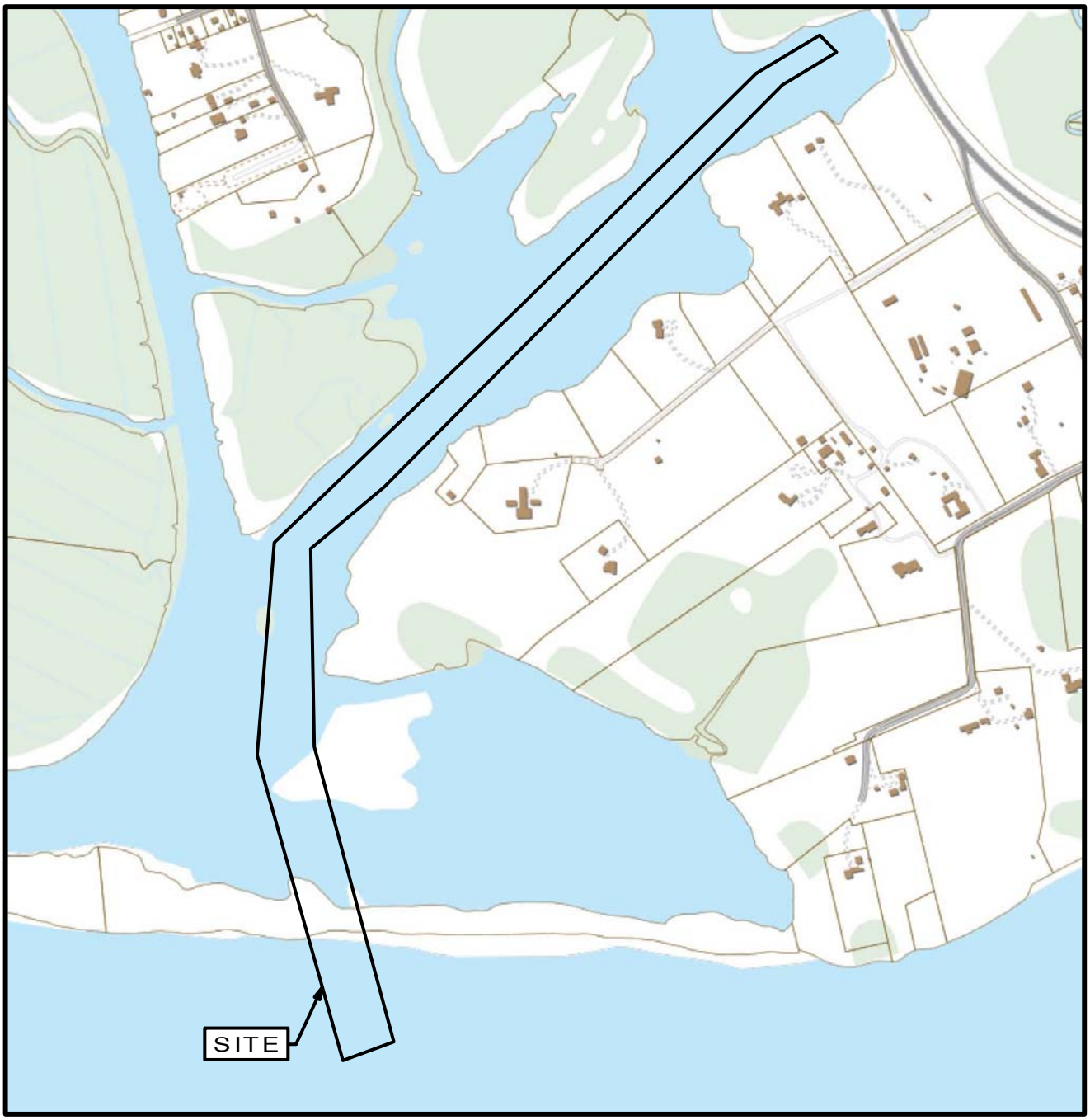
SHEET 1 OF 9
PROPOSED NAVIGATION CHANNEL
SAMPLING & ANALYSIS PLAN
SITE LOCATION MAP

BLACK HALL RIVER
OLD LYME, CONNECTICUT

JANUARY 8, 2014 | SCALE: 1 = 24,000



GRAPHIC SCALE

500 0 1000 2000

NOTE: REFER TO NOTES FOR THIS SHEET IN SAMPLING PLAN DRAWING NOTES ON SHEET 9 OF 9.

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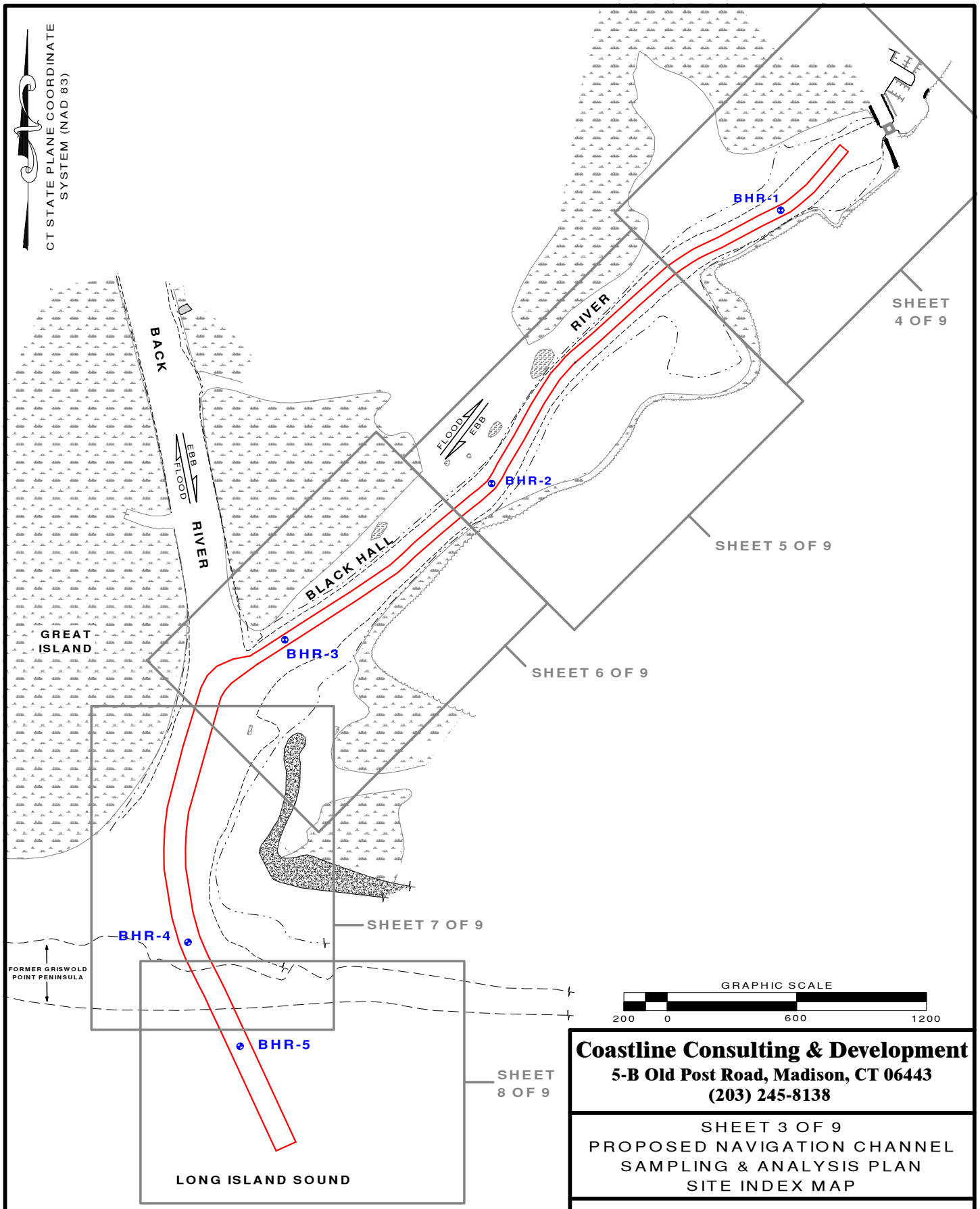
SHEET 2 OF 9
PROPOSED NAVIGATION CHANNEL
SAMPLING & ANALYSIS PLAN
SITE PLAN VIEW

BLACK HALL RIVER
OLD LYME, CONNECTICUT

JANUARY 8, 2014

SCALE: 1" = 1000'



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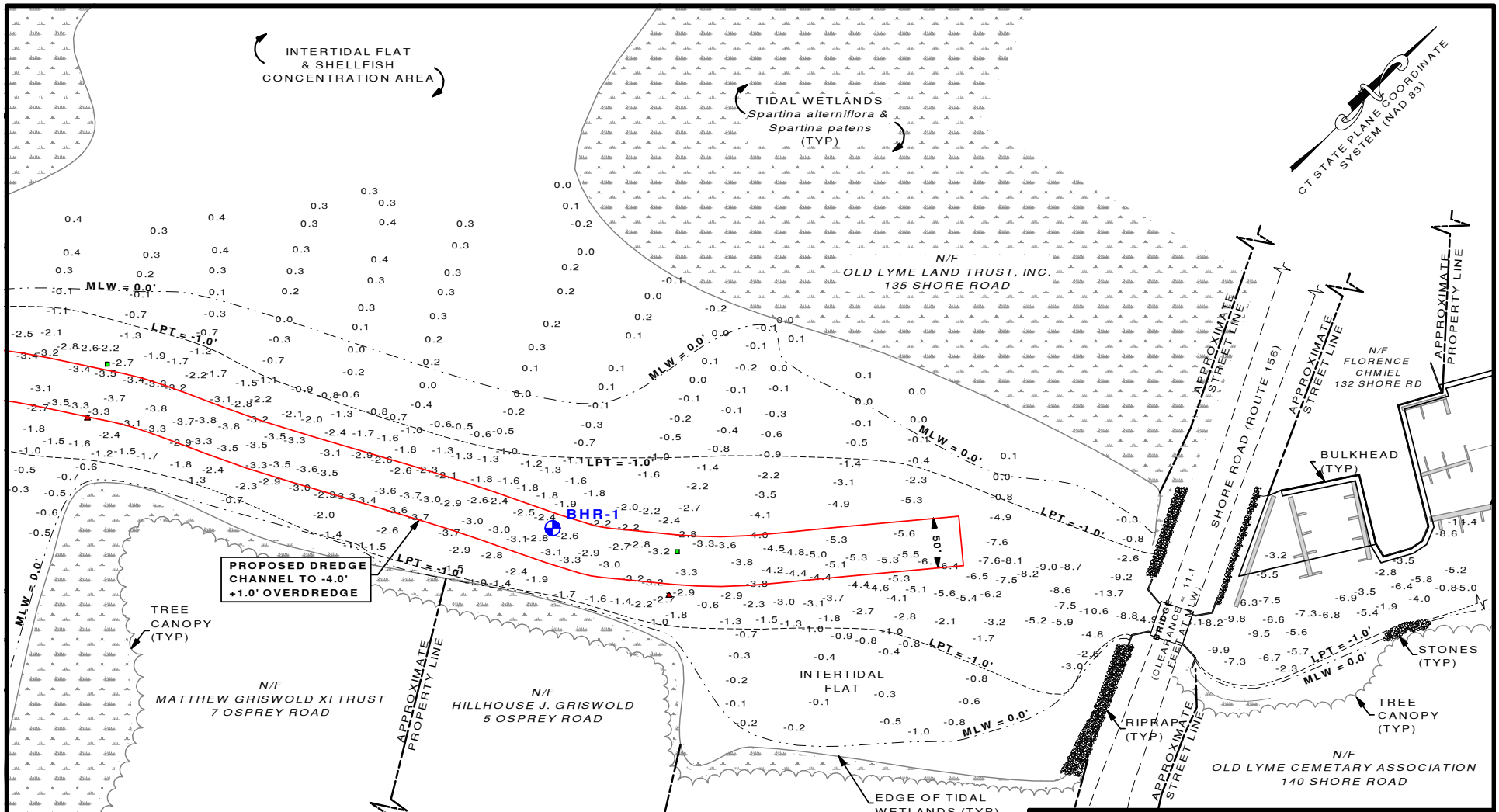
SHEET 3 OF 9
PROPOSED NAVIGATION CHANNEL
SAMPLING & ANALYSIS PLAN
SITE INDEX MAP

BLACK HALL RIVER
OLD LYME, CONNECTICUT

JANUARY 8, 2014 | SCALE: 1" = 600'

NOTE: REFER TO NOTES FOR THIS SHEET IN SAMPLING PLAN DRAWING NOTES ON SHEET 9 OF 9.



LEGEND

-1.2	=	SOUNDINGS IN FEET
+7.3	=	UPLAND ELEVATION
N/F	=	NOW/FORMERLY
TYP	=	TYPICAL
MLW	=	MEAN LOW WATER
LPT	=	LOWEST PREDICTED TIDE
■ ▲	=	NAVIGATION AID PVC PIPE
⊕ BHR-1	=	SEDIMENT CORE LOCATION

-2.1

NOTE: MEASURING POINT FOR INDIVIDUAL SOUNDINGS IS LOCATED AT THE DECIMAL POINT

GRAPHIC SCALE

60 30 0 150 300

NOTE: REFER TO NOTES FOR THIS SHEET IN SAMPLING PLAN DRAWING NOTES ON SHEET 9 OF 9.

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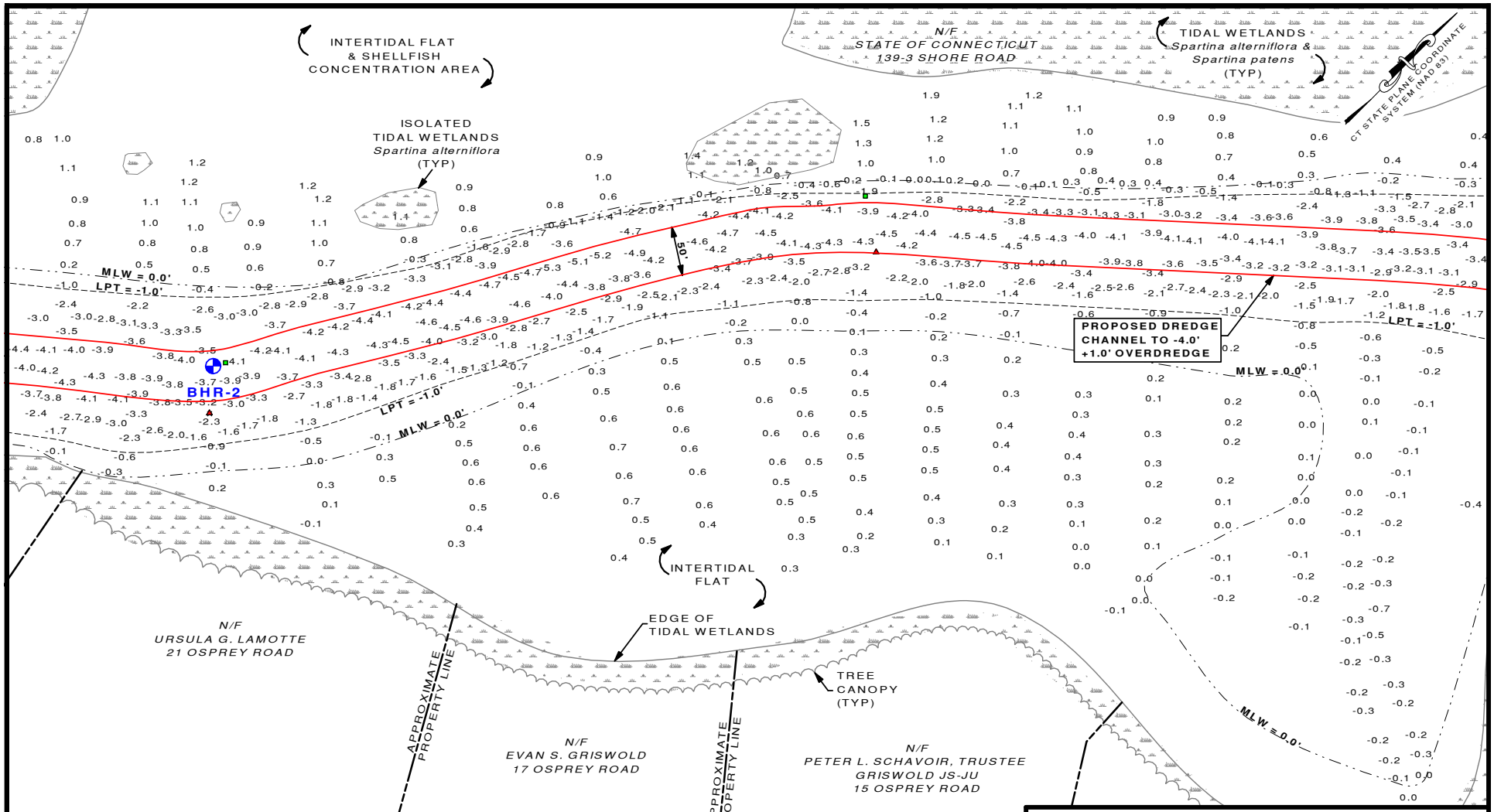
SHEET 4 OF 9
PROPOSED NAVIGATION CHANNEL
SAMPLING & ANALYSIS PLAN
SAMPLE LOCATIONS

BLACK HALL RIVER
OLD LYME, CONNECTICUT

JANUARY 8, 2014 | SCALE: 1" = 150'



LEGEND

-1.2	=	SOUNDINGS IN FEET
+7.3	=	UPLAND ELEVATION
N/F	=	NOW/FORMERLY
TYP	=	TYPICAL
MLW	=	MEAN LOW WATER
LPT	=	LOWEST PREDICTED TIDE
■ ▲	=	NAVIGATION AID PVC PIPE
◐ BHR-2	=	SEDIMENT CORE LOCATION

-2.1

NOTE: MEASURING POINT FOR INDIVIDUAL SOUNDINGS IS LOCATED AT THE DECIMAL POINT

NOTE: REFER TO NOTES FOR THIS SHEET IN SAMPLING PLAN DRAWING NOTES ON SHEET 9 OF 9.

GRAPHIC SCALE

60 30 0 150 300

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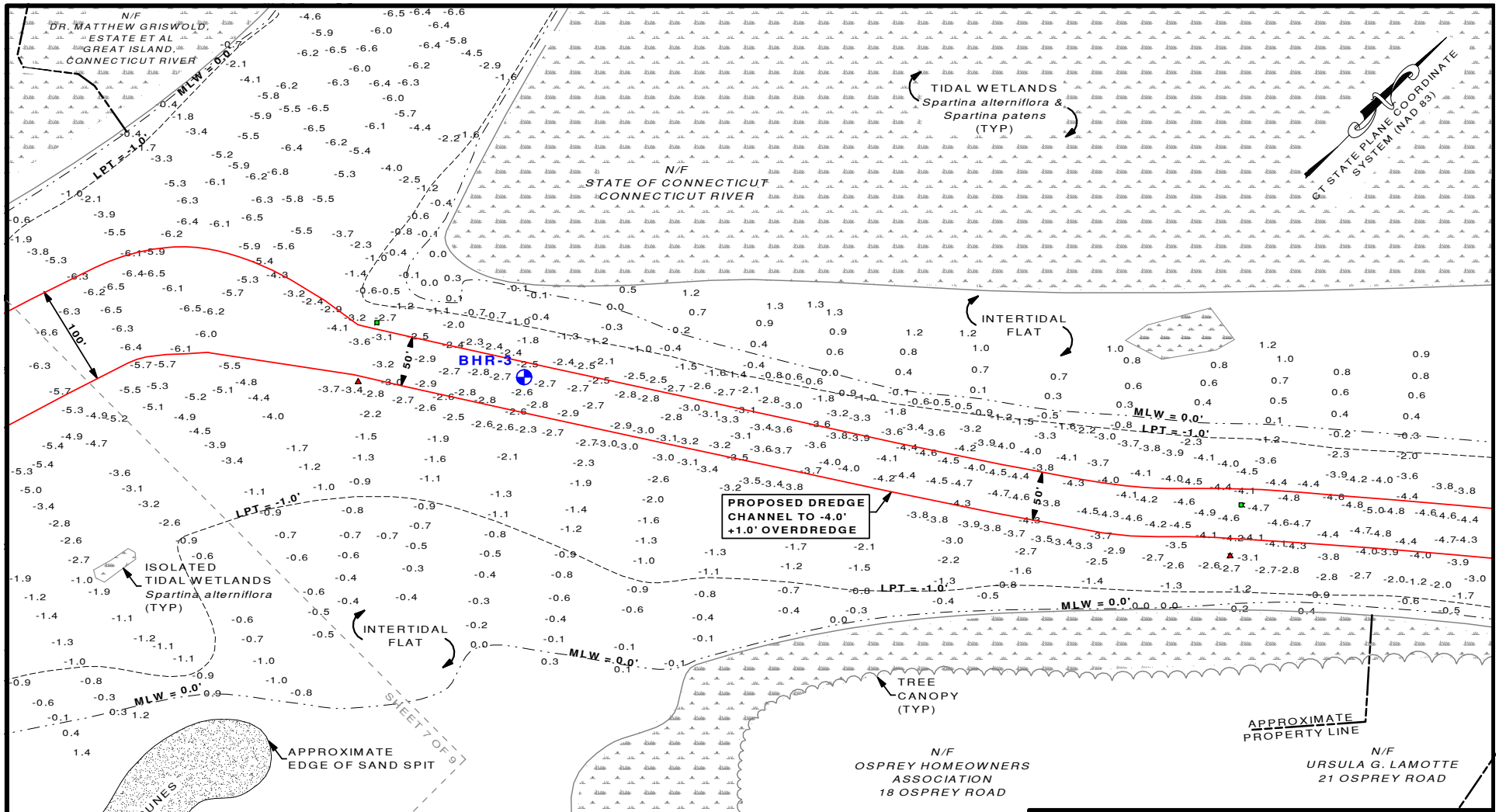
SHEET 5 OF 9
PROPOSED NAVIGATION CHANNEL
SAMPLING & ANALYSIS PLAN
SAMPLE LOCATIONS

BLACK HALL RIVER
OLD LYME, CONNECTICUT

JANUARY 8, 2014

SCALE: 1" = 150'



LEGEND

-1.2	=	SOUNDINGS IN FEET
+7.3	=	UPLAND ELEVATION
N/F	=	NOW/FORMERLY
TYP	=	TYPICAL
MLW	=	MEAN LOW WATER
LPT	=	LOWEST PREDICTED TIDE
■ ▲	=	NAVIGATION AID PVC PIPE
⊕ BHR-3	=	SEDIMENT CORE LOCATION

-2.1

NOTE: MEASURING POINT FOR INDIVIDUAL SOUNDINGS IS LOCATED AT THE DECIMAL POINT

GRAPHIC SCALE

60 30 0 150 300

NOTE: REFER TO NOTES FOR THIS SHEET IN SAMPLING PLAN DRAWING NOTES ON SHEET 9 OF 9.

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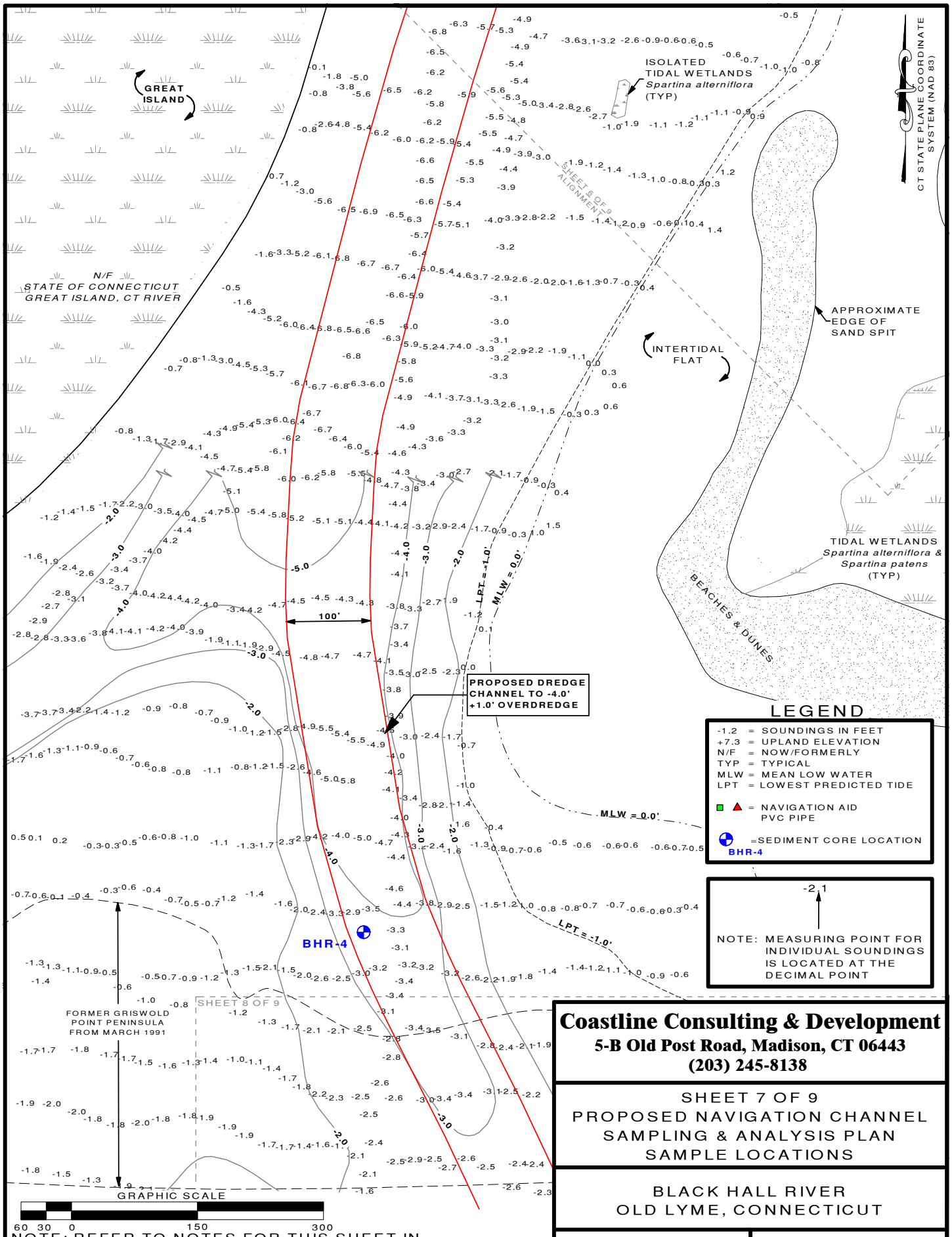
SHEET 6 OF 9
PROPOSED NAVIGATION CHANNEL
SAMPLING & ANALYSIS PLAN
SAMPLE LOCATIONS

BLACK HALL RIVER
OLD LYME, CONNECTICUT

JANUARY 8, 2014

SCALE: 1" = 150'



NOTE: REFER TO NOTES FOR THIS SHEET IN SAMPLING PLAN DRAWING NOTES ON SHEET 9 OF 9.

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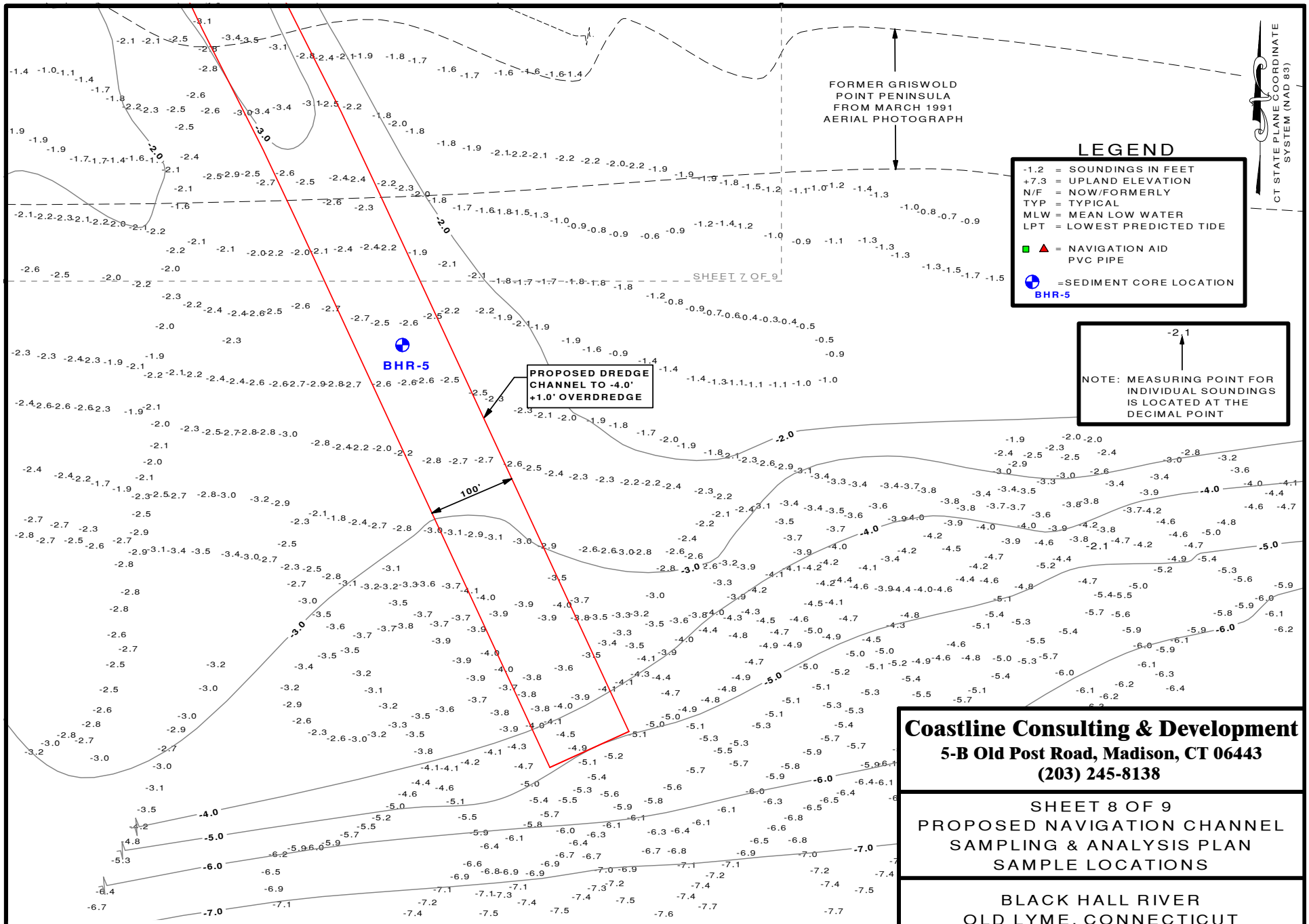
SHEET 7 OF 9
PROPOSED NAVIGATION CHANNEL
SAMPLING & ANALYSIS PLAN
SAMPLE LOCATIONS

BLACK HALL RIVER
OLD LYME, CONNECTICUT

JANUARY 8, 2014 | SCALE: 1" = 150'



NOTE: REFER TO NOTES FOR THIS SHEET IN SAMPLING PLAN DRAWING NOTES ON SHEET 9 OF 9.

GRAPHIC SCALE

60 30 0 150 300

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SHEET 8 OF 9
PROPOSED NAVIGATION CHANNEL
SAMPLING & ANALYSIS PLAN
SAMPLE LOCATIONS

BLACK HALL RIVER
OLD LYME, CONNECTICUT

JANUARY 8, 2014

SCALE: 1" = 150'

SAMPLING & ANALYSIS PLAN DRAWING NOTES

SHEET 1 OF 9
SITE LOCATION MAP

1. MAP TAKEN FROM TOPO, INC., 7.5 MINUTE USGS TOPOGRAPHIC MAPS OF THE OLD LYME, CONNECTICUT, QUADRANGLE, 1960 (PHOTO INSPECTED 1976, PHOTO REVISED 1984).

SHEET 2 OF 9
SITE PLAN VIEW

1. THE CONDITIONS ARE APPROXIMATE AND ARE BASED OLD LYME, CT GIS MAPPING, TAKEN FROM "http://www.mapgeo.com/oldlymect/" ON JANUARY 17, 2013, AND FIELD OBSERVATIONS.

SHEET 3-8 OF 9
PROPOSED SAMPLE LOCATIONS

1. THESE DRAWINGS WERE PREPARED FROM RECORDED RESEARCH, OTHER MAPS, FIELD OBSERVATIONS COLLECTED ON 1/10/2013, 1/11/2013 & 1/15/2013 AND OTHER SOURCES.
2. REFERENCE IS MADE TO THE FOLLOWING MAPS:
   A. A CLASS T-2 SURVEY TITLED “FOUR MILE RIVER, TOPOGRAPHIC SURVEY, HYDROGRAPHIC CONDITIONS, PREPARED FOR THE TOWN OF OLD LYME, NAVIGABLE WATERWAYS STUDY, OLD LYME, CONNECTICUT”, SCALE 1” = 100’, DATED JANUARY 31, 2013, AND PREPARED BY COASTLINE CONSULTING & DEVELOPMENT, LLC, CERTIFIED BY JAMES NAGLE, LS. LIC. NO. 15195.
   B. AN AERIAL IMAGE OF THE PROJECT SITE TAKEN FROM "GOOGLE EARTH" ON JANUARY 17, 2013.
3. BENCHMARK, TIDE LINES, AND SOUNDINGS ARE IN FEET, FIELD-LOCATED BY COASTLINE CONSULTING & DEVELOPMENT, LLC, AND REFERENCED TO THE MEAN LOW WATER (MLW) TIDAL DATUM BASED ON NAVD88 VERTICAL DATUM. SPECIFIC ELEVATIONS FOR TIDE LINES WERE TAKEN FROM TIDAL DATA FOR THE LONG ISLAND SOUND, EAST CENTRAL, "OLD LYME" AS NOTED IN THE "CONNECTICUT ASSOCIATION OF LAND SURVEYORS, RESOURCES FOR TIDAL AND NAVIGABLE WATERS IN CONNECTICUT, BY JOHN J. DOODY, PS & PE, OCTOBER 15, 2012"..
4. THESE DRAWINGS ARE FOR PLANNING PURPOSES ONLY. ANY PROPERTY LINES ARE DEPICTED GRAPHICALLY ONLY, AND DO NOT REPRESENT ANY PROPERTY/BOUNDARY OPINION. NOT ALL IMPROVEMENTS AND FEATURES HAVE BEEN DEPICTED.
5. SITE MAY BE SUBJECT TO AND/OR TOGETHER WITH CERTAIN LITTORAL, RIPARIAN, OR OTHER RIGHTS AS PER THE RECORD MAY APPEAR
6. ANY UNDERGROUND AND/OR UNDERWATER UTILITY, STRUCTURE, AND FACILITY LOCATIONS DEPICTED AND/OR NOTED HEREON MAY HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR GOVERNMENTAL AGENCIES, FROM PAROLE TESTIMONY AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE LOCATIONS OF WHICH ARE UNKNOWN TO COASTLINE CONSULTING & DEVELOPMENT, LLC. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO ANY CONSTRUCTION. CALL BEFORE YOU DIG: 1-800-922-4455.

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(203) 245-8138

SHEET 9 OF 9
PROPOSED NAVIGATION CHANNEL
SAMPLING PLAN DRAWING NOTES

BLACK HALL RIVER
OLD LYME, CONNECTICUT

JANUARY 8, 2014	FILE NO.: 13-062

PERMITS

S W C-11- 1000-7 58

STATE OF CONNECTICUT
FLOOD CONTROL AND WATER POLICY COMMISSION
Room 317, State Office Building
Hartford, Connecticut

CERTIFICATE

March 11, 1957

Mr. Bernard L. Felton
Black Hall Boat Livery
Shore Road
Old Lyme, Connecticut

Gentlemen:

You have submitted an application dated February 26, 1957 for a permit to excavate an area approximately 65 feet x 55 feet located directly in front of property owned by you as shown on plans dated February 15, 1957 and to dispose of the matdrial on your property above mean high water

in Blackhall River

at Old Lyme, Connecticut

in accordance with the plans submitted to this Commission with your application.

The Commission, after investigation, is of the opinion that such construction will have no adverse effect upon the navigability of the waterway, insofar as concerns the interest of the state and authority in matters of navigation, or on any right of the state, and will not increase the danger to life or property by reason of flood waters. This letter will be considered as the Certificate required by Section 3571, General Statutes, 1949 Revision.

If the structure or work herein authorized is not completed on or before March 11, 1959 this certificate, if not previously revoked or specifically extended, shall cease and be null and void.

It is not the intent of this Commission to convey or waive any property right in any lands of the state, nor will this letter be construed as giving any property rights in real estate or material or any exclusive privileges, nor does it authorize any injury to private property or the invasion of private rights or any infringement of federal, state or local laws or regulations.

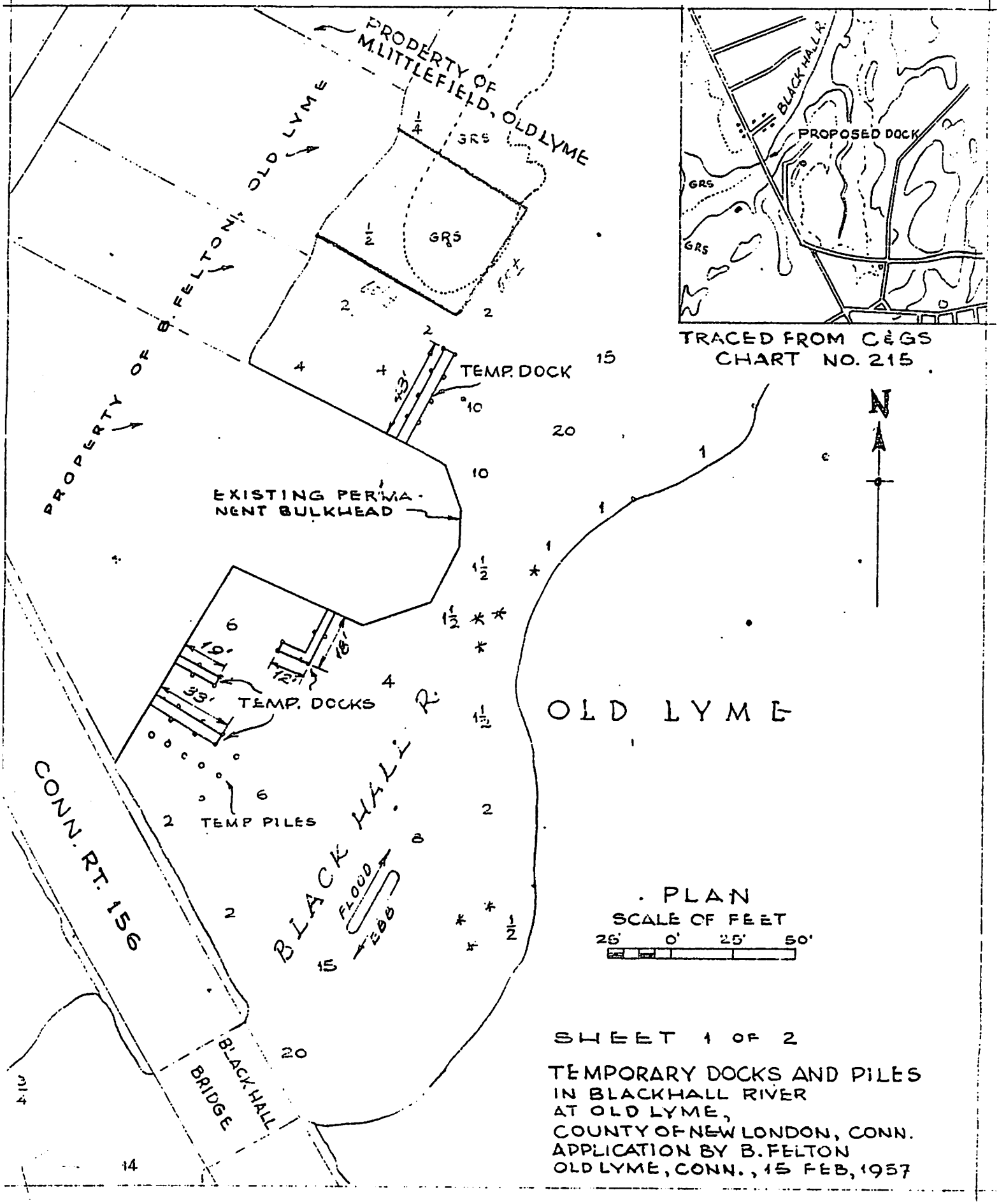
Very truly yours,

STATE FLOOD CONTROL AND WATER POLICY COMMISSION

By: .....
Exec. Secretary

WSW/jb

cc: U. S. Army Engineers



SHEET 1 OF 2

TEMPORARY DOCKS AND PILES
IN BLACKHALL RIVER
AT OLD LYME,
COUNTY OF NEW LONDON, CONN.
APPLICATION BY B. FELTON
OLD LYME, CONN., 15 FEB, 1957

S W C-11-1000-7 58

STATE OF CONNECTICUT
FLOOD CONTROL AND WATER POLICY COMMISSION
Room 317, State Office Building
Hartford, Connecticut

CERTIFICATE

March 11, 1957

Messrs. E. J. Hayman, C. Edwin Delinks
E. S. Peterson, J.T. Speirs, Jr., and
E. A. Westervelt
c/o Robert S. Peterson, Agent
Route 1, Box 129
Old Lyme, Connecticut

Gentlemen:

You have submitted an application dated February 16, 1957 for a permit to dredge a channel about 950 feet long and 48 feet wide to a depth of 5 feet at mean low water (dredged material to be deposited on shore above mean high water on land of the applicants)

in Black Hall River

at Old Lyme, Connecticut

in accordance with the plans submitted to this Commission with your application.

The Commission, after investigation, is of the opinion that such construction will have no adverse effect upon the navigability of the waterway, insofar as concerns the interest of the state and authority in matters of navigation, or on any right of the state, and will not increase the danger to life or property by reason of flood waters. This letter will be considered as the Certificate required by Section 3571, General Statutes, 1949 Revision.

If the structure or work herein authorized is not completed on or before March 11, 1959 this certificate, if not previously revoked or specifically extended, shall cease and be null and void.

It is not the intent of this Commission to convey or waive any property right in any lands of the state, nor will this letter be construed as giving any property rights in real estate or material or any exclusive privileges, nor does it authorize any injury to private property or the invasion of private rights or any infringement of federal, state or local laws or regulations.

Very truly yours,

STATE FLOOD CONTROL AND WATER POLICY COMMISSION

By: .....
Secretary
Exec.

WSW/jb

cc: U. S. Army Engineers

May 22, 1961

Mr. Gustave Fetter
Black Hall Boat Livery
Shore Road
Old Lyme, Connecticut

Dear Mr. Fetter:

This is in reply to your letter of May 5, 1961 in regard to dredging a relatively narrow strip along and adjacent to the bulkhead in front of your property at Old Lyme. The proposed work would be done in the Black Hall River on the east side of Route 156.

An inspection was made of the site and Mrs. Fetter was interviewed.

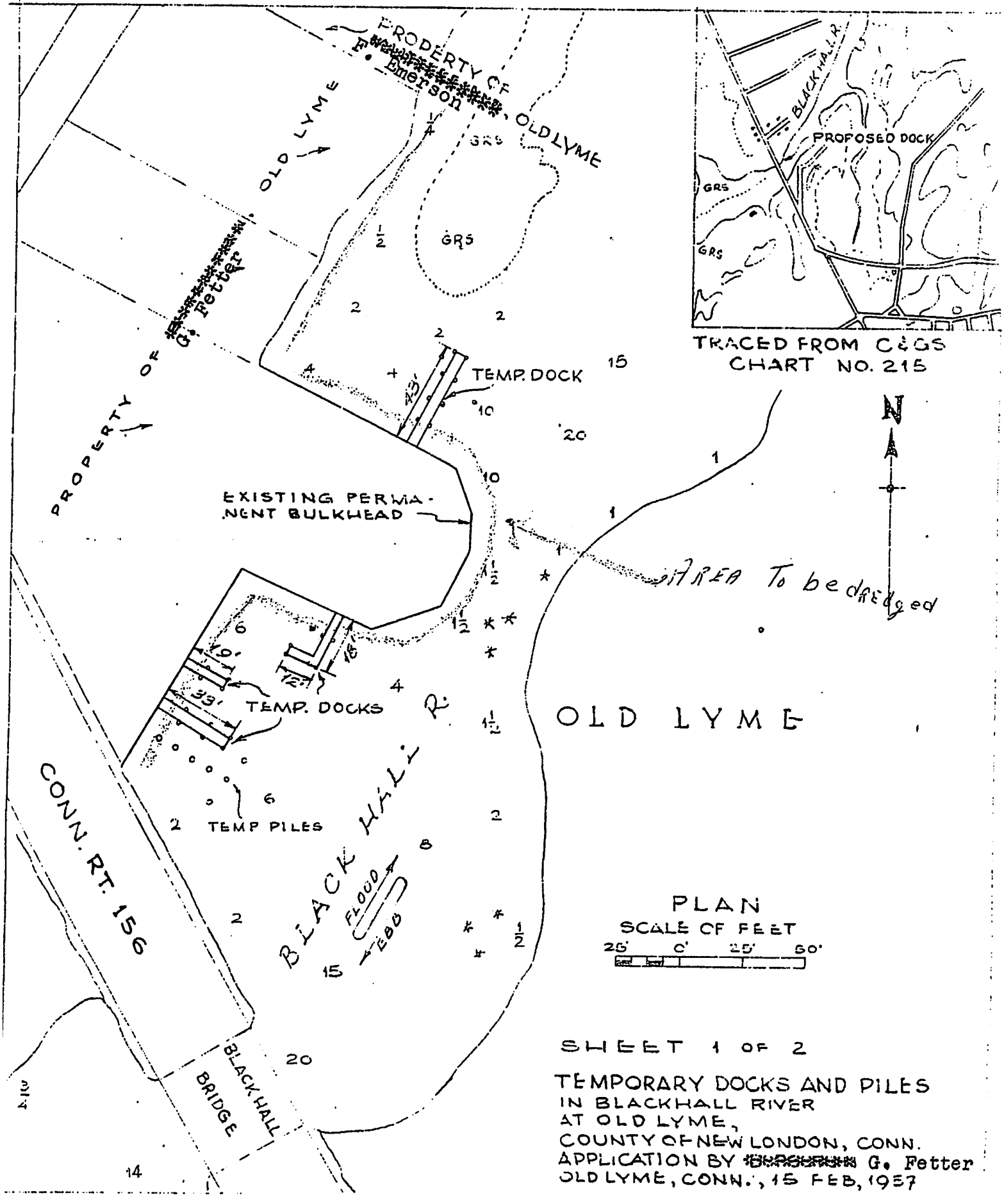
It would appear from the inspection and the information furnished us that this will undoubtedly be a maintenance project. Such being the case, a state certificate is not required.

We trust that this satisfactorily answers your inquiry.

Very truly yours,

Willis J. Snow
Principal Engineer

WJS:tv



SHEET 1 OF 2

TEMPORARY DOCKS AND PILES
IN BLACKHALL RIVER
AT OLD LYME,
COUNTY OF NEW LONDON, CONN.
APPLICATION BY G. Fetter
OLD LYME, CONN., 15 FEB, 1957

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PERMIT

Permit No: 200103084-KZ

Town: Old Lyme

Work Area: Black Hall River off property located at 132 Shore Road

Permittee: Black Hall Marina, LLC

Pursuant to sections 22a-359 through 22a-363f of the Connecticut General Statutes (General Statutes) and in accordance with section 22a-98 of the Connecticut General Statutes, and the Connecticut Water Quality Standards dated April, 1997, a permit is hereby granted by the Commissioner of Environmental Protection (Commissioner) to conduct dredging for marine commercial boating use and to retain existing structures for shoreline erosion protection as is more specifically described below in the SCOPE OF AUTHORIZATION, in the Black Hall River off property identified as the "work area" above.

*******NOTICE TO PERMITTEES AND CONTRACTORS*******

FAILURE TO CONFORM TO THE TERMS AND CONDITIONS OF THIS PERMIT MAY SUBJECT THE PERMITTEE AND ANY CONTRACTOR TO ENFORCEMENT ACTIONS, INCLUDING PENALTIES AND INJUNCTIONS, AS PROVIDED BY LAW.

SCOPE OF AUTHORIZATION

The Permittee is hereby authorized to conduct the following work as described in application #200103084-KZ including six sheets of plans submitted by the Permittee to the Commissioner and attached hereto as follows: sheets 1 through 6 of 6 dated October 3, 2001 and revised March 13, 2002:

1. dredge approximately 480 cubic yards of material from the marina basin in two areas as follows: 420 cubic yards in area A (marina basin area); and 60 cubic yards in area B (near the boat ramp) and dispose of such material on the upland in the confines of an existing parking area; and

2. retain two large stone blocks measuring 2' x 8' and 2' x 4', repectively located along the northern embankment of the existing boat lauching ramp.

UPON INITIATION OF ANY WORK AUTHORIZED HEREIN, THE PERMITTEE ACCEPTS AND AGREES TO COMPLY WITH ALL TERMS AND CONDITIONS OF THIS PERMIT.

SPECIAL TERMS AND CONDITIONS

1. The Permittee shall establish a minimum of a 10 foot setback from any wetlands or watercourses nearby and adjacent to the area where work is to be conducted or which is to be used for access to the work site as identified in the above-referenced application materials. Such setback area(s) shall be flagged so as to be readily identifiable by contractor personnel until the work authorized hereunder is completed.

2. Except as specifically authorized by this permit, no equipment or material including but not limited to, fill, construction materials, excavated material or debris, shall be deposited, placed or stored in any wetland or watercourses on or off-site, or within the delineated setback area, nor shall any wetland, watercourse or delineated setback area be used as a staging area or accessway other than as provided herein.

3. Not later than two weeks prior to the commencement of any work authorized herein, the Permittee shall submit to the Commissioner, on the form attached hereto as Appendix A, the name(s) and address(es) of any contractor(s) employed to conduct such work and the expected date for commencement and completion of such work.

4. On or before (a) 90 days after completion of the work authorized herein, or (b) upon expiration of the work completion date or any authorized one year extension thereof, whichever is earlier, the Permittee shall submit to the Commissioner "as-dredged" survey of the work area showing contours, bathymetries, and tidal datums prepared and scalcd by a licensed engineer, licensed surveyor or licensed architect, as applicable, of the work area showing all contours, bathymetries, tidal datums and structures.

5. Unconfined in-water excavation, dredging, filling, or removal of debris or other material is prohibited from June 1st through September 30th, inclusive, of any year in order to protect spawning shellfish and blue crab in the area unless otherwise authorized in writing by the Commissioner.

6. Unconfined in-water excavation, dredging, filling, or removal of debris or other material is prohibited during the month of April, inclusive, of any year in order to protect alewife in the area unless otherwise authorized in writing by the Commissioner or under the provision of SPECIAL TERMS AND CONDITIONS paragraph 7., below.

7. The Permittee may dredge during the month of April provided that the turbidity barriers shown on sheets 2 and 3 of 6 of the plans attached hereto are properly installed and maintained. Prior to the commencement of any dredging during the month of April, the Permittee shall contact DEP-OLISP staff to schedule an inspection of the turbidity barriers. The Permittee shall not commence dredging until DEP-OLISP staff have determined that the turbidity barriers have been properly installed and have so notified the Permittee. The Department may stop work during the month of April if OLISP staff determine that such turbidity barriers are not functioning properly and/or sediment is reaching the main river channel. If the Permittee dredges during the month of April, all dredging shall be completed within 72 hours of commencement.

8. The Permittee shall dewater all dredged material in the area shown on sheet 3 of 6 of the plans attached hereto provided that the dredged sediment is completely surrounded by stacked haybales. Once the material is dewatered, the Permittee may spread out such material in the area designated on sheet 3 of 6 of the plans attached hereto. Silt barriers must be maintained around this area until the site is stabilized or capped with clean gravel material. At no time shall the Permittee allow dewatering to enter the waterway.

9. All floating docks and ramps removed from the existing basin to facilitate the work authorized herein shall be stored in the area designated on sheet 3 of 6 of the plans attached hereto.

10. The Permittee shall maintain silt fence around the staging area of dredging of the northern basin adjacent to the existing boat ramp as shown on sheet 3 of 6 of the plans attached hereto. Such silt fence must be maintained until all work authorized herein has been completed and the site is stabilized.

11. Prior to the commencement of work authorized herein, the Permittee shall remove any debris including, but not limited to, derelict floating docks, wooden piles, or wooden boards from the area of tidal wetlands bordering the northern portion of the property to a location that is landward of the high tide line and outside tidal wetlands.

GENERAL TERMS AND CONDITIONS

1. All work authorized by this permit shall be completed within three years from date of issuance of this permit ("work completion date") in accordance with all conditions of this permit and any other applicable law.

   a. The Permittee may request a one year extension of the work completion date. Such request shall be in writing and shall be submitted to the Commissioner at least 30 days prior to said work completion date. Such request shall describe the work done to date, work which still needs to be completed and the reason for such extension. The Commissioner shall grant or deny such request in his sole discretion.

   b. Any work authorized herein conducted after said work completion date or any authorized one year extension thereof is a violation of this permit and may subject the Permittee to enforcement action, including penalties, as provided by law.

2. In conducting the work authorized herein, the Permittee shall not deviate from the attached plans, as may be modified by this permit. The Permittee shall not make de minimis changes from said plans without prior written approval of the Commissioner.

3. The Permittee shall maintain all structures or other work authorized herein in good condition. Any such maintenance shall be conducted in accordance with applicable law including, but not limited to, sections 22a-28 through 22a-35 and sections 22a-359 through 22a-363f of the General Statutes.

4. Prior to the commencement of any work authorized hereunder, the Permittee shall cause a copy of this permit to be given to any contractor(s) employed to conduct such work. At the work area the Permittee shall, whenever work is being performed, make available for inspection a copy of this permit and the final plans for the work authorized herein.

5. The Permittee shall notify the Commissioner in writing of the commencement of any work and completion of all work authorized herein no later than three days prior to the commencement of such work and no later than seven days after the completion of such work.

6. The Permittee shall dispose of aquatic sediments in accordance with the terms and conditions of this permit. All waste material generated by the performance of the work authorized herein shall be disposed of by the Permittee at an upland site approved for the disposal of such waste material, as applicable.

7. In undertaking the work authorized hereunder, the Permittee shall not cause or allow pollution of wetlands or watercourses, including pollution resulting from sedimentation and erosion. For purposes of this permit, "pollution" means "pollution" as that term is defined by section 22a-423 of the General Statutes.

8. Upon completion of any work authorized herein, the Permittee shall restore all areas impacted by construction, or used as a staging area or accessway in connection with such work, to their condition prior to the commencement of such work.

9. Any document required to be submitted to the Commissioner under this permit or any contact required to be made with the Commissioner shall, unless otherwise specified in writing by the Commissioner, be directed to:

   Permit Section
   Office of Long Island Sound Programs
   Department of Environmental Protection
   79 Elm Street
   Hartford, Connecticut 06106-5127
   (860) 424-3034
   Fax # (860) 424-4054

10. The date of submission to the Commissioner of any document required by this permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" as used in this permit means calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or a Connecticut or federal holiday shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or a Connecticut or federal holiday.

11. a. The work specified in the SCOPE OF AUTHORIZATION is authorized solely for the purpose set out in this permit. No change in the purpose or use of the authorization work or facilities as set forth in this permit may occur without the prior written authorization of the Commissioner. The Permittee shall, prior to undertaking or allowing any change in use or purpose from that which is authorized by this permit, request authorization from the Commissioner for such change. Said request shall be in writing and shall describe the proposed change and the reason for the change.

    b. A change in the form of ownership of any structure authorized herein from a rental/lease commercial marina to a wholly-owned common interest community or dockominium may constitute a change in purpose as specified in paragraph (a) above.

12. This permit may be revoked, suspended, or modified in accordance with applicable law.

13. This permit is not transferable without prior written authorization of the Commissioner. A request to transfer a permit shall be submitted in writing and shall describe the proposed transfer and the reason for such transfer. The Permittee's obligations under this permit shall not be affected by the passage of title to the work area to any other person or municipality until such time as a transfer is authorized by the Commissioner.

14. The Permittee shall allow any representative of the Commissioner to inspect the work authorized herein at reasonable times to ensure that it is being or has been accomplished in accordance with the terms and conditions of this permit.

15. In granting this permit, the Commissioner has relied on representations of the Permittee, including information and data provided in support of the Permittee's application. Neither the Permittee's representations nor the issuance of this permit shall constitute an assurance by the Commissioner as to the structural integrity, the engineering feasibility or the efficacy of such design.

16. In the event that the Permittee becomes aware that he did not or may not comply, or did not or may not comply on time, with any provision of this permit or of any document required hereunder, the Permittee shall immediately notify the Commissioner and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. In so notifying the Commissioner, the Permittee shall state in writing the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and the Permittee shall comply with any dates which may be approved in writing by the Commissioner. Notification by the Permittee shall not excuse noncompliance or delay and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically stated by the Commissioner in writing.

17. In evaluating the application for this permit the Commissioner has relied on information and data provided by the Permittee and on the Permittee's representations concerning site conditions, design specifications and the proposed work authorized herein, including but not limited to representations concerning the commercial, public or private nature of the work or

structures authorized herein, the water-dependency of said work or structures, its availability for access by the general public, and the ownership of regulated structures or filled areas. If such information proves to be false, deceptive, incomplete or inaccurate, this permit may be modified, suspended or revoked, and any unauthorized activities may be subject to enforcement action.

18. The Permittee may not conduct work waterward of the high tide line or in tidal wetlands at this permit site other than the work authorized herein, unless otherwise authorized by the Commissioner pursuant to section 22a-359 et. seq. and/or section 22a-32 et. seq. of the General Statutes.

19. The issuance of this permit does not relieve the Permittee of his obligations to obtain any other approvals required by applicable federal, state and local law.

20. Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this permit shall be signed by the Permittee and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense."

21. This permit is subject to and does not derogate any present or future property rights or powers of the State of Connecticut, and conveys no property rights in real estate or material nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the property or activity affected hereby.

Issued on May 6, 2002.

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Arthur J. Rocque, Jr.
Commissioner

Permit Application No. 200103084-KZ
Black Hall Marina, LLC
Certified Mail #_____

LOCATION MAP

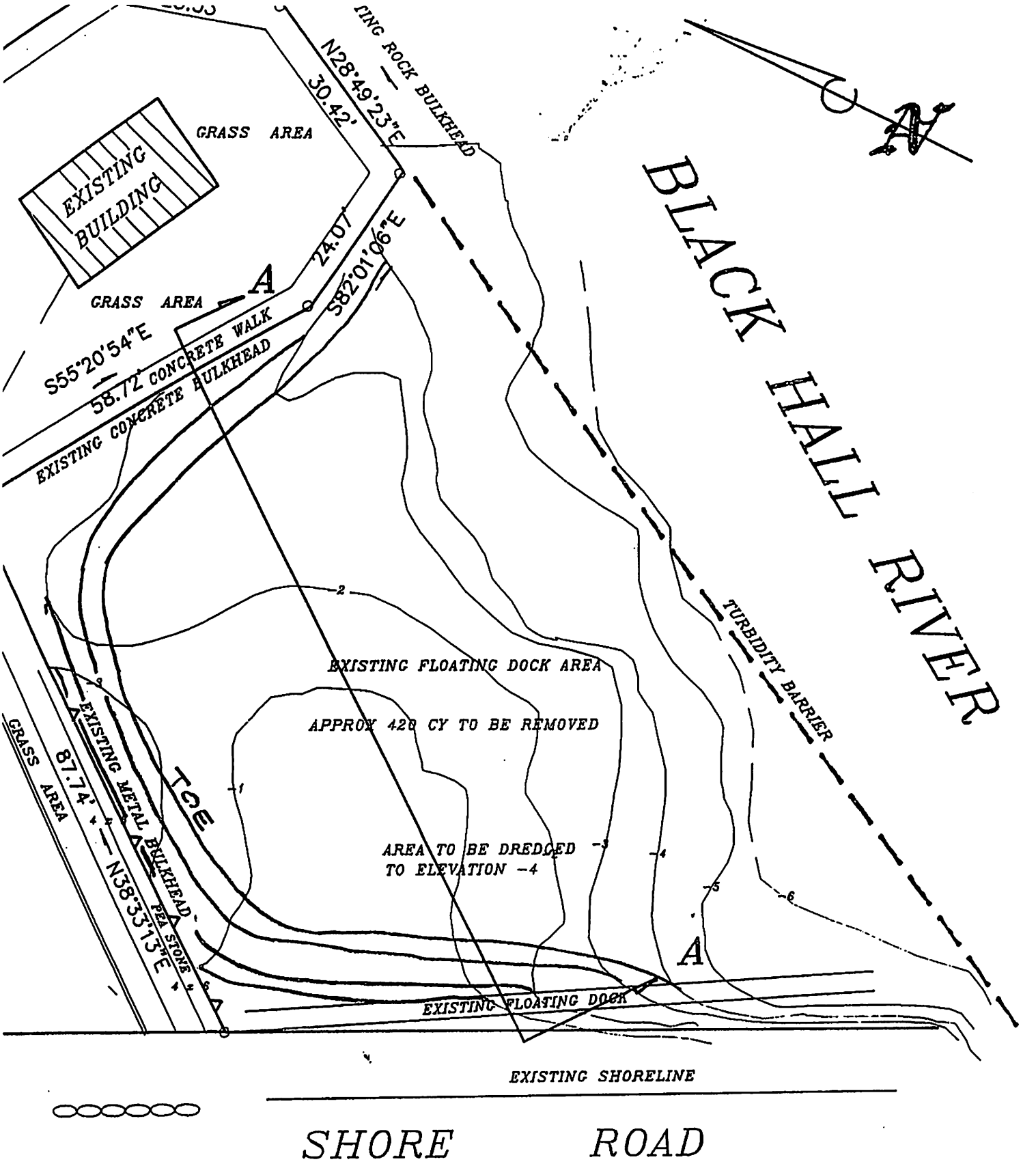
MAP SHOWING PROPOSED AREA TO BE DREGED FOR GENERAL MAINTENANCE 132 SHORE ROAD OLD LYME, CT PREPARED FOR BLACK HALL MARINA, LLC

OCT. 3, 2001

REV. 3/13/02

SHEET 1 OF 6

APPLICATION NUMBER OLD LYME 200103084-SJ

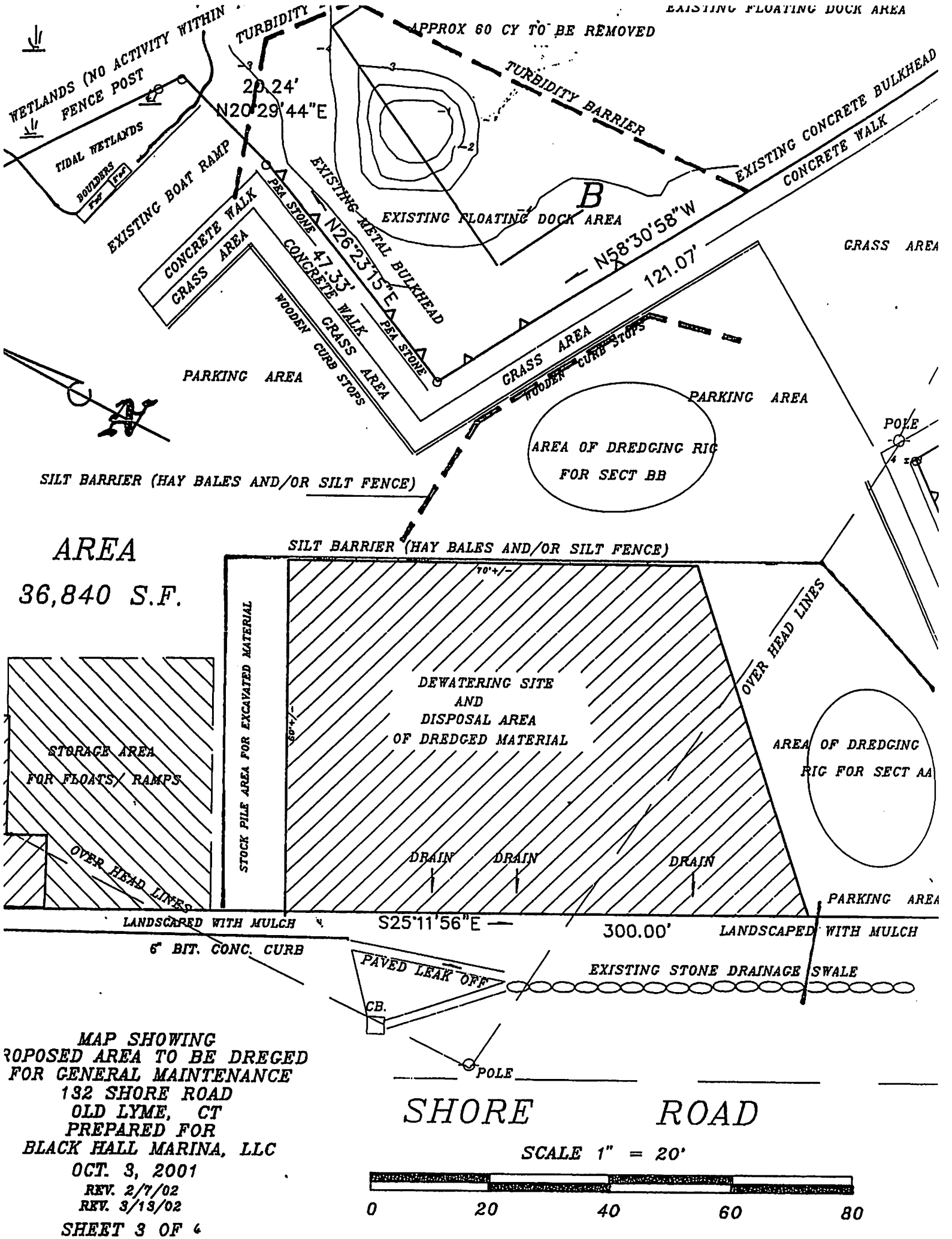


MAP SHOWING
PROPOSED AREA TO BE DREGED
FOR GENERAL MAINTENANCE
132 SHORE ROAD
OLD LYME, CT
PREPARED FOR
BLACK HALL MARINA, LLC

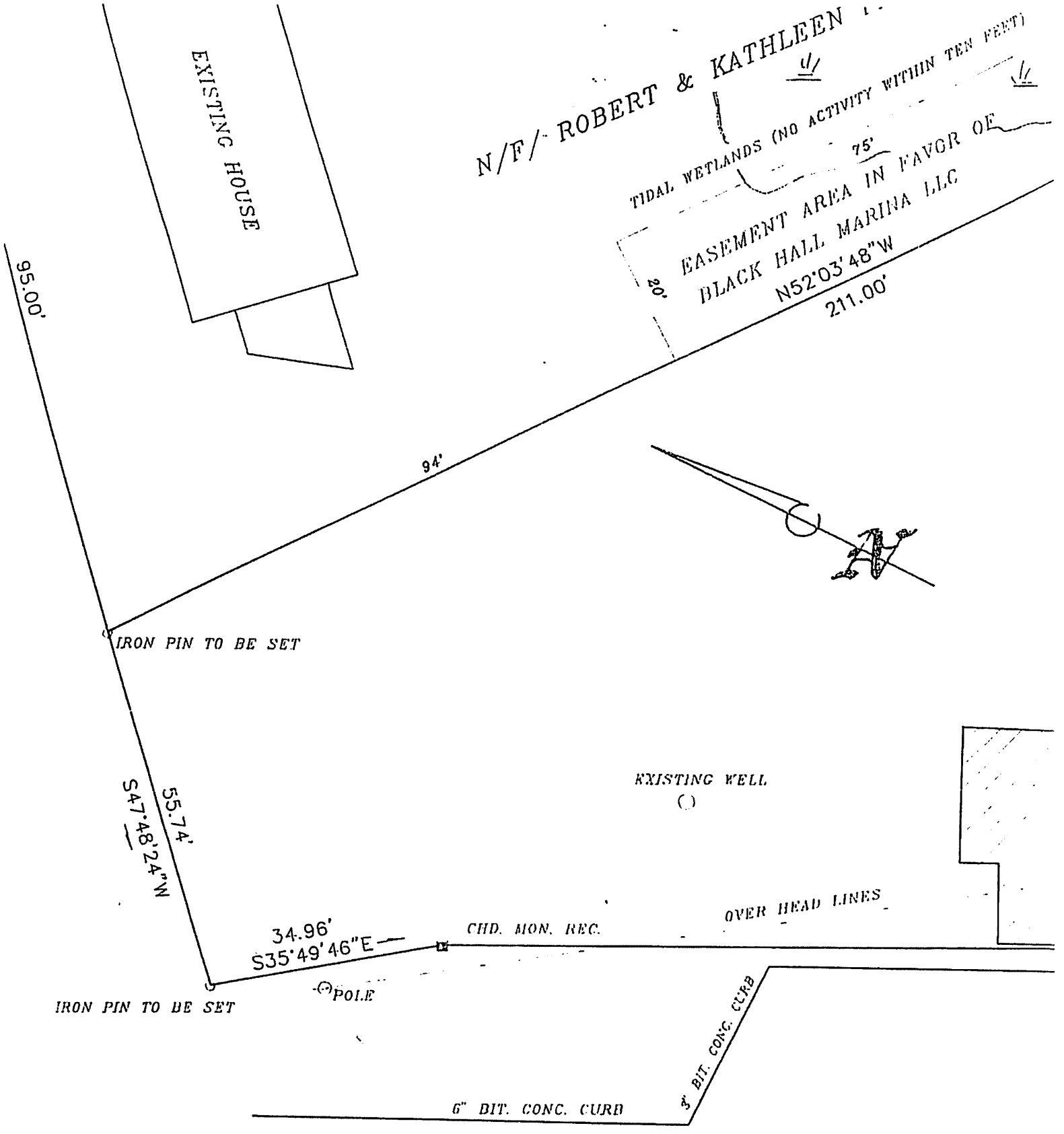
OCT. 3, 2001
REV. 2/7/02
REV. 3/13/02
SHEET 2 OF 4

SCALE 1" = 20'

0 20 40 60 80



MAP SHOWING
PROPOSED AREA TO BE DREGED
FOR GENERAL MAINTENANCE
132 SHORE ROAD
OLD LYME, CT
PREPARED FOR
BLACK HALL MARINA, LLC
OCT. 3, 2001
REV. 2/7/02
REV. 3/13/02
SHEET 3 OF 4



MAP SHOWING
PROPOSED AREA TO BE DREGED
FOR GENERAL MAINTENANCE
132 SHORE ROAD
OLD LYME, CT
PREPARED FOR
BLACK HALL MARINA, LLC

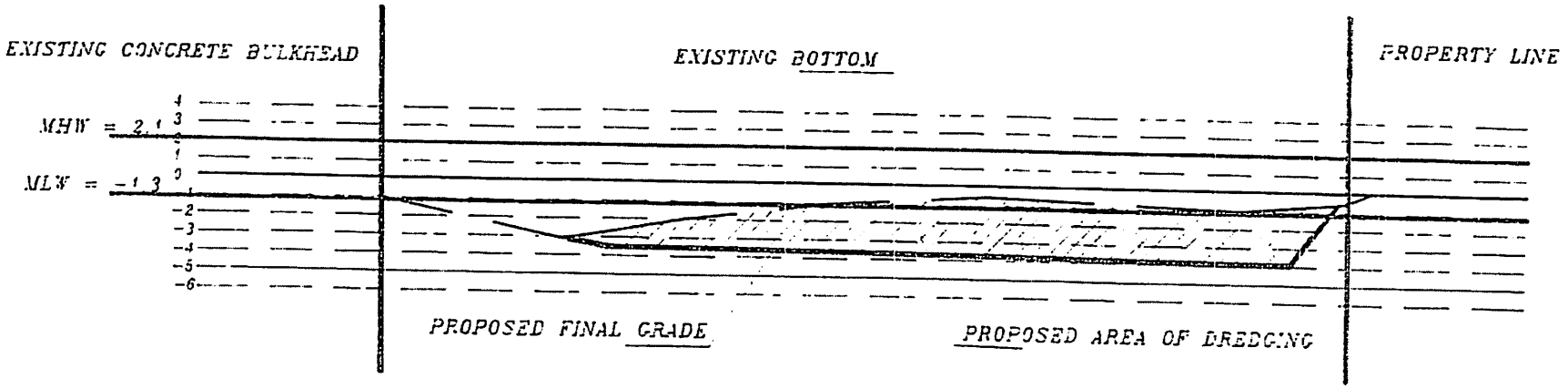
OCT. 3, 2001
REV. 3/13/02

SHEET 4 OF 6

SCALE 1" = 20'

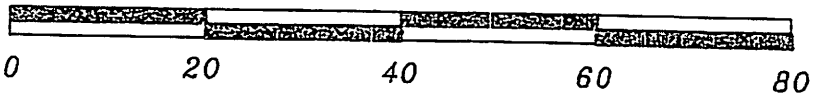
0 20 40 60 80

APPLICATION NUMBER OLD LYME 200108084-SI



SECTION A–A

SCALE 1" = 20'



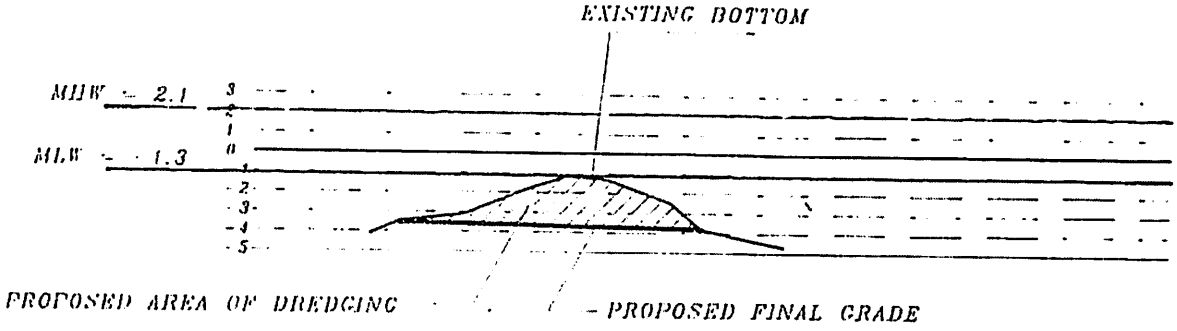
MAP SHOWING
PROPOSED AREA TO BE DREGED
FOR GENERAL MAINTENANCE
132 SHORE ROAD
OLD LYME, CT
PREPARED FOR
BLACK HALL MARINA, LLC

OCT. 3, 2001

REV. 3/13/02

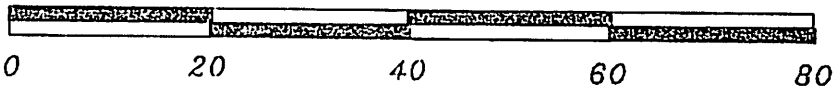
SHEET 5 OF 6

APPLICATION NUMBER OLD LYME 200103084–SJ



SECTION B–B

SCALE 1" = 20'



MAP SHOWING PROPOSED AREA TO BE DREGED FOR GENERAL MAINTENANCE 132 SHORE ROAD OLD LYME, CT PREPARED FOR BLACK HALL MARINA, LLC

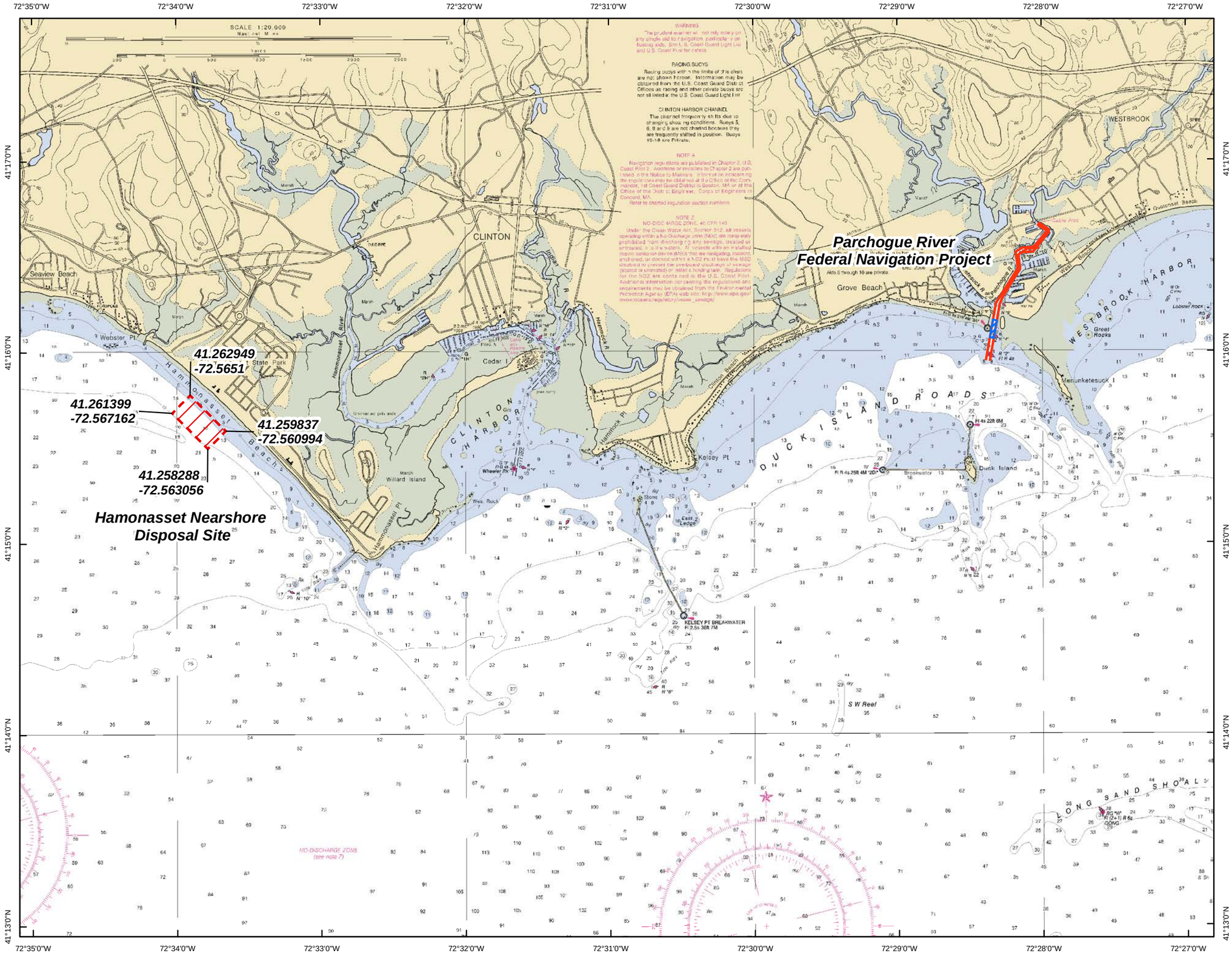
OCT. 3, 2001

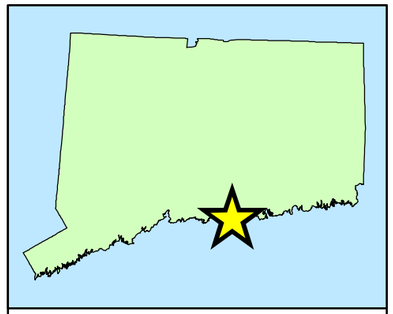
REV. 3/13/02

SHEET 6 OF 6

APPLICATION NUMBER OLD LYME 200103084–SJ

NEARSHORE DISPOSAL LOCATION





ATTACHMENT NO. 2

PATCHOGUE RIVER AND NEARSHORE DISPOSAL SITE WESTBROOK AND MADISON, CT

US ARMY CORPS
OF ENGINEERS
NEW ENGLAND DISTRICT

N
W E
S

SCALE 1:35,000

Kilometers
0 0.25 0.5 0.75 1 1.25 1.5

0 0.25 0.5 0.75 1
Miles

Background Image from NOAA Chart 12374

Coordinate System: GCS North American Datum 1983

Legend:

- Federal Navigation Project
- Dredge Area
- Nearshore Disposal Site