



**US Army Corps
of Engineers**
New England District
696 Virginia Road
Concord, MA 01742-2751

PUBLIC NOTICE

Comment Period Begins: April 30, 2013
Comment Period Ends: May 30, 2013
File Number: NAE-2011-488
In Reply Refer To: Kevin R. Kotelly, P.E.
Phone: (978) 318-8703
E-mail: kevin.r.kotelly@usace.army.mil

The District Engineer has received a permit application from the applicant below to conduct work in waters of the United States as described below.

APPLICANT

The Town of Chatham, Massachusetts

PROPOSED WORK AND PURPOSE

The work is dredging and the discharge of dredged material below the high tide line of waters of the United States for the dredging of seven (7) waterway sites and disposal of dredge material at seventeen (17) disposal sites in the Town of Chatham, Massachusetts. Six of the proposed dredge sites have been previously permitted by the Corps of Engineers and are, therefore, maintenance dredging sites. One of the dredge sites is new dredging. Also, two of the dredge sites are Federal Navigation Projects (FNP) maintained by the Corps. All of the proposed disposal sites have been previously permitted by the Corps. Fourteen of the disposal sites are beach nourishment sites and three of the disposal sites are nearshore sites. The tables below summarize the proposed dredge and disposal sites.

Proposed Dredge Sites

Site Name	Volume (CY)	Area (SF)	Depth (MLW)	Category
Mill Creek	16,500	55,500	-3 and -5	Maintenance
Stage Harbor (FNP)	150,000	450,000	-10	Maintenance
Barn Hill Landing	100	525	-3	Maintenance
Old Mill Boat Yard	100	2550	-3	Maintenance
Ryder's Cove	150	2350	-2	Maintenance
Aunt Lydia's Cove (FNP)	150,000	26,000,000 (Dredge Zone)	-8	Maintenance
Morris Island Cut	20,000	7,155,200 (Dredge Zone)	-4	New
Total =	336,850	33,666,125		

Proposed Disposal Sites

Site Name	Category	Area (Square Feet)
Pleasant Street	Beach Nourishment	20,361
Forest Beach	Beach Nourishment	115,157
Cockle Cove Beach	Beach Nourishment	114,495
Hardings Beach	Beach Nourishment	1,196,154
Oyster Pond Beach	Beach Nourishment	14,794
Cotchpinicut Landing	Beach Nourishment	2,579
Scatteree Landing	Beach Nourishment	18,320
Clafin Landing Beach	Beach Nourishment	164,007
Andrew Hardings Lane/ Lighthouse Beach	Beach Nourishment	489,532
Barn Hill Landing	Beach Nourishment	883
Battlefield Landing	Beach Nourishment	5,165
Strong Island	Beach Nourishment	5,433
Ryder's Cove	Beach Nourishment	1,337
Mill Creek	Beach Nourishment	30,162
Hardings Beach W	Nearshore	561,924
Hardings Beach E	Nearshore	1,219,680
Outside Bar (1987 Inlet)	Nearshore	10,018,800
	Total =	13,978,783

Dredging would be performed by both mechanical and hydraulic means. The purpose of this permit review is to bring all of the Town's dredging and disposal activities under one comprehensive permit. This will give the Town the flexibility they need to dredge and nourish the highest priority areas and allow for effective and efficient use of Town resources. The permit will be valid for 10 years. The work locations are shown on the enclosed location plans entitled, "Town of Chatham, Comprehensive Dredging and Disposal Project," on three sheets, and dated, 2011. Detail plans are available for each work location by request.

MITIGATION

The various dredging and disposal sites have been designed to avoid and minimize impacts to aquatic resources as much as possible. The proposed plan is for typical dredging and disposal of sand. No compensatory mitigation is proposed.

WATERWAY AND LOCATION OF THE PROPOSED WORK

This work is proposed in seven waterways and seventeen disposal areas in the Town of Chatham, Massachusetts. The location of the Town of Chatham, Massachusetts, on the USGS Chatham quadrangle is at Latitude 41°40'55" N and Longitude 69°57'37" E.

AUTHORITY

Permits are required pursuant to:

- Section 10 of the Rivers and Harbors Act of 1899
- Section 404 of the Clean Water Act
- Section 103 of the Marine Protection, Research and Sanctuaries Act).

The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which may reasonably accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are: conservation, economics, aesthetics, general environmental concerns, wetlands, cultural value, fish and wildlife values, flood hazards, flood plain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Where the activity involves the discharge of dredged or fill material into waters of the United States or the transportation of dredged material for the purpose of disposing it in ocean waters, the evaluation of the impact of the activity in the public interest will also include application of the guidelines promulgated by the Administrator, U.S Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act, and/or Section 103 of the Marine Protection Research and Sanctuaries Act of 1972 as amended.

ESSENTIAL FISH HABITAT

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires all federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

The dredging portion of this project will impact approximately 773 Acres and the beach nourishment portion of this project will impact approximately 50 Acres of Essential Fish Habitat (EFH) for various life stages of Atlantic cod (*Gadus morhua*), haddock (*Melanogrammus aeglefinus*), pollock (*Pollachius virens*), whiting (*Merluccius bilinearis*), offshore hake (*Merluccius albidus*), red hake (*Urophycis chuss*), white hake (*Urophycis tenuis*), winter flounder (*Pleuronectes americanus*), yellowtail flounder (*Pleuronectes ferruginea*), windowpane flounder (*Scopthalmus aquosus*), American plaice (*Hippoglossoides platessoides*), ocean pout (*Macrozoarces americanus*), Atlantic halibut (*Hippoglossus hippoglossus*), Atlantic sea scallop (*Placopecten magellanicus*), Atlantic sea herring (*Clupea harengus*), monkfish (*Lophius americanus*), bluefish (*Pomatomus saltatrix*), long finned squid (*Loligo pealei*), short finned squid (*Illex illecebrosus*), Atlantic butterfish (*Peprilus triacanthus*), Atlantic mackerel (*Scomber scombrus*), summer flounder (*Paralichthys dentatus*), scup (*Stenotomus chrysops*), black sea bass (*Centropristus striata*), spiny dogfish (*Squalus acanthias*), bluefin tuna (*Thunnus thynnus*), king mackerel (*Scomberomorus cavalla*), Spanish mackerel (*Scomberomorus maculatus*), and Cobia (*Rachycentron canadum*). Habitat at this site can be described as subtidal silt and sand. Loss of this habitat may adversely affect the species listed above. However the District Engineer has made a preliminary determination that the site-specific adverse effect will not be substantial. Further consultation with the National Marine Fisheries

Service regarding EFH conservation recommendations is being conducted and will be concluded prior to the final decision.

SECTION 106 COORDINATION

Based on his initial review, the District Engineer has determined that little likelihood exists for the proposed work to impinge upon properties with cultural or Native American significance, or listed in, or eligible for listing in, the National Register of Historic Places. Therefore, no further consideration of the requirements of Section 106 of the National Historic Preservation Act of 1966, as amended, is necessary. This determination is based upon one or more of the following:

- a. The permit area has been extensively modified by previous work.
- b. The permit area has been recently created.
- c. The proposed activity is of limited nature and scope.
- d. Review of the latest published version of the National Register shows that no presence of registered properties listed as being eligible for inclusion therein are in the permit area or general vicinity.
- e. Coordination with the State Historic Preservation Officer and/or Tribal Historic Preservation Officer(s)

ENDANGERED SPECIES CONSULTATION

The New England District, Army Corps of Engineers has reviewed the list of species protected under the Endangered Species Act of 1973, as amended, which might occur at the proposed project site during the construction and subsequent operation/use period sought by the applicant. We are consulting with the US Fish and Wildlife Service and National Marine Fisheries Service on the presence of federally listed endangered or threatened species in order to avoid adverse affects to any listed species that might be in the vicinity of the project. We will conclude consultation prior to the issuance of a permit.

The States of Connecticut, Maine, Massachusetts, New Hampshire and Rhode Island have approved **Coastal Zone Management Programs**. Where applicable the applicant states that any proposed activity will comply with and will be conducted in a manner that is consistent with the approved Coastal Zone Management Program. By this Public Notice, we are requesting the State concurrence or objection to the applicant's consistency statement.

The following authorizations have been applied for, or have been, or will be obtained:

- (X) Permit, License or Assent from State.
- (X) Permit from Local Wetland Agency or Conservation Commission.
- (X) Water Quality Certification in accordance with Section 401 of the Clean Water Act.

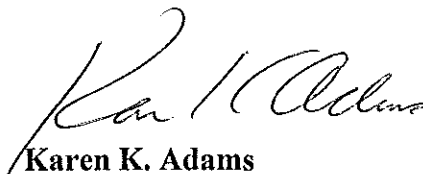
In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. **Comments should be submitted in writing by the above date.** If you have any questions, please contact Kevin Kotelly at (978) 318-8703, (800) 343-4789 or (800) 362-4367, if calling from within Massachusetts.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for a public hearing shall specifically state the reasons for holding a public hearing. The Corps holds public hearings for the purpose of obtaining public comments when that is the best means for understanding a wide variety of concerns from a diverse segment of the public.

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FILE NO. NAE-2011-488

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. All comments will be considered a matter of public record. Copies of letters of objection will be forwarded to the applicant who will normally be requested to contact objectors directly in an effort to reach an understanding.

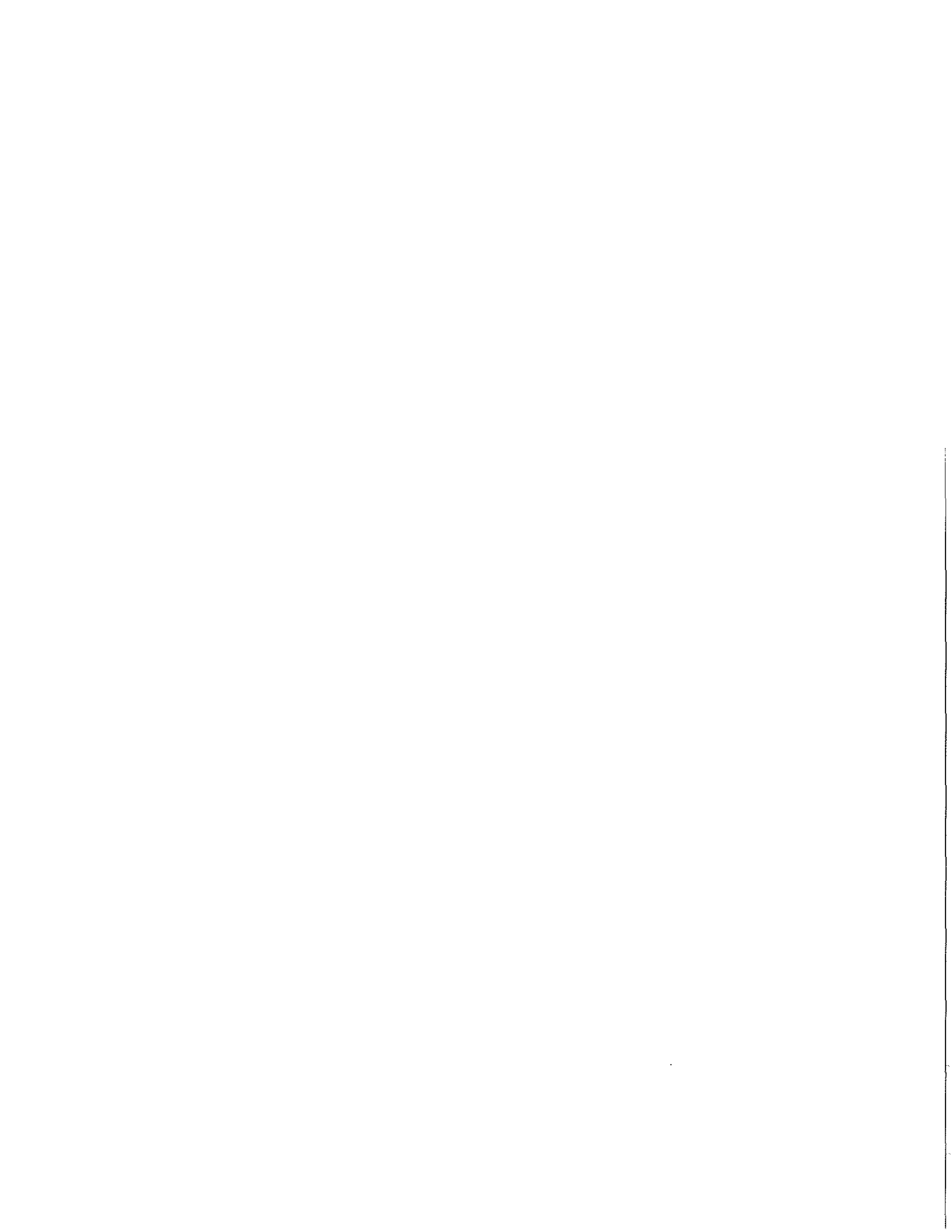
THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK.

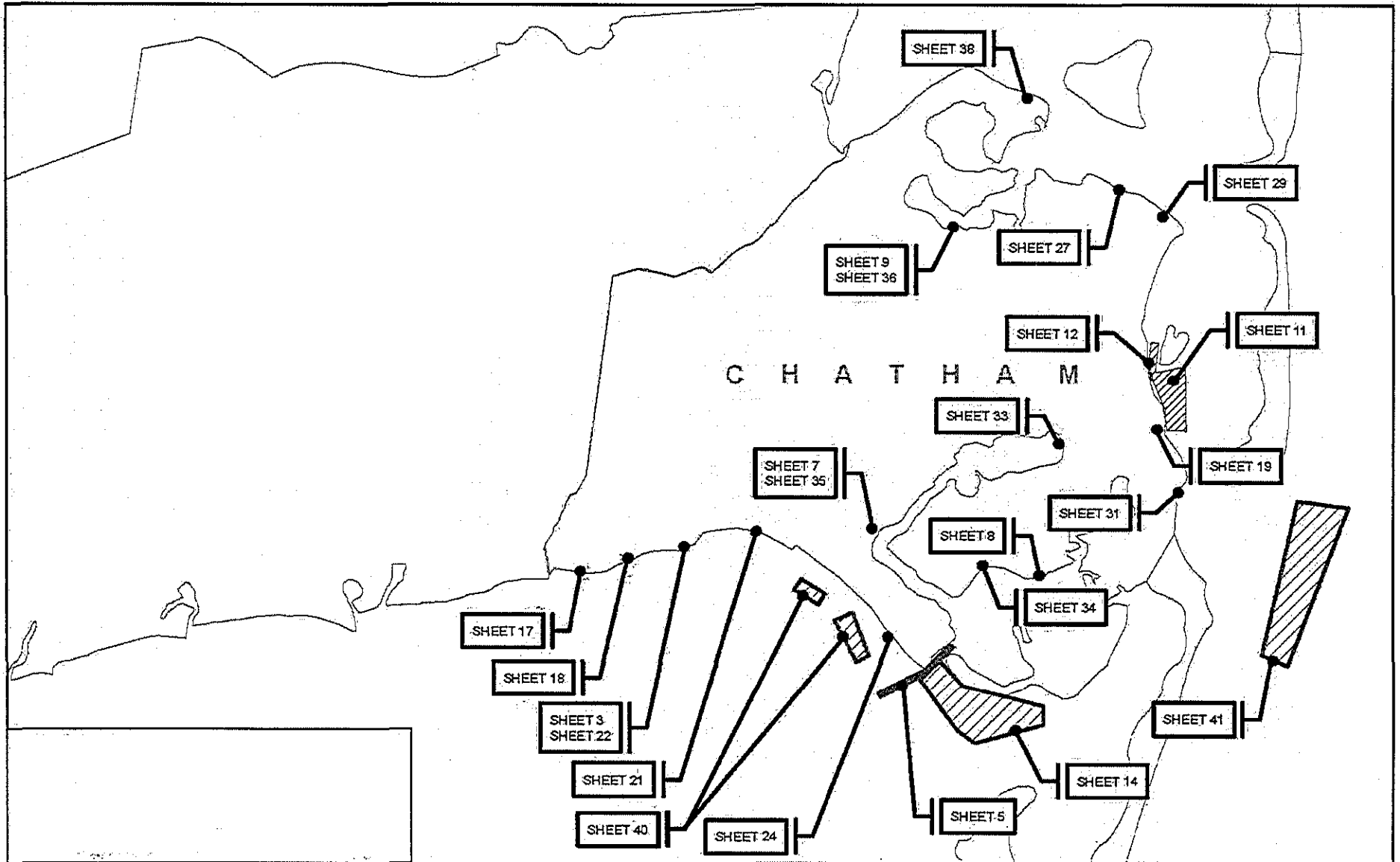


Karen K. Adams
Chief, Permits and Enforcement Branch
Regulatory Division

If you would prefer not to continue receiving Public Notices, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at bettina.m.chaisson@usace.army.mil. You may also check here () and return this portion of the Public Notice to: Bettina Chaisson, Regulatory Division, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751.

NAME: _____
ADDRESS: _____





DATE: APRIL 23, 2012

LOCUS PLAN

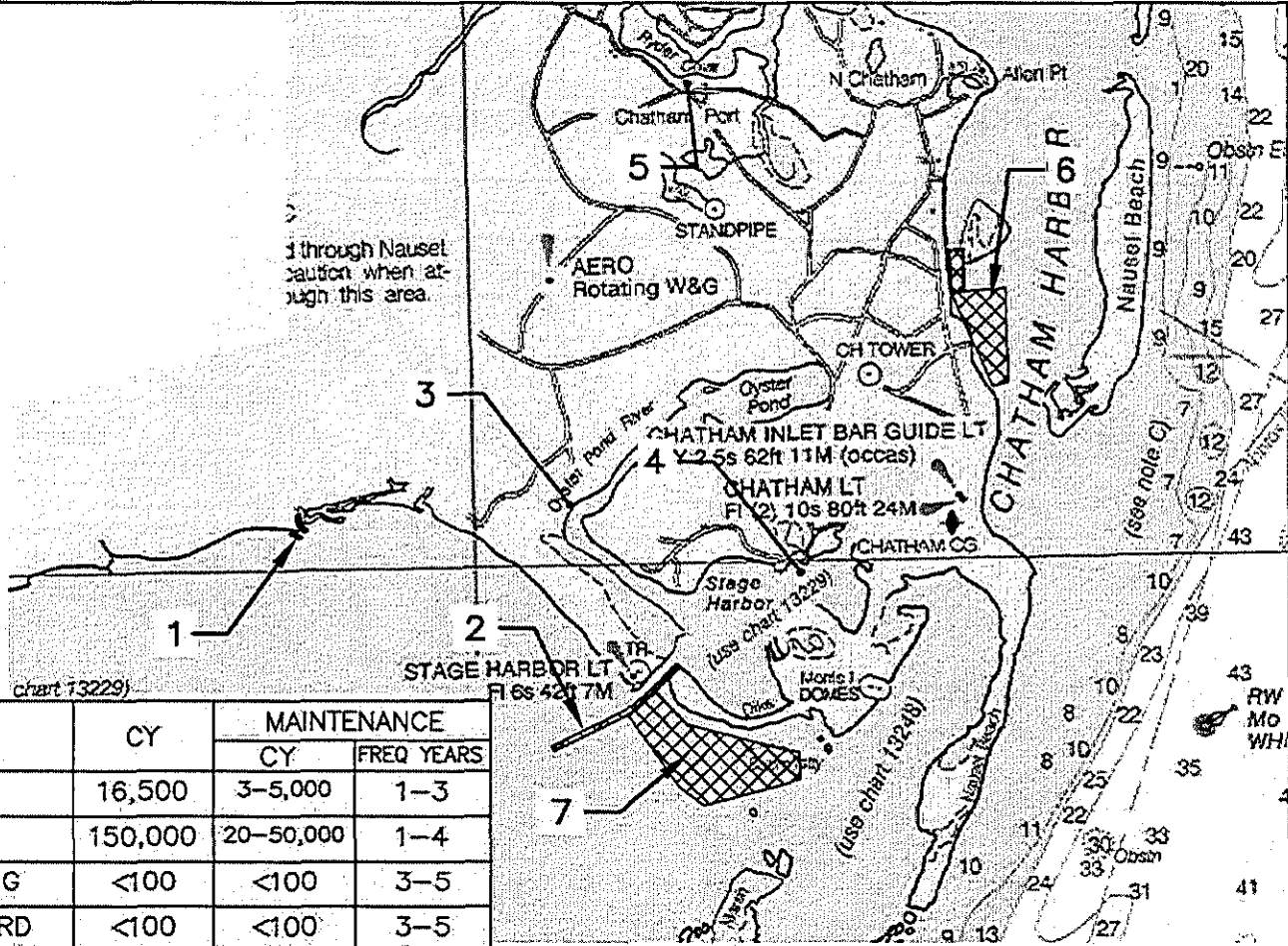
1 inch = 5,280 feet



**TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT
SHEET 1 OF 41**

IN: CHATHAM
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA

File: \\BCFSR501\ProjDrawings\30774 - 30807\Revised Comprehensive Dredge & Disposal\Fig



SITE	SHT. REF.	LOCATION	CY	MAINTENANCE	
				CY	FREQ YEARS
1	3	MILL CREEK	16,500	3-5,000	1-3
2	5	STAGE HARBOR	150,000	20-50,000	1-4
3	7	BARN HILL LANDING	<100	<100	3-5
4	8	OLD MILL BOAT YARD	<100	<100	3-5
5	9	RYDER'S COVE LANDING	135	<100	3-5
6	11	AUNT LYDIAS COVE	150,000	20-50,000	1-3
7	14	MORRIS ISLAND CUT	20,000	5-8,000	1-3

CHATHAM DREDGE SITES



1 Inch = 5000'

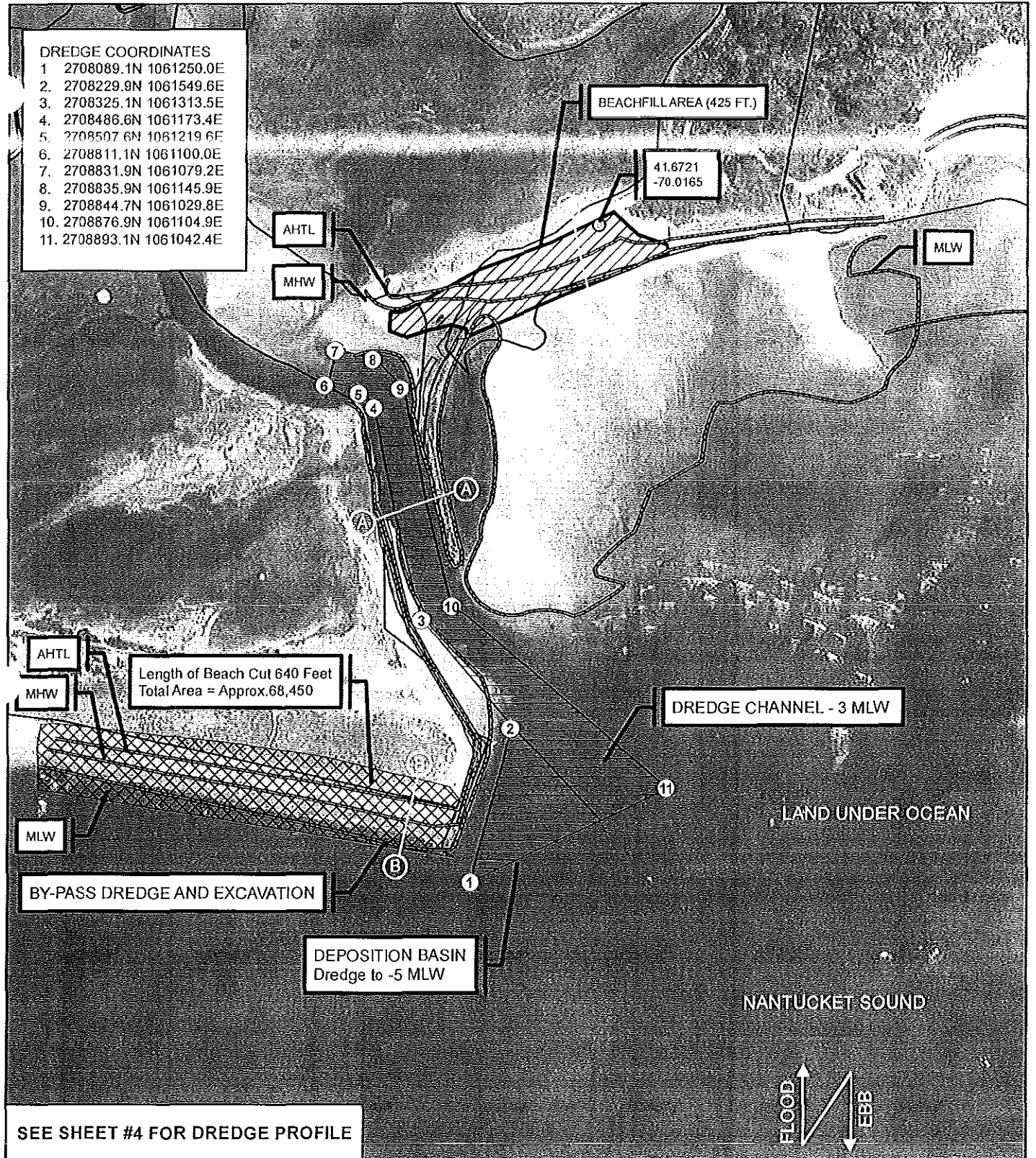
Date: April 23, 2012

TOWN OF CHATHAM COMPREHENSIVE DREDGING & DISPOSAL PROJECT

IN: CHATHAM
 AT: CHATHAM
 COUNTY: BARNSTABLE
 STATE: MA

DREDGE COORDINATES

1. 2708089.1N 1061250.0E
2. 2708229.9N 1061549.6E
3. 2708325.1N 1061313.5E
4. 2708486.6N 1061173.4E
5. 2708507.6N 1061219.6E
6. 2708811.1N 1061100.0E
7. 2708831.9N 1061079.2E
8. 2708835.9N 1061145.9E
9. 2708844.7N 1061029.8E
10. 2708876.9N 1061104.9E
11. 2708893.1N 1061042.4E

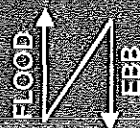


Length of Beach Cut 640 Feet
Total Area = Approx. 68,450

DREDGE CHANNEL - 3 MLW

LAND UNDER OCEAN

NANTUCKET SOUND



SEE SHEET #4 FOR DREDGE PROFILE

**Mill Creek
Dredge & Disposal
DREDGE SITE 1 / DISPOSAL SITE 16**

- Beachfill/Dredged Material (425 Feet)
- By-Pass Dredge/Excavation
- Channel Dredge Area -3 MLW/
Deposition Basin -5 MLW

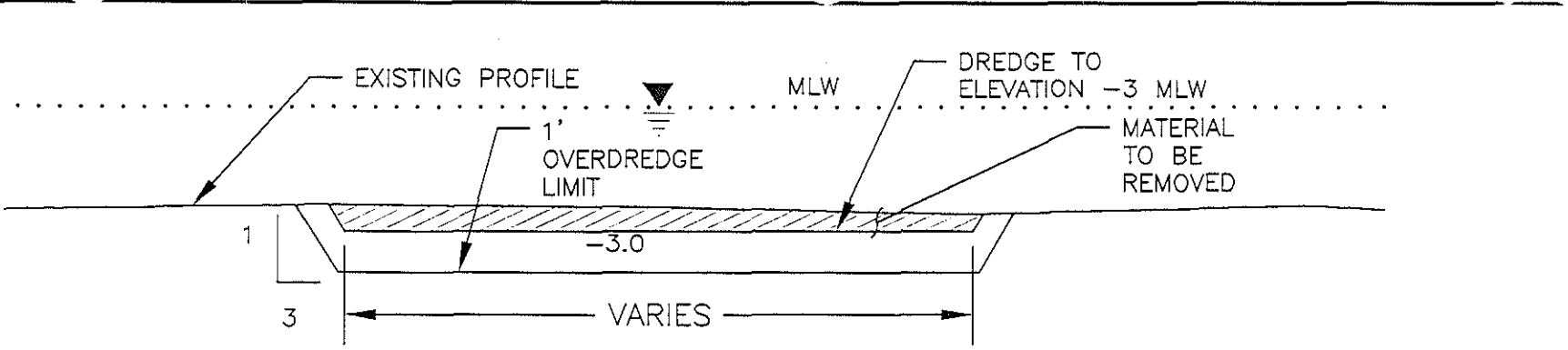
1 inch = 200 feet
Aerial Photo: 2011

AHTL	+5.5	N ▲
MHW	+3.9	
MLW	0.0	

**TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT
SHEET 3 OF 41**

IN: NANTUCKET SOUND
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA

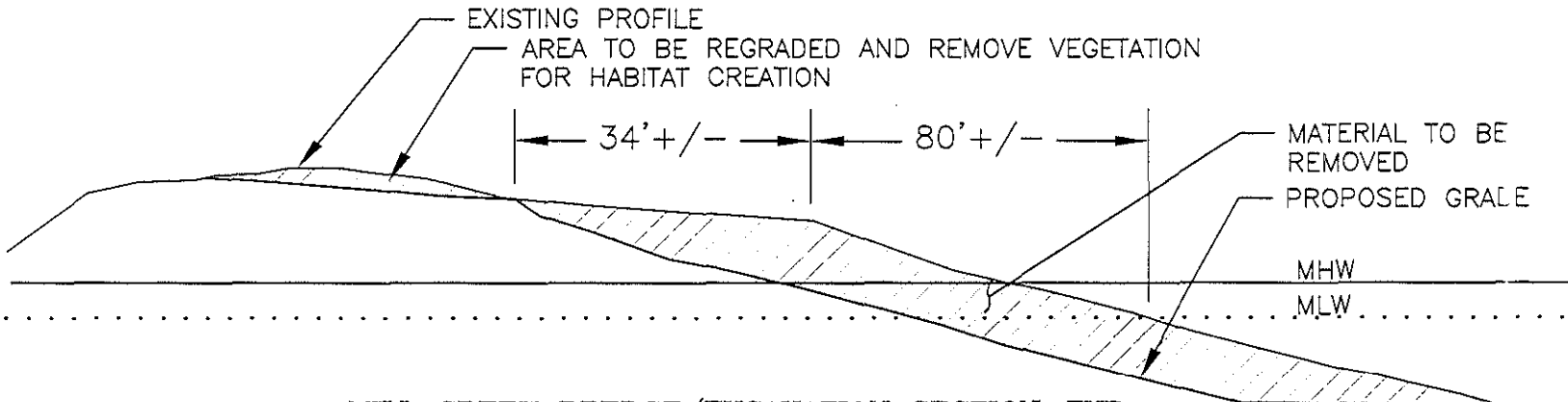
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A
4

MILL CREEK DREDGE SECTION-TYP.

SCALE: 1"=20'-0" HORIZ.
1"=10'-0" VERT.



B
4

MILL CREEK DREDGE/EXCAVATION SECTION-TYP.

SCALE: 1"=20'-0" HORIZ.
1"=10'-0" VERT.



TOWN OF CHATHAM COMPREHENSIVE DREDGING & DISPOSAL PROJECT

IN: CHATHAM
AT: CHATHAM
COUNTY: BARN STABLE
STATE: MA

A N 2702632.89
E 1068686.55

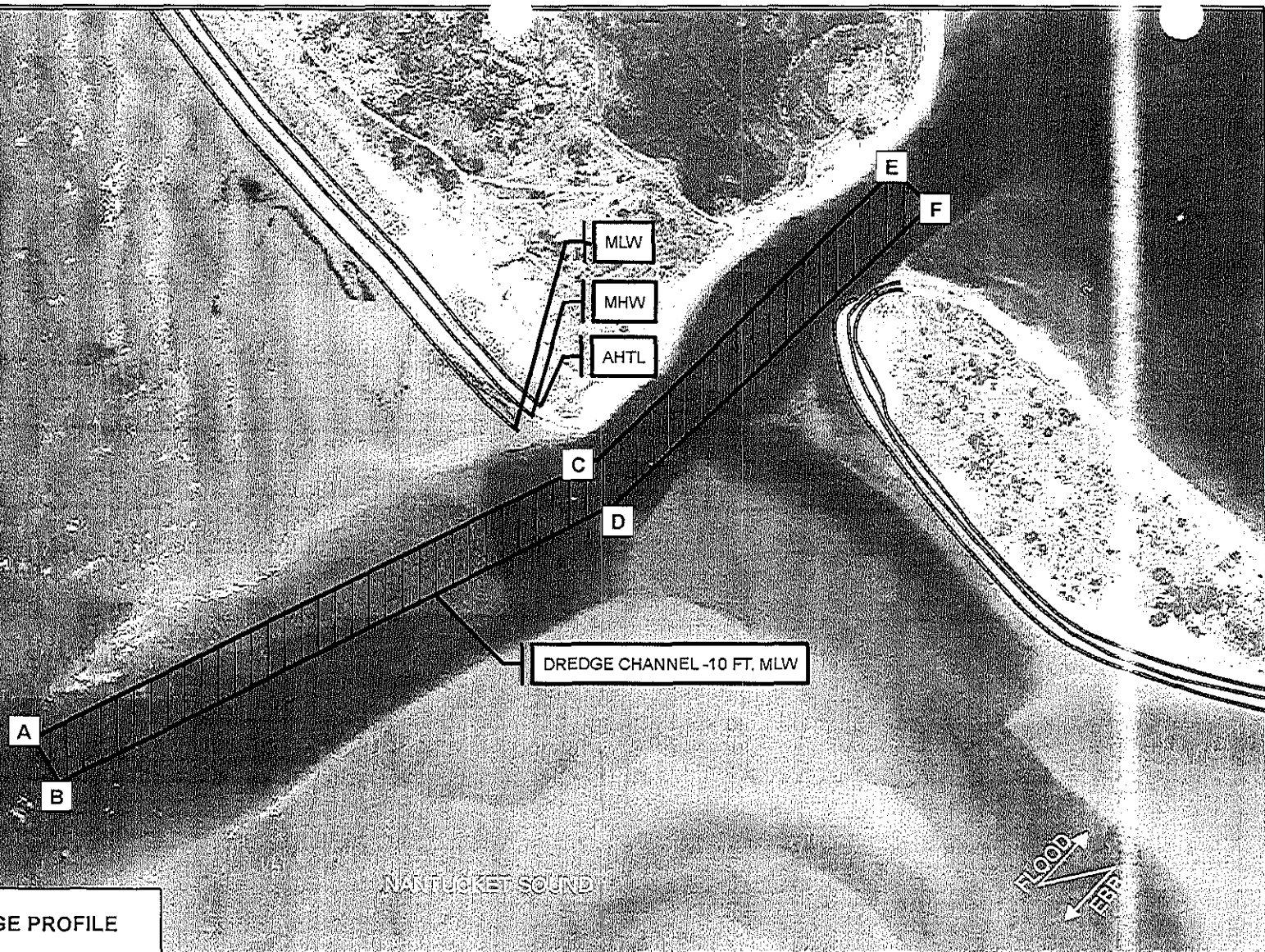
B N 2702476.97
E 1068758.91

C N 2703565.14
E 1070556.71

D N 2703414.39
E 1070594.62

E N 2704543.26
E 1071538.44

F N 2704423.46
E 1071658.33



SEE SHEET #6 FOR DREDGE PROFILE

Stage Harbor
Dredge Area
DREDGE SITE 2

 Dredge Area -10 Ft. MLW

1 inch = 500 feet
Aerial Photo: 2011

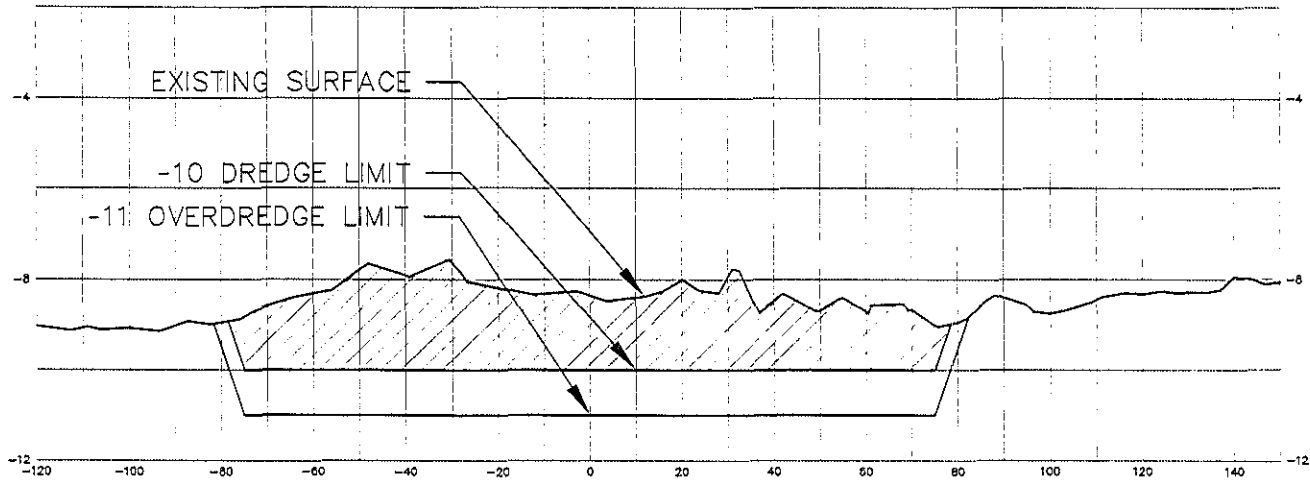
AHTL +5.5
MHW +3.9
MLW 0.0



**TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT**
SHEET 5 OF 41

IN: NANTUCKET SOUND
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA

File: X:\30774\30507A Revised Comprehensive Dredging & Disposal Final Set\30774_0.dwg



A
6

STAGE HARBOR CHANNEL
TYPICAL DREDGE SECTION

SCALE: 1"=40'

STAGE HARBOR
DREDGE SECTION

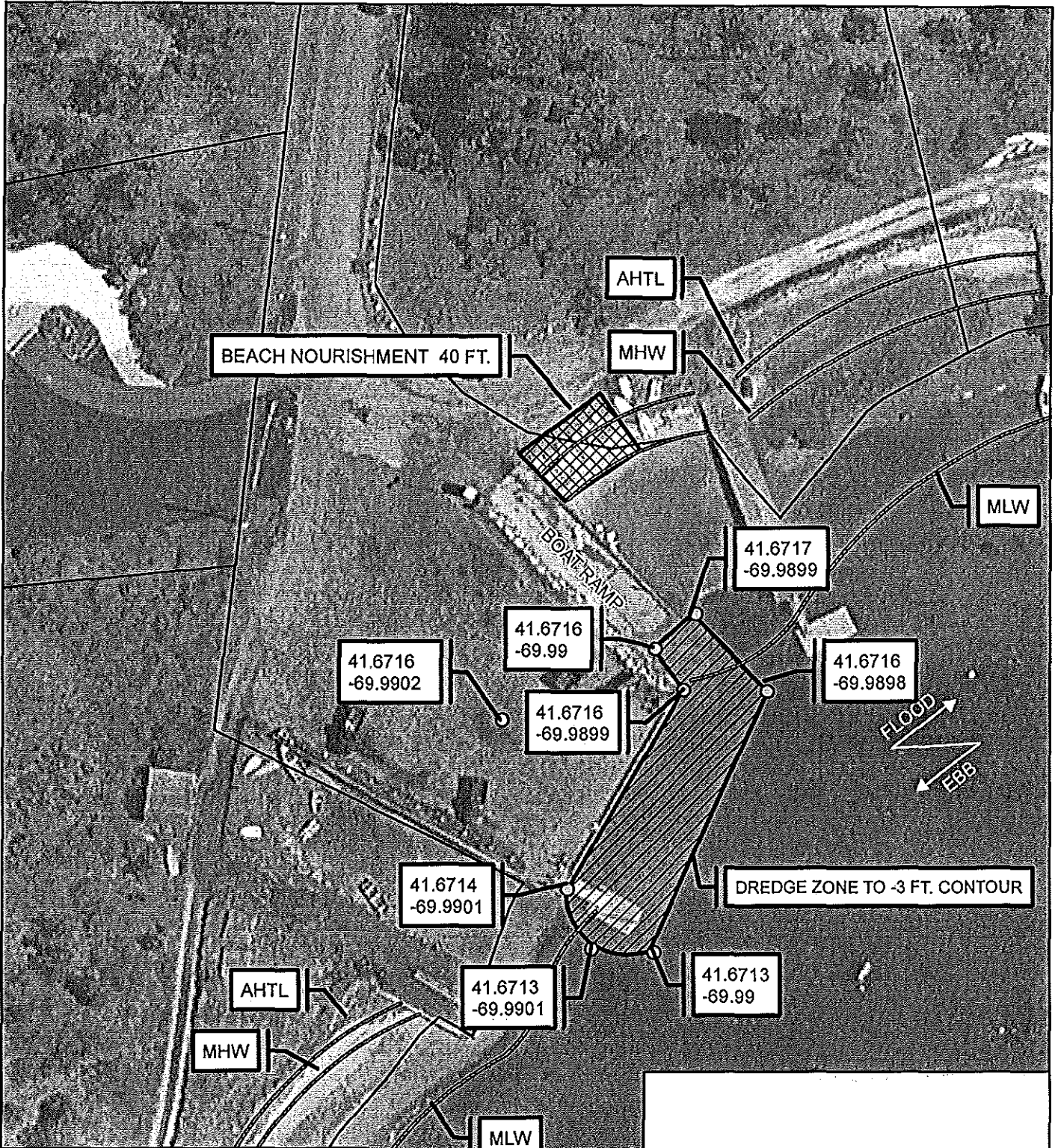


1 Inch = 40'

TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT



IN: CHATHAM
AT: CHATHAM
COUNTY: BARN STABLE
STATE: MA

SHEET 6 OF 41



SEE SHEET #10 FOR DREDGE PROFILE

**Barn Hill Landing
Dredge & Disposal Area
DREDGE SITE 3 / DISPOSAL SITE 10**

-  Beach Nourishment/
Dredged Material (40 Feet)
-  Dredge Area to -3 Ft. Contour

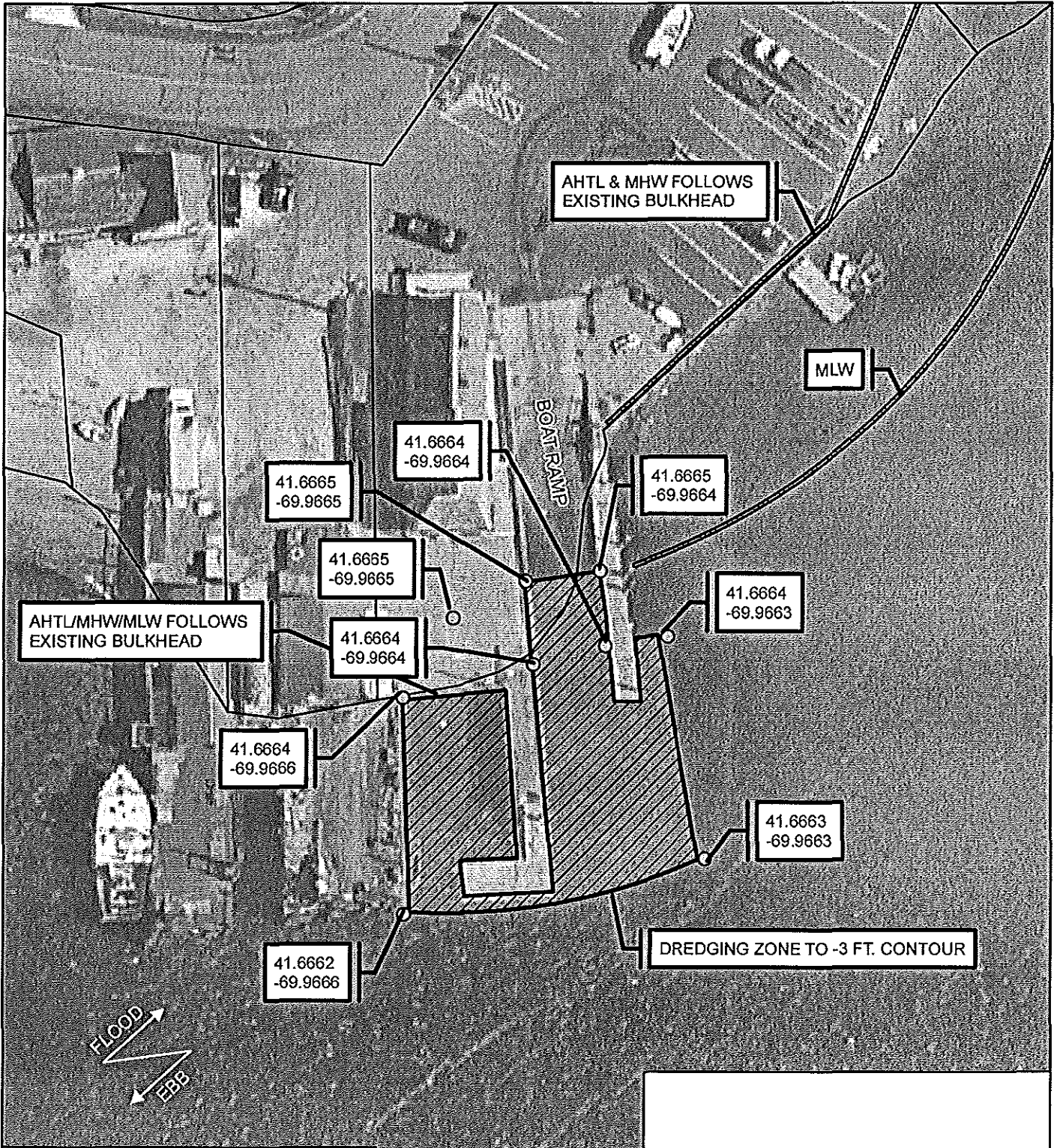
1 inch = 50 feet
Aerial Photo: 2011

AHTL +5.0
MHW +4.5
MLW 0.0
DATE: APRIL 23, 2012



**TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT
SHEET 7 OF 41**

IN: OYSTER RIVER
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA

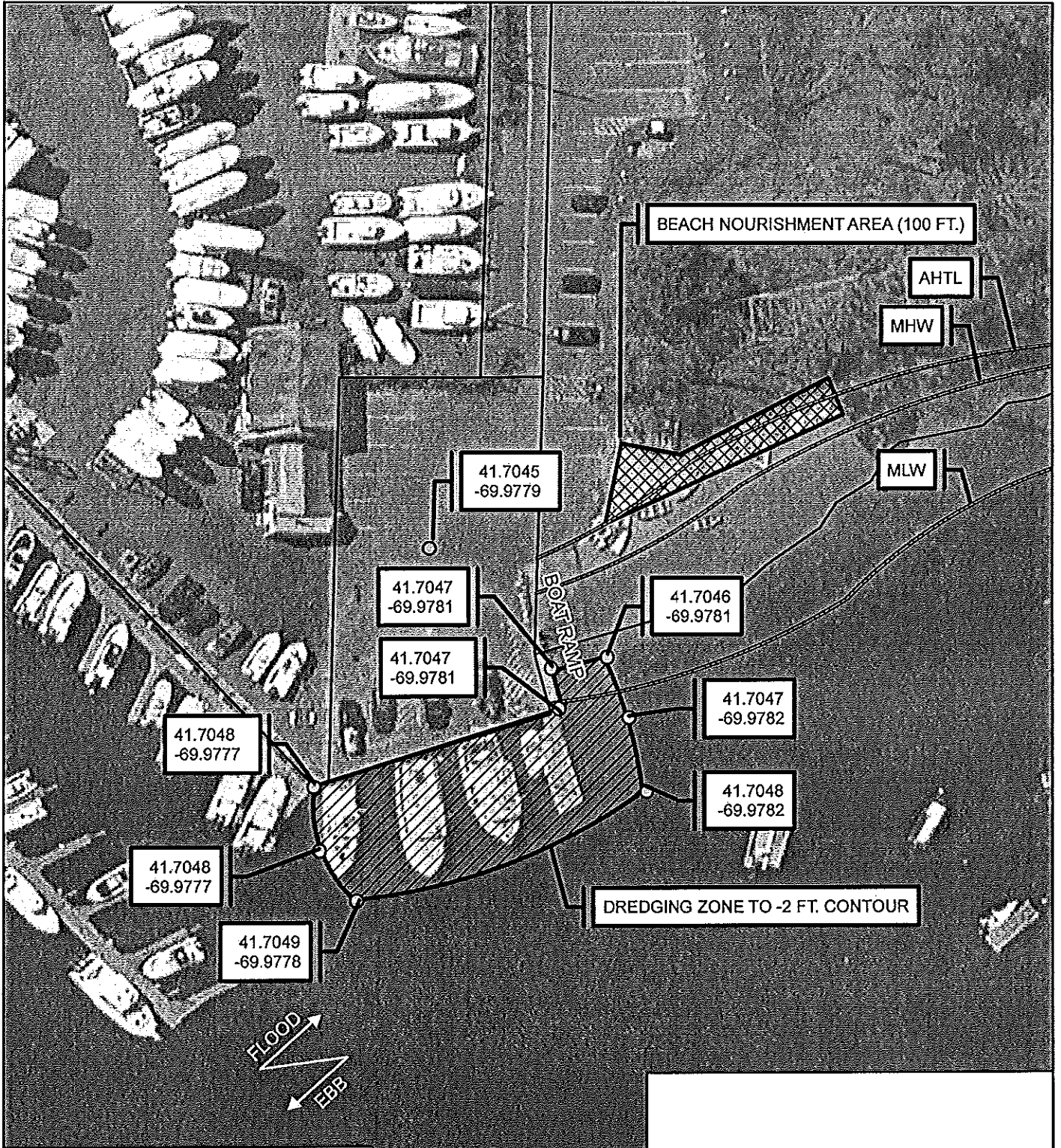


SEE SHEET #10 FOR DREDGE PROFILE

Old Mill Boat Yard Dredge Area DREDGE SITE 4	
AHTL +5.0 MHW +4.5 MLW 0.0 DATE: APRIL 23, 2012	N

Dredge Area to -3 Ft. Contour	TOWN OF CHATHAM COMPREHENSIVE DREDGING & DISPOSAL PROJECT SHEET 8 OF 41
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1 inch = 40 feet Aerial Photo: 2011 IN: STAGE HARBOR AT: CHATHAM COUNTY: BARNSTABLE STATE: MA
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SEE SHEET #10 FOR DREDGE PROFILE

Ryders Cove
Dredge & Disposal Area
DREDGE SITE 5 / DISPOSAL SITE 13

AHTL +5.6
MHW +4.0
MLW 0.0
DATE: APRIL 23, 2012

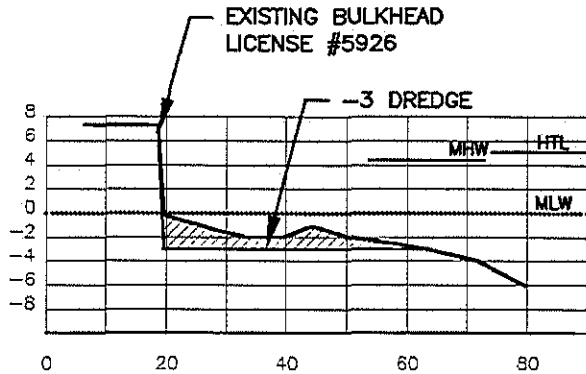
 Beach Nourishment/
Dredged Material (100 Feet)
 Dredging Area to -2 Ft. Contour

TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT
SHEET 9 OF 41

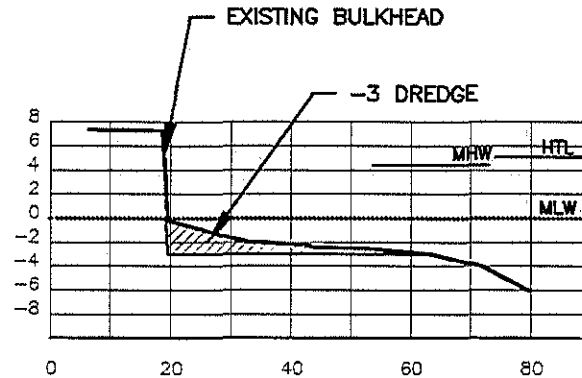
1 inch = 50 feet
Aerial Photo: 2011

IN: RYDERS COVE
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA

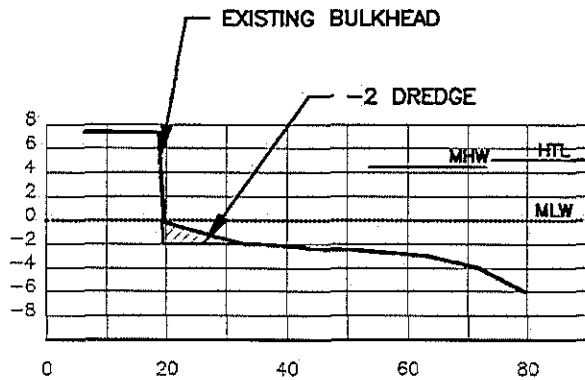
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A
10
OLD MILL BOAT YARD
HORIZONTAL SCALE: 1"=30'-0"
VERTICAL SCALE: 1"=15'-0"



B
10
BARN HILL LANDING
HORIZONTAL SCALE: 1"=30'-0"
VERTICAL SCALE: 1"=15'-0"



C
10
RYDERS COVE
HORIZONTAL SCALE: 1"=50'-0"
VERTICAL SCALE: 1"=25'-0"

DREDGE SECTIONS

Date: April 23, 2012

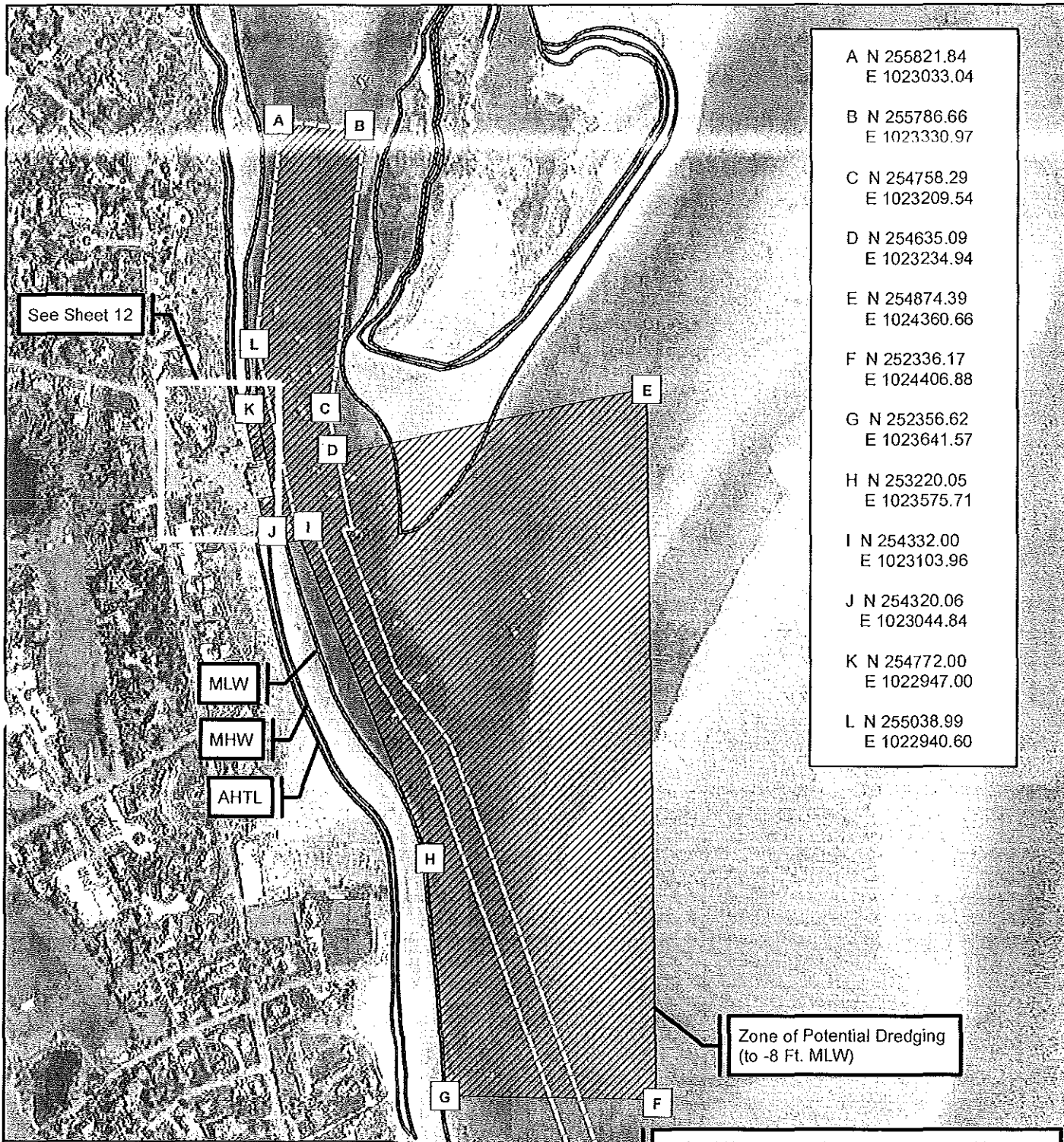


**TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT**

SHEET 10 OF 41

SCALE VARIES

IN: CHATHAM
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA



A	N 255821.84	E 1023033.04
B	N 255786.66	E 1023330.97
C	N 254758.29	E 1023209.54
D	N 254635.09	E 1023234.94
E	N 254874.39	E 1024360.66
F	N 252336.17	E 1024406.88
G	N 252356.62	E 1023641.57
H	N 253220.05	E 1023575.71
I	N 254332.00	E 1023103.96
J	N 254320.06	E 1023044.84
K	N 254772.00	E 1022947.00
L	N 255038.99	E 1022940.60

SEE SHEET #13 FOR DREDGE PROFILE

Federal Navigation Channel (current position)
-8 MLW x 100 Ft. (See Sheet 13 for Dredge Profile)

**Aunt Lydia's Cove
Dredge Area
DREDGE SITE 6**

AHTL: 5.8
MHW: 7.5
MLW: 0.0

N
▲

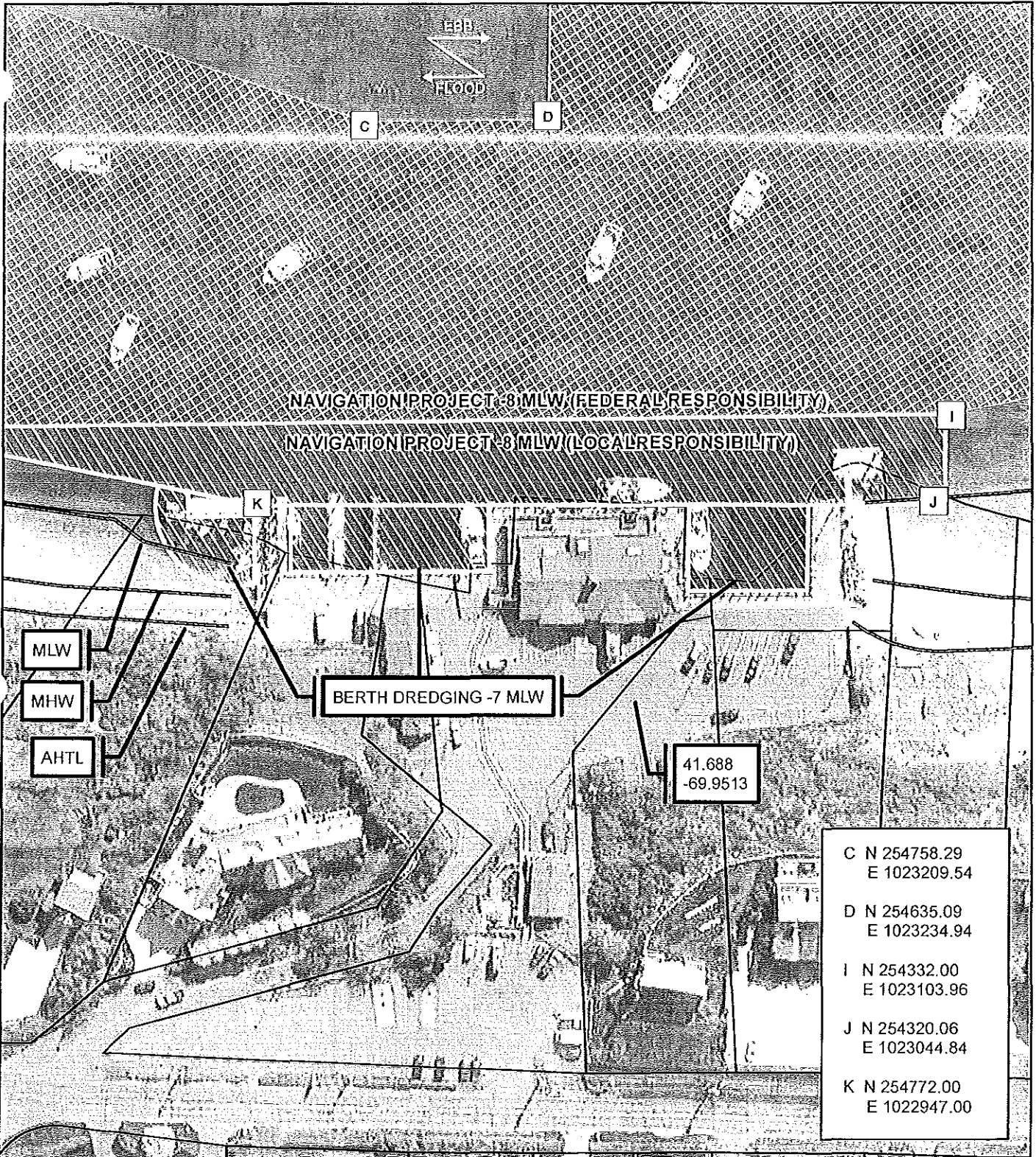
Zone of Potential Dredging -8 Ft. MLW

**TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT**



SHEET 11 OF 41

1 inch = 500 feet
Aerial Photo: 2011

IN: CHATHAM HARBOR
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA



Fish Pier
Dredge Area
DREDGE SITE 6

 Berth Dredging -7 MLW
 Navigation Dredging -8 MLW

1 inch = 90 feet
Aerial Photo: 2011

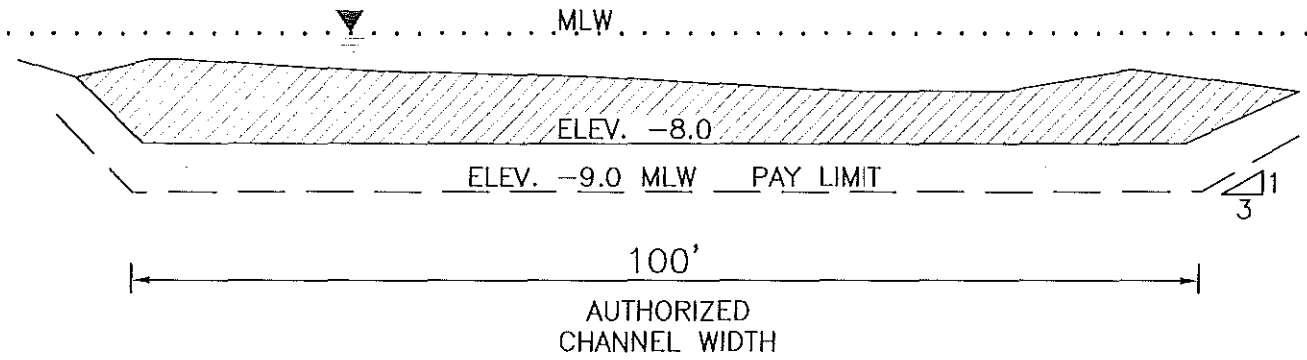
AHTL: 5.8
MHW: 7.5
MLW: 0.0



TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT
SHEET 12 OF 41

IN: CHATHAM HARBOR
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA


FILE: A:\2007-11-15\2007-2008 Comprehensive Dredge & Disposal Final.dwg



AUNT LYDIA'S COVE CHANNEL
TYPICAL DREDGE SECTION

A
13

SCALE: N.T.S

<p>AUNT LYDIA'S COVE CHANNEL DREDGE</p>	 <p>BCE <i>Boarne Consulting Engineering</i> <small>7 Bond Street Franklin, MA 01902 TEL (508) 532-0000 FAX (508) 532-0000</small></p>	<p>SCALE N.T.S.</p>
	<p>TOWN OF CHATHAM COMPREHENSIVE DREDGING & DISPOSAL PROJECT</p> <p>SHEET 13 OF 41</p>	<p>IN: CHATHAM AT: CHATHAM COUNTY: BARNSTABLE STATE: MA</p>

STAGE HARBOR

A	2703224.82,	1070295.03
B	2703932.00,	1071040.22
C	2702974.55,	1075069.52
D	2702168.30,	1075069.52
E	2701426.95,	1075090.56
F	2700700.59,	1072422.31
G	2701219.79,	1071738.28

MLW

MHW

AHTL

A

B

C

D

E

G

F

POTENTIAL DREDGE ZONE 164.27 ACRES

SEE SHEET #15 FOR PROPOSED CHANNEL

Morris Island Cut
Dredge Area
DREDGE SITE 7



Morris Island Cut Zone of Potential Dredging
-4 Ft. MLW

1 inch = 850 feet
Aerial Photo: 2011

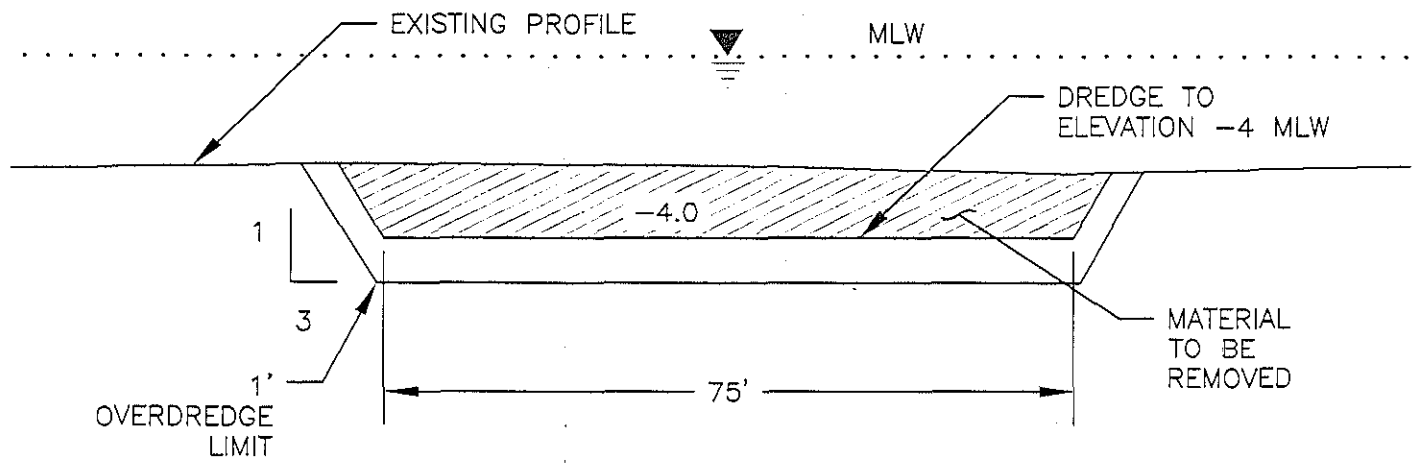
AHTL: 7.5
MHW: 5.8
MLW: 0.0



TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT
SHEET 14 OF 41

IN: NANTUCKET SOUND
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA

File: X:\40774\40750\Revised\Comprehensive\bridge & disposal\final\sheet 15.dwg



MORRIS ISLAND CUT
DREDGE SECTION-TYP.

A
15

SCALE: 1"=20'-0"



1 Inch = 20'

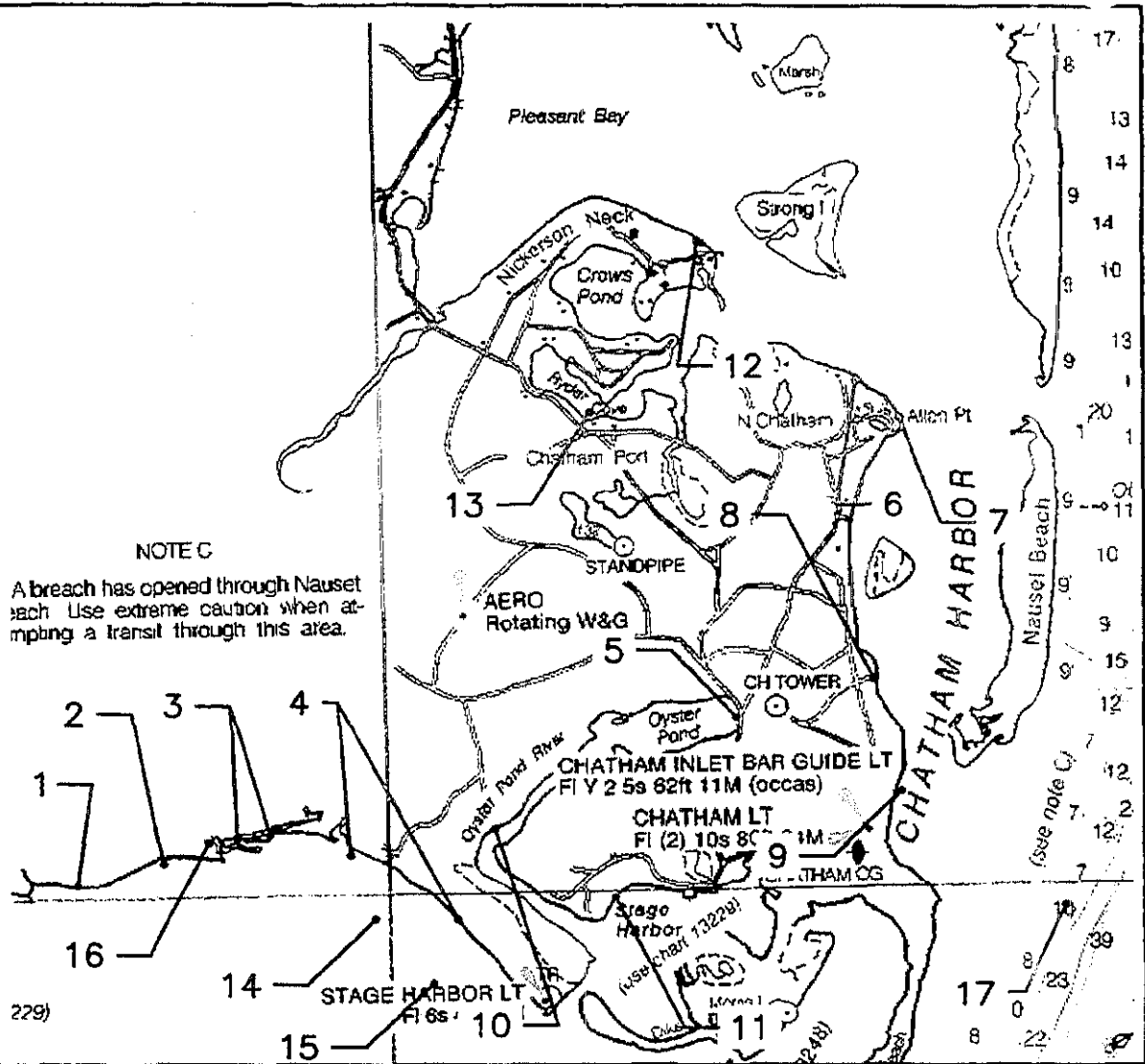
TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT

IN: CHATHAM
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA

File: X:\30774-1\30807 Revised Comprehensive Dredge & Disposal\Final Set\SH16.dwg

SITE	SHEET REF.	DISPOSAL SITES	LF
1	17	PLEASANT STREET	370
2	18	FOREST BEACH	1160
3	21	COCKLE COVE	1250
4	24	HARDINGS BEACH	7175
5	33	OYSTER POND BEACH	315
6	27	COTCHPINICUT	112
7	29	SCATTEREE LANDING	280
8	19	CLAFLIN LANDING BEACH	850
9	31	ANDREW HARDINGS LANE /LIGHTHOUSE BEACH	2250
10	35	BARN HILL LANDING	40
11	34	BATTLEFIELD LANDING	295
12	38	STRONG ISLAND	180
13	36	RYDER'S COVE	100
14	40	HARDINGS BEACH W	NEAR SHORE
15	40	HARDINGS BEACH E	NEAR SHORE
16	22	MILL CREEK	425
17	41	OUTSIDE BAR	NEAR SHORE

NOTE C
 A breach has opened through Nauset beach. Use extreme caution when attempting a transit through this area.



TOWN WIDE PERMIT

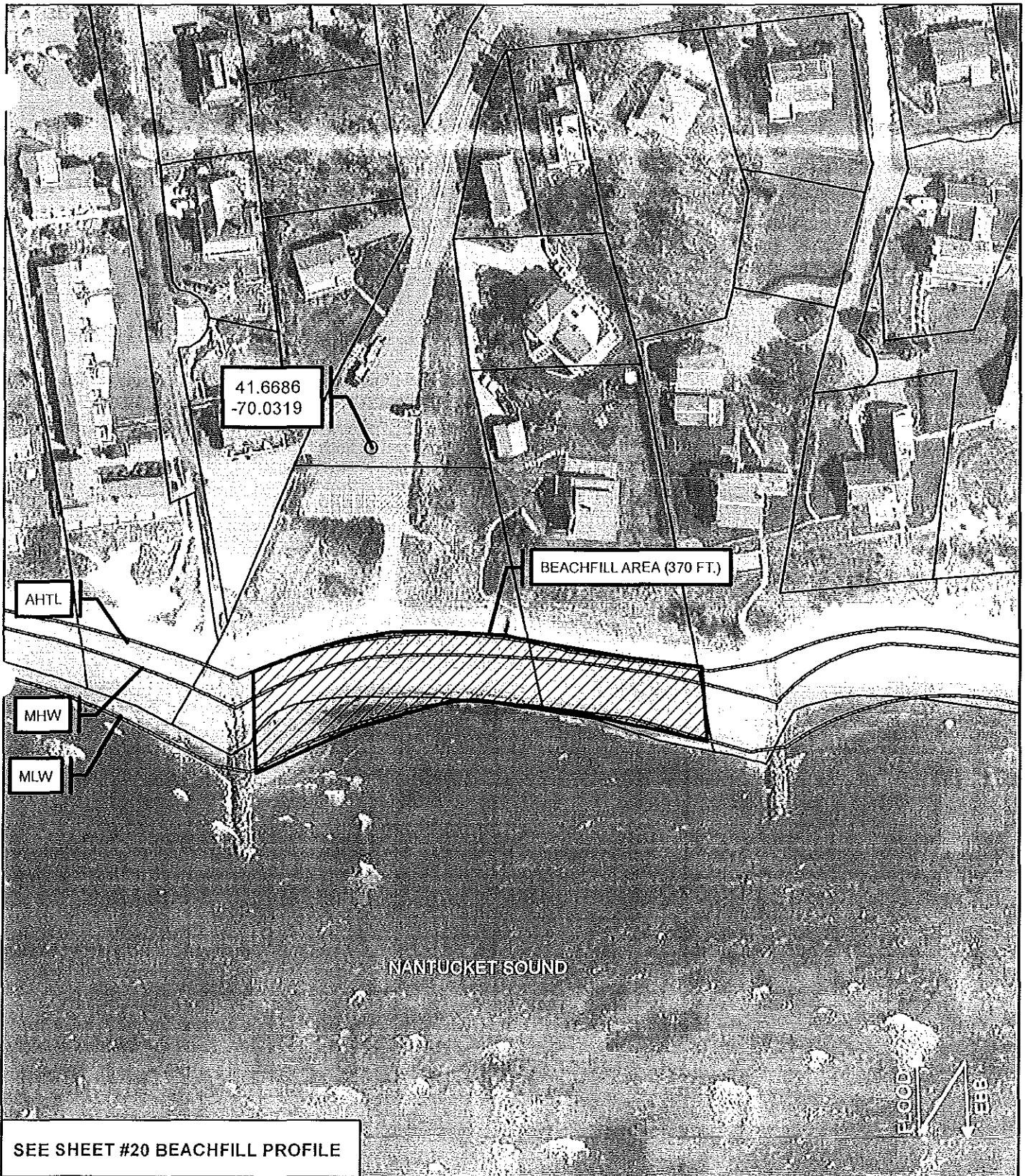


1 Inch = 5000'


CHATHAM DISPOSAL SITES

TOWN OF CHATHAM COMPREHENSIVE DREDGING & DISPOSAL PROJECT

IN: CHATHAM
 AT: CHATHAM
 COUNTY: BARNSTABLE
 STATE: MA



Pleasant Street
Disposal Area
DISPOSAL SITE 1

 Beachfill/Dredged Material (370 Feet)

1 inch = 100 feet
Aerial Photo: 2011

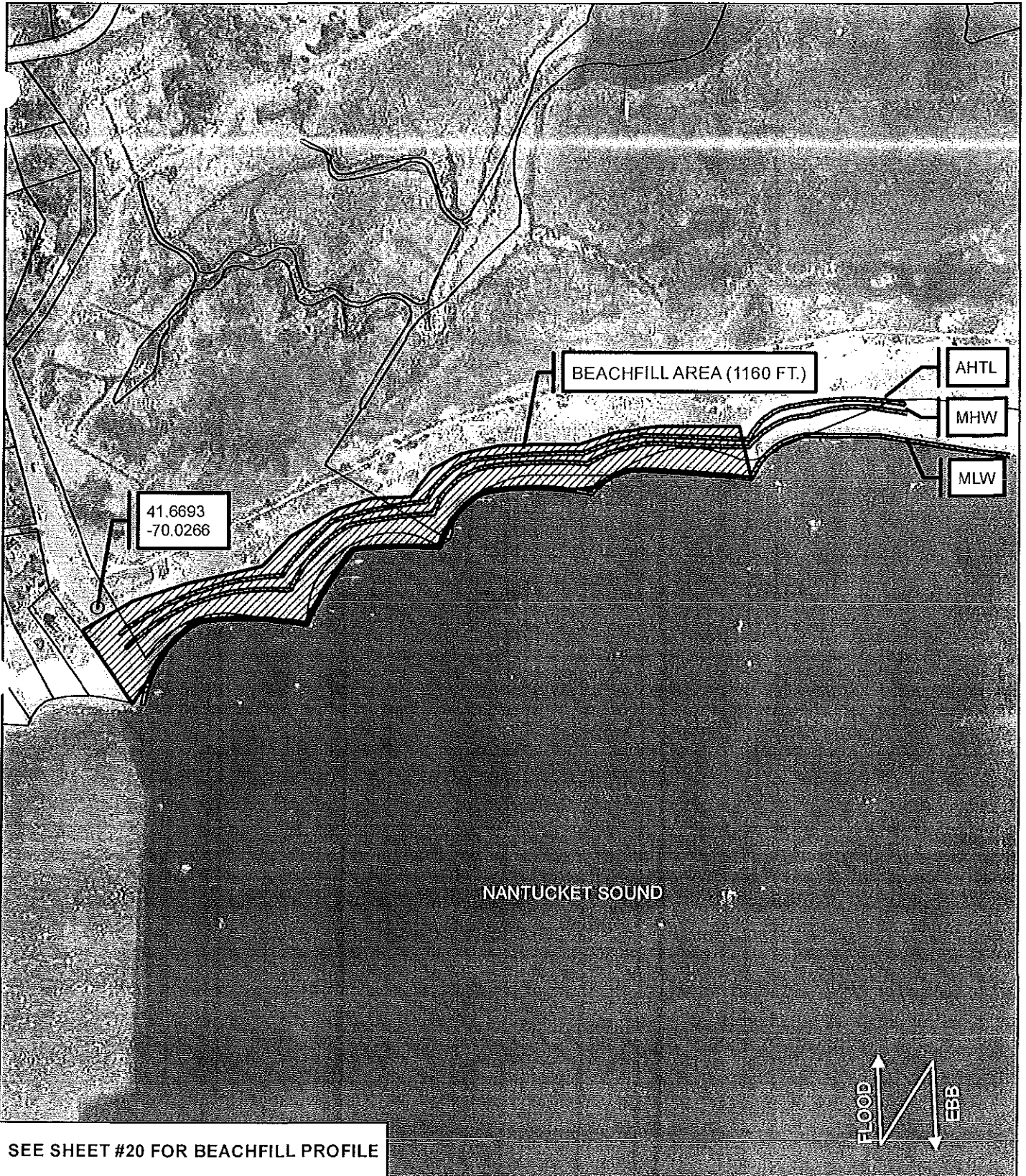
AHTL +5.5
MHW +3.9
MLW 0.0



**TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT**


SHEET 17 OF 41

IN: NANTUCKET SOUND
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA




SEE SHEET #20 FOR BEACHFILL PROFILE

Forest Beach
Disposal Area
DISPOSAL SITE 2

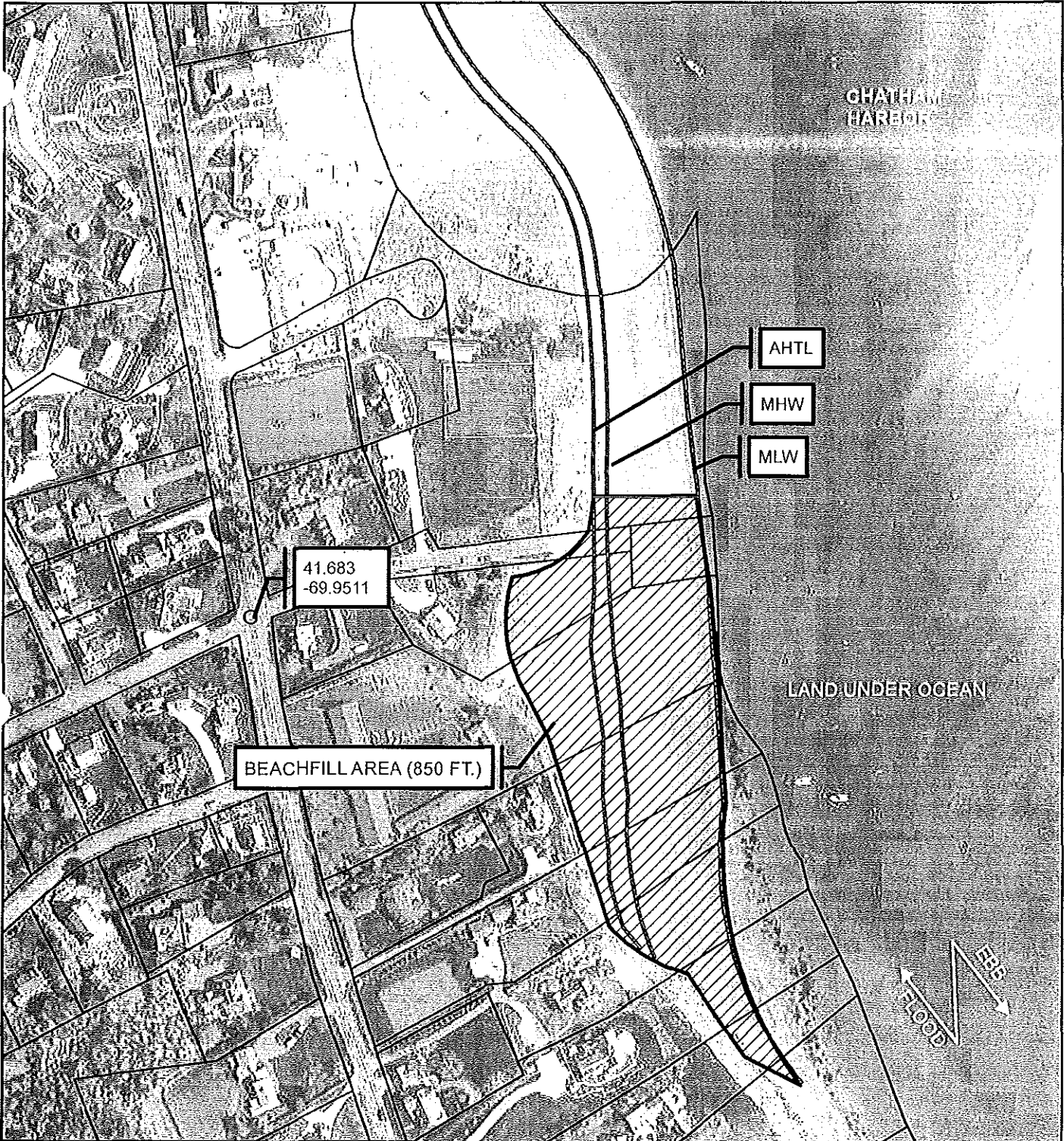
 Beachfill/Dredged Material (1160 Feet)

1 inch = 236 feet
Aerial Photo: 2011

AHTL	+5.5	
MHW	+3.9	
MLW	0.0	


**TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT**
SHEET 18 OF 41

IN: NANTUCKET SOUND
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA



SEE SHEET #20 FOR BEACHFILL PROFILE

Clafin Landing
Disposal Area
DISPOSAL SITE 8

 Beachfill/Dredged Material (850 Feet)

1 inch = 200 feet
Aerial Photo: 2011

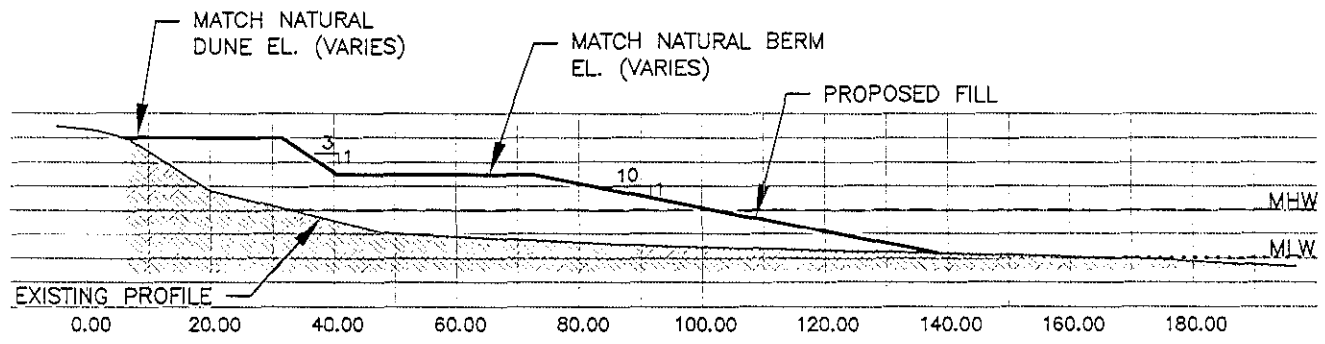
AHTL: 7.5
MHW: 5.8
MLW: 0.0



**TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT**
SHEET 19 OF 41


IN: CHATHAM HARBOR
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA

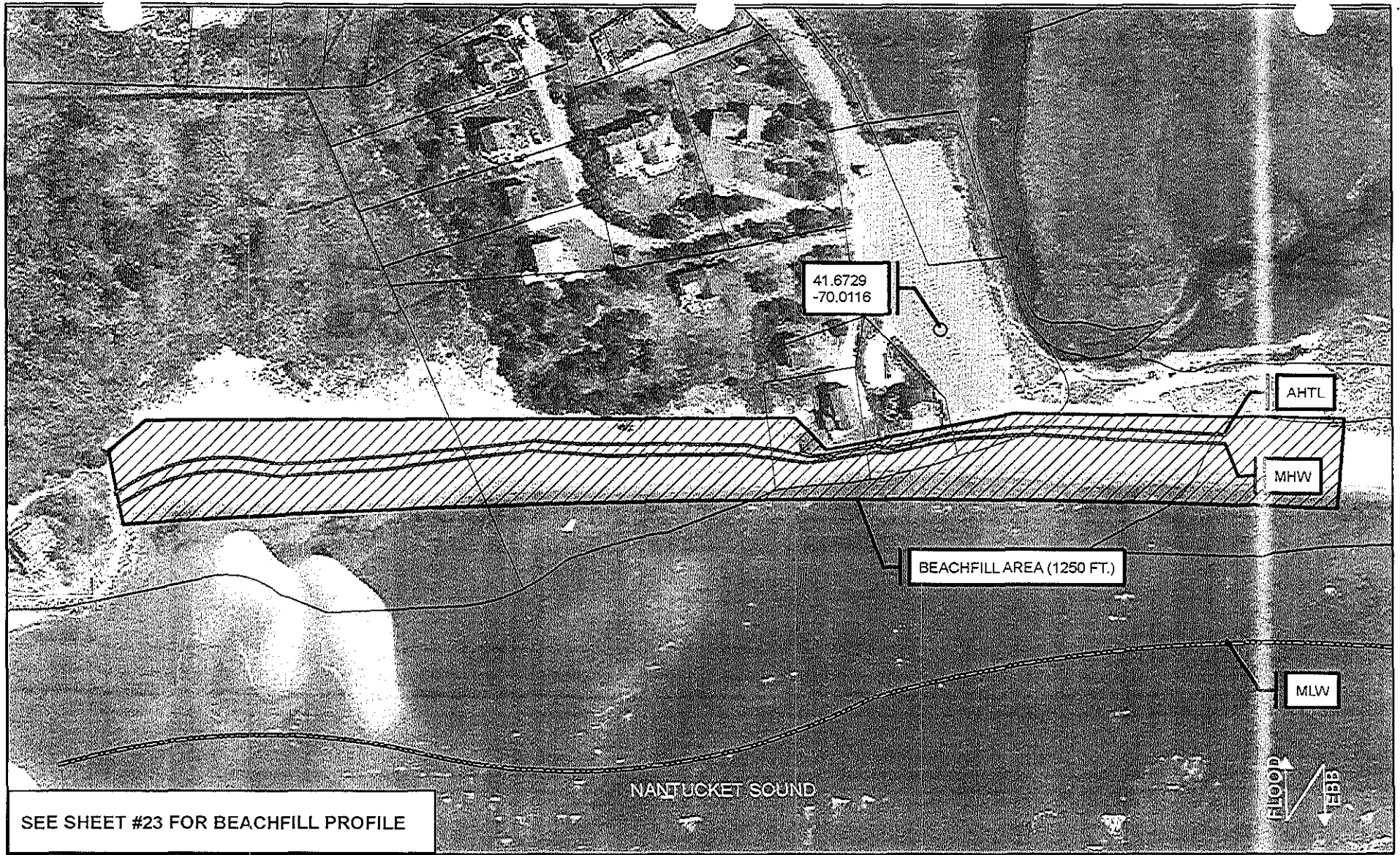
File: X:\50774 - 5050\Received\Comprehensive Dredging & Disposal\Final\CLN.dwg 20.dwg



A
20
TYPICAL FILL SECTION
HORIZONTAL SCALE: 1"=30'-0"
VERTICAL SCALE: 1"=15'-0"


TYPICAL BEACH NOURISHMENT SECTION FOR:
PLEASANT STREET,
FOREST BEACH,
CLAFLIN LANDING

<p>BEACH NOURISHMENT</p>	 <p>BCE Bourne Consulting Engineering 3 Bond Street Franklin, MA 01902 TEL (508) 633-8888 FAX (508) 633-8888</p>	<p>SCALE VARIES</p>
<p>TOWN OF CHATHAM COMPREHENSIVE DREDGING & DISPOSAL PROJECT</p> <p>SHEET 20 OF 41</p>		<p>IN: CHATHAM AT: CHATHAM COUNTY: BARNSTABLE STATE: MA</p>



SEE SHEET #23 FOR BEACHFILL PROFILE

**Cockle Cove Beach
Disposal Area
DISPOSAL SITE 3**

 Beachfill/Dredged Material (1250 Ft.)

1 inch = 140 feet
Aerial Photo: 2011

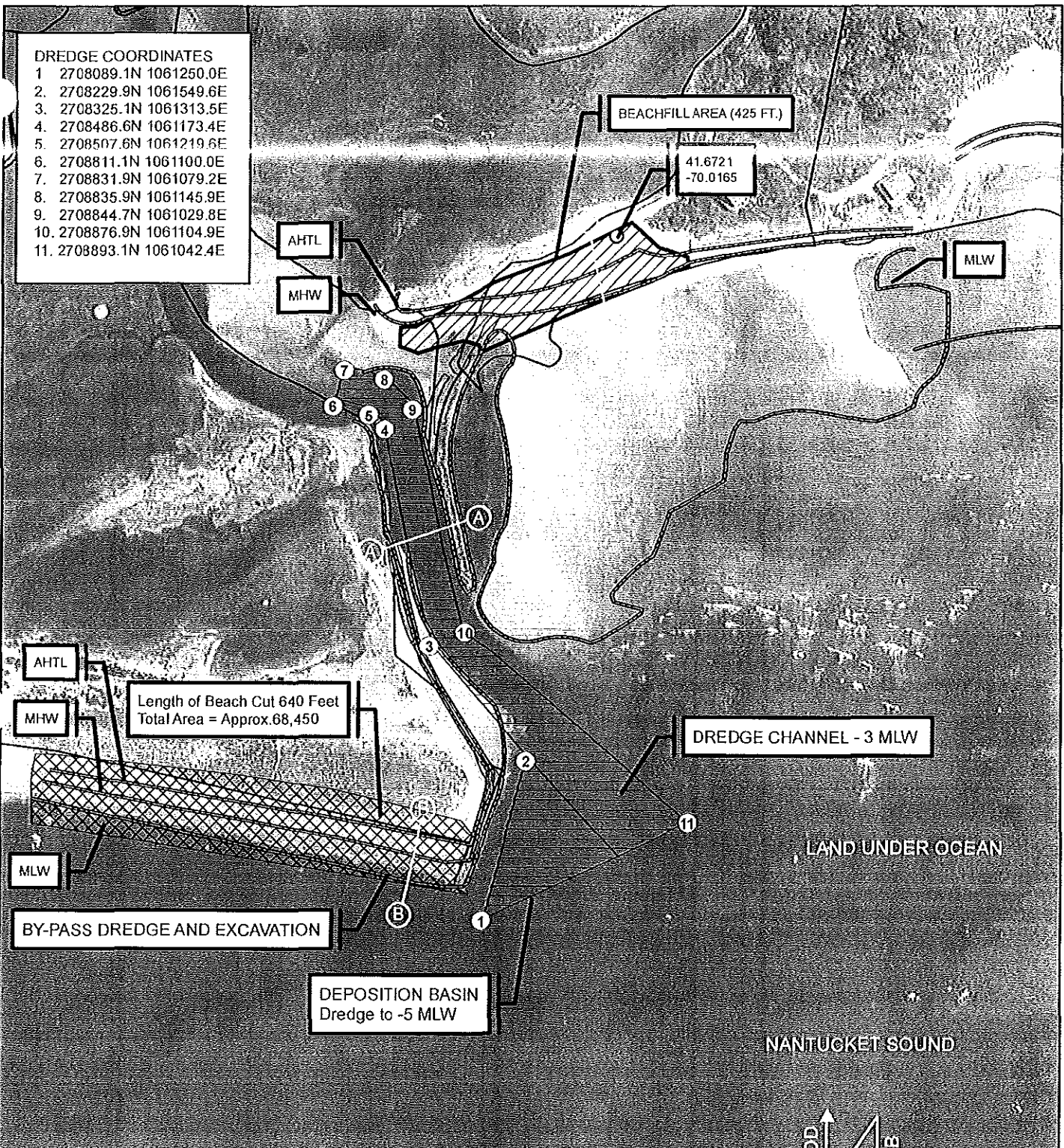
AHTL +5.5
MHW +3.9
MLW 0.0



**TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT
SHEET 21 OF 41**




IN: NANTUCKET SOUND
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA

- DREDGE COORDINATES**
1. 2708089.1N 1061250.0E
 2. 2708229.9N 1061549.6E
 3. 2708325.1N 1061313.5E
 4. 2708486.6N 1061173.4E
 5. 2708507.6N 1061219.6E
 6. 2708811.1N 1061100.0E
 7. 2708831.9N 1061079.2E
 8. 2708835.9N 1061145.9E
 9. 2708844.7N 1061029.8E
 10. 2708876.9N 1061104.9E
 11. 2708893.1N 1061042.4E



SEE SHEET #23 FOR BEACHFILL PROFILE

**Mill Creek
Dredge & Disposal
DREDGE SITE 1 / DISPOSAL SITE 16**

-  Beachfill/Dredged Material (425 Feet)
-  By-Pass Dredge/Excavation
-  Channel Dredge Area -3 MLW/
Deposition Basin -5 MLW

1 inch = 200 feet
Aerial Photo: 2011

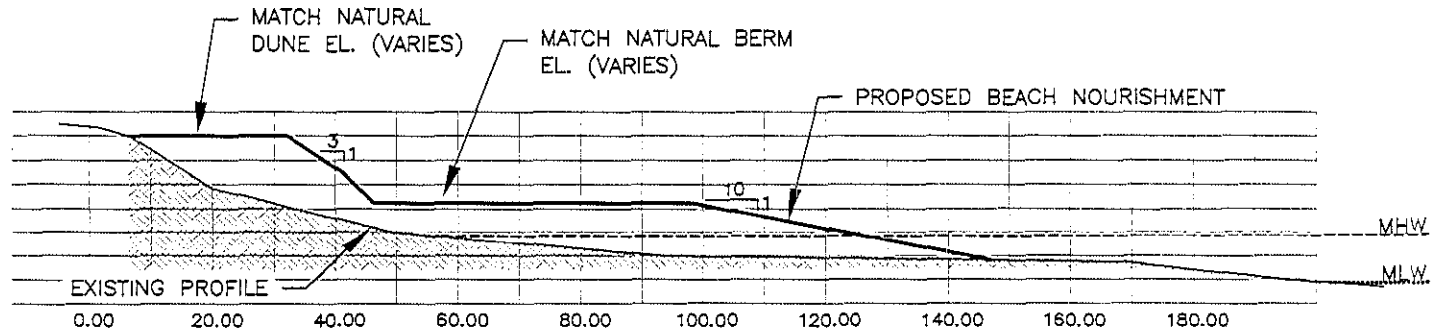
AHTL +5.5
MHW +3.9
MLW 0.0



**TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT
SHEET 22 OF 41**


IN: NANTUCKET SOUND
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA

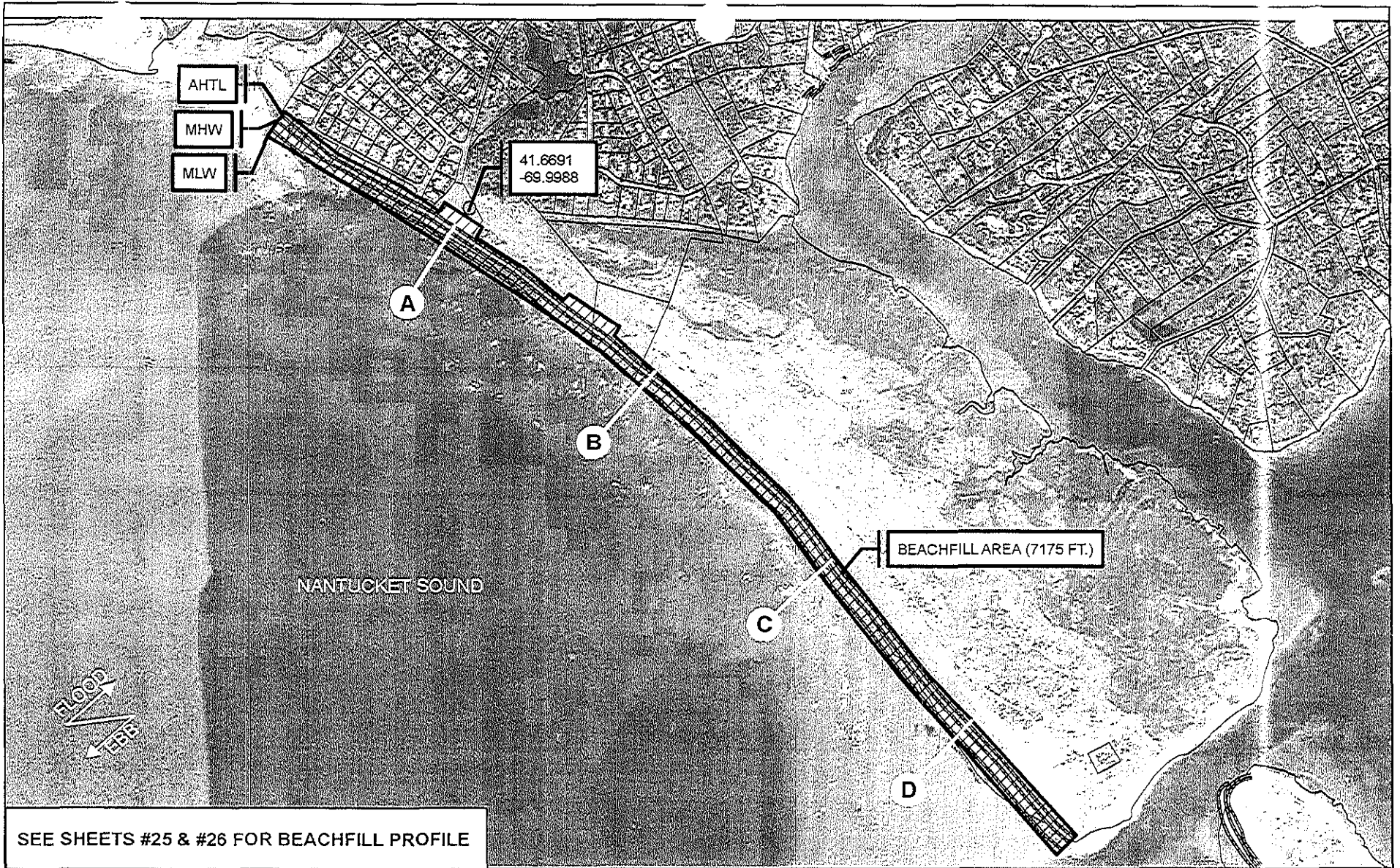
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23
TYPICAL FILL SECTION
 HORIZONTAL SCALE: 1"=30'-0"
 VERTICAL SCALE: 1"=15'-0"

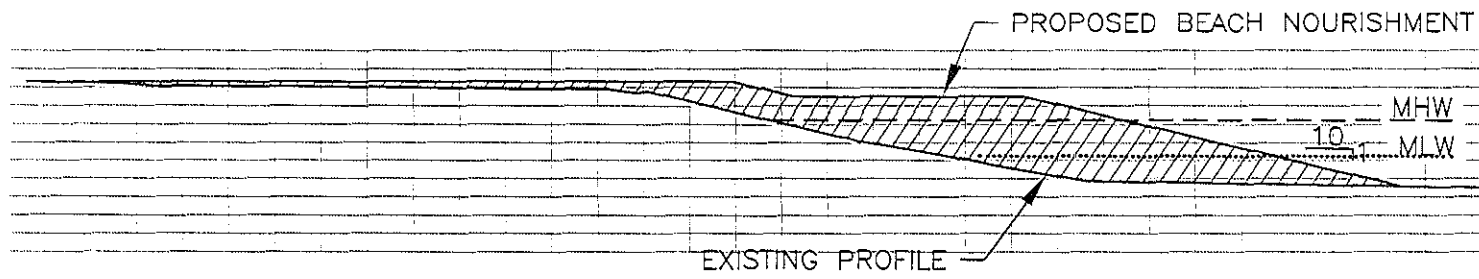
TYPICAL BEACH NOURISHMENT SECTION FOR:
 COCKLE COVE
 MILL CREEK

BEACH NOURISHMENT	 <p style="font-size: small; margin: 0;"> 3 Dent Street Franklin, MA 01903 TEL (508) 833-8888 FAX (508) 833-8880 </p>	SCALE VARIES
TOWN OF CHATHAM COMPREHENSIVE DREDGING & DISPOSAL PROJECT		IN: CHATHAM AT: CHATHAM COUNTY: BARNSTABLE STATE: MA
SHEET 23 OF 41		



<p>Hardings Beach Disposal Area DISPOSAL SITE 4</p>	 Beachfill/Dredged Material (7175 Ft.)	<p>1 inch = 900 feet Aerial Photo: 2011</p>
<p>AHTL +5.5 MHW +3.9 MLW 0.0</p> 	<p>TOWN OF CHATHAM COMPREHENSIVE DREDGING & DISPOSAL PROJECT SHEET 24 OF 41</p>	<p>IN: NANTUCKET SOUND AT: CHATHAM COUNTY: BARNSTABLE STATE: MA</p>

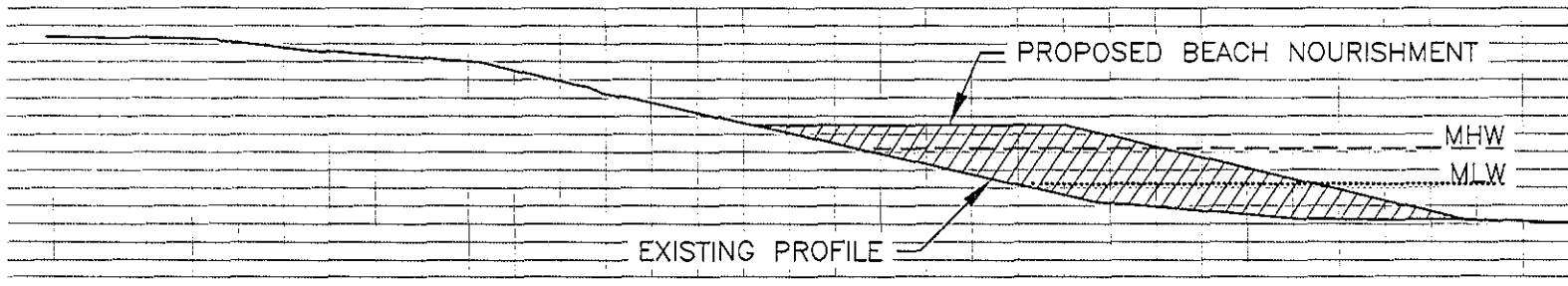
File: X:\50774-1\5080\Revised_Comprensive_Dredging_Disposal\Drawings\Hardings\Hardings.dwg



A
25

TYPICAL FILL HARDINGS BEACH STA 5+00

SCALE: 1"=40'-0"



B
25

TYPICAL FILL HARDINGS BEACH STA 20+00

SCALE: 1"=40'-0"

HARDINGS BEACH SECTIONS



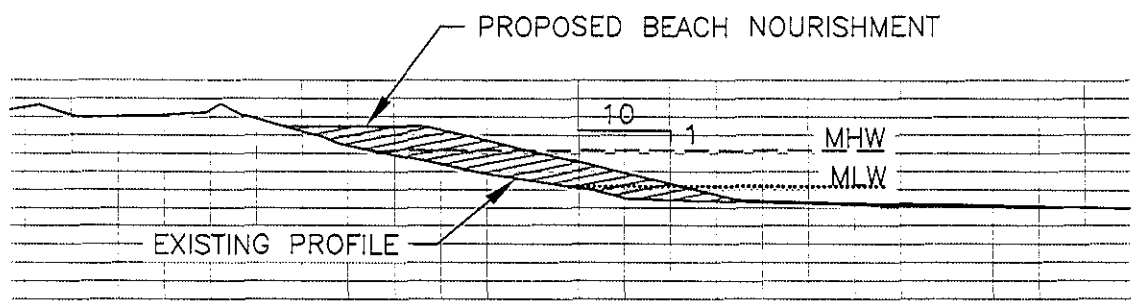
SCALE VARIES

TOWN OF CHATHAM COMPREHENSIVE DREDGING & DISPOSAL PROJECT

SHEET 25 OF 41

IN: CHATHAM
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA

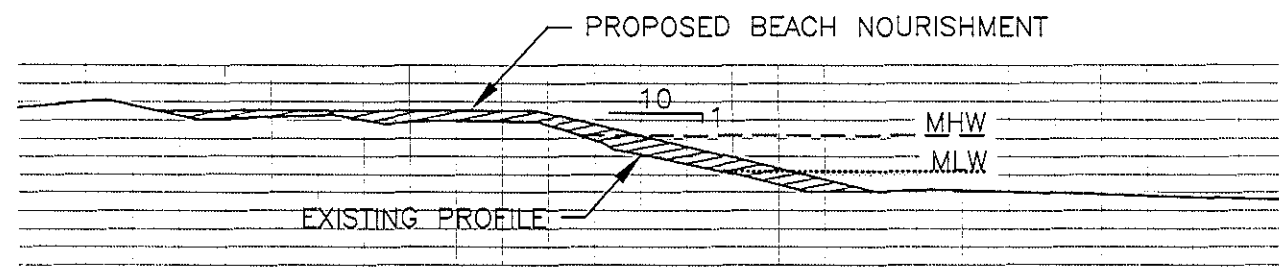
File: X:\A\4174\A\4174\Revised\Comprehensive_Dredge & Disposal\Final\incl_sch\11_11_11.dwg



C
26

TYPICAL FILL HARDINGS BEACH STA 35+00


SCALE: 1"=40'-0"

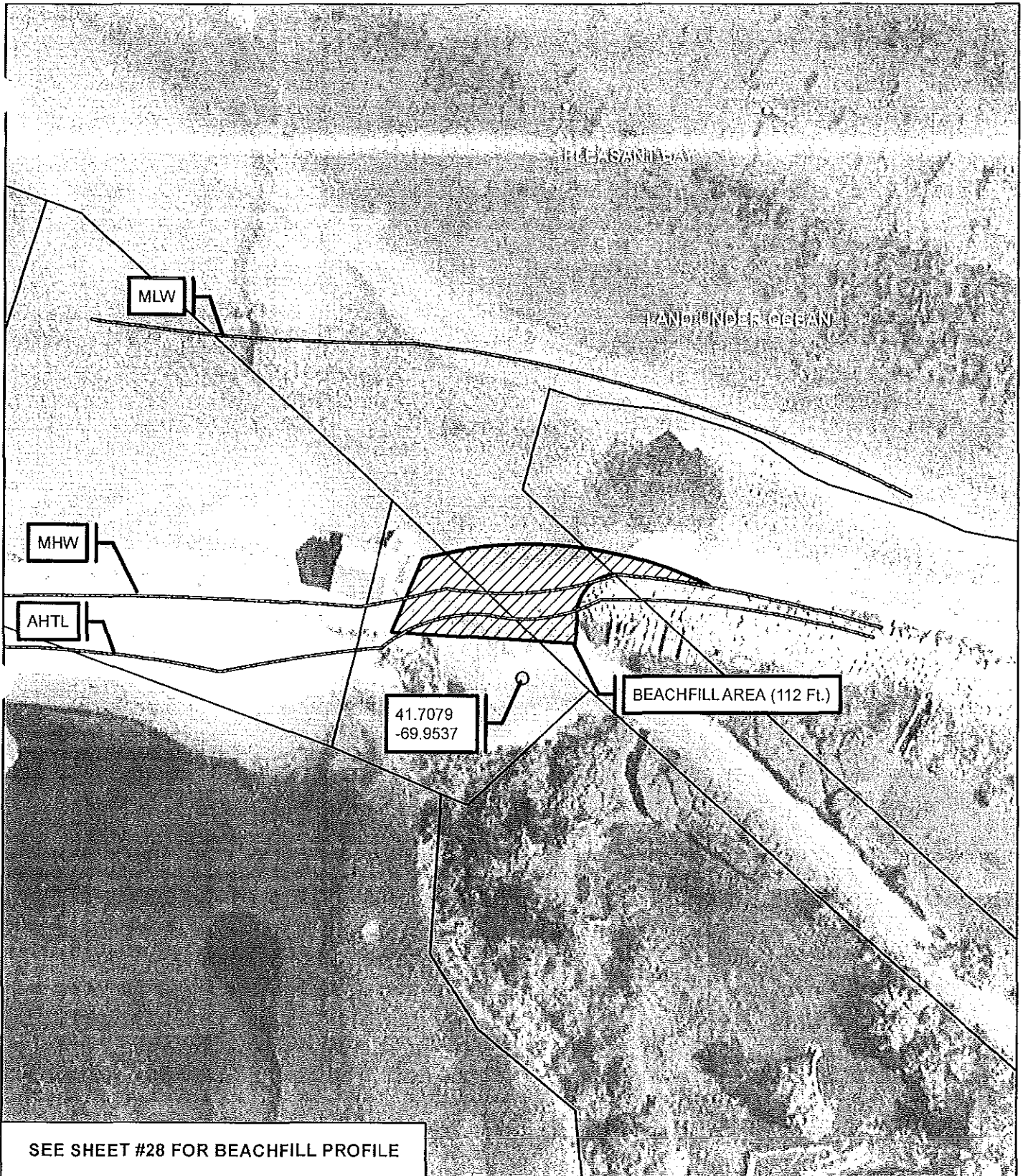




D
26

TYPICAL FILL HARDINGS BEACH STA 50+00

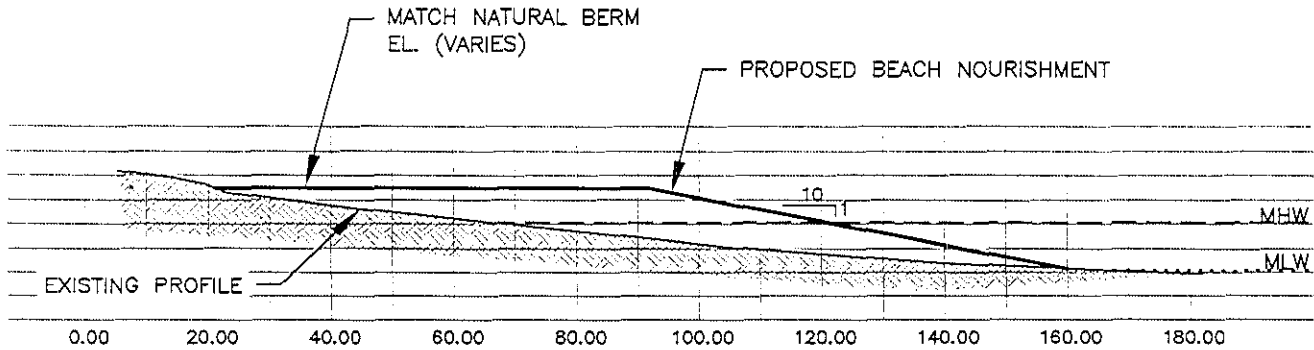
SCALE: 1"=40'-0"

<p>BEACH NOURISHMENT</p>	 <p>BCE Bourne Consulting Engineering <small>3 Reef Street Bourne, MA 02532 TEL (508) 853-0996 FAX (508) 853-0998</small></p>	<p>SCALE VARIES</p>
<p>TOWN OF CHATHAM COMPREHENSIVE DREDGING & DISPOSAL PROJECT</p> <p>SHEET 26 OF 41</p>		<p>IN: CHATHAM AT: CHATHAM COUNTY: BARNSTABLE STATE: MA</p>



<p>Cotchpicut Landing Disposal Area DISPOSAL SITE 6</p>	 Beachfill/Dredged Material (112 Feet)	<p>1 inch = 50 feet Aerial Photo: 2011</p>
<p>AHTL: 7.5 MHW: 5.8 MLW: 0.0</p> 	<p>TOWN OF CHATHAM COMPREHENSIVE DREDGING & DISPOSAL PROJECT</p> <p>SHEET 27 OF 41</p>	<p>IN: PLEASANT BAY AT: CHATHAM COUNTY: BARNSTABLE STATE: MA</p>

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28

TYPICAL FILL SECTION

HORIZONTAL SCALE: 1"=30'-0"
VERTICAL SCALE: 1"=15'-0"

COTCHPINICUT BEACH

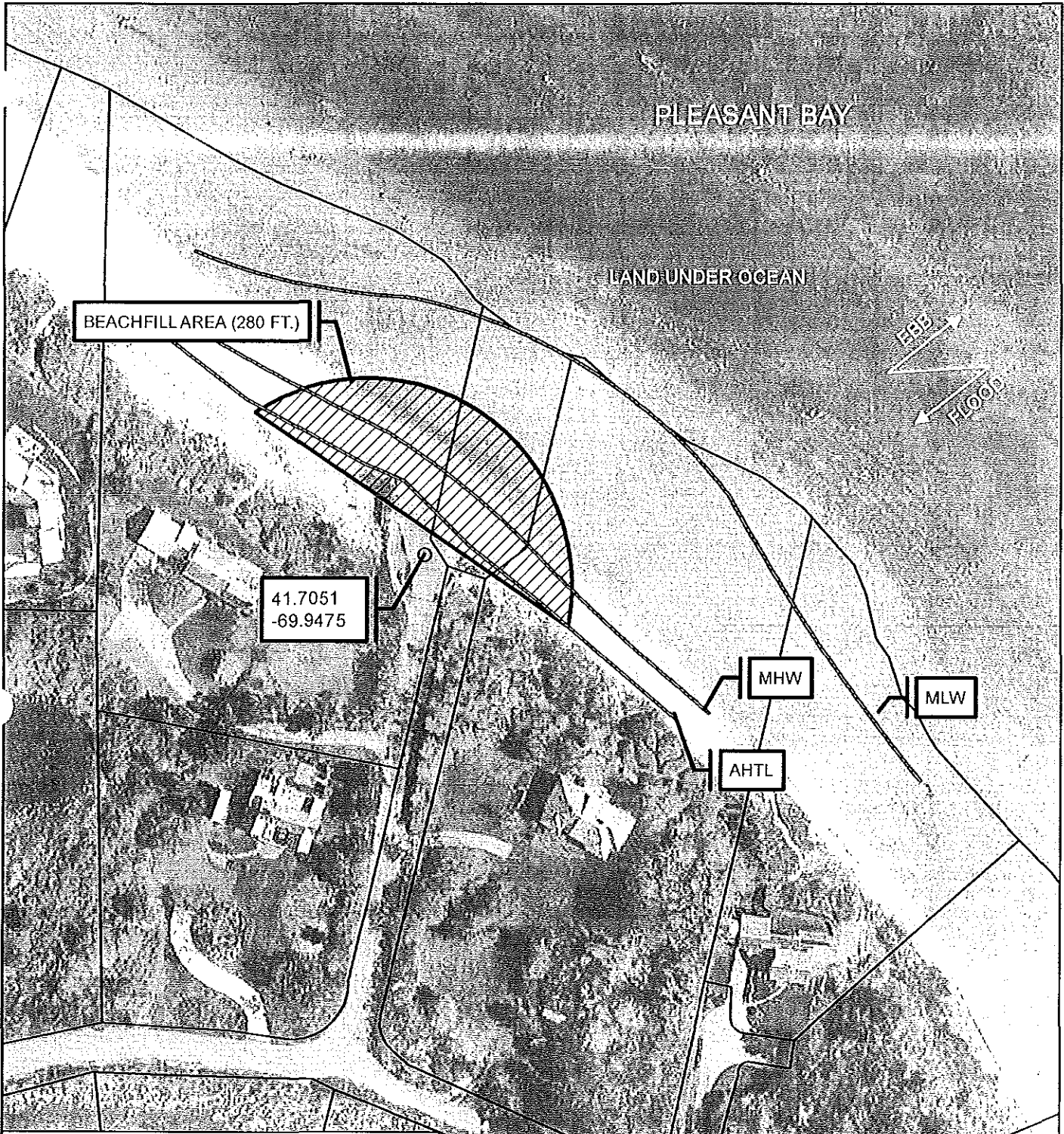
BEACH
NOURISHMENT



SCALE VARIES


TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT

IN: CHATHAM
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA



SEE SHEET #30 FOR BEACHFILL PROFILE

Scatteree Landing
Disposal Area
DISPOSAL SITE 7

 Beachfill/Dredged Material Disposal (280 Feet)

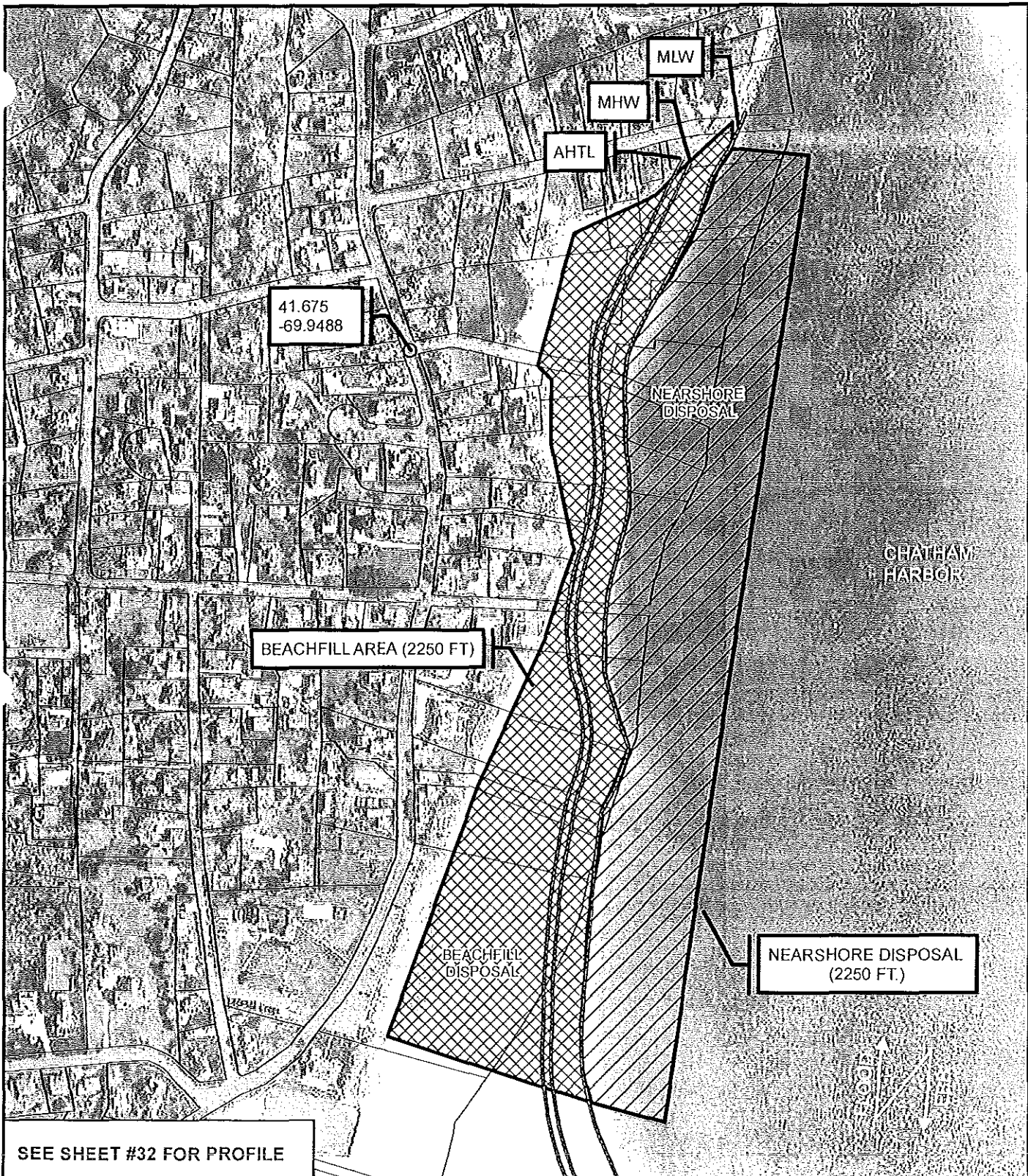
1 inch = 100 feet
Aerial Photo: 2011

AHTL: 7.5
MHW: 5.8
MLW: 0.0



TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT
SHEET 29 OF 41

IN: PLEASANT BAY
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA



SEE SHEET #32 FOR PROFILE

**Andrew Harding's Lane/
Lighthouse Beach
Disposal Area
DISPOSAL SITE 9**

AHTL: 7.5
MHW: 5.8
MLW: 0.0



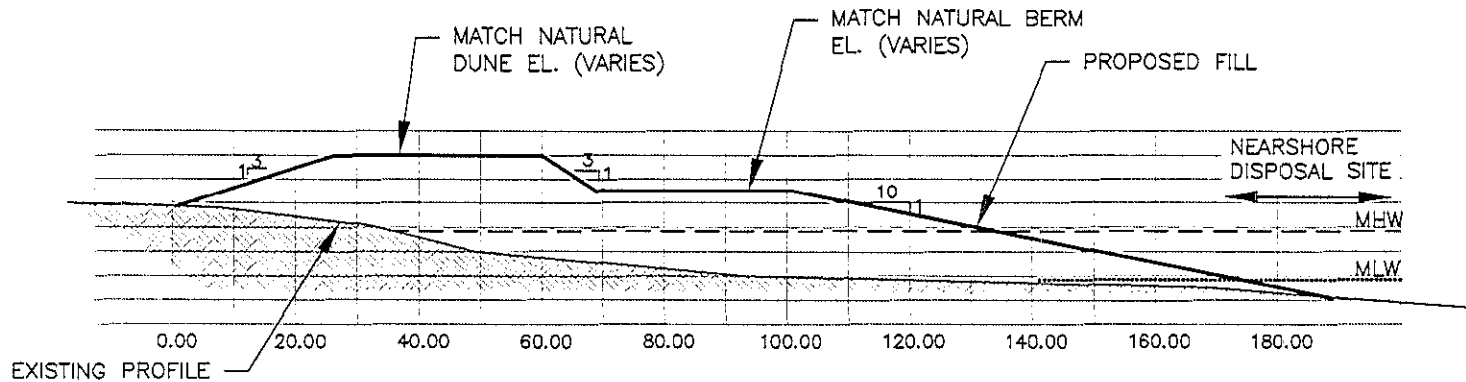
- Area for Nearshore Disposal (2250 Feet)
- Area for Beachfill Disposal (2250 Feet)

1 inch = 300 feet
Aerial Photo: 2011

**TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT
SHEET 31 OF 41**

IN: CHATHAM HARBOR
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA

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TYPICAL FILL ANDREW HARDINGS LANE / LIGHTHOUSE BEACH

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32

HORIZONTAL SCALE: 1"=20'-0"
VERTICAL SCALE: 1/2"=10'-0"

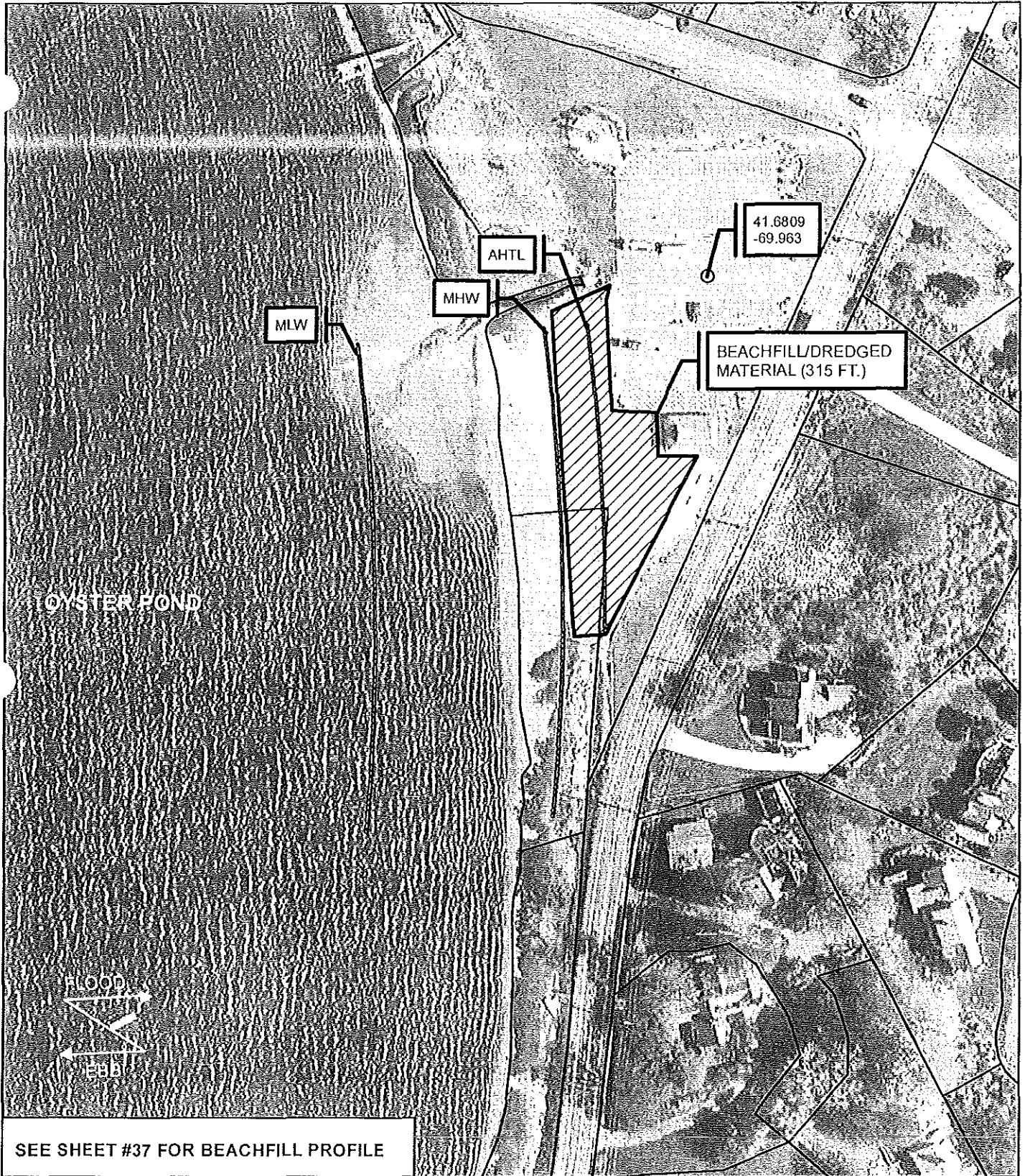
BEACH
NOURISHMENT



SCALE VARIES

**TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT**

IN: CHATHAM
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA



SEE SHEET #37 FOR BEACHFILL PROFILE

Oyster Pond Beach
Disposal Area
DISPOSAL SITE 5



Beachfill/Dredged Material (315 Feet)

1 inch = 100 feet
Aerial Photo: 2011

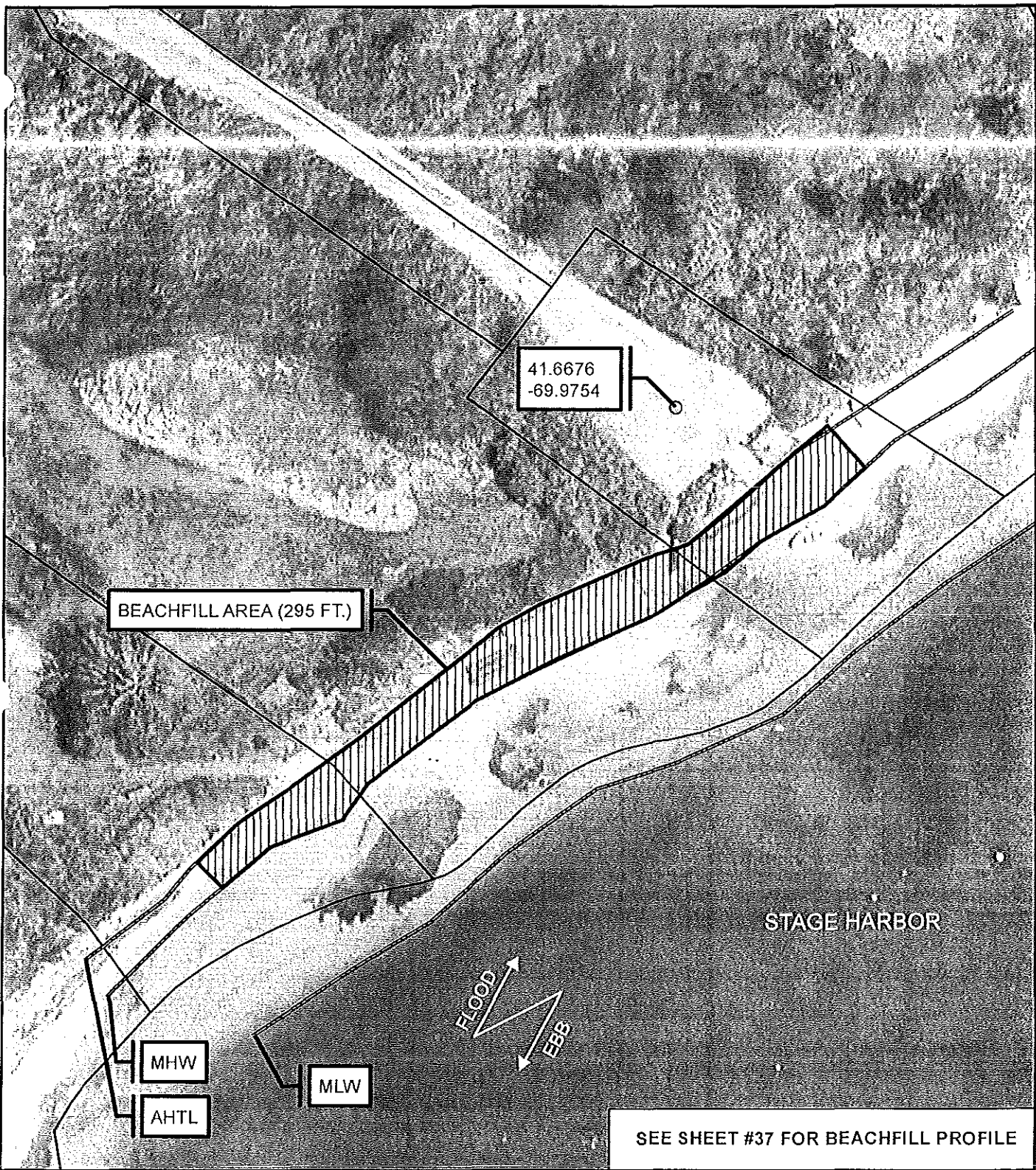
AHTL 5.5
MHW 3.9
MLW 0.0



**TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT**

SHEET 33 OF 41


IN: OYSTER POND
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA



**Battlefield Landing
Disposal Area
DISPOSAL SITE 11**

AHTL: 5.5
MHW: 3.9
MLW: 0.0

N
▲

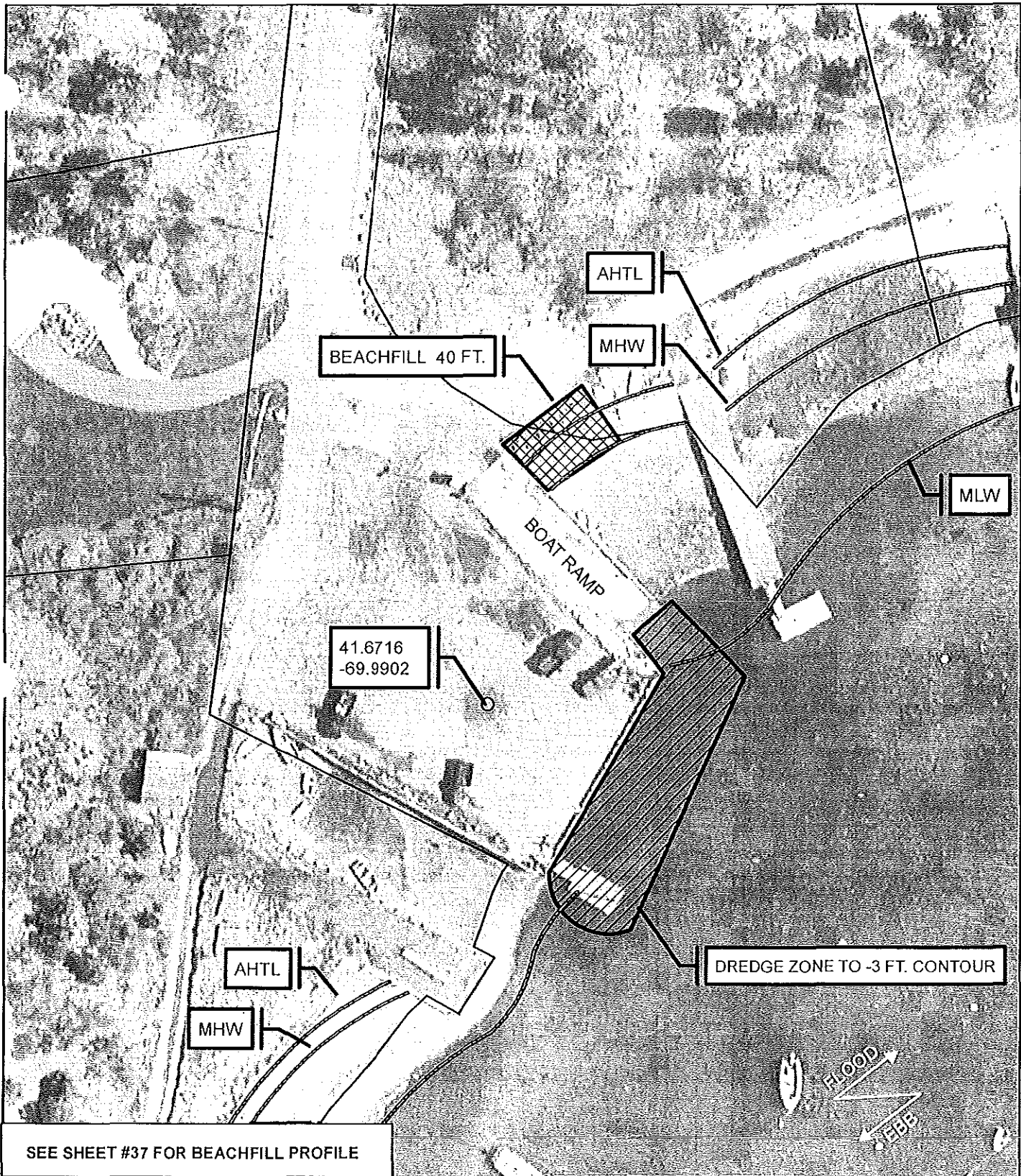
 Beachfill/Dredged Material (295 Feet)

**TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT**

SHEET 34 OF 41



1 inch = 50 feet
Aerial Photo: 2011

IN: STAGE HARBOR
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA




SEE SHEET #37 FOR BEACHFILL PROFILE

**Barn Hill Landing
Dredge & Disposal Area
DREDGE SITE 3 / DISPOSAL SITE 10**

-  Beachfill/Dredged Material (40 Feet)
-  Dredge Area to -3 Ft. Contour

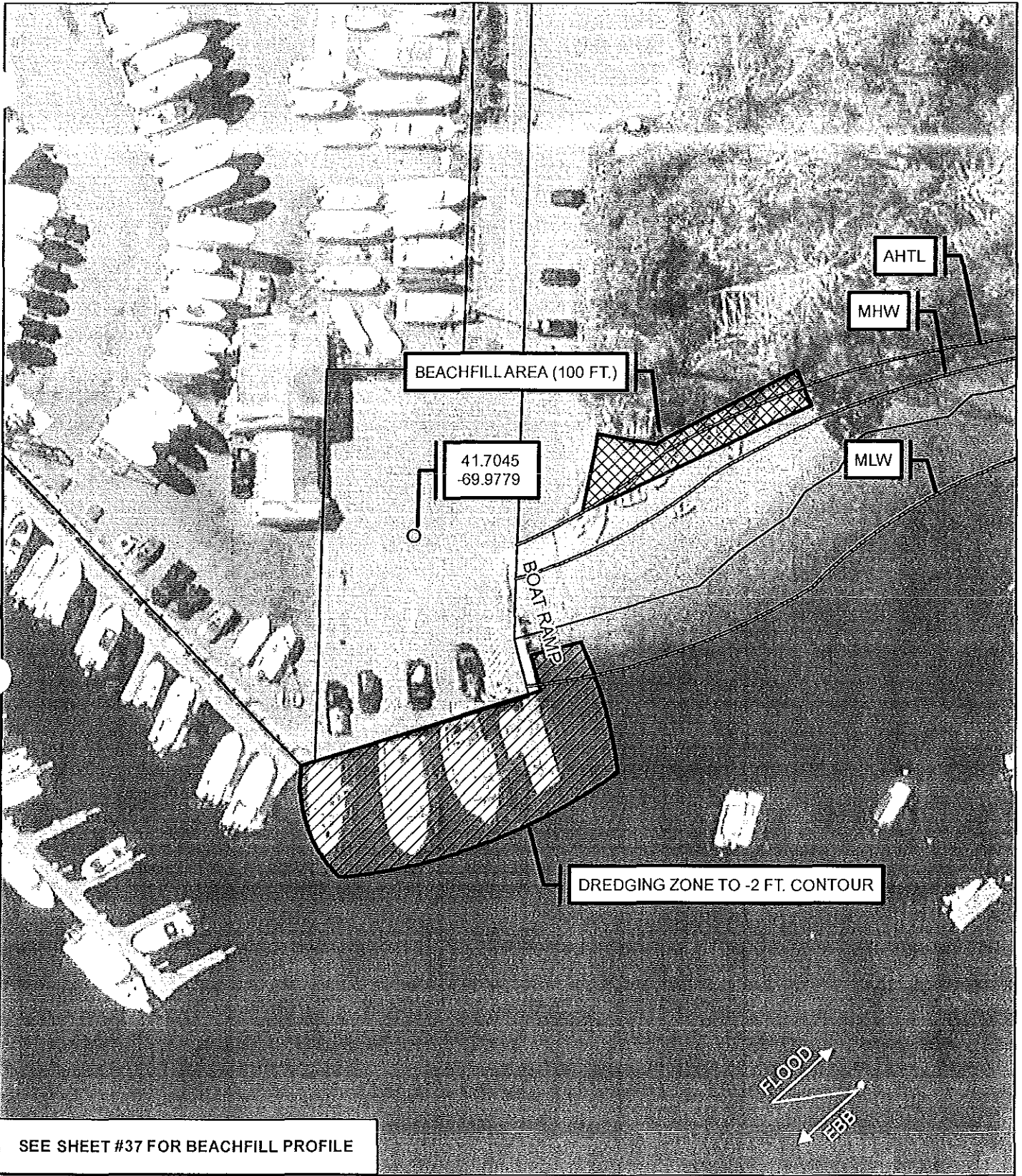
1 inch = 50 feet
Aerial Photo: 2011

AHTL	+5.0	
MHW	+4.5	
MLW	0.0	

**TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT**

SHEET 35 OF 41

IN: OYSTER RIVER
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA



SEE SHEET #37 FOR BEACHFILL PROFILE

Ryders Cove
Dredge & Disposal Area
DREDGE SITE 5 / DISPOSAL SITE 13

- Beachfill/Dredged Material (100 Feet)
- Dredging Area to -2 Ft. Contour

1 inch = 50 feet
Aerial Photo: 2011

AHTL +5.6
MHW +4.0
MLW 0.0

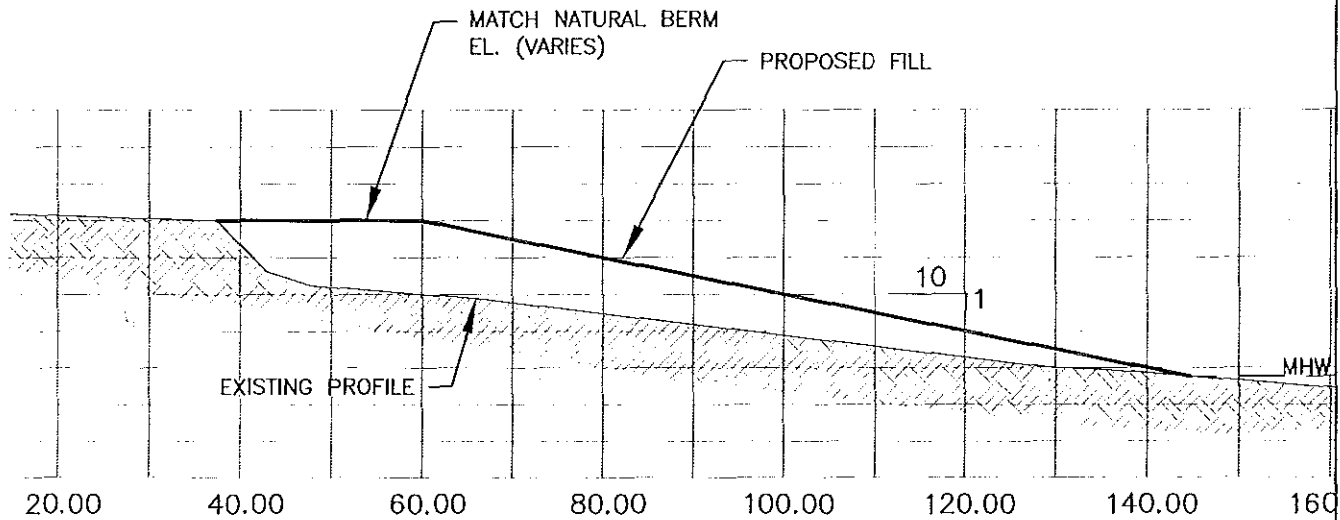


**TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT**

SHEET 36 OF 41

IN: RYDERS COVE
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA

2007 Revised Comprehensive Dredging & Disposal Plan, Section 37.dwg



OYSTER POND
 BATTLEFIELD LANDING
 RYDERS COVE
 BARN HILL LANDING
TYPICAL DISPOSAL SECTION

A
 37

HORIZONTAL SCALE: 1"=20'-0"
 VERTICAL SCALE: 1"=8'-0"

TYPICAL SECTIONS

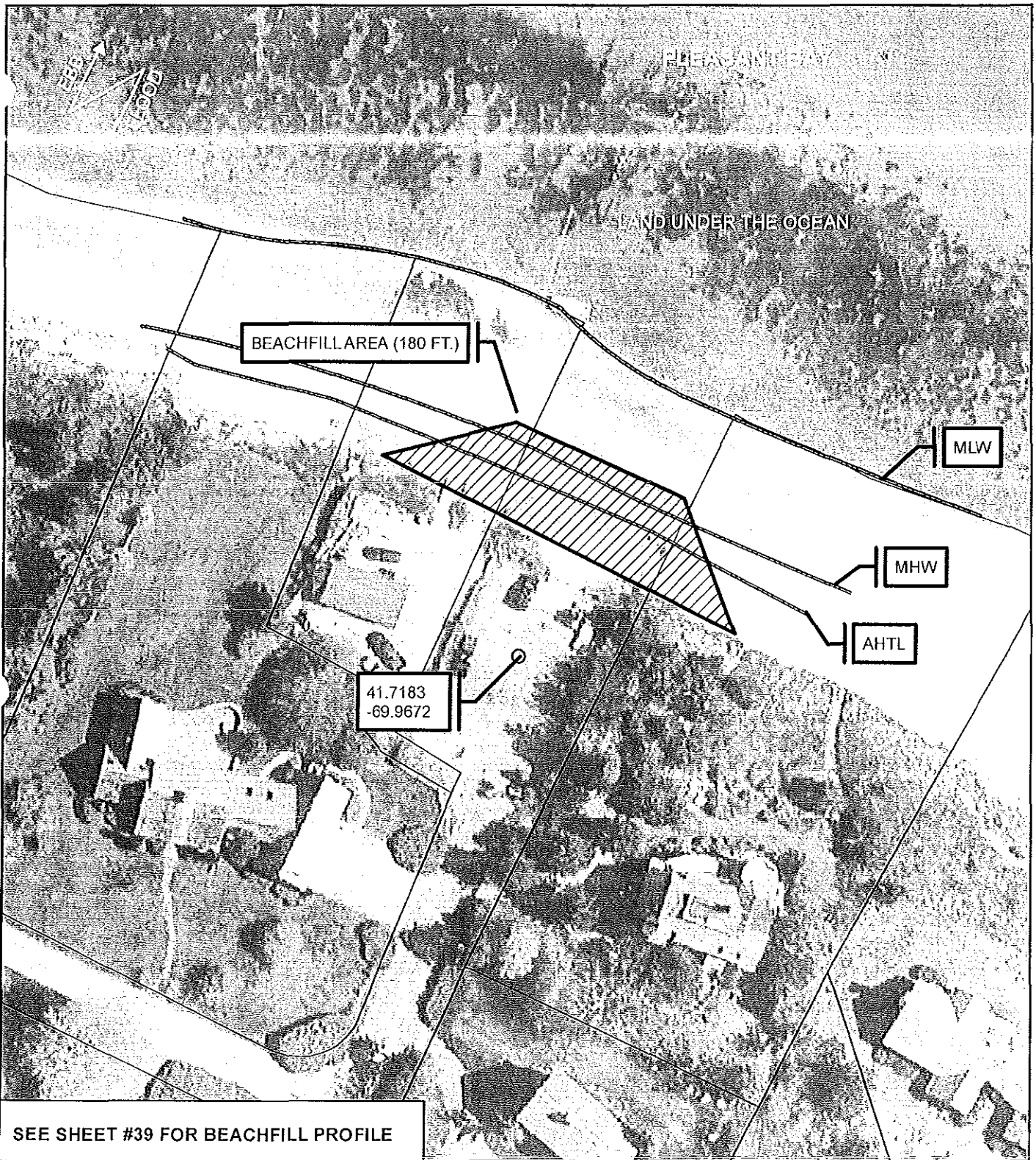


SCALE VARIES

TOWN OF CHATHAM COMPREHENSIVE
 DREDGING & DISPOSAL PROJECT


IN: CHATHAM
 AT: CHATHAM
 COUNTY: BARNSTABLE
 STATE: MA

SHEET 37 OF 41



SEE SHEET #39 FOR BEACHFILL PROFILE

**Strong Island Landing
Disposal Area
DISPOSAL SITE 12**

 Beachfill/Dredged Material (180 Feet)

1 inch = 60 feet
Aerial Photo: 2011

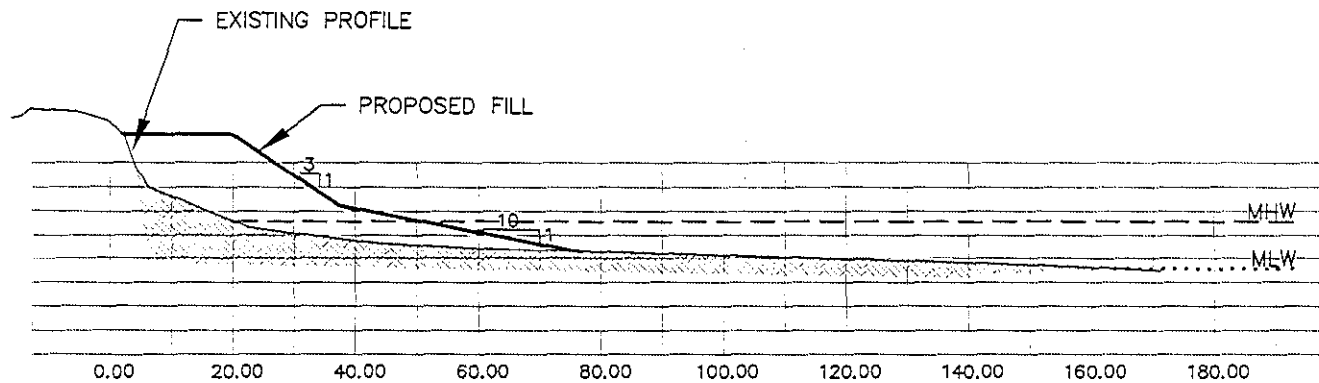
AHTL: 7.5
MHW: 5.8
MLW: 0.0



**TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT
SHEET 38 OF 41**

IN: PLEASANT BAY
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA

File: X:\30774\30774\Revised\Comprehensive Dredging & Disposal\Final Set\5111_59.dwg



A
39

TYPICAL FILL STRONG ISLAND LANDING

HORIZONTAL SCALE: 1"=30'-0"
VERTICAL SCALE: 1"=15'-0"

BEACH
NOURISHMENT

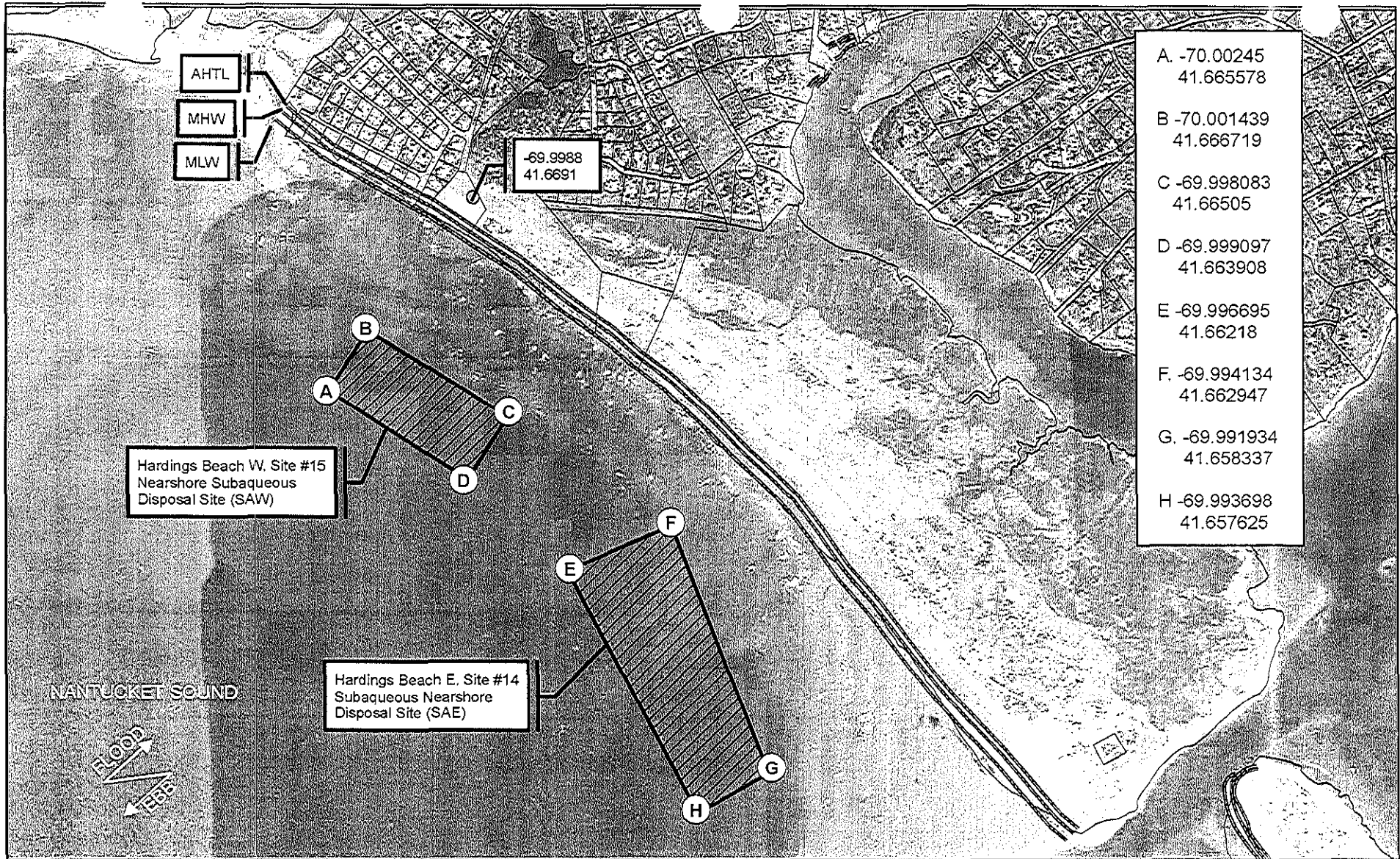


SCALE VARIES

TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT

SHEET 39 OF 41

IN: CHATHAM
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA



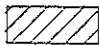
Hardings Beach W. Site #15
Nearshore Subaqueous
Disposal Site (SAW)

Hardings Beach E. Site #14
Subaqueous Nearshore
Disposal Site (SAE)

-69.9988
41.6691

- A -70.00245
41.665578
- B -70.001439
41.666719
- C -69.998083
41.66505
- D -69.999097
41.663908
- E -69.996695
41.66218
- F -69.994134
41.662947
- G -69.991934
41.658337
- H -69.993698
41.657625

Hardings Beach
Disposal Areas
DISPOSAL SITES 14 and 15

 Nearshore Disposal Sites

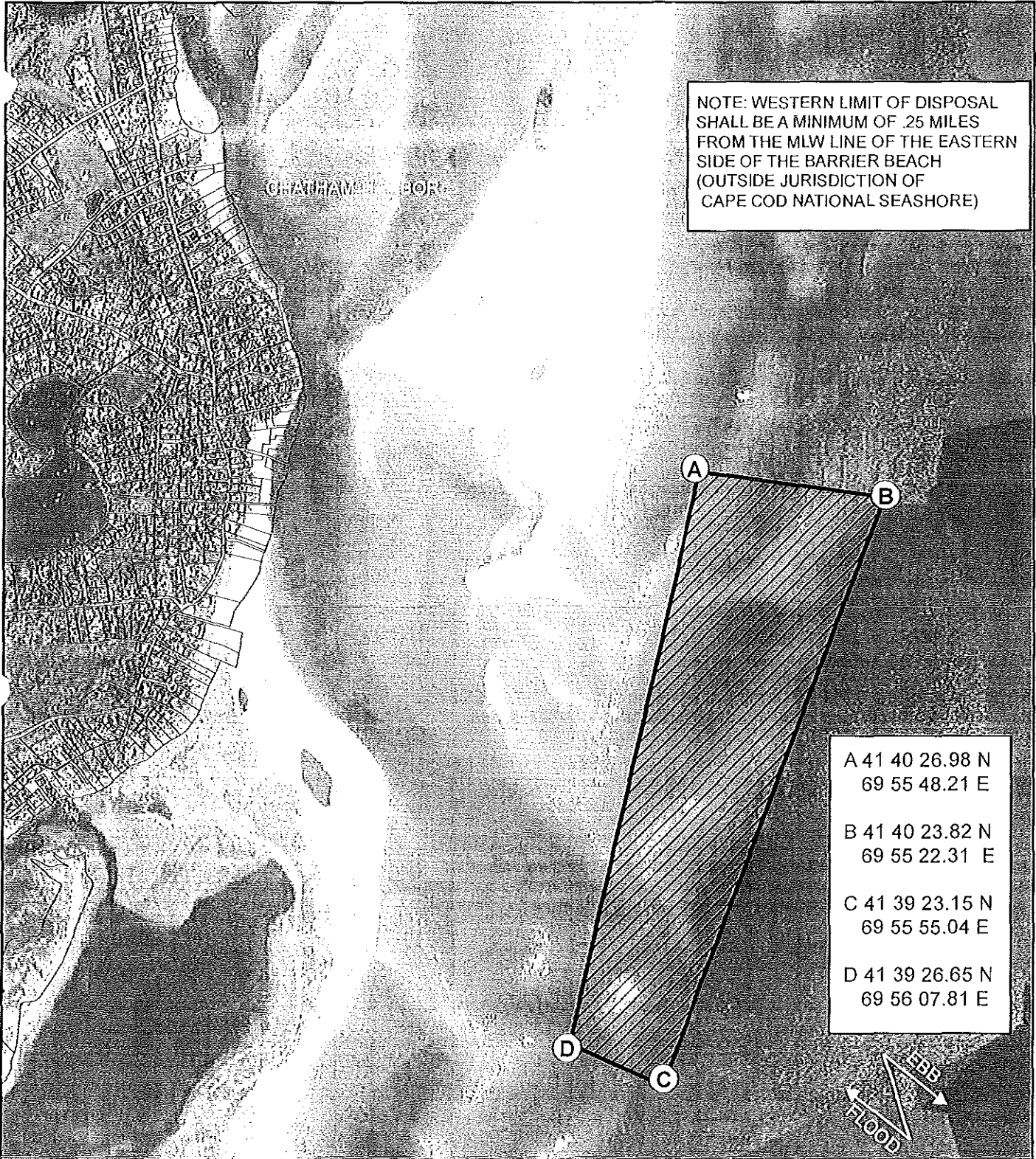
1 inch = 900 feet
Aerial Photo: 2011

AHTL +5.5
MHW +3.9
MLW 0.0



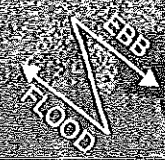
**TOWN OF CHATHAM COMPREHENSIVE
DREDGING & DISPOSAL PROJECT
SHEET 40 OF 41**

IN: NANTUCKET SOUND
AT: CHATHAM
COUNTY: BARNSTABLE
STATE: MA



NOTE: WESTERN LIMIT OF DISPOSAL SHALL BE A MINIMUM OF .25 MILES FROM THE MLW LINE OF THE EASTERN SIDE OF THE BARRIER BEACH (OUTSIDE JURISDICTION OF CAPE COD NATIONAL SEASHORE)

A	41 40 26.98 N	69 55 48.21 E
B	41 40 23.82 N	69 55 22.31 E
C	41 39 23.15 N	69 55 55.04 E
D	41 39 26.65 N	69 56 07.81 E



Outside Bar/Outer Shoal Disposal Area
DISPOSAL SITE 17

AHTL: 7.5
 MHW: 5.8
 MLW: 0.0

N

Nearshore Disposal Site

TOWN OF CHATHAM COMPREHENSIVE DREDGING & DISPOSAL PROJECT

SHEET 41 OF 41

1 inch = 1,437 feet
 Aerial Photo: 2011

IN: CHATHAM HARBOR
 AT: CHATHAM
 COUNTY: BARNSTABLE
 STATE: MA

