



PUBLIC NOTICE

US Army Corps
of Engineers
New York District
Jacob K. Javits Federal Building
New York, New York 10278-0090
ATTN: Regulatory Branch

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

In replying refer to:

Public Notice Number: NAE-2004-1017

Issue Date: May 25, 2004

Expiration Date: June 28, 2004

In Reply Refer to: Ms. Diane M. Ray at New England District

Or by e-mail: diane.m.ray@usace.army.mil

In Reply Refer to: Ms. Mary Ann Miller at New York District

TO WHOM IT MAY CONCERN:

CONNECTICUT LIGHT AND POWER COMPANY, 107 SELDEN STREET, BERLIN, CONNECTICUT 06037 has requested a Corps of Engineers permit under Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act to perform work as shown on the attached plans and described as follows:

Replace an existing 300 MW electrical interconnection cable system between Norwalk, Connecticut and Northport, New York. The work requires the removal of seven existing single-conductor fluid-insulated cables, laid on and in the seabed of Long Island Sound (LIS), and the installation of three fully buried, 3-core, solid dielectric submarine transmission cables. The new system will have the same electric capacity as the existing cable system and utilize a portion of the authorized 11-mile long and varied width cable corridor. The new cables will cross Sheffield Island, CT, within the existing easement.

The cables will be placed approximately 6' below the seabed within LIS and 4' below grade on land. In the Village Creek channel, in CT, cables will be buried to a minimum depth of approximately -11 feet MLLW, sufficient to allow for a 7-foot deep local navigation channel. At the Norwalk Federal Navigation channel crossing, in CT, cables will be buried to a minimum depth of -18 feet MLLW, which is 6 feet below the authorized depth of the channel.

Three or four of the existing cables will be de-energized and removed initially, leaving a transmission interconnection throughout the construction period. In the aquatic areas, the new cables will be buried using hydraulic jet technology or horizontal directional drilling. In upland areas, burial will be done mechanically. After the new cables have been installed, energized, and fully tested, the remaining, single conductor cables will be removed.

The removal of the existing cables will be preceded by flushing the insulating fluid from the conductor cores into an appropriate receptacle at either Northport, New York or Norwalk, Connecticut for disposal at an approved location. Water will be pumped through the cables' conductor core to remove free, residual insulating fluid. The cables will then be removed using methods similar to those authorized for installation of the new system and reeled up onto a barge for appropriate disposal.

The upland trench work at the three project landfalls (Manresa Island and Sheffield Island, CT and Northport, NY) involves removing the existing cable after opening the trenches. These areas are predominantly coastal beaches. One site in CT includes a small area of intertidal marsh. Upland trenches will be back-filled and re-vegetated to pre-construction conditions as appropriate.

At the Northport, New York landing, the transition from the sub-tidal environment of Long Island Sound to upland environment would occur over approximately 1,000 feet. As previously mentioned, the trenches in the sub-tidal environments would be approximately 6 feet below the seabed, while the upland portions of the trenches would be approximately 4 feet below grade, but in both cases the bottoms of the trenches would be 4 feet wide. In the marine environment, jetting would be used to install the cables, but as the trenches climbed higher on the beach profile (and eventually above U.S. Army Corps of Engineers' jurisdiction), a clamshell bucket would be used for installation. The material removed from these portions of the trenches would be stored temporarily on site, and to the maximum extent practicable, used for backfill. Excess material would be disposed of off site in a state-approved manner. Before the backfill is placed into the trenches, a concrete slab would be placed over the cables. The upland portions of the trenches, where removal and installation occur together, are expected to be open for approximately two to four months.

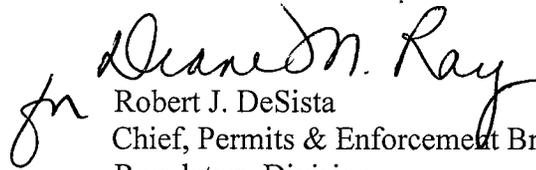
This project will impact approximately 11 miles of sub-tidal habitat, most of which has been designated Essential Fish Habitat (EFH) for the species and life stages identified below – see attached sheets 4 & 5. Loss or degradation of this habitat will result, primarily, from the alteration of sediment stability and topography as well as loss of prey items within the direct disturbance and the area impacted by suspended sediment surrounding the construction zone both landward of Sheffield Island and in the open waters of LIS. These adverse impacts are related to the removal and installation, use and maintenance of the cables. Loss or degradation of this habitat may adversely affect the species shown on sheets 4 and 5 noted above. Those impacts could reduce the availability of EFH for spawning and spawning success, nursery shelter and as prey, as well as both juvenile and adult habitat functions and values. The District Engineer has made a preliminary determination that the site-specific adverse effects associated with project implementation and cable operation can be avoided, minimized or mitigated by design and installation practices to a point where they 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.

This project is located on the USGS Norwalk South, CT quadrangle sheet at UTM coordinates 4547932N and 633315E on the Connecticut side and on USGS Northport, NY quadrangle sheet at UTM coordinates 453242N and 640403E on the New York side.

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 Ms. Diane M. Ray at (978) 318-8831, (800) 343-4789 or (800) 362-4367, if calling from within Massachusetts or Ms. Mary Ann Miller at (212) 264-3740 at the New York District.

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.

SEE NEXT PAGE FOR
DETAILS OF EVALUATION
FACTORS


Robert J. DeSista
Chief, Permits & Enforcement Branch
Regulatory Division

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.

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.

Based on his initial review, the District Engineer has determined that the proposed work may impact properties listed in, or eligible for listing in, the National Register of Historic Places. Additional review and consultation to fulfill requirements under Section 106 of the National Historic Preservation Act of 1966, as amended, will be ongoing as part of the permit review process.

Pursuant to the Endangered Species Act, the District Engineer is hereby requesting that the appropriate Federal Agency provide comments regarding the presence of and potential impacts to listed species or its critical habitat.

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

- (X) Permit, License or Assent from State.
- (X) Water Quality Certification in accordance with Section 401 of the Clean Water Act.
- (X) A Protection of Waters Permit from the New York State Department of Environmental Conservation.

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.

For activities within the coastal zone of the State of New York, the applicant's consistency certification and accompanying information is available from the Consistency Coordinator, New York State Department of State, Division of Coastal Resources and Waterfront Revitalization, Coastal Zone Management Program, 41 State Street, Albany, NY 12231, Telephone # (518) 474-3642.

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.

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: _____

Summary of Essential Fish Habitat (EFH) Designation

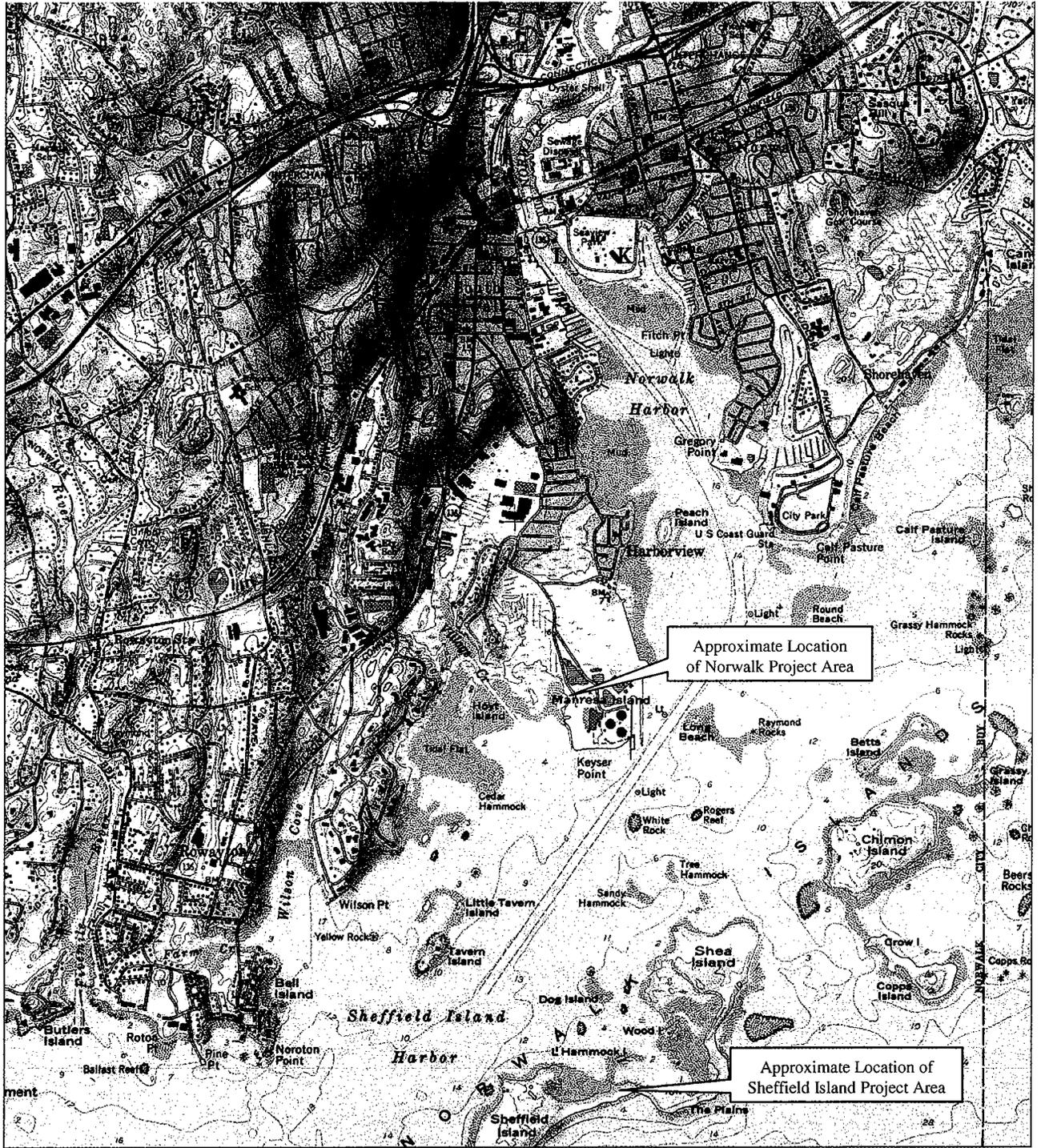
10' x 10' Square Coordinates:

| Boundary | North | East | South | West |
|------------|-------------|-------------|-------------|-------------|
| Coordinate | 41° 10.0' N | 73° 20.0' W | 41° 00.0' N | 73° 30.0' W |
| Coordinate | 41° 00.0' N | 73° 20.0' W | 40° 50.0' N | 73° 30.0' W |

Square Description (i.e. habitat, landmarks, coastline markers): The two squares include all the Atlantic Ocean waters within Long Island Sound within the squares affecting south of the following: South Norwalk, West Norwalk and Norwalk, CT. These waters include the Norwalk Island (including Manresa, Sheffield, Tavern and Cable and anchor reef), CT. The squares include, also, the waters along the north shore of Long Island, northward from Northport, NY to Cooper Bluff and the discontinued and still used dredged material disposal sites within LIS to abut the Norwalk square on the north. The habitat is comprised of unconsolidated sediments ranging from cobblestone to silts and clay.

| Species | Eggs | Larvae | Juveniles | Adults |
|---|------|--------|-----------|--------|
| Atlantic salmon (<i>Salmo salar</i>) | | | X | X |
| Pollock (<i>Pollachius virens</i>) | | | X | X |
| Red hake (<i>Urophycis chuss</i>) | X | X | X | X |
| Redfish (<i>Sebastes fasciatus</i>) | n/a | | | |
| Winter flounder (<i>Pleuronectes americanus</i>) | X | X | X | X |
| Windowpane flounder (<i>Scopthalmus aquosus</i>) | X | X | X | X |
| American plaice (<i>Hippoglossoides platessoides</i>) | | | X | X |

| | | | | |
|---|-----|-----|---|---|
| ocean pout (<i>Macrozoarces americanus</i>) | X | X | X | X |
| Atlantic sea herring (<i>Clupea harengus</i>) | | | X | X |
| bluefish (<i>Pomatomus saltatrix</i>) | | | X | X |
| Long finned squid (<i>Loligo pealei</i>) | n/a | n/a | | |
| short finned squid (<i>Illex illecebrosus</i>) | n/a | n/a | | |
| Atlantic butterfish (<i>Peprilus triacanthus</i>) | | X | X | X |
| Atlantic mackerel (<i>Scomber scombrus</i>) | X | X | X | X |
| summer flounder (<i>Paralichthys dentatus</i>) | | | X | X |
| scup (<i>Stenotomus chrysops</i>) | X | X | X | X |
| black sea bass (<i>Centropristus striata</i>) | n/a | | X | X |
| surf clam (<i>Spisula solidissima</i>) | n/a | n/a | | |
| ocean quahog (<i>Artica islandica</i>) | n/a | n/a | | |
| spiny dogfish (<i>Squalus acanthias</i>) | n/a | n/a | | |
| king mackerel (<i>Scomberomorus cavalla</i>) | X | X | X | X |
| Spanish mackerel (<i>Scomberomorus maculatus</i>) | X | X | X | X |
| cobia (<i>Rachycentron canadum</i>) | X | X | X | X |
| sand tiger shark (<i>Odontaspis taurus</i>) | | X | X | |
| little Skate (<i>Leucoraja erinacea</i>) | | | X | X |
| winter skate (<i>Leucoraja ocellata</i>) | | | X | X |



MN 14° TN

0 1000 FEET 0 500 1000 METERS
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Purpose: Electric Transmission Submarine Cable System
 Source: USGS Topographic Maps (Topo CD)

**Project Vicinity Map – Norwalk, CT
 CL&P/LIPA Submarine Cable Replacement**

Sheet 1 of 11

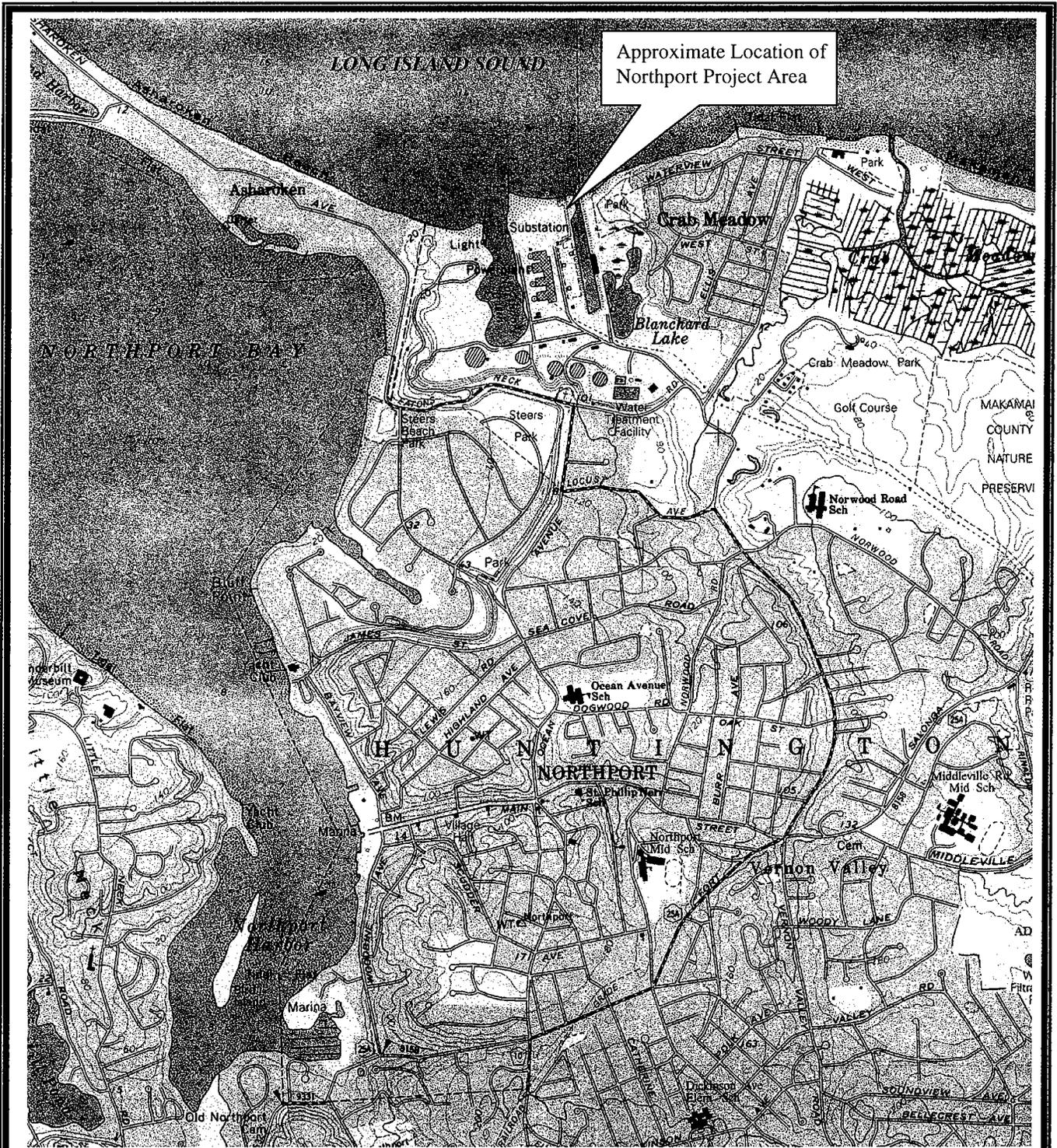


At: Norwalk, Fairfield County, Connecticut
 Northport, Suffolk County, New York
 In: Sheffield Island Harbor and Long Island Sound
 Applicant: Connecticut Light & Power and Long Island Power Authority

Date: 01/18/02

PROJECT NO.
 K070-020.1





Purpose: Electric Transmission Submarine Cable System
 Source: NY State Department of Transportation (1991)

**Project Vicinity Map - Northport, NY
 CL&P/LIPA Submarine Cable Replacement**

Sheet 2 of 11

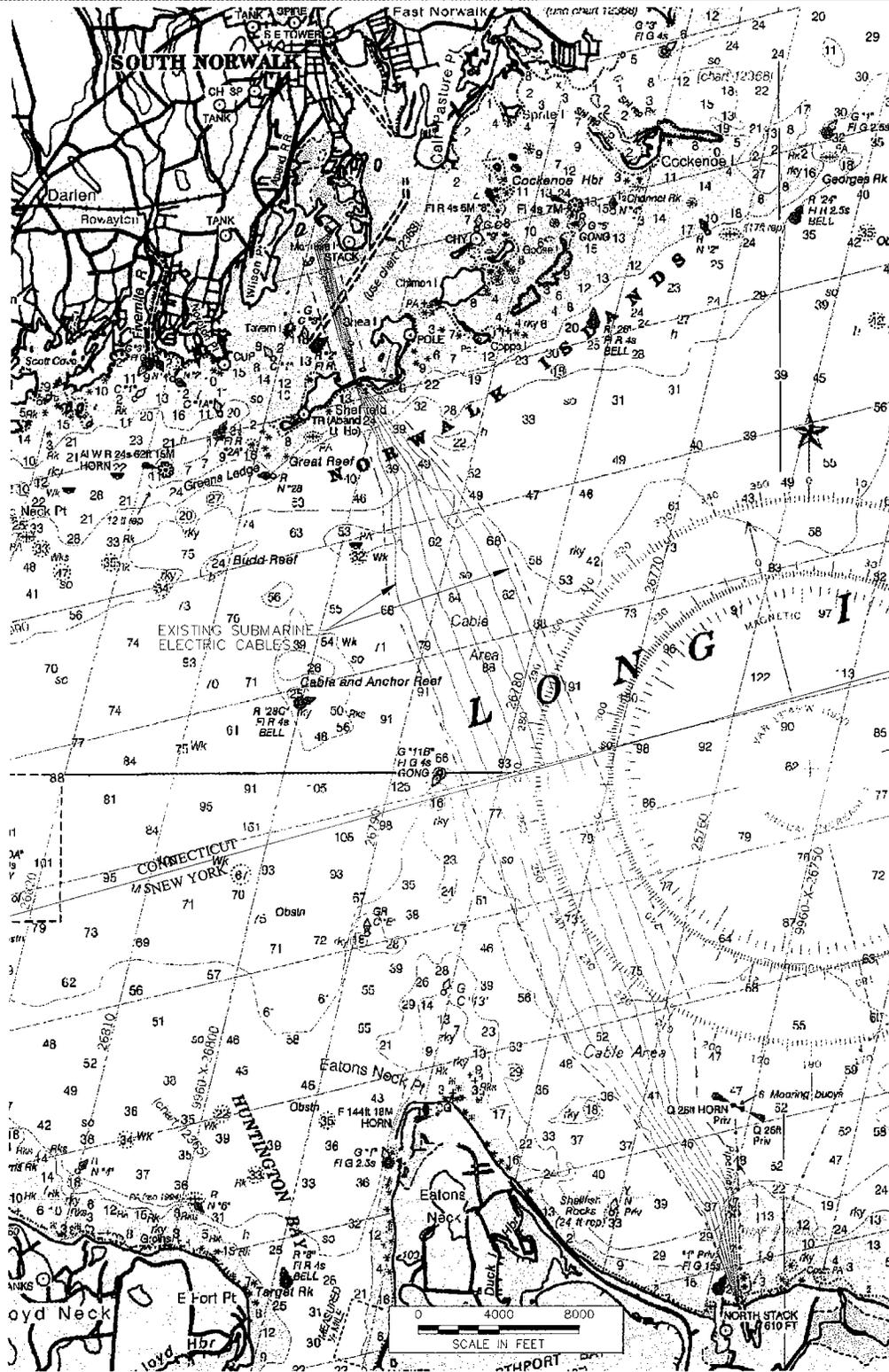


At: Norwalk, Fairfield County, Connecticut
 Northport, Suffolk County, New York
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 Applicant: Connecticut Light & Power and Long Island Power Authority

Date: 01/18/02

PROJECT NO.
K070-020.1





Purpose: Electric Transmission Submarine Cable System
 Source: Source: NOAA # 12368 and # 12363 (1984)

**Plan View – Existing Cable Locations
 CL&P/LIPA Submarine Cable Replacement**

Sheet 3 of 11



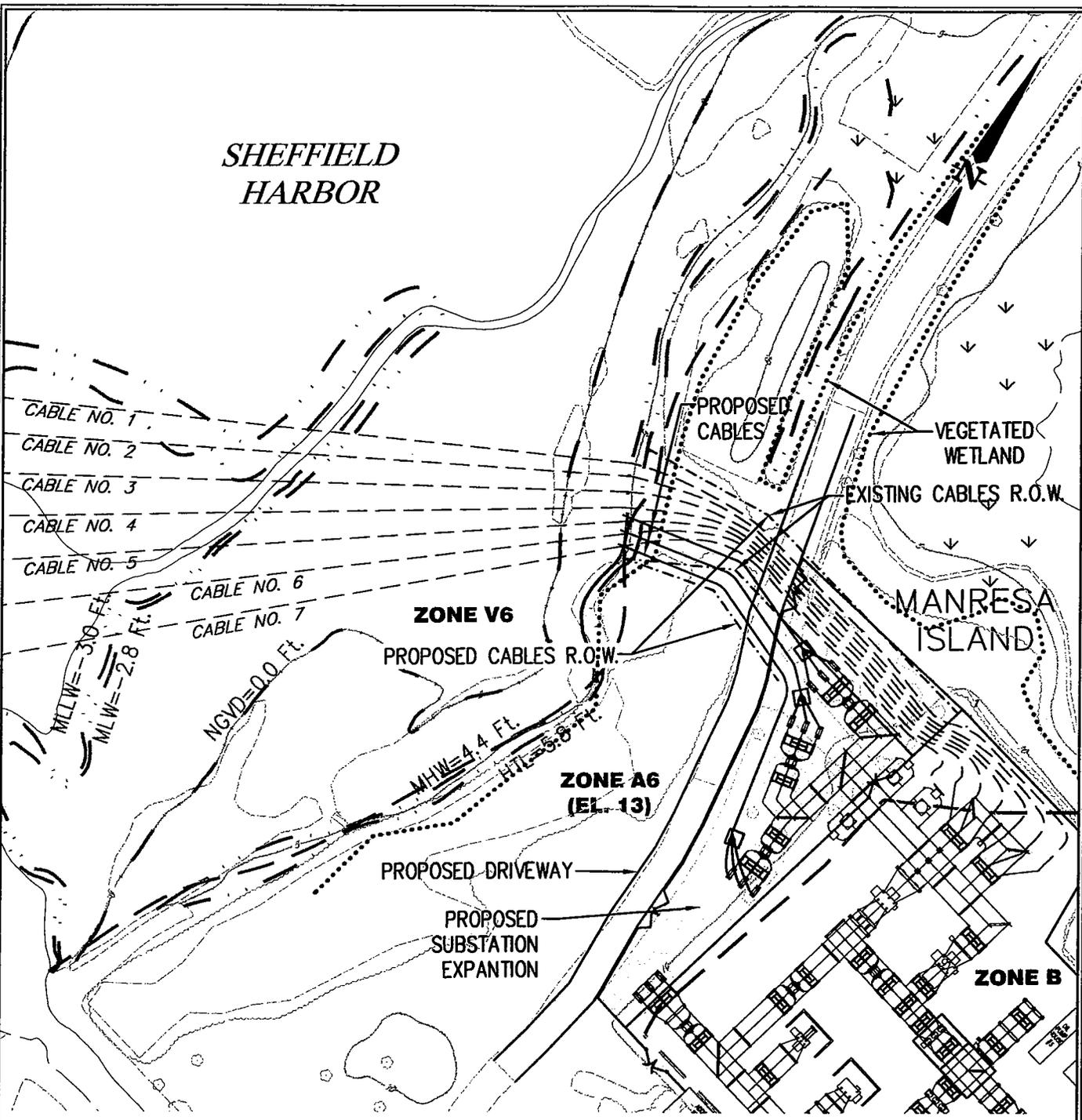
At: Norwalk, Fairfield County, Connecticut
 Northport, Suffolk County, New York
 In: Sheffield Island Harbor and Long Island Sound
 Applicant: Connecticut Light & Power and Long Island Power Authority

Date: 01/18/02

PROJECT NO.
K070-020.1

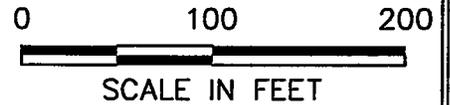


SHEFFIELD HARBOR



NOTES:

LIMIT OF 100-YEAR FLOODPLAIN AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP FOR THE TOWN OF NORWALK, CONNECTICUT, PANEL 6 OF 10, MAP NUMBER 090012 0006 C, DATED AUGUST 19, 1986.



Purpose: Electric Transmission
Submarine Cable System
Scale: 1"=100'

Norwalk CT. Landfall Floodplain, Tidal Wetlands & Datum Relationship Submarine Cable Replacement Project

SHEET NO.
4 OF 11



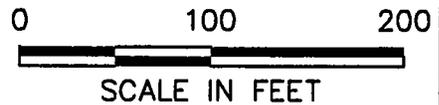
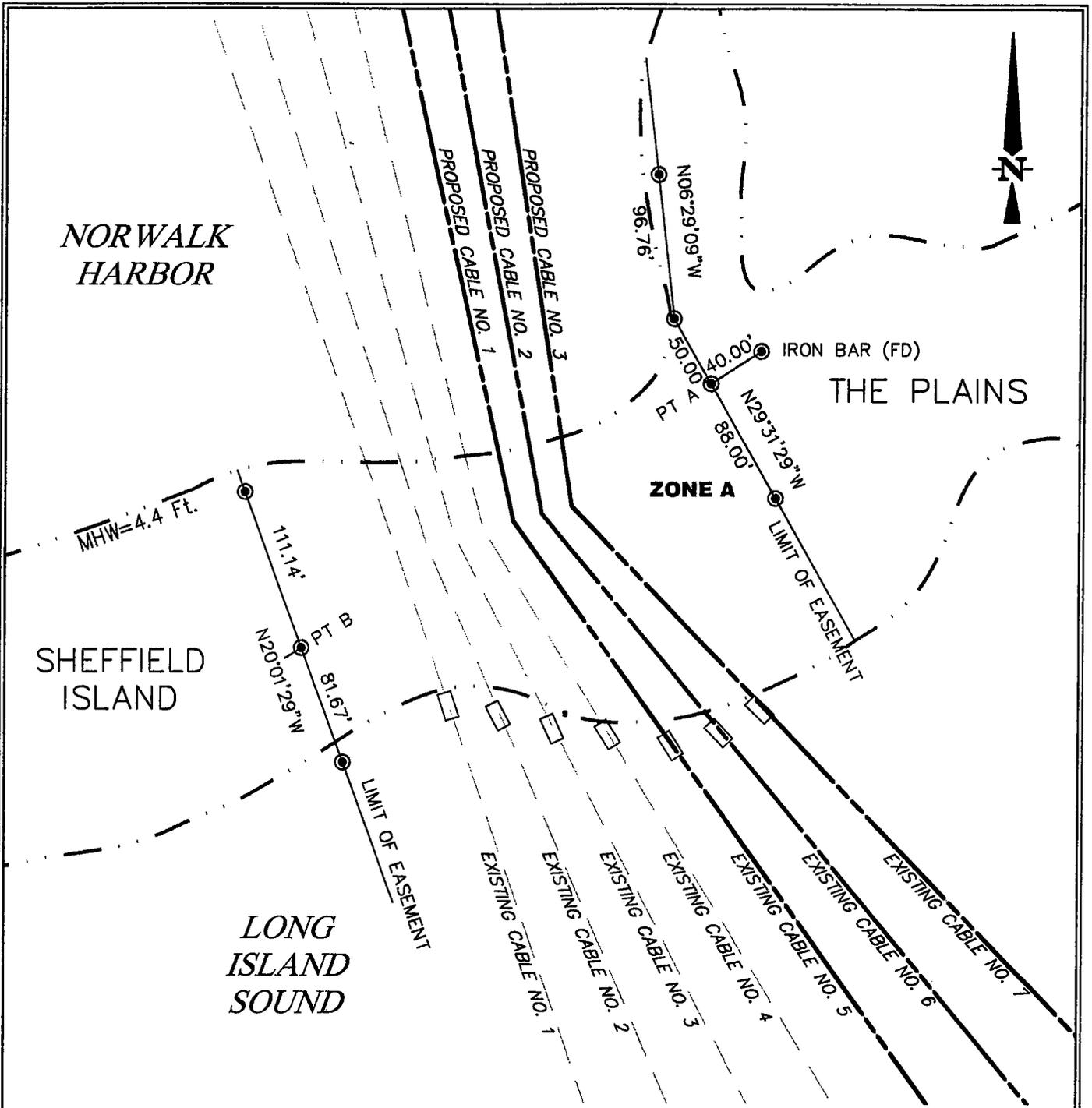
At: Norwalk, Fairfield County, Connecticut
In: Sheffield Island Harbor and Long Island Sound
Applicant: CL&P/LIPA

DATE: 01/18/02

PROJECT NO.
K070.021.1



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NOTES:

LIMIT OF 100-YEAR FLOODPLAIN AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP FOR THE TOWN OF NORWALK, CONNECTICUT, PANEL 10 OF 10, MAP NUMBER 090012 0010 D, DATED JUNE 2, 1992.

Purpose: Electric Transmission
Submarine Cable System
Scale: 1"=100'

**Sheffield Island CT. Landfall Floodplain Map
& Datum Relationship
Submarine Cable Replacement Project**

**SHEET NO.
5 OF 11**

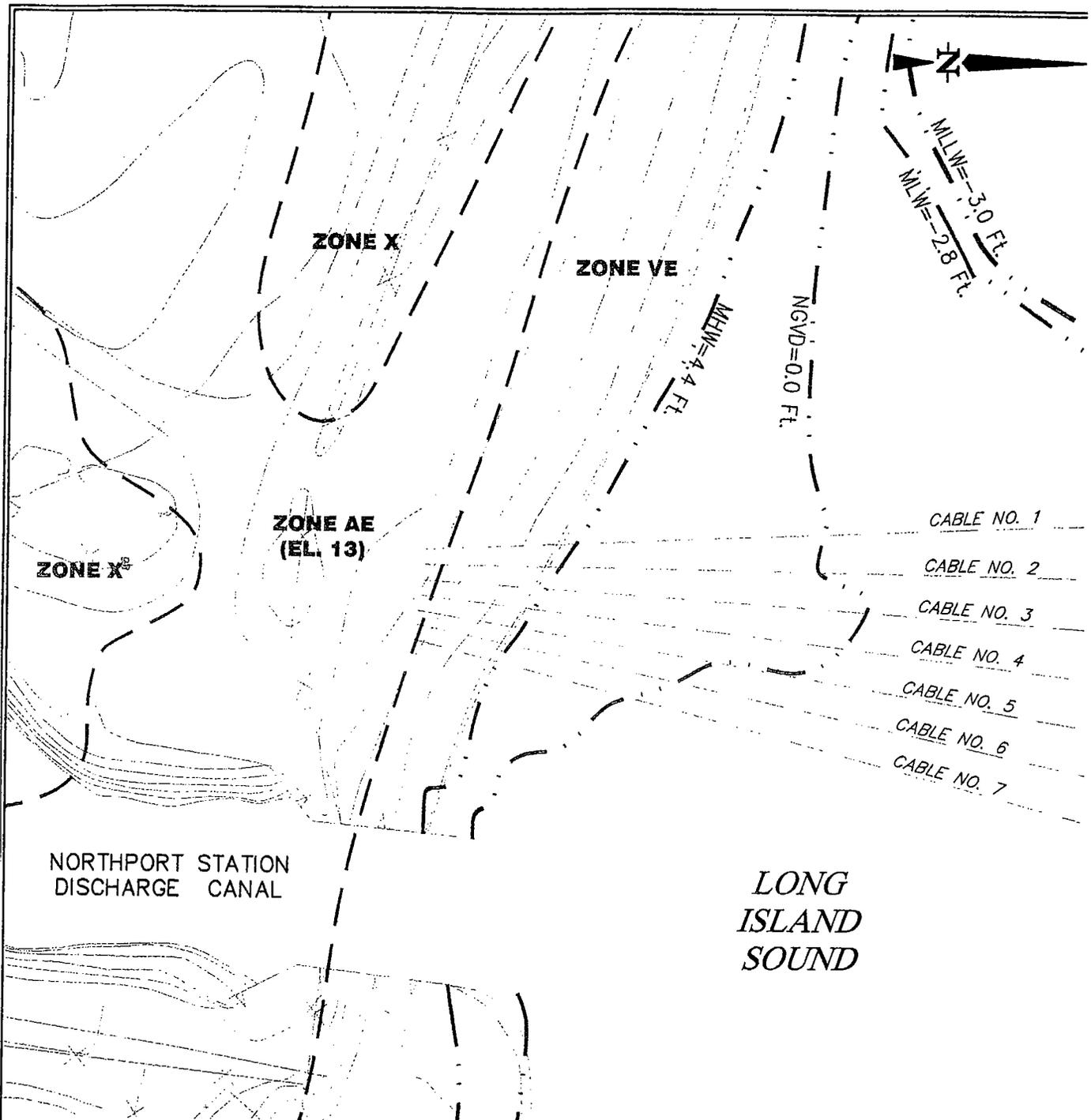
At: Norwalk, Fairfield County, Connecticut
In: Sheffield Island Harbor and Long Island Sound
Applicant: CL&P/LIPA

DATE: 01/18/02

PROJECT NO.
K070.021.1

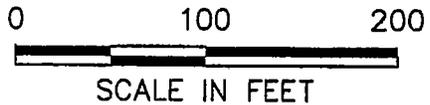
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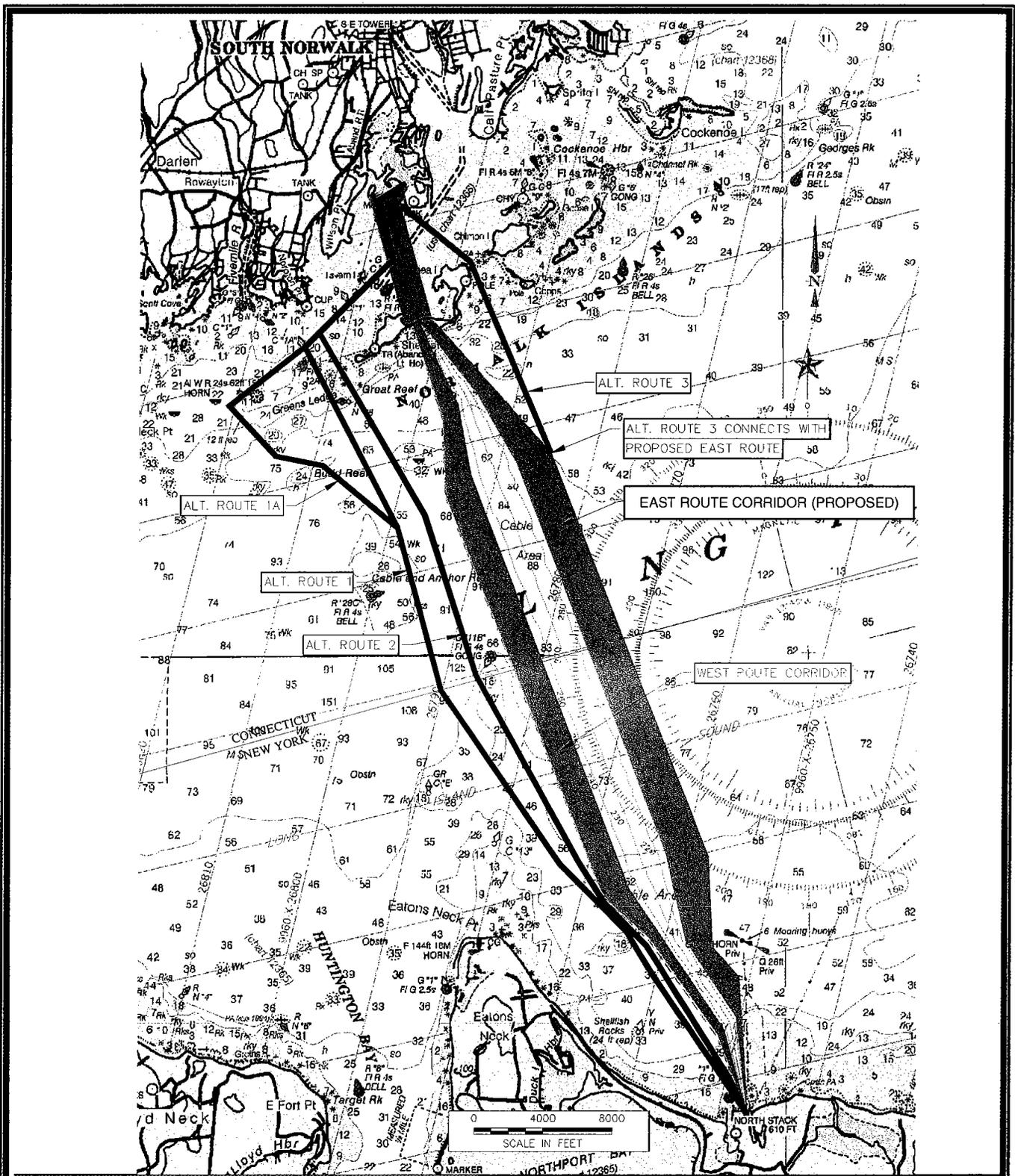
NOTES:

LIMIT OF 100-YEAR FLOODPLAIN AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP FOR THE SUFFOLK COUNTY, NEW YORK, PANEL 336 OF 1026, MAP NUMBER 36103C0336 G, DATED MAY 4, 1998.



| | | |
|--|---|--|
| Purpose: Electric Transmission Submarine Cable System Scale: 1"=100' | Northport, N.Y. Landfall Floodplain Map & Datum Relationship Submarine Cable Replacement Project | SHEET NO. 6 OF 11 |
|  LIPA Long Island Power Authority | At: Northport, Suffolk County, New York In: Sheffield Island Harbor and Long Island Sound Applicant: CL&P/LIPA | DATE: 01/18/02 PROJECT NO. K070.021.1 |

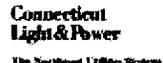




Purpose: Electric Transmission Submarine Cable System
 Source: Source: NOAA # 12368 and # 12363 (1984)

**Plan View – Proposed Cable Locations
 CL&P/LIPA Submarine Cable Replacement**

Sheet 7 of 11



At: Norwalk, Fairfield County, Connecticut
 Northport, Suffolk County, New York
 In: Sheffield Island Harbor and Long Island Sound
 Applicant: Connecticut Light & Power and Long Island Power Authority

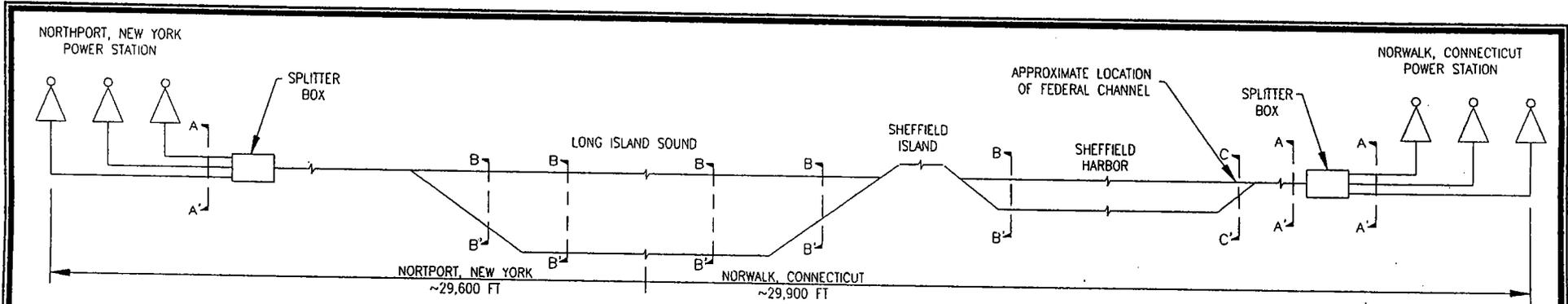
Date: 01/18/02

PROJECT NO.
K070-020.1

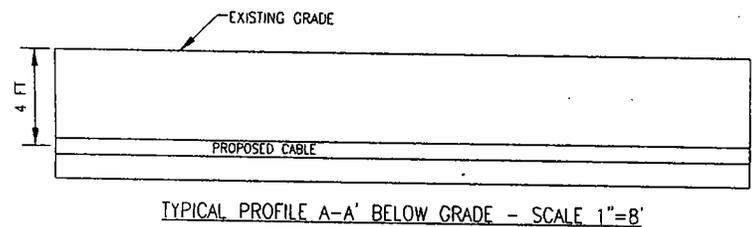


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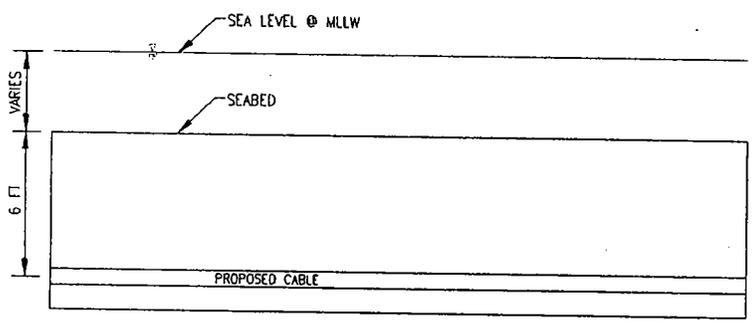




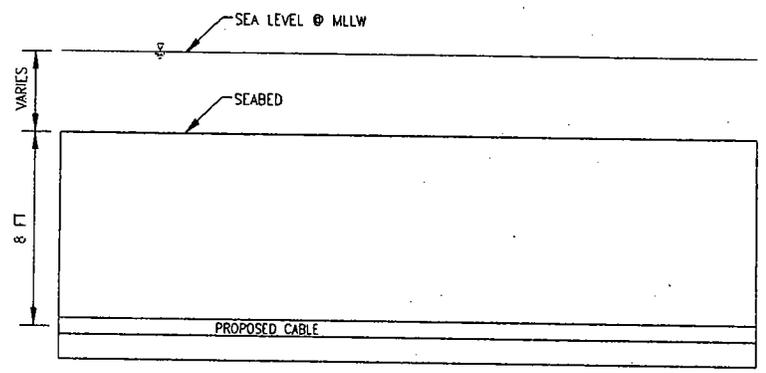
CROSS-SECTION - SCHEMATIC



TYPICAL PROFILE A-A' BELOW GRADE - SCALE 1"=8'

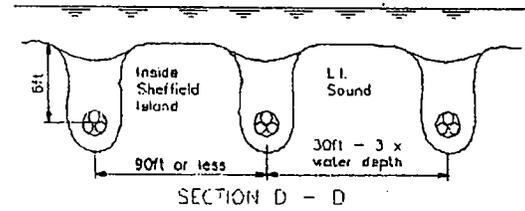
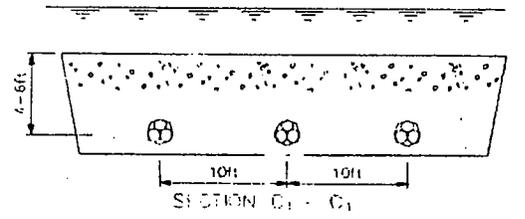
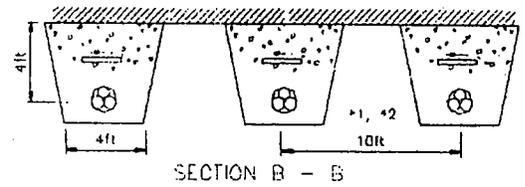
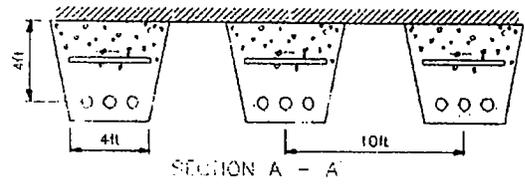
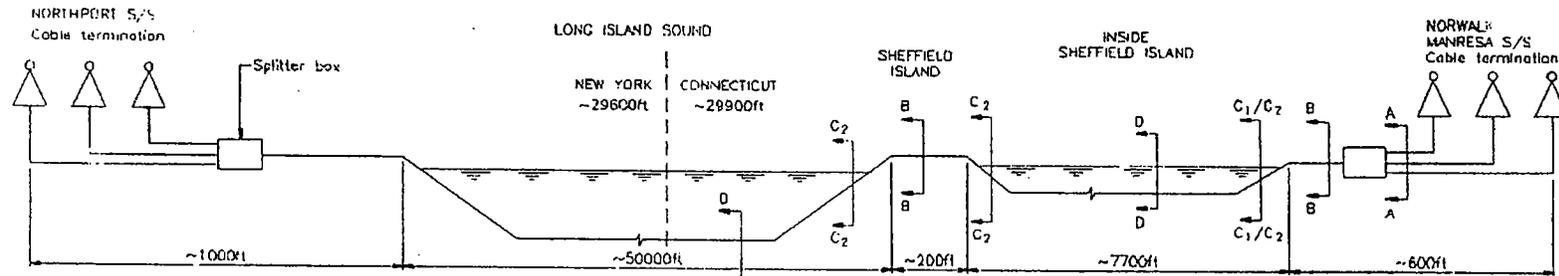


TYPICAL PROFILE B-B' BELOW SEA BED - SCALE 1"=8'

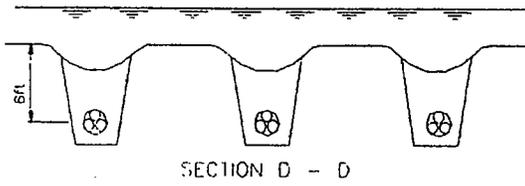


TYPICAL PROFILE C-C' FEDERAL CHANNEL - SCALE 1"=8'

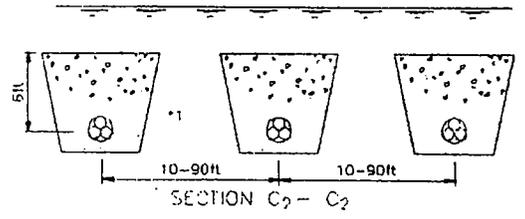
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|---|---|--|
| Purpose: Electric Transmission Submarine Cable System | Typical Cable Profiles CL&P/LIPA Submarine Cable Replacement | Sheet 8 of 11 |
|   | At: Norwalk, Fairfield County, Connecticut Northport, Suffolk County, New York In: Sheffield Island Harbor and Long Island Sound Applicant: Connecticut Light & Power and Long Island Power Authority | Date: 01/18/02 PROJECT NO. |



Typical trench in soft soil (sand)
Backfill by tidal/current action.
Trench widths estimated to be approximately 6-11' (Bohlen, 2001).



Typical trench in hard soil (sand clay e.g.).
Backfill by tidal/current action.
Trench widths estimated to be approximately 4-8' (Bohlen, 2001).



- *1) New cable will follow trenches of existing cables wherever there are no obstacles
- *2) 20-30ft on Sheffield Island

Purpose: Electric Transmission Submarine Cable System
Scale: Not To Scale

Typical Trench Cross Sections - Connecticut CL&P/LIPA Submarine Cable Replacement

Sheet 9 of 11



At: Norwalk, Fairfield County, Connecticut Northport, Suffolk County, New York
In: Sheffield Island Harbor and Long Island Sound
Applicant: Connecticut Light & Power and Long Island Power Authority

Date: 01/18/02

PROJECT NO. K070.020.1

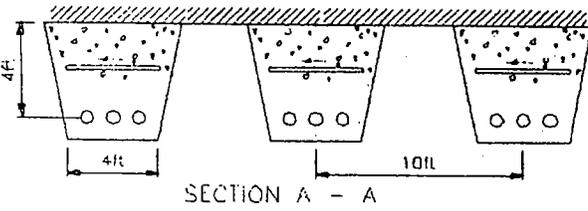
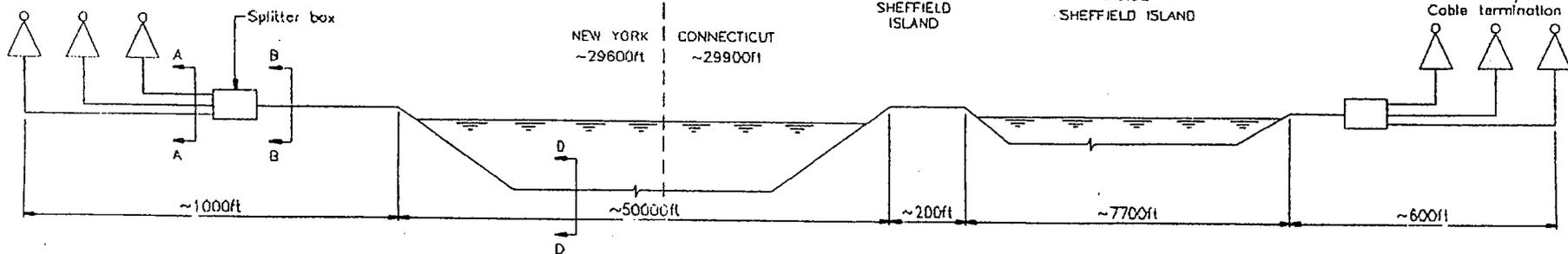
NORTHPORT 5/S
Cable termination

LONG ISLAND SOUND

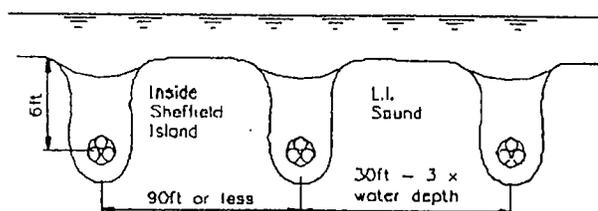
SHEFFIELD ISLAND

INSIDE SHEFFIELD ISLAND

NORWALK MANRESA S/S
Cable termination

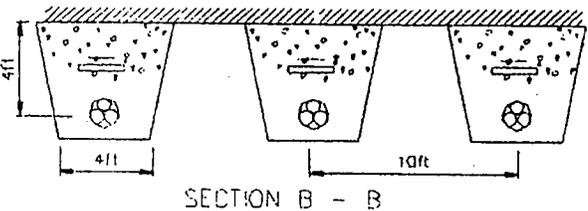


SECTION A - A

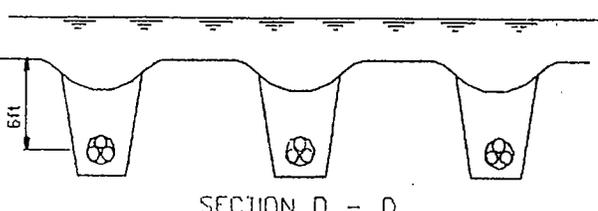


SECTION D - D

Typical trench in soft soil (sand). Backfill by tidal/current action. Trench widths estimated to be approximately 4-11' (Bohlen, 2001).



SECTION B - B



SECTION D - D

Typical trench in hard soil (sand clay e.g.) Backfill by tidal/current action. Trench widths estimated to be approximately 4-11' (Bohlen, 2001).

Purpose: Electric Transmission Submarine Cable System
Scale: Not To Scale

Typical Trench Cross Sections - New York CL&P/LIPA Submarine Cable Replacement

Sheet 10 of 11

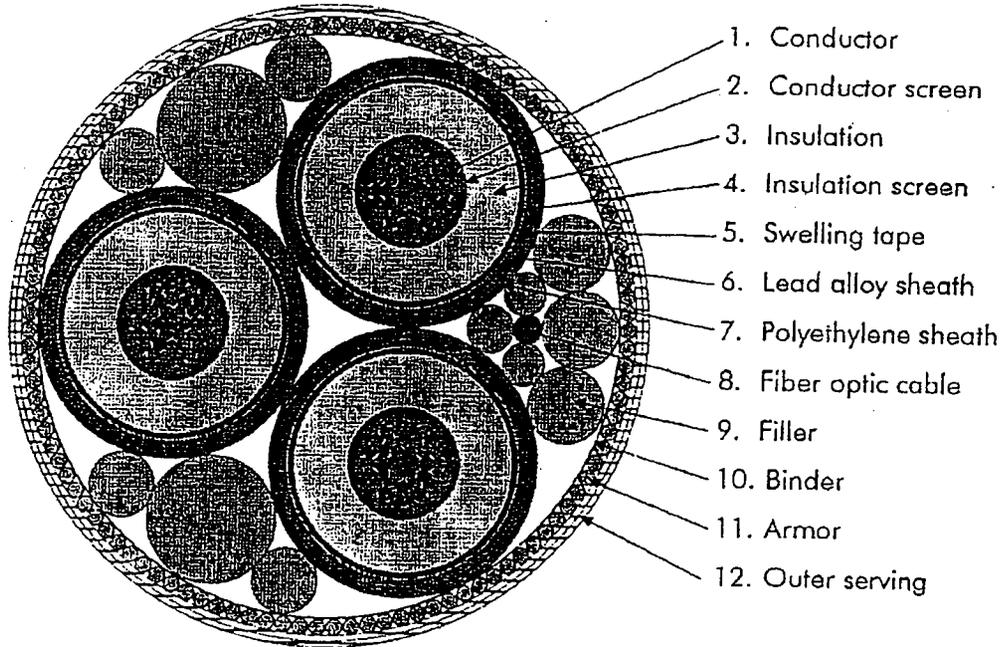


At: Norwalk, Fairfield County, Connecticut Northport, Suffolk County, New York
In: Sheffield Island Harbor and Long Island Sound
Applicant: Connecticut Light & Power and Long Island Power Authority

Date: 01/18/02

PROJECT NO.

**TKRA 145 kV 3x1x800 mm² KQ
with PE-sheath on each phase.**



| No. | Constituents | Nominal thickness mm | Nominal diameter mm |
|-----|---|----------------------|---------------------|
| 1 | Conductor, stranded copper wires, watertight | 61x4.21 ^Ø | 35.0 |
| 2 | Conductor screen, semiconducting XLPE | | |
| 3 | Insulation, XLPE | 18.0 | 74.4 |
| 4 | Insulation screen, semiconducting XLPE | | |
| 5 | Semiconducting swellable tape | | |
| 6 | Lead alloy sheath | 2.8 | 85.1 |
| 7 | Inner sheath, semiconducting polyethylene | 2.8 | |
| 8 | Fiber optic cable | | 10 |
| 9 | Polypropylene yarn fillers | | |
| 10 | Binder tape | | |
| 11 | Armor, galvanized steel wires | 111x5.6 ^Ø | |
| 12 | Outer serving, polypropylene yarn and bitumen | | 217 |

Purpose: Electric Transmission Submarine Cable System
Scale: Not To Scale

**Cross Section - 145KV Submarine Cable Set
CL&P/LIPA Submarine Cable Replacement**

Sheet 11 of 11



Connecticut Light & Power
The Northeast Light System

At: Norwalk, Fairfield County, Connecticut
Northport, Suffolk County, New York
In: Sheffield Island Harbor and Long Island Sound
Applicant: Connecticut Light & Power and Long Island Power Authority

Date: 01/18/01

PROJECT NO.
K070-020.1



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