



Third Taxing District

2 Second Street
East Norwalk, CT 06855

Tel: (203) 866-9271
Fax: (203) 866-9856

Third Taxing District of the City of Norwalk Commission Meeting

Monday, April 16, 2018 at 7:00p.m.

At the Third Taxing District Office, 2 Second Street, East Norwalk, CT

1. Public Comment – 15 Minute Limit
2. Norwalk Tree Alliance Donation Request (Andrew Strauss) – A/R (Pg. 1)
3. Marvin PTO Donation Request (Jen Jeffries & Sarah Mills) – A/R (Pgs. 2-4)
4. Minutes of Meeting – March 29, 2018 Special Joint Meeting (Pgs. 5-40) and
April 9, 2018 Special Meeting (Pgs. 50-61) – A/R
5. Person-to-Person Report (Ron Scofield) (Pg. 62)
6. Library Roof Bids – A/R (Pgs. 63-71)
7. Discussion of Power Cost Adjustment (PCA) – Possible A/R (Pgs. 72-103)
8. Discussion: Follow-Up to Shellfish/Harbor/TTD Meeting re: Eversource
Undergrounding – Possible A/R (Pgs 104-115)
9. Adjourn

*A/R – Action Required/See Attached Motion

Agenda backup material is available at the TTD office, www.ttd.gov and will be available at the meeting.

M:\Shared\Commission Meeting Information\Agenda 4-16-18.doc

District Commissioners

David L. Brown	203-866-8099	Chairman	Kevin Barber	203-866-9271	General Manager
Debora Goldstein	203-252-7214	Commissioner	Ron Scofield	203-866-9271	Assistant General Manager
Pamela Parkington	203-858-4261	Commissioner	Johnnie Weldon	203-216-2652	Treasurer



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Third Taxing District Application for Contribution from District Funds

This completed application will be reviewed for eligibility by District Staff and for approval by the Third Taxing District Commission. All information will be subject to review and dissemination under the state's FOI regulations for public records.

Overview

- District funds are maintained from the proceeds (when available) of the Third Taxing District Electric Department under a budget that is approved by the electors of the District at the annual meeting.
- Distributions from the District funds are intended to primarily benefit residents, businesses and rate-payers of the Third Taxing District.
- District funds are not intended to help with individual financial hardship requests, except as administered through a designated agency funded for that purpose.
- Decisions regarding fund disbursements are dependent upon timely, properly documented requests that meet the requirements of the "Third Taxing District Policy on Contributions from District Funds" and any applicable governing documents.
- All determinations made by the Commission shall be final and binding, and shall be made by the Commission in its sole discretion.

Full Name: <i>ANDREW STRAUSS</i>	Date of Application: <i>03.18.18</i>
Legal Address: <i>NTA 215 EAST AVE E NORWALK, CT 06855</i>	Needed by: <i>08.18</i>
Organization: <i>Norwalk Tree Alliance, 501(c)(3)</i>	Preferred Phone#: <i>917 862 4567</i>
Amount Requested: <i>\$ 2500.</i>	Preferred Email: <i>strawssa99@gmail.com</i>

Describe in detail your reason(s) for this request.

The NTA proposer to continue its program to plant trees in residential locations exclusively in East Norwalk, at no cost to homeowners. With the grant amount requested, we anticipate planting approximately 15-18 trees for 2018-2019.

Attestation (check boxes)

Qualified

I attest that my organization meets the stated requirements for a contribution from District funds and that this request is made to primarily benefit residents, businesses or rate-payers of the District.

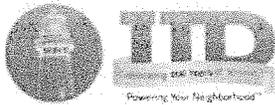
No Conflict

I attest that neither my organization, nor any individual associated with this request, represents a conflict of interest for any of the Commissioners, the Treasurer, the District Clerk or any of the employees of the Electric Department.

Should your request be approved, will you consent to be publicized? Y N

By signing below, I verify that I understand the purpose of the Third Taxing District Funds and the requirements for contributions from these funds. I verify that the information provided in this application is true to the best of my knowledge.

Signature of authorized representative: <i>Strawm, NTA PRESIDENT</i>	Date: <i>03.18.18</i>
-------------------------------------------------------------------------	--------------------------

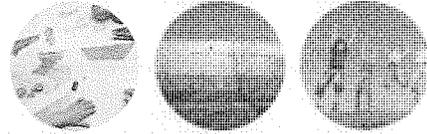


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Full Name: Marvin Elementary School	Date of Application: April 2, 2018
Legal Address: 15 calf Pasture Beach Road Norwalk, CT 06855	Needed by:
Organization: Marvin Elementary School PTA	Preferred Phone#: (203) 858-5340
Amount Requested: \$ 6,500	Preferred Email: marissabmangone@gmail.com
Describe in detail your reason(s) for this request. <p style="text-align: center;">PLEASE SEE ATTACHED</p>	
Attestation (check boxes) Qualified <input type="checkbox"/> I attest that my organization meets the stated requirements for a contribution from District funds and that this request is made to primarily benefit residents, businesses or rate-payers of the District. No Conflict <input checked="" type="checkbox"/> I attest that neither my organization, nor any individual associated with this request, represents a conflict of interest for any of the Commissioners, the Treasurer, the District Clerk or any of the employees of the Electric Department.	
Should your request be approved, will you consent to be publicized? Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
By signing below, I verify that I understand the purpose of the Third Taxing District Funds and the requirements for contributions from these funds. I verify that the information provided in this application is true to the best of my knowledge.	
Signature of authorized representative: 	Date: 4/2/18



Marvin Elementary School PTA
15 Calf Pasture Beach Road
East Norwalk, CT 06855

April 2, 2018

Commissioners
Third Taxing District of the City of Norwalk Electrical Department
2 Second Street
East Norwalk, CT 06855

Dear Commissioners,

Please accept our deep gratitude for the generous support the Third Taxing District (TTD) has provided to the elementary school children of East Norwalk over the years. TTD has been an invaluable community partner helping to facilitate a variety of enrichment opportunities for our school community.

The Marvin PTA is a volunteer organization comprised of parents, teachers, and administrators who work together to help make life at Marvin the best it can be. As a PTA we rely on the kindness and generosity of local companies, family, friends, and neighbors to help leverage resources so we can help to improve the educational, social, and developmental experiences of our children. Marvin Elementary is a Title I School; approximately 50% of children live at or below the poverty level. The PTA helps to generate additional revenues used to support enrichment activities, school assemblies, and field trips that are often not included in our school budget. Through these programs are students are exposed to experiences that they would likely not have access to in their everyday lives.

We kindly ask the Third Taxing District to consider once again supporting Marvin Elementary School for the 2018-2019 school year. Specifically, we are requesting funding in the amount of \$5,700 which will be used to support programming designed to complement school curriculum focused on electricity and energy conservation and will allow students the opportunity to access learning outside the classroom through field trips, as well as bringing scientists into the classroom.

“Power Play” an inquiry-based exhibit for Kindergarten (\$700)

As part of the kindergarten curriculum, students study the conservation of energy and energy transfer. Through this in-classroom presentation, students will learn about powerful energy sources (sun, wind, and water). In addition, students will explore the importance of these renewable resources through inquiry-based activities, including measuring wind-generated electricity and creating water turbine. Stepping Stones Museum for Children will facilitate this exhibit and “prompt students and teachers to uncover the many levels of learning opportunities,” (*Stepping Stones Museum*).



CT Science Center trip for the Fifth Grade (\$3,000)

As part of the fifth grade curriculum, students review all energy concepts (learned in prior grades), including the conservation of energy. The CT Science Center offers hands-on applications (exhibits and laboratories) that help students relate abstract concepts to the real world. Students also have the opportunity to explore exhibits that include energy topics related to water and electricity, studied in third and fourth grades respectively. Students will tour Energy City, a virtual city where they will explore/discover alternative energy technologies (wind turbines, solar panels, hydro power, fuel cells, and biomass products) and the impact they have on the planet. Additional exhibit highlights include mapping the paths of electricity through a model of a city, calculating their personal carbon footprint, touring the Conservation Energy House and participating in search-and-find activities. Many of the exhibits afford problem solving and engineering concepts for students to investigate, which is a vital skill in all facets of science. The field trip to the CT Science Center provides Marvin students access to experiences they will continue to draw from as they approach other areas of energy and physical sciences in their academic careers. The requested funding will cover admission to the CT Science Center as well as transportation.

High Touch, High Tech Session “Currently Attracted” (\$800)

“Currently Attracted” brings scientists into the classroom, offering students the opportunity to learn about the importance and power of electricity through hands-on experiences. Activities include: building series and parallel circuits using wires, a battery, and light bulbs; students work collaboratively, teaching one another how these circuits are assembled; utilizing electricity to make sound, heat, and light; and exploring different types of magnets (bar magnets, circle magnets, and even electromagnets). Students are very excited to show one another what they have learned and discovered about electricity.

STEAM Museum (\$2,000)

Mobile Ed’s STEAM Museum will turn the Marvin Elementary school gym into a state-of-the-art, hands on children’s museum focused on STEAM education (science, technology, engineering, art and math). Every Marvin student will have a Science Museum at their fingertips. Exhibit subjects include energy, conservation of energy, technology, manufacturing, methods and techniques, and team building. The Bike Generator Exhibit will turn student’s energy into a dazzling light show that stands at the center of the STEAM Museum. As student’s pedal the bike, they will convert their kinetic energy into electricity, first illuminating low-power LEDs until finally creating enough power to light halogen lamps at the top of the tower,” (*Mobil Ed*).

Again, we are truly grateful for your partnership. On behalf of the children, faculty and staff, we thank you in advance for your consideration of this request. Should you have any additional questions, please feel free to contact Marissa Mangone at marissabmangone@gmail.com.

Sincerely,

Marisa Mangone, PTA President
Sarah Mills, PTA Secretary
Jen Jefferies, PTA Enrichment Coordinator

DRAFT

THIRD TAXING DISTRICT
of the City of Norwalk
Special Joint Meeting
Third Taxing District, Norwalk Harbor Management and Shellfish Commissions
March 29, 2018
The Marvin, 60 Gregory Boulevard, E. Norwalk, CT

ATTENDANCE: Commissioners: David Brown, Chair; Debora Goldstein;

STAFF: Kevin Barber, General Manager

OTHERS: John Pinto, Chairman, NHMC Application Review Committee
Geoffrey Steadman, Consultant to the NHMC
Peter Johnson, Chairman, Shellfish Commission & Ratepayer
Representative, TTD
Steve Bartush, Commissioner, Shellfish Commission

PUBLIC: Tony D'Andrea

CALL TO ORDER

Chairman Brown of the TTD noted that there was a quorum of the Third Taxing District and convened the meeting. Noting that there was not a quorum of either the NHMC or the Shellfish Commission, those Commissions were not formally convened. Chairman Brown asked Commissioner Goldstein to serve as Acting Chairman for the meeting.

PUBLIC COMMENT

Mr. D'Andrea spoke during public comment. He said that he represented Norwalk Harbor Keeper, whose concerns with the undergrounding of the Eversource transmission cable were that the environmental impact of the project was not adequate. He indicated that the spoils from the drilling needed to be handled correctly to preserve the vitality of the Shellfish Industry.

**DISCUSSION OF EXPECTED APPLICATION BY EVERSOURCE FOR A
DECLARATORY RULING FROM THE CONNECTICUT SITING COUNCIL
FOR THE RELOCATION OF A 115kv TRANSMISSION LINE WITH A
PROPOSED ROUTING UNDER THE VISITOR'S DOCK AT VETERAN'S PARK**

Commissioner Johnson raised the issue of the related project to run a temporary submarine and communications cable under the harbor in connection with the Walk Bridge project, which requires using barge mounted equipment, dredging a channel, installing the line and backfilling

Third Taxing District
of the City of Norwalk
March 29, 2018

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the trench. He indicated that the safety measures being taken when dredging this area would possibly indicate that the materials needed extra care to ensure that hazardous materials don't go into the harbor. Commissioner Pinto cautioned that the measures described could relate to higher levels of certain substances (such as zinc) that shouldn't be difficult to handle.

Discussion of the handling of the dredged materials suggested that both the NHMC and Shellfish Commission understood the materials will be dewatered in barges, and the dry materials would be transported up to the Devine site for further transfer to appropriate disposal sites. Upon closer examination of the application (#2017-08-100), it was found that the application does not, in fact, specify that plan, but uses generic language.

The DEEP notice, application and the draft plan for #2017-08-100 is attached to these minutes as Exhibits A-1, A-2 and A-3 respectively). Commissioner Pinto explained that the NHMC was going to support the Shellfish Commission's recommendation on the application, which was to do water quality monitoring in connection with the process. Commissioner Johnson expressed a desire to know exactly what materials are being disturbed.

Discussion moved to the two 115kv transmission lines intended to go under the visitor's docks and Veteran's Memorial Park's parking area, per the plans proposed by Eversource, due to the Walk Bridge project. Mr. Steadman explained the path and identified the "sending" and "receiving" sites for the horizontal drilling under the harbor, including the "threading" of the drill path between two pilings of the Visitor's Docks with a clearance of 5'9" from each piling. The drilling requires that a pit be dug on each site to accumulate the oils and other materials required for the drilling process. The pit on the west side would be 3,600 sq ft and the pit on the east side would be 2,700 sq ft.

Commissioner Pinto expressed concern that the permanent right of way created in connection with the undergrounding of a transmission line would preclude any alteration, expansion and possibly repair work on the docks in the future, because work would be prevented in a right of way 15" on either side of the transmission line. Commissioner Johnson agreed that this was a very serious concern. They discussed examples in the past where work was prevented due to such restrictions. Mr. Steadman and Commissioner Pinto explained that the NHMC was fortunate to have a highly-qualified expert (Mr. Mailman) on horizontal drilling to do a pro-bono peer review of the proposed plan. Mr. Mailman's qualifications and his report are attached as exhibits B-1 and B-2 respectively.

The approval process was discussed, with the Connecticut Siting Council (CSC) having absolute say, but approvals also required by Connecticut's Department of Energy and Environmental Protection (DEEP) and the Army Corps of Engineers. The Army Corps actually approves two items: one is a permit for a public works project in a federal navigation channel and the other is a general permit for work in a coastal waterway. One requires a letter from the chief elected official of the City to proceed. Eversource is pursuing a pre-application review process to secure approval from DEEP in advance of the application to the siting council. This is voluntary, and premature, given that CSC could object to the proposed site and the process would have to start from scratch.

Third Taxing District
of the City of Norwalk
March 29, 2018

Commissioner Goldstein observed that the TTD was also a municipality and that part of the proposed site was within the TTD's district. Mr. Barber observed that part of the project was also in the SNEW district, which is also a municipality. Commissioner Goldstein commented that it was unlikely that the status of "municipality" would be met for the chief elected official's letter for the DEEP approval, but that the status as a municipality, as well as an electric utility was likely to carry some weight with the Connecticut Siting Council (CSC). There are various mechanism for public hearings on both projects, but it is likely that only a public hearing by the CSC would be triggered, though it was reported that Mayor Rilling suggested that he was in favor of advocating for a public hearing.

Discussion moved on to highlight some of Mr. Mailman's findings, which were: that the main environmental concern is the handling of the drill material, that Eversource's assertion that they could not drill at right angles was not consistent with industry practice, and the fact that the precision required to thread the drilling channel between the pilings with the necessary clearance was unlikely. The margin of error could be as much as three feet.

Commissioner Brown observed that it should be clear what the "ask" should be, and what mechanism would be used, and to whom the ask should be made.

The group also discussed the fact that the undergrounding project had not received environmental scrutiny under the Environmental Assessment (EA) done for the Walk Bridge, and was now under consideration for exemption from a full environmental review. The DOT has taken the position that exclusion from the EA was proper because it met the definition of a project that has "independent utility".

Commissioner Pinto reported that the NHMC was working on the response to the pre-application to DEEP, and Commissioner Johnson reported that the Shellfish Commission would be similarly engaged at their next meeting on April 5th. Commissioner Goldstein observed that the next regular TTD meeting would normally have been held on April 2nd, but that it had been rescheduled to April 9th, so that members of the Commission could attend the public hearing continuation on 230 East Avenue—a project that was controversial in the district.

Commissioner Pinto reiterated that the NHMC does not have the qualifications to recommend an alternate path, but has grave concerns about the existing path. Commissioner Goldstein observed that the TTD might pursue retention of its own experts to advise them on any safety concerns with the proximity of steel pilings near a high-voltage transmission line, including stresses that might occur under extreme weather condition, especially if the clearances were below the proposed 5'9". Commissioner Johnson observed that the Shellfish Commission has not yet received the pre-application for DEEP, despite being one of the required sign-offs.

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ADJOURN

Commissioner Goldstein moved to adjourn, and Mr. Brown seconded. The motion to adjourn passed unanimously.

The meeting adjourned at 9:10 p.m.

Respectfully submitted,

Debra Goldstein
Commissioner, TTD

Third Taxing District
of the City of Norwalk
March 29, 2018

Connecticut Department of Energy & Environmental Protection

**Notice of Tentative Determination to Approve
Structures, Dredging & Fill and Tidal Wetlands and Water Quality Certificate
And Intent to Waive Public Hearing
Applicant: CT Department of Transportation
Application No. 201708100
City: Norwalk**

The Department of Energy & Environmental Protection ("DEEP") hereby gives notice that a tentative determination has been reached to approve the following application submitted under Section 401 of the Federal Clean Water Act, as amended, for a Water Quality Certificate and Sections 22a-32 and 22a-361 of the Connecticut General Statutes ("CGS") for a permit to conduct work waterward of the coastal jurisdiction line in tidal, coastal or navigable waters of the state and in tidal wetlands for infrastructure improvements.

The Commissioner also gives notice that a hearing may be held on this application if a written request is received from the applicant, or if the Commissioner determines that the public interest will best be served thereby. The Commissioner shall hold a hearing pursuant to CGS Sections 22a-361(b) and 22a-32 on receipt of a petition signed by twenty-five or more persons.

Applicant's Name and Address: Kimberly Lesay, Assistant Planning Director, State of Connecticut
Department of Transportation, 2800 Berlin Turnpike, P.O. Box
317546, Newington, CT 06131

Contact Name/Phone/Email: Christian Brown, HNTB Corporation, 913-221-3327,
CBrown@HNTB.com

Site Location: Norwalk River Bridge (Bridge No. 04288R), Norwalk

PROPOSED ACTIVITY

The proposed activity includes the installation of a temporary submarine signal and communications cable and will affect aquatic and coastal resources and tidal wetlands.

INFORMATION REQUESTS/PUBLIC COMMENT

Interested persons may obtain a copy of the application from the above contacts or by sending a request for an electronic copy to DEEP at micheal.grzywinski@ct.gov. The application is available for inspection at the DEEP Land and Water Resources Division, 79 Elm Street, Hartford, from 8:30 - 4:30 Monday through Friday. Additional surveys, plans or other materials may be available with the original application file at DEEP. All interested parties are invited to express their views on the tentative determination concerning this application. Written comments on the application should be directed to Micheal Grzywinski, DEEP Land & Water Resources Division, 79 Elm Street, Hartford, CT 06106-5127, no later than forty (40) days from the publication date of this notice. Comments regarding this application may be submitted via electronic mail to: micheal.grzywinski@ct.gov.

PETITIONS FOR HEARING

Petitions for a hearing should include the application number noted above and also identify a contact person to receive notifications. Petitions may also identify a person who is authorized to engage in discussions regarding the application and, if resolution is reached, withdraw the petition. Original signed petitions may be scanned and sent electronically to deep.adjudications@ct.gov or may be mailed or delivered to: DEEP Office of Adjudications, 79 Elm Street, 3rd floor, Hartford, CT 06106-5127. All petitions must be received within the comment period noted above. If submitted electronically, original signed petitions must also be mailed or delivered to the address above within ten (10) days of electronic submittal. For additional information visit www.ct.gov/deep/adjudications.

/s/ Brian P. Thompson

Brian P. Thompson, Director

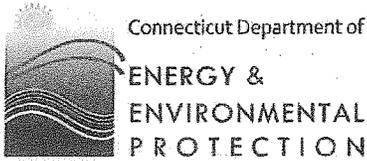
Published in The Hour on March 13, 2018

ADA PUBLICATION STATEMENT

The Connecticut Department of Energy & Environmental Protection is an Affirmative Action and Equal Opportunity Employer that is committed to complying with the Americans with Disabilities Act. To request an accommodation contact us at (860) 418-5910 or deep.accommodations@ct.gov.

[Draft Permit \(PDF\)](#)

[Draft Plans \(PDF\)](#)



Draft

Bureau of Water Protection and Land Reuse
Land & Water Resources Division

79 Elm Street • Hartford, CT 06106-5127

www.ct.gov/deep

Affirmative Action/Equal Opportunity Employer

Connecticut Department of Energy and Environmental Protection License*

Structures, Dredging & Fill and Tidal Wetlands Permit
Section 401 Water Quality Certification

Licensee(s): State of Connecticut,
Department of Transportation

Licensee Address(s): 2800 Berlin Turnpike P.O. Box
317546
Newington, CT 06131

License Number(s): 201708100-SDFTW & 401

Municipality: City of Norwalk

Project Description: Install a temporary submarine signal and communication cable for infrastructure improvements

Project Address/Location: Immediately upstream of Metro North Railroad Bridge No. 04288R

Waters: Norwalk River

Authorizing CT Statute(s) and/or Federal Law: CGS Section 22a-28 to 35; CGS Section 22a-359 to 363g; CGS Section 22a-90 to 112; Section 401 CWA (33 USC 1341)

Applicable Regulations of CT State Agencies: 22a-426-1 to 9

Agency Contact: Land & Water Resources Division,
Bureau of Water Protection & Land Reuse, 860-424-3019

License Expiration: Five (5) years from the date of issuance of this license.

Project Site Plan Set: One location map and thirteen (13) sheets of plans dated May 9, 2017

License Enclosures: Compliance Certification Form, Coastal Dredging Conditions, Site Plan Set, WQC CT GP Conditions, Work Commencement Form, LWRD General Conditions

Authorized Activities:

1. remove several existing timber piles at the existing pivot pier and rest pier fender systems;

*Connecticut's Uniform Administrative Procedure Act defines License to include, "the whole or part of any agency permit, certificate, approval, registration, charter or similar form of permission required by law . . ."

2. install floating turbidity curtains around the trench area;
3. using barge-mounted equipment, mechanically remove existing sediment to a depth not less than -18' MLLW or seven (7) feet below the existing substrate and place the sediment in hopper barges with appropriate dewatering measures;
4. place a temporary static line within the excavated trench identified above and using divers, install 260 linear feet two (2) armored inner conduits housing fiber optics, two (2) armored signal cables and one spare 4" diameter high density polyethylene (HDPE) conduit using hand-held hydro-fluidization techniques;
5. backfill the excavated trench, using suitable backfill material located on a barge to pre-existing grades using either a clamshell bucket or a tremie tube only during incoming and slack tides;
6. install cable mounting brackets, associated terminal cabinets or access ladders on the existing railroad bridge piers hand-held rock drills; and
7. using mechanical equipment, reinstall the timber pivot pier and rest pier fender piles identified above.

Failure to comply with the terms and conditions of this license shall subject the Licensee and / or the Licensee's contractor(s) to enforcement actions and penalties as provided by law.

This license is subject to the following Terms and Conditions:

1. **License Enclosure(s) and Conditions.** The Licensee shall comply with all applicable terms and conditions as may be stipulated within the License Enclosure(s) listed above.
2. The Licensee shall restore the intertidal areas located on the eastern and western shorelines to pre-existing grades using organic material with the same grain size as the existing sediment.
3. The Licensee shall install and maintain floating turbidity curtains around the work area.
4. All unconfined in-water work shall be prohibited between February 1st through September 30th, inclusive, of any calendar year in order to protect anadromous fish, spawning winter flounder and spawning shellfish unless otherwise authorized in writing from the Commissioner.
5. The Licensee shall maintain navigation access in the Norwalk River during the work authorized herein unless Coast Guard approval for temporary channel closures is received.
6. All work authorized herein shall be conducted during incoming and slack tides.
7. Within one hundred twenty (120) days following the completion of the work authorized herein the Licensee shall conduct an as-built survey of the new submarine cables. The survey shall include the depth of installation, location and horizontal alignment of the cables.
8. The Licensee shall place the approximately 462 cubic yards of excavated sediment back in the trench authorized herein.

9. The Licensee shall mechanically remove the top four (4) feet of existing sediment, properly manage the material and dispose the material at an approved upland location in accordance with state and federal regulations.
10. The Licensee shall utilize the previously approved Peregrine Falcon Protocol dated March 8, 2016.
11. Prior to the commencement of the work authorized herein the Licensee shall obtain all necessary local, state and federal authorizations.
- 12.

Issued by the Commissioner of Energy and Environmental Protection on:

Date

Robert E. Kaliszewski
Deputy Commissioner
Department of Energy & Environmental Protection



Work Commencement Form

To: Regulatory Section
Department of Energy and Environmental Protection
Land & Water Resources Division
79 Elm Street
Hartford, CT 06106-5127

Licensee Name: _____

Licensee Address: _____

License No(s): 201708100

CONTRACTOR(s):

1 Name: _____

Address: _____

Telephone: _____

E-mail: _____

2 Name: _____

Address: _____

Telephone: _____

E-mail: _____

3 Name: _____

Address: _____

Telephone: _____

E-mail: _____

Date Contractor(s) received a copy
of the license and approved plans: _____

EXPECTED DATE OF COMMENCEMENT OF WORK: _____

EXPECTED DATE OF COMPLETION OF WORK: _____

LICENSEE: _____
(Signature) (Date)



Coastal Dredging Conditions for Land & Water Resource Division Licenses

1. **Time-of-Year Restriction.** Unless otherwise noted in the License, unconfined in-water excavation, dredging, filling or removal of debris or other material is prohibited, inclusive, in any year from June 1 through September 30 in order to protect spawning shellfish in the area unless otherwise authorized in writing by the Commissioner.
2. **Dredging Report.** Not later than two (2) weeks subsequent to the completion of any dredging activity authorized herein, the Certificate Holder shall submit to the Commissioner a completed Dredging Report. A separate form shall be submitted by the Permittee for each distinct dredging activity conducted pursuant to this license.
3. **Bottom Disturbance.** Dragging the bottom with a spoil barge, scow, vessel, beam or similar equipment outside of any authorized area is prohibited.
4. **Material Handling.** Sidecasting or in-water rehandling of dredged or excavated material is prohibited.
5. **Barge Control.** Spoil scows or barges shall be loaded and navigated in a manner which prevents uncontrollable motion or spillage and washout of dredged or excavated materials.
6. **Sale of Sediment.** Sediment dredged pursuant to the license shall not be sold nor shall any fee for its use be charged without the express prior written authorization of the Commissioner and payment of a \$4.00 per yard royalty to the state of Connecticut Department of Environmental Protection, pursuant to CGS section 22a-361(e).
7. **Sediment Disposal.** The Licensee shall dispose of aquatic sediments in accordance with the terms and conditions of the license.

Open Water Disposal, if authorized in Project Description

1. **Material Disposal.** The Licensee shall dispose of dredged or excavated material in accordance with the requirements of the United States Army Corps of Engineers-New England District, except that if the authorized disposal site is modified, the Licensee shall submit a request for modification of the location to the Commissioner and shall not dispose of the material until such location modification has been approved in writing by the Commissioner.
2. **Disposal Site / Use Modification.** The Commissioner may modify the authorized disposal site and direct dredged sediment to an alternate site for use as cap material, provided that no modification will take effect if such modification imposes uncompensated additional costs solely attributable to such modification on the Licensee.
3. **Disposal Monitoring.** The Licensee shall not dispose of dredged or excavated material unless said disposal is supervised and witnessed by an on-board inspector or documented by

an automated disposal monitoring program approved by the United States Army Corps of Engineers-New England District.

4. **Barge Navigation.** Spoil scows or barges used by the Licensee for disposal of dredged or excavated material shall travel to and from the authorized disposal site utilizing sea lanes defined by the United States Army Corps of Engineers-New England District.
5. **Point Dumping.** The Licensee shall point-dump dredged or excavated materials at a specified buoy or set of coordinates identified by United States Army Corps of Engineers-New England District within the authorized disposal site.



General Conditions for Land & Water Resources Division Licenses

1. **Land Record Filing (for Structures Dredging & Fill, Tidal Wetlands, Certificate of Permission, and Long Island Sound General Permit Licenses only).** The Licensee shall file the Land Record Filing on the land records of the municipality in which the subject property is located not later than thirty (30) days after license issuance pursuant to Connecticut General Statutes (CGS) Section 22a-363g. A copy of the Notice with a stamp or other such proof of filing with the municipality shall be submitted to the Commissioner no later than sixty (60) days after license issuance. If a Land Record Filing form is not enclosed and the work site is not associated with an upland property, no filing is required.
2. **Contractor Notification.** The Licensee shall give a copy of the license and its attachments to the contractor(s) who will be carrying out the authorized activities prior to the start of construction and shall receive a written receipt for such copy, signed and dated by such contractor(s). The Licensee's contractor(s) shall conduct all operations at the site in full compliance with the license and, to the extent provided by law, may be held liable for any violation of the terms and conditions of the license. At the work site, the contractor(s) shall, whenever work is being performed, have on site and make available for inspection a copy of the license and the authorized plans.
3. **Work Commencement¹.** Not later than two (2) weeks prior to the commencement of any work authorized herein, the Licensee shall submit to the Commissioner, on the Work Commencement Form attached hereto, the name(s) and address(es) of all contractor(s) employed to conduct such work and the expected date for commencement and completion of such work, if any.
 - For water diversion activities authorized pursuant to 22a-377(c)-1 of the Regulations of Connecticut State Agencies, the Licensee shall also notify the Commissioner in writing two weeks prior to initiating the authorized diversion.
 - For emergency activities authorized pursuant Connecticut General Statutes Section 22a-6k, the Licensee shall notify the Commissioner, in writing, of activity commencement at least one (1) day prior to construction and of activity completion no later than five (5) days after conclusion.
4. **For Coastal Licenses Only - License Notice.** The Licensee shall post the first page of the License in a conspicuous place at the work area while the work authorized therein is undertaken.
5. **Unauthorized Activities.** Except as specifically authorized, no equipment or material, including but not limited to, fill, construction materials, excavated material or debris, shall be

¹ The Work Commencement condition and the need for a Work Commencement Form is not applicable to Flood Management Certification approvals.

deposited, placed or stored in any wetland or watercourse on or off-site. The Licensee may not conduct work within wetlands or watercourses other than as specifically authorized, unless otherwise authorized in writing by the Commissioner. Tidal wetlands means "wetland" as defined by section 22a-29 and "freshwater wetlands and watercourses" means "wetlands" and "watercourses" as defined by section 22a-38.

6. **Unconfined Instream Work.** Unless otherwise noted in a condition of the license, the following conditions apply to projects in non-coastal waters:
 - Unconfined instream work is limited to the period June 1 through September 30.
 - Confinement of a work area by cofferdam techniques using sand bag placement, sheet pile installation (vibratory method only), portadam, or similar confinement devices is allowed any time of the year. The removal of such confinement devices is allowed any time of the year.
 - Once a work area has been confined, in-water work within the confined area is allowed any time of the year.
 - The confinement technique used shall completely isolate and protect the confined area from all flowing water. The use of silt boom/curtain or similar technique as a means for confinement is prohibited.
7. **For State Actions Only - Material or Equipment Storage in the Floodplain.** Unless approved by a Flood Management Exemption, the storage of any materials at the site which are buoyant, hazardous, flammable, explosive, soluble, expansive, radioactive, or which could in the event of a flood be injurious to human, animal or plant life, below the elevation of the five-hundred (500) year flood is prohibited. Any other material or equipment stored at the site below said elevation by the Licensee or the Licensee's contractor must be firmly anchored, restrained or enclosed to prevent flotation. The quantity of fuel stored below such elevation for equipment used at the site shall not exceed the quantity of fuel that is expected to be used by such equipment in one day. In accordance with the licensee's Flood Contingency Plan, the Licensee shall remove equipment and materials from the floodplain during periods when flood warnings have been issued or are anticipated by a responsible federal, state or local agency. It shall be the Licensee's responsibility to obtain such warnings when flooding is anticipated.
8. **Temporary Hydraulic Facilities for Water Handling.** If not reviewed and approved as a part of the license application, temporary hydraulic facilities shall be designed by a qualified professional and in accordance with the *Connecticut Guidelines for Soil Erosion and Sediment Control*, the *2004 Connecticut Stormwater Quality Manual*, or the *Department of Transportation's ConnDOT Drainage Manual*, as applicable. Temporary hydraulic facilities may include channels, culverts or bridges which are required for haul roads, channel relocations, culvert installations, bridge construction, temporary roads, or detours.
9. **Excavated Materials.** Unless otherwise authorized, all excavated material shall be staged and managed in a manner which prevents additional impacts to wetlands and watercourses.
10. **Best Management Practices.** The Licensee shall not cause or allow pollution of any wetlands or watercourses, including pollution resulting from sedimentation and erosion. In constructing

or maintaining any authorized structure or facility or conducting any authorized activity, or in removing any such structure or facility, the Licensee shall employ best management practices to control storm water discharges, to prevent erosion and sedimentation, and to otherwise prevent pollution of wetlands and other waters of the State. For purposes of the license, "pollution" means "pollution" as that term is defined by CGS section 22a-423. Best Management Practices include, but are not limited, to practices identified in the *Connecticut Guidelines for Soil Erosion and Sediment Control* as revised, *2004 Connecticut Stormwater Quality Manual*, Department of Transportation's *ConnDOT Drainage Manual* as revised, and the Department of Transportation Standard Specifications as revised.

11. **Work Site Restoration.** Upon completion of any authorized work, the Licensee 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.
12. **Inspection.** The Licensee shall allow any representative of the Commissioner to inspect the project location at reasonable times to ensure that work is being or has been conducted in accordance with the terms and conditions of this license.
13. **Change of Use. (Applies only if a use is specified within the License "Project Description")**
 - a. The work specified in the license is authorized solely for the purpose set forth in the license. No change in purpose or use of the authorized work or facilities as set forth in the license may occur without the prior written approval of the Commissioner. The Licensee shall, prior to undertaking or allowing any change in use or purpose from that which is authorized by this license, request permission 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.
14. **De Minimis Alteration.** The Licensee shall not deviate from the authorized activity without prior written approval from the Commissioner. The Licensee may request a de minimis change to any authorized structure, facility, or activity. A de minimis alteration means a change in the authorized design, construction or operation that does not increase environmental impacts or substantively alter the construction of the project as authorized.
 - For diversion activities authorized pursuant to 22a-377(c)-2 of the Regulations of Connecticut State Agencies, a de minimis alteration means an alteration which does not significantly increase the quantity of water diverted or significantly change the capacity to divert water.
15. **Extension Request.** The Licensee may request an extension of the license expiration date. Such request shall be in writing and shall be submitted to the Commissioner at least thirty (30) days prior to the license expiration. Such request shall describe the work done to date, what work still needs to be completed, and the reason for such extension. It shall be the Commissioner's sole discretion to grant or deny such request.

- 16. Compliance Certification.** Not later than 90 days after completion of the authorized work, the Licensee shall prepare and submit to the Commissioner the attached Compliance Certification Form. Such Compliance Certification shall be completed, signed, and sealed by the Licensee and a Connecticut Licensed Design Professional. If non-compliance is indicated on the form, or the Commissioner has reason to believe the activities and/or structures were conducted in non-compliance with the license, the Commissioner may require the Licensee to submit as-built plans as a condition of this license.
- 17. Maintenance.** The Licensee shall maintain all authorized structures or work in optimal condition or shall remove such structures or facility and restore the affected waters to their pre-work condition. Any such maintenance or removal activity shall be conducted in accordance with applicable law and any additional approvals required by law.
- 18. No Work After License Expiration.** Work conducted after the license expiration date is a violation of the license and may subject the licensee to enforcement action, including penalties, as provided by law.
- 19. License Transfer.** The license is not transferable without prior written authorization of the Commissioner. A request to transfer a license shall be submitted in writing and shall describe the proposed transfer and the reason for such transfer. The Licensee's obligations under the license shall not be affected by the passage of title to the license site to any other person or municipality until such time as a transfer is approved by the Commissioner.
- 20. Document Submission.** Any document required to be submitted to the Commissioner under the license or any contact required to be made with the Commissioner shall, unless otherwise specified in writing by the Commissioner, be directed to:

Regulatory Section
Land & Water Resources Division
Department of Energy and Environmental Protection
79 Elm Street
Hartford, Connecticut 06106-5127
860-424-3019
- 21. Date of Document Submission.** The date of submission to the Commissioner of any document required by the license shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under the license, 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 (3) days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in the license, the word "day" as used in the license means calendar day. Any document or action which is required by the license 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.
- 22. Certification of Documents.** Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under the license shall be signed by the Licensee 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."

23. Accuracy of Documentation. In evaluating the application for the license, the Commissioner has relied on information and data provided by the Licensee and on the Licensee's representations concerning site conditions, design specifications and the proposed work, including but not limited to representations concerning the commercial, public or private nature of the work or structures, 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, the license may be modified, suspended or revoked, and any unauthorized activities may be subject to enforcement action.

24. Limits of Liability. In granting the license, the Commissioner has relied on all representations of the Licensee, including information and data provided in support of the Licensee's application. Neither the Licensee's representations nor the issuance of the license shall constitute an assurance by the Commissioner as to the structural integrity, the engineering feasibility or the efficacy of such design.

25. Reporting of Violations. In the event that the Licensee becomes aware that they did not or may not comply, or did not or may not comply on time, with any provision of this license or of any document incorporated into the license, the Licensee shall immediately notify the agency contact specified within the license 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 agency contact, the Licensee shall provide, for the agency's review and written approval, a report including the following information:

- a. the provision(s) of the license that has been violated;
- b. the date and time the violation(s) was first observed and by whom;
- c. the cause of the violation(s), if known;
- d. if the violation(s) has ceased, the duration of the violation(s) and the exact date(s) and times(s) it was corrected;
- e. if the violation(s) has not ceased, the anticipated date when it will be corrected;
- f. steps taken and steps planned to prevent a reoccurrence of the violation(s) and the date(s) such steps were implemented or will be implemented; and
- g. the signatures of the Licensee and of the individual(s) responsible for actually preparing such report.

If the violation occurs outside of normal business hours, the Licensee shall contact the Department of Energy and Environmental Protection Emergency Dispatch at 860-424-3333. The Licensee shall comply with any dates which may be approved in writing by the

Commissioner.

26. **Revocation/Suspension/Modification.** The license may be revoked, suspended, or modified in accordance with applicable law.
27. **Other Required Approvals.** License issuance does not relieve the Licensee of their obligations to obtain any other approvals required by applicable federal, state and local law.
28. **Rights.** The license 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.
29. **Condition Conflicts.** In the case where a project specific special condition listed on the license differs from, or conflicts with, one of the general conditions listed herein, the project specific special condition language shall prevail. It is the licensee's responsibility to contact the agency contact person listed on the license for clarification if needed prior to conducting any further regulated activities.

**Section 401 Water Quality Certification Conditions for Department of the Army (Corps of Engineers)
General Permits for the State of Connecticut**

1. **Rights.** This certificate is subject to and does not derogate any present or future property rights or other 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. This certification does not comprise the permits or approvals as may be required by Chapters 440, 446i, 446j and 446k of the Connecticut General Statutes.
2. **Expiration of Certificate.** The Section 401 Water Quality Certifications contained herein shall be valid until such time as the Department of the Army General Permits for the State of Connecticut expires or is modified, suspended, revoked or reissued.
3. **Compliance with Certificate.** All work and all activities authorized herein conducted by the permittee at the site shall be consistent with the terms and conditions of this certificate. Any regulated activities carried out at the site, including but not limited to, construction of any structure, excavation, fill, obstruction, or encroachment, that are not specifically identified and authorized herein shall constitute a violation of this certificate and may result in its modification, suspension, or revocation. In carrying out the certified discharge(s) authorized herein, the permittee shall not store equipment or construction material, or discharge any material including without limitation, fill, construction materials or debris in any wetland or watercourse on or off site unless specifically authorized by this certificate. Upon initiation of the activities authorized herein, the permittee thereby accepts and agrees to comply with the terms and conditions of this certificate.
4. **Transfer of Certificate.** This authorization is not transferable without the written consent of the Commissioner.
5. **Reliance on Application.** In evaluating the permittee's application, the Commissioner has relied on information provided by the permittee. If such information subsequently proves to be false, deceptive, incomplete or inaccurate, this certificate may be modified, suspended or revoked.
6. **Best Management Practices.** In constructing or maintaining the activities authorized herein, the permittee shall employ best management practices, consistent with the terms and conditions of this certificate, to control storm water discharges and erosion and sedimentation and to prevent pollution. Such practices to be implemented by the permittee at the site include, but are not necessarily limited to:
 - a. Prohibiting dumping of any quantity of oil, chemicals or other deleterious material on the ground;
 - b. Immediately informing the Commissioner's Oil and Chemical Spill Response Division at (860) 424-3338 (24 hours) of any adverse impact or hazard to the environment, including any discharges, spillage, or loss of oil or petroleum or chemical liquids or solids, which occurs or is likely to occur as the direct or indirect result of the activities authorized herein;
 - c. Separating staging areas at the site from the regulated areas by silt fences or straw/hay bales at all times;
 - d. Prohibiting storage of any fuel and refueling of equipment within twenty-five (25) feet from any wetland or watercourse;

- e. Preventing pollution of wetlands and watercourses in accordance with the document "Connecticut Guidelines for Soil Erosion and Sediment Control" as revised. Said controls shall be inspected by the permittee for deficiencies at least once per week and immediately after each rainfall and at least daily during prolonged rainfall. The permittee shall correct any such deficiencies within 48 hours of said deficiencies being found;
- f. Stabilizing disturbed soils in a timely fashion to minimize erosion. If a grading operation at the site will be suspended for a period of thirty (30) or more consecutive days, the permittee shall, within the first seven (7) days of that suspension period, accomplish seeding and mulching or take such other appropriate measures to stabilize the soil involved in such grading operation. Within seven (7) days after establishing final grade in any grading operation at the site the permittee shall seed and mulch the soil involved in such grading operation or take such other appropriate measures to stabilize such soil until seeding and mulching can be accomplished.
- g. Prohibiting the storage of any materials at the site which are buoyant, hazardous, flammable, explosive, soluble, expansive, radioactive, or which could in the event of a flood be injurious to human, animal or plant life, below the elevation of the five hundred (500) year flood. Any other material or equipment stored at the site below said elevation by the permittee or the permittee's contractor must be firmly anchored, restrained or enclosed to prevent flotation. The quantity of fuel stored below such elevation for equipment used at the site shall not exceed the quantity of fuel that is expected to be used by such equipment in one day.
- h. Immediately informing the Commissioner's Inland Water Resources Division at (860) 424-3019 and the U.S. Army Corps of Engineers at (978) 318-8879, of the occurrence of pollution or other environmental damage resulting from construction or maintenance of the authorized activity or any construction associated therewith in violation of this certificate. The permittee shall, no later than 48 hours after the permittee learns of a violation of this certificate, report same in writing to the Commissioner. Such report shall contain the following information:
 - (i) the provision(s) of this certificate that has been violated;
 - (ii) the date and time the violation(s) was first observed and by whom;
 - (iii) the cause of the violation(s), if known
 - (iv) if the violation(s) has ceased, the duration of the violation(s) and the exact date(s) and times(s) it was corrected;
 - (v) if the violation(s) has not ceased, the anticipated date when it will be corrected;
 - (vi) steps taken and steps planned to prevent a reoccurrence of the violation(s) and the date(s) such steps were implemented or will be implemented;
 - (vii) the signatures of the permittee and of the individual(s) responsible for actually preparing such report, each of whom shall certify said report in accordance with condition 7 of this certificate.

For information and technical assistance, contact the DEEP Land and Water Resources Division at (860) 424-3019.

7. Unconfined Instream Work; Installation and Removal of Confining Structures.

- Unconfined instream work is limited to the period June 1 through September 30.
- Confinement of a work area by cofferdam techniques using sand bag placement, sheet pile installation (vibratory method only), portadam, or similar confinement devices is allowed any time of the year unless specifically prohibited by a permit condition.

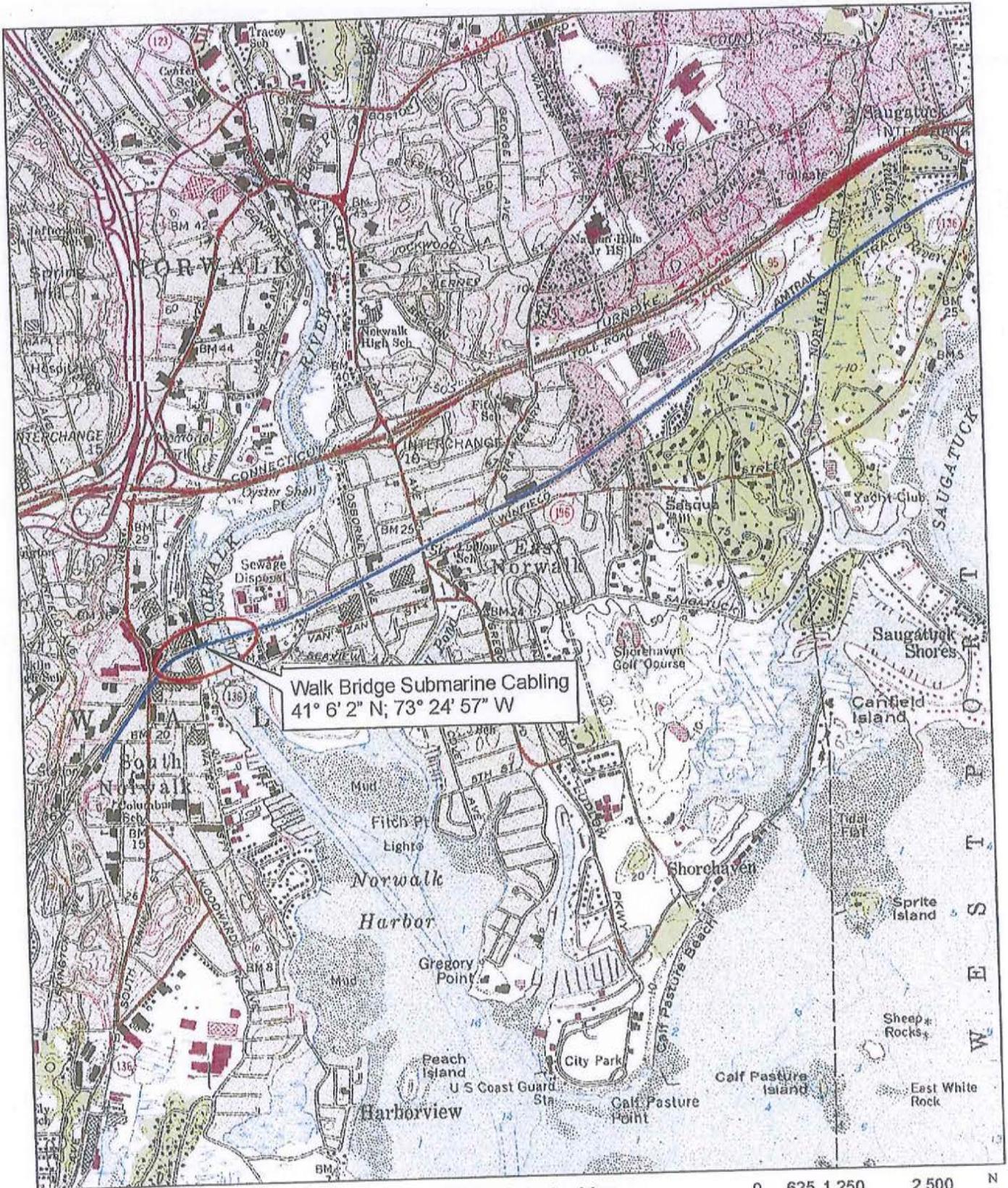
- The removal of such confinement devices is allowed any time of the year unless specifically prohibited by a permit condition.
 - The confinement technique used shall completely isolate and protect the confined area from all flowing water. The use of silt boom/curtain or similar technique as a means for confinement is prohibited.
 - Once a work area has been confined, in-water work within the confined area is allowed any time of the year.
8. **Certification of Documents.** Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this certificate shall be signed by the permittee, a responsible corporate officer of the permittee, a general partner of the permittee, or a duly authorized representative of 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 in accordance with Section 22a-6 under Section 53a-157 of the Connecticut General Statutes."

9. **Submission of Documents.** The date of submission to the Commissioner of any document required by this certificate shall be the date such document is received by the Commissioner. Except as otherwise specified in this certificate, the word "day" as used in this certificate means the calendar day. Any document or action which falls on a Saturday, Sunday, or legal holiday shall be submitted or performed by the next business day thereafter.

Any document or notice required to be submitted to the Commissioner under this certificate shall, unless otherwise specified in writing by the Commissioner, be directed to:

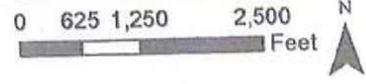
Director, Land and Water Resources Division
Bureau of Water Protection and Land Reuse
Department of Environmental Protection
79 Elm Street
Hartford, Connecticut 06106-5127

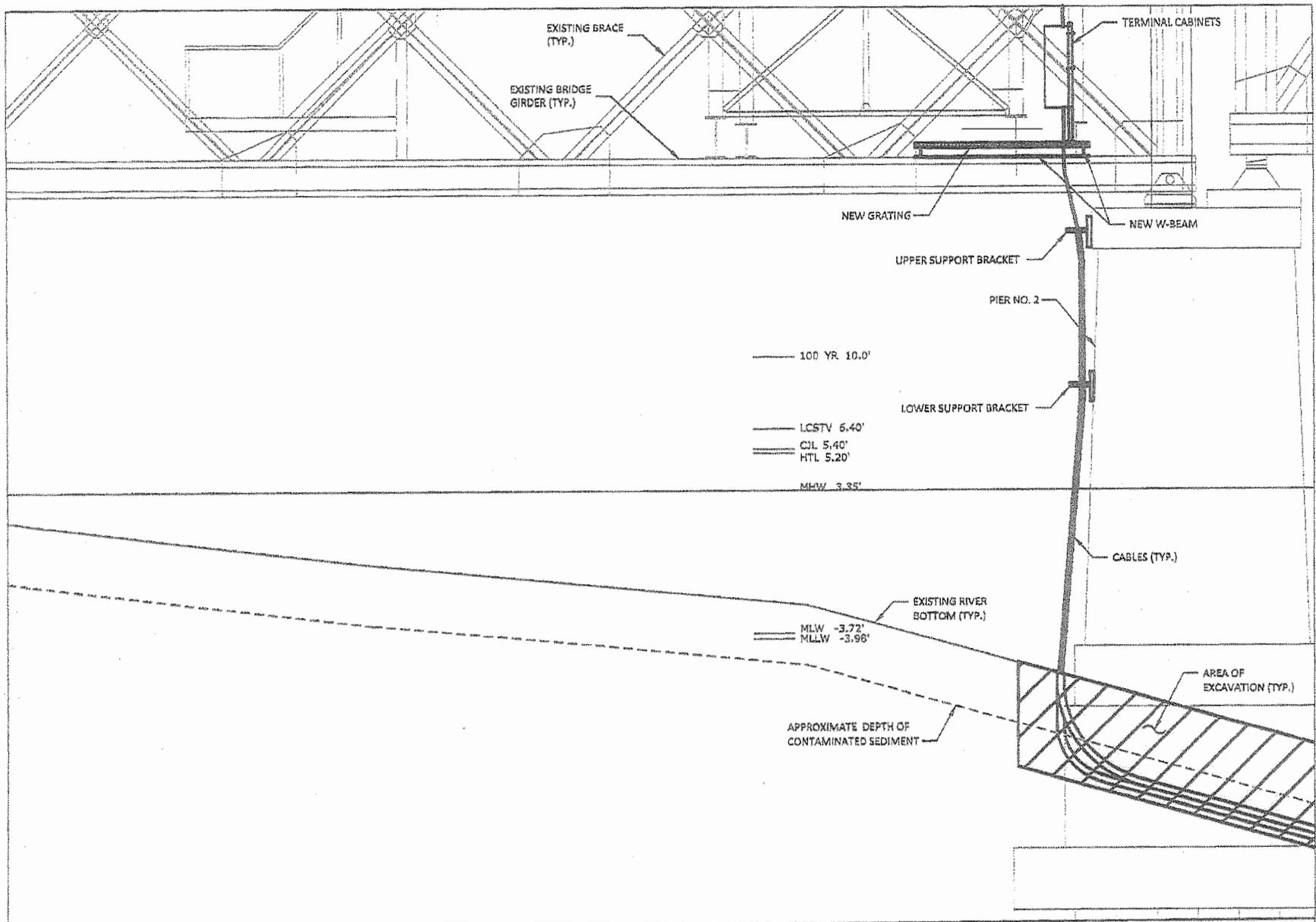


Walk Bridge Submarine Cabling
 41° 6' 2" N; 73° 24' 57" W

Norwalk South Quadrangle
 Connecticut - Fairfield County
 7.5 Minute Series
 41073-A4-TF-024

**CP243 Interlocking
 Norwalk/Westport, Connecticut
 Bridge No. 04288R
 Connecticut Department of Transportation
 Project No. 0301-0181**





TO SOUTH NORWALK STATION

1/2" = 1'-0"

SUBMARINE CABINET DETAIL
WALK BRIDGE LOCATION 1 ELEVATION

TO EAST NORWALK STATION

DESIGNED
DRAWN
CHECKED
APPROVED

NO.	DATE	REVISIONS	DRAWN	CHECK	APPROV	NO.	DATE	REVISIONS	DRAWN	CHECK	APPROV

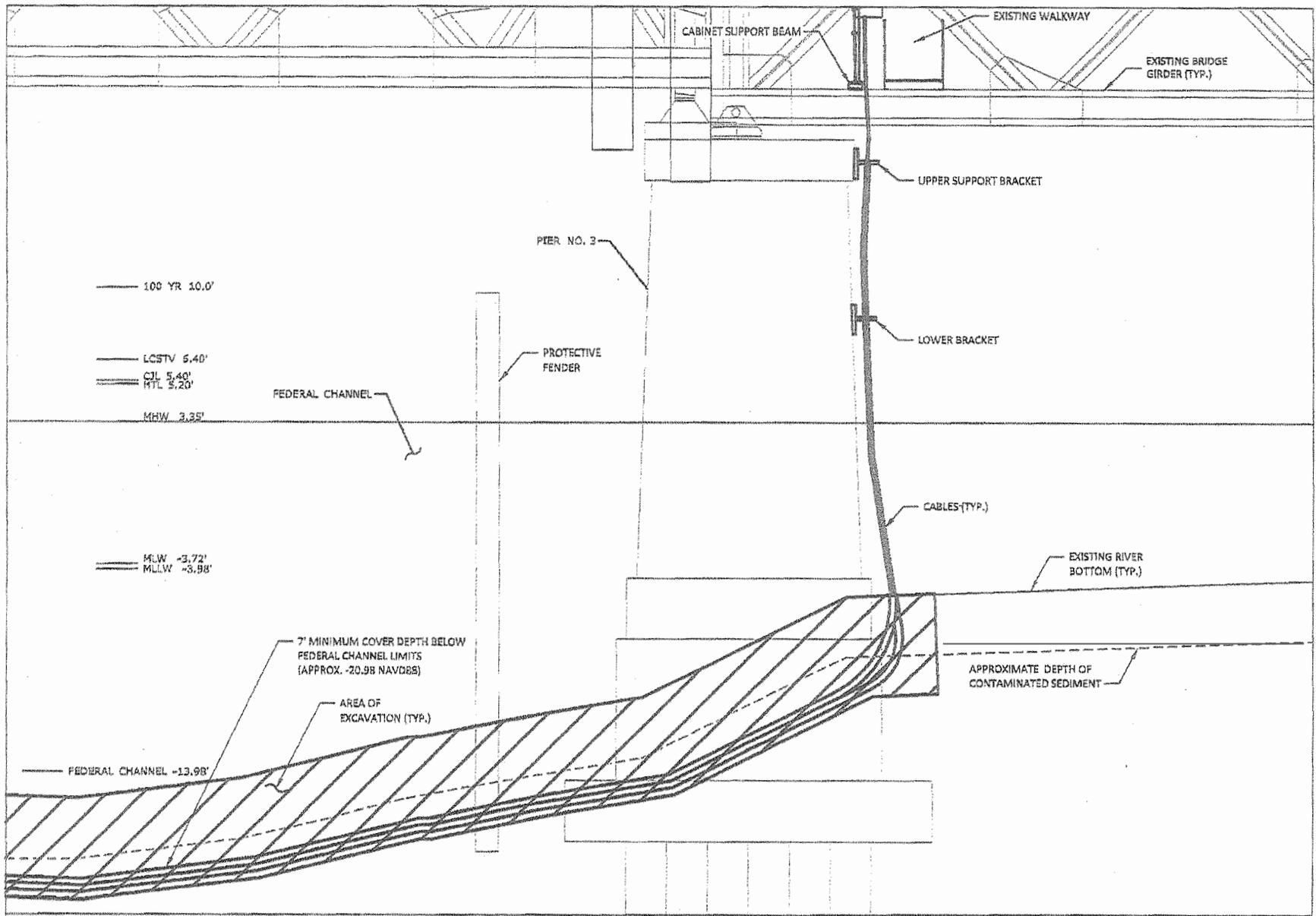
WSP **WSP/CWA**
 WSP CONSULTING
 100 WEST 17TH STREET, 10TH FLOOR
 NEW YORK, NY 10011
 TEL: 212-921-1000
 FAX: 212-921-1001
 WWW.WSPCWA.COM

NYMTC
 ENGINEERS ARCHITECTS PLANNERS

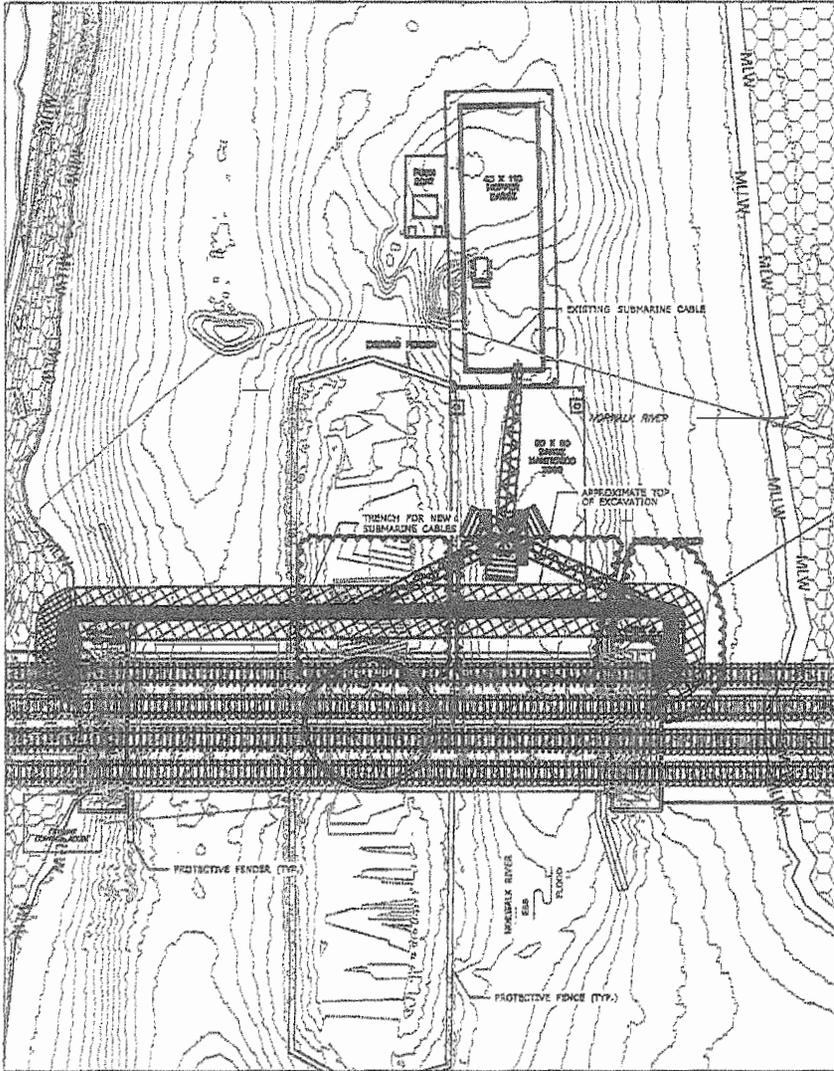
Metro-North Railroad
 347 Madison Avenue
 New York, N.Y. 10017

TITLE
 SUBMARINE CABLE DESIGN
 WALK BRIDGE
 LOCATION 1 ELEVATION

CONTRACT NO.
 SCALE
 DATE 08-08-17
 DRAWING NO.
 2NF-03



TO SOUTH NORWALK STATION		SUBMARINE CABLE DETAIL WALK BRIDGE LOCATION 2 ELEVATION		TO EAST NORWALK STATION																					
DESIGNED																									
DRAWN		GWA Geomatics Planning Transit & Public Systems 100 West 42nd Street, 4th Floor New York, NY 10018 Tel: 212-693-6000 Fax: 212-693-6001		M&T Metro-North Railroad 347 Madison Avenue New York, N.Y. 10017																					
CHECKED		SH&B 134 West 42nd Street, 6th Fl. New York, NY 10018 Tel: 212-693-6000 Fax: 212-693-6001		TITLE SUBMARINE CABLE DESIGN WALK BRIDGE																					
APPROVED		REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>CHKD</th> <th>APPROV</th> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>CHKD</th> <th>APPROV</th> </tr> </thead> <tbody> <tr> <td> </td> </tr> </tbody> </table>		NO.	DATE	BY	CHKD	APPROV	NO.	DATE	BY	CHKD	APPROV											CONTRACT NO. SCALE DATE 05-09-17 DRAWING NO. EHV-07	
NO.	DATE	BY	CHKD	APPROV	NO.	DATE	BY	CHKD	APPROV																



CONSTRUCTION PHASING:

- 5) EXCAVATE USING CLAM BUCKET, DUMP ON HOPPER BARGE TO DEWATER. ADJUST BARGE AND TURBIDITY CURTAIN PLACEMENT AS NEEDED FOR EXCAVATION ACCESS.
- 6) MOVE HOPPER BARGE OFF STATION AND OFFLOAD MATERIAL FOR PROPER DISPOSAL. RELOAD THE BARGE WITH CLEAN BACKFILL.
- 7) MOBILIZE EQUIPMENT TO PLACE CABLES, PLACE CABLES USING DIVERS.
- 8) BACKFILL TRENCH WITH SEDIMENT MIXTURE THAT MEETS CONSISTENCY AND PROPORTIONS OF THAT IDENTIFIED DURING PRE-EXCAVATION SAMPLING.

NOTE:

EXCAVATED MATERIAL WILL BE DISPOSED OF OFF SITE AT AN APPROVED LOCATION.

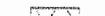
WEST CHANNEL OPEN TO BOAT TRAFFIC WHILE WORK TAKES PLACE IN THE EAST CHANNEL.

KEY

HYDROFLUIDIZATION TECHNIQUE:

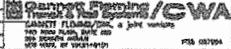
-  TOTAL PERMANENT IMPACT
-  IMPACT TO INTERTIDAL AREA

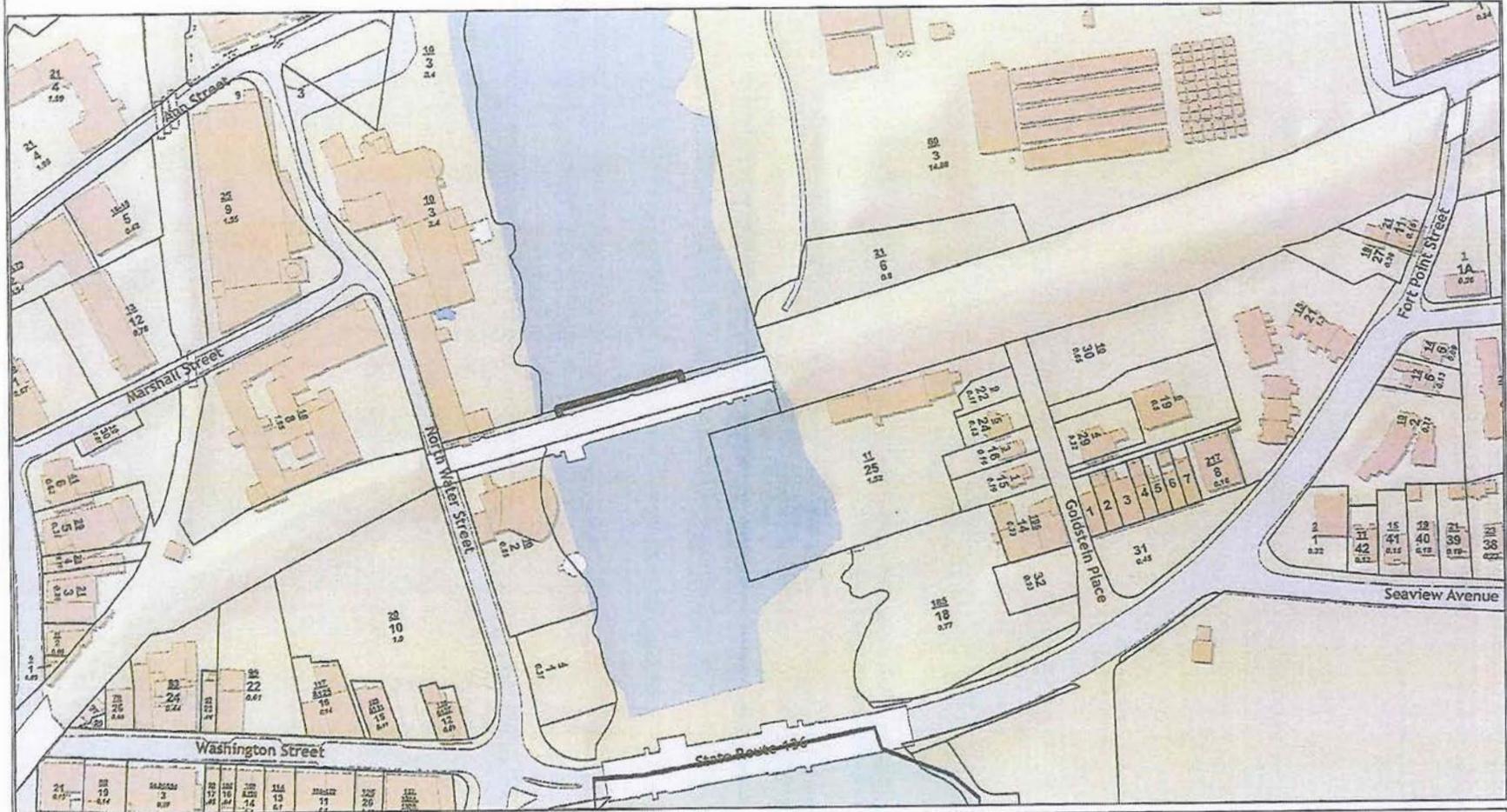
LEGEND:

-  100-YEAR FLOODPLAIN
-  CT COASTAL JURISDICTION LINE
-  HIGH TIDE LINE
-  MEAN HIGH WATER LINE
-  MEAN LOW WATER LINE
-  MEAN LOWER LOW WATER LINE
-  LAND CAPABLE OF SUPPORTING TIDAL VEGETATION
-  TIDAL WETLAND
-  INTERTIDAL AREA
-  TURBIDITY CURTAIN (TYP.)

TO SOUTH NORWALK STATION EAST CHANNEL PLAN TO EAST NORWALK STATION



DESIGNED	GC									 Gannett Fleming/CSWA 347 Madison Avenue New York, N.Y. 10017 Metro-North Railroad	TITLE	SUBMARINE CABLE DESIGN WALK BRIDGE	CONTRACT NO.	
DRAWN	AM										SCALE	DATE	05-09-17	
CHECKED	DE										DRAWING NO.	EN-09		
APPROVED											BARGE STAGING AND SEQUENCE 2 - HYDROFLUIDIZATION METHOD			
		REV. 1	DATE								REVISIONS			



Submarine Cable Crossing Tax Map



DESIGNED									
DRAWN									
CHECKED									
APPROVED									
	NO.	DATE	DRWN	CHGD	APPROV	NO.	DATE	DRWN	CHGD

Garrett Fleming / CWA
 CIVIL ENGINEERING & SURVEYING
 100 MAIN ST., SUITE 200
 NORFOLK, VA 23510-1000
 PH: 757-622-1100

HNTB
 ENGINEERS ARCHITECTS PLANNERS
 1344 BIRN BEACH DRIVE, SUITE 107
 NORFOLK, VA 23510-1000
 PH: 757-622-1100

MNR Metro-North Railroad
 347 Madison Avenue
 New York, N.Y. 10017

TITLE
**SUBMARINE CABLE DESIGN
 WALK BRIDGE
 PARCEL MAP**

CONTRACT NO.
 SCALE DATE 06-09-17
 DRAWING NO. ENV-13



Mitchell E. Mailman

Mr. Mailman has been the General Manager of Electric Lines Division of Welsbach Electric, since 1990. During that time, crews under his auspices have logged hundreds of thousands of man hours, working for over fifty utilities and municipal electric entities, in twenty states, all without a fatality or catastrophic injury. They have completed projects at both transmission and distribution voltages; building substations and generation facilities; running circuits: overhead, underground and underwater. A Journeyman Lineman for over forty years, and a certified cable splicer up through 345 Kv. He also holds multiple Bachelor and Master's degrees from Columbia University, which he attended for eight years. He is a Professional Engineer and Licensed Architect.

In addition to be hired by utility concerns, the Electric Lines Division has worked for manufacturers, acting as their in house installation arm for "turnkey" projects where they have been engaged to "furnish and install." On transmission cable installation jobs, these have included, Okonite, Kerite, Brugg; for electrical equipment projects, Southern States, Areva, S&C, Haefely Trench, ABB. He regularly is contacted by utilities in the planning and design stages of projects for expertise in construction feasibility and to devise implementation strategies. He has vast experience working on installations in environmentally sensitive areas and is fully conversant with the unique requirements of the US Army Corps of Engineers. He has experience working within major metropolitan areas such as New York, Boston, Washington DC, and Pittsburgh.

Mr. Mailman maintains a strong relationship with executives at the National Electrical Contractors Association and the International Brotherhood of Electrical Workers. He is a Director of the Northeastern Line Constructors Chapter of NECA, presides over the NEAT Apprenticeship Committee for the State of New Jersey and the same entity for IBEW Local 3 in New York City. He has twice chaired the joint Steering Committee of the IBEW and NECA responsible for the drafting of the "Safety Rules for the Outside Electrical Industry."

During his tenure, the Electric Lines Division has undertaken several large scale and highly complex substation projects. They expanded the 345 Kv, Sprain Brook Substation belonging to Con Edison, installing the largest Series Reactors ever manufactured. To prevent a shortage of available electrical capacity, the New York Power Authority, built five gas turbine generation facilities within four of the five boroughs of New York City requiring the construction of five 13 Kv to 138 Kv substations, as well as the expansion of Con Edison's Fox Hills, Gowanus, Hell Gate and Ravenswood substations, all in a five month period. He has overseen the installation of GIS equipment up through 345 Kv in substations belonging to the New York Power Authority, Rochester Gas and Electric, and Con Edison.

He is adroit at interfacing with utilities on substation projects where they are the approval body, though not necessarily the contracting entity. For the municipal electric company in Milltown, New Jersey, he oversaw Welsbach's design and construction building of a new 34.5 to 13 kv Substation, on the Public Service Electric and Gas system. For the Village of Freeport, Welsbach completed a "design/build" of their municipal 69 kv to 13 Kv substation, on the Long Island Power Authority's network that also included a three mile, 69 solid dielectric feeder.

The Welsbach Electric Lines Division is one of only a few electrical contractors in America who install and maintain pipe type cables and fluid filled feeders. As the prime contractor, they have placed new circuits beneath the streets of New York City, Boston and Pittsburgh for Con Edison, NStar, and Duquesne Light. They have worked on similar projects for Orange & Rockland, Florida Power and Light, the New York Power Authority, New York State Electric and Gas, Public Service Electric and Gas, Entergy, Long Island Lighting Company. They have also installed hundreds of circuit miles of solid dielectric, underground transmission cables within the territories of Atlantic City Electric, PPL, Con Edison, Rochester Gas and Electric, PEPco, New York Power Authority.



111-01 14TH Avenue, P.O. Box 560252, College Point, NY 11356-0252 (718) 670-7900

March 26, 2018

Dr. John Pinto
Chairman, Application Review Committee
Norwalk Harbor Management Commission
City Hall
125 East Avenue
Norwalk, Connecticut 06856

**Subject: Proposal by Eversource Energy to relocate electric transmission lines under
Norwalk Harbor**

Dear Dr. Pinto,

At your request, I have carefully reviewed the various drawings you forwarded me describing a project Eversource is contemplating. It involves undergrounding a section of their 115 Kv overhead transmission feeders that presently occupy the Metro North Right of Way in Norwalk. This would be a permanent reroute, only brought about by the eventual replacement of the Railroad Bridge over the Norwalk River.

A feature of this design is the directional drilling of two, thirty inch casings beneath the Norwalk River, to the south of the existing vehicle/pedestrian bridge on Washington Street. Within these two casings would be individual conduits that would house solid dielectric cables. Essentially what is being created is an underground "dip".

At some point, west of the Railroad Bridge (near Elizabeth Street), the overhead circuits would transition onto a set of tall, tubular steel poles, known as "riser" or "transition" structures. These must be fitted out with terminations for the underground cables, along with lightning arresters to protect the underground cables. Although there are numerous design options as to how this can be accomplished, none of them are particularly aesthetically attractive. The existing overhead wires from the current structures are terminated, or in engineering parlance, "dead-ended" on the poles. Similarly, the underground cables emerge from being buried underground and are mounted to the poles as they extend vertically upward. The overhead wires are then connected to the underground cables by means of short sections of wire, called "taps".

Another set of riser structures would be needed somewhere to the east of the Railroad Bridge (near Fort Point Street) to bring the new sections of underground cable back up vertically to connect to the existing overhead wires. Once both new riser structures would be completed, the existing overhead wires between the structures would be rendered superfluous and could come down.

Since overhead transmission wires are not insulated, thus the significant air space between each of the various wires, they can be very thin relative to the amount of electricity they can carry. Not so, underground wires. These must be significantly thicker, owing to their being

insulated. (An overhead wire that may be 1.302 inches in overall diameter (1192.5 kc mil, ACSR, "Bunting"), would be equivalent in ampacity to a 4-inch diameter, 2000 kc mil, cross linked polyethylene insulated, underground feeder.) Of course, the insulation of the underground cable allows it to be buried underground safely and allows these cables to be positioned in close proximity one to the other.

Underground cables are negatively impacted by heat. As any cable carries electricity it gets hot. The hotter a cable, the less efficiently it operates. In any underground cable system, the designer's task is to devise means by which the heat can be dissipated off the cable and shed onto the surrounding subterranean environment. While this is achievable, it is vastly more complex with two sets of feeders. Whereas the individual cables of one circuit can be placed close together, there has to be significant space between each feeder when there are two or more sets of feeders. In this case, there are indeed two sets of feeders.

Physically placing transmission cables underground is a not very complex operation. A set of pipes are run prescribed distances between manholes. The manholes are where the various sections of cable are spliced together. Considering the overall diameter of underground cable and its weight, a typical 4-inch cross linked polyethylene insulated cable may weigh as much as twelve pounds per foot; there are, therefore, manufacturing, shipping and installation concerns relative to the cable that will dictate the spacing between manholes.

For cables of the nature needed for this project, the typical spacing is about 1800 feet, though stretches up to 2500+ feet are conceivable. The more bends in the route of the piping, both in the horizontal and vertical planes, the shorter the permissible spacing between splicing vaults.

When cables are run through streets, burying the pipes beneath the ground is not difficult. Common techniques applied to the construction of water mains, gas mains, communication ductbanks, and other buried electrical facilities are employed. These primarily are "open cut" excavations; where a piece of excavating equipment merely digs through the pavement and earth to create a trench. Once the piping is placed in the trench, the earth gets put back in the trench, "backfilled," and the work progresses. When the pipe and manholes have been installed, the cable can be pulled into the ducts.

Crossing a body of water requires entirely different construction methodologies. For many years, cables, be them electrical or communications, were simply placed on the bottom of the seabed, lake, river or whatever the body of water was. This did not afford the cables much mechanical protection. Cables were repeatedly damaged by anchors, dredging, shellfish gathering operations, and often were left "hanging in midair" if the contours of the sea bottom changed owing to tidal forces.

The next iteration of underwater cable crossings featured burying the facilities. In very rare instances, excavating equipment mounted on floating barges dug a trench through the water into the seabed into which the cables were then placed. A version of this technique involved building parallel cofferdams to hold back the water. The material in between the cofferdams would be removed and the cables or pipes are then able to be placed and backfilled, much like if this was on land.

Another common means of "burying" underwater cables involves "plowing" the cable under the bottom. Instead of digging a furrow, a plow, using water jets, can neatly dislodge the seabed to create a trench into which the cable could be set right after the slit was created in the sea floor. This also ensures that there would be material covering the cable to act as protection from mechanical hazards.

Plowing can reach formidable depths but poses difficulties for short water crossings. It entails sufficiently large equipment, tug boats and barges, which cannot operate in shallow waters. Furthermore, like the excavation methods, it has proved to be very harmful to marine biology owing to the disruption it causes to the sea floor and the turbidity it produces.

The current, most preferable, means of traversing a body of water with a pipe or cable involves some form of "trenchless technology", most commonly directional drilling. For longer crossings, those in excess of a mile, plowing remains the preferred technique. Virtually every shorter crossing today now employs, horizontal directional drilling. Since all the work can be accomplished from both shores, there is no need for deep draft vessels and barges. The pipes and/or cables can be drilled very deeply, so as to almost eliminate the risk of them being damaged once installed. If managed properly, the underground drilling activities have virtually no impact on marine life or water quality.

The terminology, "Directional Boring" and "Horizontal Directional Drilling" are used synonymously. Directional Boring is usually reserved for smaller diameter drills. For this project, the proposed drill is of the larger diameter category, exceeding 30 inches.

The technology is not very different from what is employed to drill oil wells. Oil well drilling involves vertical drilling; thus the tall, upright, steel structures whose purpose is to support the extensions attached to the drill head. Empirically, if you took an oil drilling rig and placed it on its side, you would be able to drill horizontally. That is not precisely what is done, however, the concept of directional drilling is just that.

Prior to commencing the drilling operation, there needs to be two large pits constructed at either end of the prescribed drill; one is the "launching pit", the other is the "receiving pit". The drill progresses from the launching pit to the receiving pit. These pits are substantially large in area and quite deep as well. Their main purposes are to provide an entry point (or exit point) for the drill head and to contain the "drilling mud". No differently than in the drilling of a deep oil well, the action of the drill head, owing to friction, gets quite hot, particularly when penetrating rock. The drill mud, lubricates and cools the head.

The drill head is always larger in diameter than the "drill steel"—the rods that are continuously spliced together to rotate the drill head from the "drill motor" which is on the drill rig, positioned near the drill hole. The drill mud is a slurry, usually composed of water and bentonite. In addition to lubricating and cooling the drill head, this slurry stabilizes the drilled hole. It "lines" the hole, keeping it from collapsing on the drill steel once the drill head advances.

Copious amounts of drill mud are required for any drill. It is constantly pumped into the drill hole. It is present in the launch pit all during the drilling. The "tailings", or the byproduct of the drilling, (sawdust, if one was drilling wood), get mixed in with the slurry. The slurry from the drill head eventually works its way back into the launch pit where it is "recycled" for reuse, by having the tailings removed.

The need for this drill mud is the greatest single environmental concern associated with directional drilling. It is a highly dense, chalky substance and one that readily becomes mixed with the petroleum-based lubricants employed with the various drilling components. Very often it is not properly controlled and spills well beyond the launch pit. It also has leached out subterraneously through the pit walls and bottoms. There are also numerous instances where underground estuaries or abandoned conduits have crossed the path of the drilled hole, or been adjacent to it, and the mud has found its way into these, which in turn has carried the mud substantial distances from the drilling location. Even the most carefully monitored projects cannot ameliorate the mess that accompanies the drilling mud, especially during the reaming procedure.

Horizontal Directional Drilling is a three-step process once the pits are constructed and the drill rig placed. Customarily it is a continuous operation, running around the clock, out of a fear that the drilled hole may collapse during a lull. Initially, a small diameter pilot hole is drilled from the launching pit to the receiving pit. Once the drill head emerges into the receiving pit, it is removed and replaced with a "reaming head". Whereas the drill head was "pushed" across to the other side of the crossing, the reaming head is "pulled" back to the drill rig situated by the launching pit. The reamer enlarges the pilot hole. Attached to the reaming head as it is retracted back to the drill rig are more lengths of drill steel. That way, there is a continuous "ribbon" from pit to pit.

For this particular project, the "casing", which is the pipe that is going to be placed within the final reamed out bore, is 30 inches in diameter. Depending on the wall thickness of the pipe, its overall outside diameter can vary. It will be necessary to ream a hole which is several inches larger than the pipe's overall diameter. This helps reduce the friction of the pipe coming in contact with the side walls of the reamed hole as it is pulled back and can "smooth out" some minor deviations in the routing of the drill.

Once the reaming has been completed, the casing pipe can be "pulled back" to the drill rig, in the same fashion the reamer was, employing the steel that had been attached to the reamer at the receiving pit. As measured orthographically, the length of the proposed crossing here is about 900 feet. A safe rule of thumb is to add between 2 and 5 percent to the orthographic distance to account for the parabolic configuration of the drill, to figure how long the actual length of the casing will be.

Before the casing can be "pulled back", it needs to be spliced together to form its total length. Most often, casings feature High Density Polyethylene pipe, (HDPE). The lengths are joined together by "heat fusion". The respective ends of the pipe are heated until they become molten and then they are forced together under great pressure and allowed to cool. This fusion will go on successively until the entire desired length is assembled. Very often the deciding factor as to

which side of the crossing becomes the "receiving" end, is whether or not there exists an ample stretch to lay out the entire run of casing. For this drill, Eversource proposed to assemble the pipe on the eastern shore of the river.

Horizontal Directional Drilling is constantly being perfected. Lengths and diameters of crossings have been increasing steadily. The pullback and thrust forces of drill rigs are now measurable in the millions of pounds. However, it remains by no means an "exact science." In order to properly direct the drill head, its exact location has to be known at all times. Data from its underground location, which in this case would be underwater as well, has to be received by the drill rig to allow the rig to exert the proper force directionally to keep the drill head on the predetermined course.

Many factors impact the ability of the drill rig to guide the drill. Data transmission is but one. The soil strata is another determinant. Encountering voids in the strata potentially creates deviations. Buried obstructions, including cobbles, rip rap, and buried debris) also pose problems for the drill head to navigate through while remaining "on course". Some drills cannot penetrate schists and other dense rocks. It is impossible for any driller to "guarantee" the precise path of the final bore. Deviations will vary. A drill within three feet of the desired exit point is deemed to be "spot on".

Just as the drill route cannot be assured to follow its prescribed path, the accuracy of the subterranean location of the casing once it is placed cannot be considered to be 100% accurate. Again, the data used to "locate" the bored hole can be impacted as it is transmitted. We have on several occasions needed to locate a cable that had been installed by directional drilling and failed to find it using the "as built" data we were furnished. In one instance we found the circuit a lateral distance of twelve feet from where it was "shown" to be.

After the casing is installed, the smaller diameter "inner ducts" need to be placed within the larger pipe. For this project, it will be within these smaller ducts that the eventual electrical cables will be placed.

While I am convinced that horizontal directional drilling is a viable means to install conduits and cables beneath bodies of water, I feel the present design, as depicted on a drawing bearing the title block, "Darien-Fitch and Sono-Sherwood 115 Kv Transmission Lines 1028 and 1146 HDD Plan and Profile" and labeled "Dwg. No. 01191-10005 PG 1", is very much, ill conceived.

Since 1990, I have been the General Manager of an entity that constructs and maintains facilities for electric utilities. This includes distribution and transmission circuits, substations and generation facilities. During that tenure, we have worked for fifty power concerns, located in twenty states. While we are highly skilled at building overhead lines, we are renowned for our work on underground and underwater, transmission circuits. This includes both solid dielectric feeders and pipe-type cable feeders.

Presently, we are working on a 4000+ foot crossing of the Mississippi River at Belle Chasse, Louisiana; near New Orleans. We have installed submarine feeders across the Great South Bay to Fire Island National Seashore on Long Island; beneath Barnagat Bay to power Long Beach

Island, New Jersey; underneath The Race to power Plum Island from Long Island; crossed underneath the East River to connect Rikers Island to Queens in New York City; among other installations. We have worked on Circuits Y-49 and Y-50, which go underneath Long Island Sound from New Rochelle to Sands Point, connecting Westchester County to Nassau County, both in New York; and feeders 1385 A and 1385 B which was a link between Norwalk, Connecticut and Suffolk County, New York, also beneath Long Island Sound. We have installed submarine crossings across the Intercoastal Waterway in numerous spots. We are currently working with Florida Power and Light to locate a leak in a high pressure, gas filled, pipe-type cable that feeds Cape Canaveral and the Kennedy Space Center beneath the Indian River. In December 2017; we completed the installation of a new segment of 345 Kv submarine cable run below the bottom of the Hudson River, between Edgewater, New Jersey and West 52nd Street in Manhattan.

I am highly regarded among underground transmission cable manufacturers and designers, and utility engineers, as being one of the pre-eminent authorities on constructability and implementation, for all types of buried and submarine cable systems.

The problem of this Eversource design, as I perceive it, has to do with the location of the route. It is shown as going through an active public dock and boat launching facility which, we understand, is intended not only to serve local boaters, but also visitors to city attractions such as the Maritime Aquarium and SONO area. Docks are held in place with pilings, be they steel, wood or concrete. These get driven vertically by pile-driving equipment into the seabed. Attempting to drill the new pipe casings and thread them horizontally between pilings that now are under construction and will be in place at the time of the Eversource project is an iffy proposition.

While it is possible that someone may get lucky and be able to stay close to the desired route skirting these pilings, my greatest concern deals with the future. Having the new underground 115 Kv feeders running beneath the docks will clearly limit any expansion or modification to the facility in the future. It will be virtually impossible to drive new pilings anywhere within fifteen feet of what will be the presumed location of the new feeders. The utility would simply not permit such an encroachment on the undisturbed area they would demand to protect their asset.

Even if a rearrangement of the dock configuration is not contemplated for the currently foreseeable future, pilings deteriorate and require replacement, storms dislodge them and they need to be reinforced with new pilings. I, for one, cannot recall ever seeing a buried electric line that was routed underneath any existing facility, either on land, or underwater. Surely, in streets, lines crisscross existing utilities and go under storm water culverts; but this would be akin to routing a new feeder beneath the existing basement of someone's home.

Which begs the obvious questions, "Why even attempt this?" and, "Is there no other option?"

Horizontal Directional Drilling is a highly specialized and expensive undertaking. In New Jersey, we recently completed two "underbridge" crossings, each linking two land masses separated by water. We did not opt to drill. To get across the Atlantic City inlet and to feed Brigantine Island,

we installed fiberglass conduits beneath the Brigantine Bridge, a combination causeway and fixed span bridge. We did essentially the same thing on the Long Beach Island Bridge, connecting Shipbottom to Manahawkin. What differentiates those situations from the Washington Street Bridge is that those bridges are inoperable.

There are overhead crossings of estuaries. Maybe one of the longest is across the Hudson River outside of the Indian Point Power Plant in Buchanan, New York. Those 345 Kv lines extend almost four hundred feet above the river, between Buchanan in Westchester County and Stony Point in Rockland County. Each of the towers on the edge of the shores are 600 feet tall.

To reroute these lines away from the Railroad Bridge over the Norwalk River employing overhead feeders would require new steel poles to be set along fairly narrow and active streets. While this may seem undesirable aesthetically, it is done throughout New Orleans, including in the French Quarter and the historic Garden District.

It seems as if the route of the underground of these proposed underground/underwater feeders was chosen simply because it is fairly straight and aligns in an uncomplicated fashion with the present overhead lines. As stated earlier, bends in a ductbank configuration directly impact the installation of the cable. A phenomenon known as "sidewall pressure" must be addressed. As a cable negotiates any bend, it becomes forced up against the inside radius of the bend. This force is in a direction perpendicular to the cable and if too great can crush the cable insulation. The sharper a bend, the more force is generated on the cable. The closer a bend is to end of a cable pull, the greater the "sidewall pressure".

Employing larger diameter bends can mitigate "sidewall pressures". Historically, the minimum bending radius for this type of solid dielectric cable would be 12 times the outside diameter of one of the single cables. Standard bends for a duct bank for this cable would feature 48-inch radii bends, but bends with radii in the hundreds of feet are readily achievable and very commonplace in every underground transmission cable installation.

Bends in a conduit run also will impact the overall pulling tension; in other words, how much tension can be put on the cable while it is being pulled in. For circuits such as this one, only a single cable is installed in one pipe. To complete the feeder, one pulls three cables, in three, separate pipes. The larger the overall diameter of the conductor (the current carrying component of the cable, often copper, as opposed to the insulation), the more tension it is allowed to have imparted in it. The conductor sizing for this project is unlikely to be less than 2500 kc mil and may more likely be 3500 kc mil. A 3500 kc mil conductor can be pulled in tension upwards to 28,000 pounds, whereas the smaller 2500 kc mil conductor can be tensioned to 20,000. It is highly unlikely those ultimate pulling tension limits would preclude introducing any series of horizontal or vertical bends into any cable route involving these cables.

We believe it is both prudent and practical to reorient the proposed route of the underground cable beginning at the western shore of the Norwalk River. There is ample landing area along the eastern shore of the river to employ Horizontal Directional Drilling in order to cross the river and in no way impact the public dock and boating facility. Clearly this would necessitate

routing the crossings to the south to keep them away from the public facilities. Doing so, would introduce a new bend, or sets of bends, within the park to have the ducts get back to Fort Point Street. That might necessitate an additional splice vault, but it would leave the city's public dock and boating facility thoroughly unencumbered both permanently and during construction.

On face, this seems to be one of many possible new routes across the river, but the one that makes the most use of the existing design. Another possibility is to come down Elizabeth Street as is currently shown, but to run north on Water Street toward the Washington Street Bridge and then head across the river slightly south of the bridge. But while the drills might miss the public boating facility on the east bank of the river, there is a marina directly in the vicinity on the western bank. There is the possibility of crossing the river just to the north of the Washington Street Bridge and coming up in Constitution Park. This would then allow the new ducts to reunite with the existing overhead lines via Goldstein Place, or continue along Fort Point Street as presently depicted.

We recognize the pressing need to remove the current 115 Kv overhead lines from the existing railroad bridge crossing the Norwalk River, however, we cannot endorse the current route of the replacement underground feeders. The design is impractical in its thinking that Horizontal Directional Drilling can be accurate to within the tolerances it is showing, and moreover, it is irresponsible in limiting in perpetuity the functionality of a vital resource to the City of Norwalk—that being its principal public dock and boating facility. Even if there existed no plausible alternative to the current design, to which we feel strongly there are many, we would label the current design, "short sighted" and likely the result of an ill-conceived, hasty effort.

Thank you for the opportunity to assist the Harbor Management Commission. I trust that the foregoing analysis will be helpful. Please let me know if you have any questions or wish to discuss this matter further.

Sincerely,

A handwritten signature in cursive script that reads "Mitchell Mailman".

Mitchell Mailman

COMMISSIONER (name of Commissioner) MOVED TO APPROVE THE MINUTES OF (date of meeting) SPECIAL JOINT COMMISSION MEETING.

OR

COMMISSIONER (name of Commissioner) MOVED TO APPROVE THE MINUTES OF (date of meeting) SPECIAL JOINT COMMISSION MEETING AS CORRECTED.

DRAFT

THIRD TAXING DISTRICT
of the City of Norwalk
Special Commission Meeting
April 9, 2018

ATTENDANCE: Commissioners: David Brown, Chair; Debora Goldstein (arrived 7:33pm);
Pamela Parkington; Johnnie Mae Weldon, Treasurer

STAFF: Kevin Barber, General Manager; Ron Scofield, Assistant General

OTHERS: Matt Allred (Bliss Allred & Co.)

CALL TO ORDER

Commissioner Brown called the meeting to order at 7:05 p.m. A quorum was present.

PUBLIC COMMENT

No one from the public was in attendance to comment.

MINUTES OF MEETING

March 2, 2018 Special Meeting

**** COMMISSIONER PARKINGTON MOVED TO APPROVE THE MINUTES OF MARCH 2, 2018 SPECIAL COMMISSION MEETING.**
**** COMMISSIONER BROWN SECONDED.**
**** THE MOTION PASSED UNANIMOUSLY.**

March 5, 2018 Regular Meeting

Commissioner Brown asked that Mr. Johnson's comments be added to the item "Rowan Street Building Bids."

**** COMMISSIONER BROWN MOVED TO APPROVE THE MINUTES OF MARCH 5, 2018 REGULAR COMMISSION MEETING AS AMENDED.**
**** COMMISSIONER PARKINGTON SECONDED.**
**** THE MOTION PASSED UNANIMOUSLY.**

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of the City of Norwalk
April 9, 2018

DRAFT

March 6, 2018 Emergency Telephonic Meeting

**** COMMISSIONER BROWN MOVED TO APPROVE THE MINUTES OF MARCH 6, 2018 EMERGENCY TELEPHONIC COMMISSION MEETING.**

**** COMMISSIONER PARKINGTON SECONDED.**

**** THE MOTION PASSED UNANIMOUSLY.**

March 29, 2018 Special Joint Meeting

**** COMMISSIONER PARKINGTON MOVED TO TABLE THE MINUTES OF MARCH 29, 2018 SPECIAL JOINT MEETING OF THE THIRD TAXING DISTRICT, NORWALK HARBOR MANAGEMENT AND SHELLFISH COMMISSIONS FOR FURTHER CLARIFICATION FROM COMMISSIONER GOLDSTEIN TO THE APRIL 16, 2018 COMMISSION MEETING.**

**** COMMISSIONER BROWN SECONDED.**

**** THE MOTION PASSED UNANIMOUSLY.**

DISCUSSION/ANALYSIS OF FINANCIAL STATEMENTS/KPI'S

Mr. Allred, the District's Accountant, reviewed the Financial Highlights and Footnotes with the Commission. Net Income was \$1,269,712, an increase of 8% over last year. Net Income Before Rate Stabilization was \$1,211,347, an increase of 15666% over the previous year, which was \$7,682.

Cash Balances continue to be in good shape. Operating Accounts are consistent with the previous months. Capital Improvements Fund is \$1,367,630 which reflects the CMEEC Equity Transfer of approximately \$356,000.

Outstanding Principal Balance with CMEEC continues to decrease. The current balance is \$3,229,981, down \$1,115,602 from July 1, 2016.

KPIs – Mr. Allred reviewed the KPIs with the Commission. All items continue to be in line with the Industry Average.

DISCUSSION OF RATE STABILIZATION FUND AND PCA

Mr. Barber informed the Commission that up until the recent month, the Commission was given a PCA (Power Cost Adjustment) spreadsheet. In the past, staff has talked about reviewing the spreadsheet and doing a deep dive analysis of it to see where TTD stands with the PCA. During Mr. Barber's review, it became apparent that some questions needed to be addressed to provide staff with the guidance needed to recommend changes to the PCA and related rates.

Third Taxing District
of the City of Norwalk
April 9, 2018

DRAFT

There are three questions that need to be honed in on.

- What is the appropriate balance to maintain the Rate Stabilization Fund (RSF)?
- What is the appropriate PCA rate to charge TTD customers?
- What is the appropriate billable rate for CMEEC to charge TTD?

Mr. Barber informed the Commission that he will be presenting one question at a time over the next few Commission meetings due to time constraints.

Mr. Barber explained to the Commission what the RSF is and how it works. It is a fund held at CMEEC, for the purpose of allowing the utility to actively manage their retail rates. He reviewed what can affect the RSF, i.e., monthly power bill, CMEEC member margin, interest and a one-time withdrawal.

Mr. Barber is asking the Commission to consider what would be an appropriate balance for TTD to keep in the RSF. Mr. Barber is recommending a 6-month balance in the RSF. This is also in line with CMEEC's 5-year financial plan. For TTD the target balance would be \$2,750,000 to \$3,000,000. This would provide TTD with approximately 6 months worth of CMEEC power bills in case of extraordinary circumstances.

The current balance in TTD's RSF is \$3,880,386. To achieve the new target balance, the RSF would have to be reduced between \$880,000 and \$1,100,000. There are two options to reduce the RSF balance.

- Adjust the CMEEC billable rate below the forecasted cost of energy. This would reduce the balance over a period of time (12-24 months or longer), depending on the billable rate selected.
- Make a one-time withdrawal of funds. This would reduce the balance immediately.

Mr. Barber does not feel the one-time withdrawal approach is appropriate and is not in alignment with the CMEEC Membership Agreement.

Commissioner Goldstein recommended adding the RSF balance to the KPIs for tracking on a monthly basis.

It is the recommendation of Messrs. Barber and Allred to reduce the RSF on a slow decline over 12-24 months with a target balance of approximately \$3 million.

Third Taxing District
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**** COMMISSIONER GOLDSTEIN MOVED TO ACCEPT THE RECOMMENDATION OF THE GENERAL MANAGER, KEVIN BARBER AND DISTRICT ACCOUNTANT, MATT ALLRED, TO SET A TARGET BALANCE OF THE RATE STABILIZATION FUND BETWEEN \$2,750,000 AND \$3,000,000 AND THAT WOULD BE A METRIC THAT TTD WOULD USE FOR THE CMEEC BILLABLE RATE AND THE PCA IN THE FUTURE.**

**** COMMISSIONER PARKINGTON SECONDED.**

**** THE MOTION PASSED UNANIMOUSLY.**

LINE OF CREDIT RENEWAL

Mr. Barber reviewed the history of the line of credit at Patriot Bank in the amount of \$500,000. It was originally set up for the purpose of having access to funds during the construction of the Fitch Street Substation and Cervalis projects. At that time the former General Manager, Jim Smith, had the ability draw on the line of credit. Since Mr. Smith is no longer employed at TTD, Patriot Bank will not extend the existing line of credit under his name. The bank is requiring a Resolution from TTD's Commission authorizing a new designated employee to extend and access the line of credit, provided the Commission wants to continue to keep the line of credit open.

It is the recommendation of Mr. Barber that the Commission approve the line of credit in the amount of \$500,000 with Patriot Bank and that it be extended to December 1, 2018. This will provide TTD with access to funds in case of extenuating or emergency situations.

**** COMMISSIONER GOLDSTEIN MOVED THAT KEVIN BARBER, GENERAL MANAGER OF THE THIRD TAXING DISTRICT, IS HEREBY AUTHORIZED TO RENEW FOR AND ON BEHALF OF THE DISTRICT A LINE OF CREDIT IN THE SUM OF FIVE HUNDRED THOUSAND DOLLARS (\$500,000), FROM PATRIOT BANK ON THE TERMS SET OUT IN THE TERM REVOLVING PROMISSORY NOTE PREPARED BY PATRIOT BANK AND ATTACHED TO THE MINUTES OF THIS MEETING.**

**** COMMISSIONER PARKINGTON SECONDED.**

**** THE MOTION PASSED UNANIMOUSLY.**

(See Attachment A for Second Promissory Note and Revolving Term Loan Modification Agreement.)

**** COMMISSIONER PARKINGTON MOVED TO FURTHER REQUIRE KEVIN BARBER, GENERAL MANAGER OF THE THIRD TAXING DISTRICT, BEFORE ACCESSING ANY FUNDS FROM THE LINE OF CREDIT, MUST RECEIVE AUTHORIZATION FROM THE COMMISSION AT A DULY CONVENED COMMISSION MEETING.**

**** COMMISSIONER BROWN SECONDED.**

**** THE MOTION PASSED UNANIMOUSLY.**

Third Taxing District
of the City of Norwalk
April 9, 2018

VOTE FOR CHAIRMAN

Commissioner Brown said the vote for a Chairman should come up every two years following an election. Commissioner Goldstein stated that there is nothing written in the Charter indicating this procedure and is a subject matter that would be in ByLaws for Third Taxing District, once they are developed.

Commissioner Goldstein stated that she thought it was unfair to hold this election for Chairman following an election, as the possible new Commissioner has not been able to familiarize themselves with the other Commissioners and because they are too new, probably would not put their own name forward for the position. She believes a more appropriate/fairer time to conduct the vote would be after the Annual Meeting, perhaps in April.

Commissioner Parkington agreed that to have this vote right after the election is too soon, especially if there is a new Commissioner coming on board. Commissioner Parkington believes the vote should take place after the Annual Meeting on an off year.

Mr. Scofield shared some history of when the Vote for Chairman typically took place in the past. He indicated that it did take place at the first Commission meeting following the election. It had to do with the political party. If the Democrats controlled the Commission, there would be a Democratic Chair and the same holds true for Republicans.

Further discussion took place on the subject as to when this vote should take place. Commissioner Parkington asked whether or not a vote would be taken at this meeting and asked if the Commission was open to nominations at this time. Commissioner Brown replied, "yes."

**** COMMISSIONER GOLDSTEIN MOVED TO NOMINATE COMMISSIONER DAVID BROWN TO REMAIN AS CHAIR UNTIL THE NEXT REGULAR ELECTION DAY OR UNTIL THE BYLAWS ARE INSTITUTED AND DULY PASSED.**

**** COMMISSIONER PARKINGTON SECONDED.**

**** THE MOTION PASSED UNANIMOUSLY.**

GENERAL MANAGER'S REPORT

Discussion of Budget Process

Mr. Barber informed the Commission that he and the staff have started work on next year's fiscal budget. He is planning to have a draft of the budget completed by mid to late May. It is Mr. Barber's understanding that the Commission usually approves the budget at the second Commission meeting in June. He asked the Commission if they were open to approving it sooner or keep the schedule as is.

Third Taxing District
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After discussion of the process, the Commission and Mr. Barber thought the best schedule would be to get the budget to the Commission at least one week to ten days prior to the first meeting in June. Mr. Barber will be available to review the budgets individually with the Commissioners. The first meeting in June would be used to review the draft budget and resolve any final questions or problems. Staff would then rectify any issues if needed and present the final budget to the Commission at the second meeting in June for their vote.

Mr. Barber also discussed with the Commission that he is working on changing the format for the Operating and Capital Budgets and explained how it will change. He plans on bringing a more manageable Capital Budget to the Commission with a list of projects that are more realistic and can be completed within the fiscal year instead of an entire “wish list.”

Update on Library Roof Projects

Mr. Barber gave the Commission an update on the two projects for the Library. The bids for a new roof will be received by Thursday, April 12, 2018 at 3:00 p.m. at the TTD office and will be opened at that time. It is anticipated that the bids and recommendation will be ready for the Commission’s review at the April 16, 2018 meeting.

With regard to the solar project for the Library, the RFP is “on the street” and those bids will be received by April 25, 2018 at 10:00 a.m. and be opened at the TTD office. The staff expects to have the bids and recommendation ready for the May 7, 2018 meeting.

WALK BRIDGE: OUTREACH DISCUSSION

Commissioner Goldstein reviewed the last meeting of the Mayor’s Design Advisory Committee Meeting held on March 21, 2018. One of the take-aways she is bringing to the Commission is the lighting of the Walk Bridge. The Committee has a strong preference for digital moving lights on the bridge. Commissioner Goldstein is not in favor of this type of lighting, but does not feel comfortable voting against it without input from the ratepayers.

Brainstorming took place on how to get this information out to the ratepayers and get their input. A one question survey was discussed, as well as ways to get the survey to the ratepayers. Staff will be meeting with TTD’s marketing firm, Greyskye, on Thursday, April 12, 2018 at 10:30 a.m. and will bring them on-board for the process. Options include:

- Survey link in the May/June newsletter
- Email blast with link to the survey
- Website survey
- Billing insert that can be mailed/returned to the office (English/Spanish)

Commissioner Goldstein will work on putting a preliminary lead in paragraph and multi-choice question together for the meeting with Greyskye.

Third Taxing District
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- ** COMMISSIONER GOLDSTEIN MOVED TO AUTHORIZE THE STAFF TO ENGAGE GREYSKYE MARKETING TO DO OUTREACH AND FEEDBACK ON WALK BRIDGE DESIGN ELEMENTS.**
- ** COMMISSIONER BROWN SECONDED.**
- ** THE MOTION PASSED UNANIMOUSLY.**

STRATEGIC PLANNING DISCUSSION

Due to the lateness of the evening and the fact that the subject matter could be lengthy, there was discussion as to whether or not to table this item.

- ** COMMISSIONER GOLDSTEIN MOVED TO DISCUSS STRATEGIC PLANNING AND FINISH IN TIME TO ADJOURN THE MEETING BY 9:30 P.M.**
- ** COMMISSIONER PARKINGTON SECONDED.**
- ** THE MOTION PASSED UNANIMOUSLY.**

Commissioner Goldstein reviewed the history of what has taken place to date. TTD had hired a consultant to guide both the staff and Commission in Strategic Planning. To date, no plans have been put in place. Discussion took place around whether or not TTD should hire a consultant to continue the process or try to handle it themselves. Commissioner Goldstein thought if Strategic Planning could be put on the agenda each month, perhaps some headway could be made a little bit at a time.

Commissioner Parkington believes the Commission should start with governance and create ByLaws – the rules to live by – and develop what is needed from there. The Charter also needs to be revised.

Commissioner Goldstein feels the change in the Charter should probably be held off until last, in order to pick up everything needed once the Strategic Planning process has been completed. Charter revisions will need ratepayer approval. A plan needs to be put in place as to what needs to be done and prioritize the items.

PROJECT SUMMARY

- ** COMMISSIONER GOLDSTEIN MOVED TO TABLE THE PROJECT SUMMARY DISCUSSION TO THE FOLLOWING MONTH.**
- ** COMMISSIONER BROWN SECONDED.**
- ** THE MOTION PASSED UNANIMOUSLY.**

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ADJOURN

- ** COMMISSIONER GOLDSTEIN MOVED TO ADJOURN.**
- ** COMMISSIONER BROWN SECONDED.**
- ** THE MOTION PASSED UNANIMOUSLY.**

The meeting adjourned at 9:32 p.m.

Respectfully submitted,

Cynthia Tenney
Executive Assistant
Third Taxing District

Third Taxing District
of the City of Norwalk
April 9, 2018

**SECOND PROMISSORY NOTE AND
REVOLVING TERM LOAN MODIFICATION AGREEMENT**

THIS MODIFICATION AGREEMENT, made effective as of this day March 14, 2018 between THE THIRD TAXING DISTRICT OF THE CITY OF NORWALK, having a principal place of business at 2 Second Street, Norwalk, Connecticut 06855, (the "Borrower") and PATRIOT BANK, N.A., formerly known as Patriot National Bank, a federally chartered bank association, having an office at 900 Bedford Street, Stamford, Connecticut 06901 (hereinafter called the - Lender).

BACKGROUND

WHEREAS, on July 12, 2013, the Lender and Borrower entered into a Variable Rate Commercial Revolving Term Loan Agreement (the "Loan Agreement") whereby Lender agreed, subject to the terms and conditions of the Loan Agreement, to make available loan advances in an amount of up to \$500,000 (the Loan"); and

WHEREAS, on July 12, 2013, Borrower executed a \$500,000 Term revolving Promissory Note (the "Note") evidencing all advances to be made under said loan Agreement. The Loan evidenced by the loan Agreement and the Note are secure by a lien on all assets of the Borrower and certain inventory equipment and property located at 6 Fitch Street, Norwalk , Connecticut; and

WHEREAS, on November 9, 2016, the Lender and Borrower entered into a first loan Modification Agreement Renewal of Line of Credit of \$500,000 to be Matured on December 1,2017 . Term revolving Promissory Note (the "Note") evidencing all advances to be made under said loan Agreement. the Note are secure by a lien on all assets of the Borrower and certain inventory equipment and property located at 6 Fitch Street, Norwalk , Connecticut; and

WHEREAS, Borrower has requested Lender extend the Maturity Date of the Loan to December 1, 2018 and to make other changes and modifications to the Note and Mortgage as provided herein; and

NOW, THEREFORE, for the reasons set forth above, and for good and valuable consideration received by one for the other and the mutual covenants herein contained, and each and every act to be performed hereunder by any of the parties hereto. As well as all such covenants, promises and agreements contained in the Note and Mortgage. As amended below, Borrower and Lender covenant and agree as follows:

DRAFT

SECTION 1

NOTE AND MORTGAGE MODIFICATION

1. (a) The parties hereto acknowledge and agree the Borrower has paid and Lender has received all monthly installments of interest due through March 1, 2018 at the rate for which provision is made in said Note.

(b) The parties hereto agree and acknowledge that the current principal balance due under the Note is \$0.00.

2. The Loan Agreement and the Note are modified to read as follows:

(a) Section 1(a) of the Loan Agreement is modified by extending the Maturity Date of July 1, 2016 to December 1, 2018 as the Maturity Date at which time all principal sums and accrued and paid interest shall become due and payable.

(b) Section 2 of the Note is amended by deleting July 1, 2016 and substituting December 1, 2018 as the Maturity Date under the Note.

(c) Section 1.1 of the Note is amended by adding a floor rate of 4.50%.

SECTION 2

DRAFT

BINDING EFFECT, MISCELLANEOUS

1. Borrower hereby acknowledges and reaffirms its liability for the indebtedness evidenced by the Note, the Loan Agreement and each of the various instruments and agreements evidencing and/or securing such consolidated indebtedness (collectively, the "Loan Documents") and acknowledges and agrees that no set-off, Counterclaim or defense exists with respect to its' liability under the Note and that no other claims against the Lender exist. Borrower hereby waives Borrowers' rights to raise any such set-off, counterclaim, defense or claim against the Lender arising out of occurrences prior to the date of this Modification Agreement.
2. All of the representations, warranties and covenants contained in the Loan Agreement are true and correct and as of the date hereof, are incorporated by this reference and are remade as of the date hereof.
3. All other terms and conditions of the Loan Agreement, Note and other Loan Documents shall remain the same and in full force and effect except as specifically amended by this Modification Agreement.
4. This Agreement shall be biding upon Borrower and the Lender and their respective successors and assigns.
5. This Agreement may be executed in any number of counterparts, each of which shall constitute one and the same instrument and either party hereto may execute this Agreement by signing any such counterpart.

IN WITNESS WHEREOF, the undersigned have executed this Second Promissory Note and Revolving Term Loan Modification Agreement as of the day and year first above written.

WITNESSES:

BORROWER:

THE THIRD TAXING DISTRICT
OF THE CITY OF NORWALK

By: _____
Name: Kevin Barber
Its: General Manager

PATRIOT BANK, N.A., f/k/a
PATRIOT NATIONAL BANK

By: _____
Name: Barbara Budnick
Its: Senior Vice President

COMMISSIONER (name of Commissioner) MOVED TO APPROVE THE MINUTES OF (date of meeting) SPECIAL COMMISSION MEETING.

OR

COMMISSIONER (name of Commissioner) MOVED TO APPROVE THE MINUTES OF (date of meeting) SPECIAL COMMISSION MEETING AS CORRECTED.

Memorandum

Third Taxing District

Electric Department

To: Commission

From: Ron Scofield 

Date: April 16, 2018

Subject: Person-to-Person Report

On February 21, 2018, I met with Mary Sullivan of Person-to-Person to review the program for the past year. We are completing Year 4 of our joint program and the results are very successful.

Twenty-seven households and their families participated in our joint program this year. The program helps to keep some of our senior citizens and other needy East Norwalk residents warm in the winter months. The caseworker reviews the household budgets with the applicants and does an income verification process and explores the needs and goals of the client and family. Eligibility is based on a history of low income, difficulty in making monthly TTD payments and an ability to commit to a regular monthly payment schedule. The client and caseworker explore ways to improve household stability, i.e., cutting expenses, discussing ways to increase income and utilizing resources such as food pantries, energy assistance, clothing centers and DSS services. Clients are also referred to ABCD, to apply for energy assistance.

Upon completion of the assessment process, the families sign a contract agreeing to pay an amount each month that is close to their average bill. Once the client has completed six months of the agreed upon payments, they receive a credit on their TTD account equal to the 6-month total.

In conclusion, our program made it easier for the participating families to pay their electric bills, keep the heat on and balance their budgets each month. The program also reinforced positive money management by rewarding families who paid their bills on time. The participants in the 2017 program were very grateful to the Third Taxing District to be part of this self-sufficiency program. As one participant stated, "Because of my health issues and my old age, the heat is very important to me. This program has really helped me keep the heat on in my apartment. I don't know how I would have managed without it."

Our program is making a difference in the lives of East Norwalk residents. Thank you, Commissioners, for approving this item in our annual budget for another year.

Memorandum

Third Taxing District

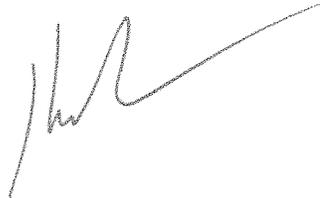
Electric Department

To: TTD Commissioners

From: Kevin Barber – General Manager

Date: April 12, 2018

Subject: Library Roof Replacement



At the request of the Commission, TTD has received bids for the roof replacement at the East Norwalk Library. TTD engaged Gill & Gill Architects to prepare the bid documents for this project. Four companies requested bid packages and TTD received bids from two of the companies. The four companies that requested bid packages were as follows:

- Milan Expert Renovation LLC
- Phil's Main Roofing LLC
- Rick's Main Roofing Ltd
- Zakhar Roofing & Siding LLC

The following is a breakdown of the bids received.

	Milan Expert Renovation	Rick's Main Roofing
Bid Price	\$33,750.00	\$21,600.00
Add Alternate 1	\$ 4,700.00	\$ 3,640.00
<u>Add Alternate 2</u>	<u>\$ 2,843.00</u>	<u>\$ 1,530.00</u>
Total	\$41,293.00	\$26,770.00

The bid documents are attached for your review.

After consulting Gill & Gill, it is staff's recommendation to award the East Norwalk Library roof replacement project to Rick's Main Roofing Ltd. We are recommending approval for \$31,230.00 broken down as follows:

Bid Price	\$21,600.00	
Alternate 1	\$ 0.00	Not expected to be required
Alternate 2	\$ 1,530.00	
<u>Contingency</u>	<u>\$ 8,100.00</u>	Possible replacement of sheathing
Total	\$31,230.00	

BID FORM

1. Submit bids in compliance with instructions to Bidders. Fill in blanks. The Owner reserves the right to reject incomplete Bid Forms.
2. This Bidding document is not part of the Contract Documents, unless specifically referenced in the Owner/Contractor Agreement.
3. Project Name: Roofing Replacement at
East Norwalk Library
51 Van Zant Street
Norwalk, CT 06855
4. Project Owner: Third District Taxing Electric Department
2 Second Street
Norwalk, CT 06855
5. The Bidder proposes to perform all of the Work required by the Contract Documents for the amount of: (Fill in amount in words and numbers.)The undersigned, having familiarized (himself, itself, themselves) with the existing conditions on the Project Site affecting the cost of the work, and with the Contract Documents, hereby proposes to furnish all supervision, technical personnel, labor, materials, equipment, tools, appurtenances, services, (including utility and transportation services required to perform and complete this Contract), all in accordance with the Contract Documents for the total fixed sum (BASE BID) specified in the schedule of prices which follows, increased or decreased in a manner as provided for in the contract:

BID PRICE: All work required to remove and replace asphalt shingle roofing. *The Contractor shall include the cost to replace 10 percent of roof sheathing within the bid price at Unit Price 1 rate. If lesser quantities are replaced then price will be reduced by unit price.*

Twenty One Thousand Six Hundred and ⁰⁰/₁₀₀ _____ Dollars (\$21,600.00)

Approximate number of consecutive calendar days to complete work.

Thirty Days _____ Days (30)

6. **ADD ALTERNATE 1:** All work required to provide new 6 inch painted aluminum ogee gutters and 3"x4" leaders.

Three Thousand Six Hundred Forty and ⁰⁰/₁₀₀ _____ Dollars (\$3,640.00)

7. **ADD ALTERNATE 2:** All work required to provide 2" round perforated soffit vents @ 32" on center and continuous ridge vent from hip to hip.

_____ Dollars (\$)

EAST NORWALK LIBRARY
Roofing Replacement

8. In addition to the Base Bid the Bidder proposes to provide the following unit prices: (Fill in amount in words and numbers.)

Unit Price #1

- a. Two Dollars and twenty five cents per ft²
_____ Dollars (\$ 2.25/ft²)
Provide a unit price per square foot to install 3/4" cdx plywood. Area of plywood, if required, to be reviewed and approved by Owner.

Unit Price #2

- b. Four Dollars per foot
_____ Dollars (\$ 4.00/1ft)
Provide a unit price per lineal foot to sister 2x10 pressure treated lumber to existing roof joists. Length of lumber, if required, to be reviewed and approved by Owner.

If and when additional or lesser work is explicitly ordered by change order in advance of the work being carried out, the unit prices shall apply. Work done without prior approved change order shall be considered part of the basic contract work. Unit prices for deducted work shall be the same as unit prices for additional work. Unit prices for both additional work and deducted work shall include overhead, profit, general conditions and fees.

9. Bid Security in the amount indicated below is attached to this Bid Form:

\$1,080.00

10. Liquidated Damages: The Bidder agrees to have liquidated damages penalties assessed at the rate of \$250.00 per day deducted from this Final Payment for each day Substantial Completion is delayed beyond the Proposed Date of Substantial Completion indicated below for reasons with his control.

11. Time: The Bidder proposes the following dates (Fill in):

- a. Proposed Starting Date: 5/2/2018
b. Proposed Date of Substantial Completion: 6/1/2018

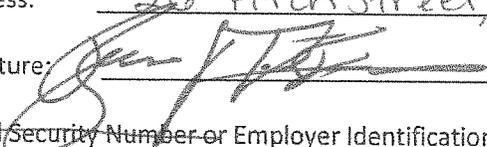
Work shall be completed by Thursday, June 14, 2018.

12. By submitting this Bid Form, the Bidder certifies that Bidder has visited the project site, is aware of existing conditions which affect the work, and has reviewed the Contract Documents, including the following Addenda:

Addendum Number... one Date... 4/5/2018
Addendum Number..... Date.....
Addendum Number..... Date.....

13. Bid Qualifications: Submit bid qualifications and reasons for qualifications with this Bid Form on separate sheet of Bidders' Letterhead. Include impact of bid qualifications on time, cost or quality. Bid qualifications may include: Cash flow requirements, assumptions for access to the work, assumptions for staging the work, assumptions for protecting existing and abutting work, proposed modifications to General and Supplementary Conditions, proposed modifications to drawings and specifications.

14. Signed and sealed (Enter date, Bidder's signature and legal business address.)

Bidder Name: Rick's Main Roofing, Ltd Brian J. Defreese
Address: 26 Fitch Street, NORWALK, CT 06855
Signature:  Title: Vice President of Sales
Social Security Number or Employer Identification Number 200017257

15. Bidders' Project Manager to be assigned to the Project (name):

Brian J. Defreese

16. Bidders' List of Proposed Major Subcontractors (list):

Trade	Contractor

END OF DOCUMENT

BID FORM
Document 00300-1

BID FORM

- 1. Submit bids in compliance with instructions to Bidders. Fill in blanks. The Owner reserves the right to reject incomplete Bid Forms.
- 2. This Bidding document is not part of the Contract Documents, unless specifically referenced in the Owner/Contractor Agreement.

3. Project Name: Roofing Replacement at
East Norwalk Library
51 Van Zant Street
Norwalk, CT 06855

4. Project Owner: Third District Taxing Electric Department
2 Second Street
Norwalk, CT 06855

5. The Bidder proposes to perform all of the Work required by the Contract Documents for the amount of: (Fill in amount in words and numbers.) The undersigned, having familiarized (himself, itself, themselves) with the existing conditions on the Project Site affecting the cost of the work, and with the Contract Documents, hereby proposes to furnish all supervision, technical personnel, labor, materials, equipment, tools, appurtenances, services, (including utility and transportation services required to perform and complete this Contract), all in accordance with the Contract Documents for the total fixed sum (BASE BID) specified in the schedule of prices which follows, increased or decreased in a manner as provided for in the contract:

BID PRICE: All work required to remove and replace asphalt shingle roofing. The Contractor shall include the cost to replace 10 percent of roof sheathing within the bid price at Unit Price 1 rate. If lesser quantities are replaced then price will be reduced by unit price.

Twenty One Thousand Six Hundred and 00/100 Dollars (\$21,600.00)

Approximate number of consecutive calendar days to complete work.

Thirty Days Days (30)

6. ADD ALTERNATE 1: All work required to provide new 6 inch painted aluminum ogee gutters and 3"x4" leaders.

Three Thousand Six Hundred Forty and 00/100 Dollars (\$3,640.00)

7. ADD ALTERNATE 2: All work required to provide 2" round perforated soffit vents @ 32" on center and continuous ridge vent from hip to hip.

Dollars (\$1,530.00)

EAST NORWALK LIBRARY
Roofing Replacement

BID FORM

1. Submit bids in compliance with Instructions to Bidders. Fill in blanks. The Owner reserves the right to reject incomplete Bid Forms.
2. This Bidding document is not part of the Contract Documents, unless specifically referenced in the Owner/Contractor Agreement.
3. Project Name: Roofing Replacement at
East Norwalk Library
51 Van Zant Street
Norwalk, CT 06855
4. Project Owner: Third District Taxing Electric Department
2 Second Street
Norwalk, CT 06855
5. The Bidder proposes to perform all of the Work required by the Contract Documents for the amount of: (Fill in amount in words and numbers.)The undersigned, having familiarized (himself, itself, themselves) with the existing conditions on the Project Site affecting the cost of the work, and with the Contract Documents, hereby proposes to furnish all supervision, technical personnel, labor, materials, equipment, tools, appurtenances, services, (including utility and transportation services required to perform and complete this Contract), all in accordance with the Contract Documents for the total fixed sum (BASE BID) specified in the schedule of prices which follows, increased or decreased in a manner as provided for in the contract:

BID PRICE: All work required to remove and replace asphalt shingle roofing. *The Contractor shall include the cost to replace 10 percent of roof sheathing within the bid price at Unit Price 1 rate. If lesser quantities are replaced then price will be reduced by unit price.*

thirty three thousand seven hundred fifty dollars Dollars (\$33,750)

Approximate number of consecutive calendar days to complete work.

five days Days (- 5 -)

6. **ADD ALTERNATE 1:** All work required to provide new 6 inch painted aluminum ogee gutters and 3"x4" leaders.

four thousand seven hundred dollars Dollars (\$4,700)

7. **ADD ALTERNATE 2:** All work required to provide 2" round perforated soffit vents @ 32" on center and continuous ridge vent from hip to hip.

two thousand eight hundred forty three Dollars (\$2,843)

8. In addition to the Base Bid the Bidder proposes to provide the following unit prices: (Fill in amount in words and numbers.)

Unit Price #1

a. two dollars and fifty cents
Dollars (\$ 2.50)

Provide a unit price per square foot to install 3/4" cdx plywood. Area of plywood, if required, to be reviewed and approved by Owner.

Unit Price #2

b. eight dollars and fifty cents
Dollars (\$ 8.50)

Provide a unit price per lineal foot to sister 2x10 pressure treated lumber to existing roof joists. Length of lumber, if required, to be reviewed and approved by Owner.

If and when additional or lesser work is explicitly ordered by change order in advance of the work being carried out, the unit prices shall apply. Work done without prior approved change order shall be considered part of the basic contract work. Unit prices for deducted work shall be the same as unit prices for additional work. Unit prices for both additional work and deducted work shall include overhead, profit, general conditions and fees.

9. Bid Security in the amount indicated below is attached to this Bid Form:

\$ _____

10. Liquidated Damages: The Bidder agrees to have liquidated damages penalties assessed at the rate of \$250.00 per day deducted from this Final Payment for each day Substantial Completion is delayed beyond the Proposed Date of Substantial Completion indicated below for reasons with his control.

11. Time: The Bidder proposes the following dates (Fill in):

a. Proposed Starting Date: APR - 30 - 2018

b. Proposed Date of Substantial Completion: MAY - 04 - 2018

Work shall be completed by Thursday, June 14, 2018.

12. By submitting this Bid Form, the Bidder certifies that Bidder has visited the project site, is aware of existing conditions which affect the work, and has reviewed the Contract Documents, including the following Addenda:

Addendum Number.....1..... Date.....4.05.2018.....
Addendum Number..... Date.....
Addendum Number..... Date.....

13. Bid Qualifications: Submit bid qualifications and reasons for qualifications with this Bid Form on separate sheet of Bidders' Letterhead. Include impact of bid qualifications on time, cost or quality. Bid qualifications may include: Cash flow requirements, assumptions for access to the work, assumptions for staging the work, assumptions for protecting existing and abutting work, proposed modifications to General and Supplementary Conditions, proposed modifications to drawings and specifications.

14. Signed and sealed (Enter date, Bidder's signature and legal business address.)

Bidder Name: Milan Pribelsky
Address: 10 Fox Run Rd Norwalk, CT 06850
Signature:  Title: owner
Social Security Number or Employer Identification Number 263603333

15. Bidders' Project Manager to be assigned to the Project (name):

Milan Pribelsky

16. Bidders' List of Proposed Major Subcontractors (list):

Trade	Contractor
<u>N/A</u>	

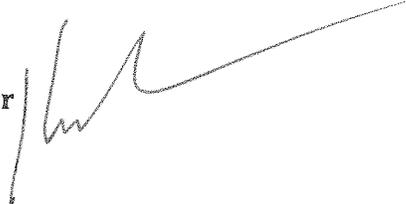
END OF DOCUMENT

Memorandum

Third Taxing District

Electric Department

To: TTD Commissioners

From: Kevin Barber – General Manager 

Date: April 12, 2018

Subject: Power Cost Adjustment Discussion

Please review the attached presentation that I will be presenting at the April 16th Commission meeting. This is the follow up discussion to the Rate Stabilization Fund discussion held at the April 9th Commission Meeting.

This discussion will focus on the Power Cost Adjustment (PCA), the spreadsheet that is currently being used and the rate we are currently charging customers. No recommendations will be made at this meeting for changing the PCA or the CMEEC billable rate.

PCA Review and Discussions Round 2

During the review of the Power Cost Adjustment (PCA) spreadsheet and the development of the forecasting model, it became apparent that some questions needed to be addressed to provide staff with the guidance needed to recommend changes to the PCA and related rates.



April 2018

3 Questions

- Rate Stabilization Fund (RSF) balance:
 - What is the appropriate balance to maintain in the RSF?
Target balance between \$2,750,000 - \$3,000,000 (6 months)
Approved at 4/9/18 Commission Meeting
- Power Cost Adjustment (PCA) Rate:
 - What is the appropriate PCA rate to charge TTD customers?
- CMEEC Billable Rate:
 - What is the appropriate billable rate for CMEEC to charge TTD?



April 2018

Question:

What is the appropriate PCA rate to charge TTD customers?

Before this question can be answered, let's review what the PCA is and the tool used to help TTD set the appropriate PCA rate.



April 2018

Power Cost Adjustment (PCA)

What is a Power Cost Adjustment?

The PCA is a mechanism that is used to allow TTD to recover the full cost of purchased power when the actual cost of power is greater than the base fuel cost rate. The base fuel cost is another term used for generation.

Base Fuel Cost:	\$0.0958 /kWh *
<u>PCA Rate:</u>	<u>\$0.0230 /kWh *</u>
Total Generation Rate:	\$0.1188 / kWh

* "Base Fuel Cost" of \$0.0958 was calculated during the cost of service study performed in 2013-2014. An initial PCA of \$0.01/kWh was calculated in the study. The current PCA rate is \$0.023/kWh (last adjusted in April 2017)



April 2018

PCA - Continued

The Base Fuel Cost rate of \$0.0958/kWh is included in the “Kilowatt Hour Charge” that is billed to TTD customers. For Example:

TTD – Rate 1 – based on 700 kWh

Residential Service Charge		\$ 8.00
Residential kWh Charge	(\$0.1424/kWh)	\$ 99.68
Power Cost Adjustment	(\$0.0230/kWh)	\$ 16.10
<u>Energy Conservation Fund</u>	<u>(\$0.0025/kWh)</u>	<u>\$ 1.75</u>
TOTAL		\$125.53

The Residential kWh Charge is comprised of the following:

Base Fuel Cost	(\$0.0958/kWh)	\$ 67.06
<u>TTD Trans & Dist</u>	<u>(\$0.0466/kWh)</u>	<u>\$ 32.62</u>
Total Residential kWh charge:		\$ 99.68

The customer is paying the following for generation :

Base Fuel Cost	(\$0.0958/kWh)	\$ 67.06
<u>Power Cost Adj</u>	<u>(\$0.0230/kWh)</u>	<u>\$ 16.10</u>
Total Generation Costs		\$ 83.16
or \$0.1188/kWh		

Based on 2014 Cost of Service Study



April 2018

PCA - Continued

Calculation of the PCA:

The PCA is calculated by comparing the Base Fuel Cost (\$0.0958/kWh) to the Purchased Power Costs (CMEEC monthly bill).

TTD has been utilizing a spreadsheet developed by the rate consultant to calculate the PCA on a monthly basis. The PCA is calculated by comparing the six month running average of the cost of power to the base fuel cost. The difference is the Calculated PCA.

In addition, the spreadsheet calculates if TTD is in an over or under collection state on an ongoing basis. The intended use of this information is to determine if and when an adjustment to the PCA is warranted.



April 2018

PCA Spreadsheet

Issues discovered with data used to populate the PCA spreadsheet.

- **Grand Total Purchased Power Costs (row h)**: Totals from the CMEEC monthly bill.
 - The billed cost of power was used instead of the actual cost of power.
 - This total cost used included CyrusOne charges.
- **Total Purchased Power kWh Units (row l)**: CyrusOne usage (kWh) was included in this field.
- **Total System Retail Sales (kWh's) (row s)**: CyrusOne usage (kWh) was included in this field.

These three issues caused a “skewed” result for the “Calculated PCA” (row q) and the “Difference of Collection vs Expense” (row w) in the PCA spreadsheet.



April 2018

PCA Spreadsheet – Cont'd

Billed Cost of Power vs. Actual Cost of Power

Billed Cost of Power: The billed cost of power is the amount CMEEC charges TTD for purchased power on a per MWh (megawatt hour) basis. The rate is set by TTD. The billed cost of power allows TTD to have a consistent cost of power each month. During months with higher or lower actual costs of power, the variances are managed with the rate stabilization fund.

Actual Cost of Power: The actual cost of power is the true cost of power purchased by CMEEC from the market. This also includes any benefits TTD would receive from CMEEC power projects. On any given month the actual cost of power is greater than or less than the billed cost of power.



April 2018

PCA Spreadsheet – Cont'd

Inclusion of CyrusOne data in the calculations

CyrusOne has a special contract with TTD and CMEEC to purchase their electricity needs directly from the market. CyrusOne is not charged a PCA as part of this special contract.

Because CyrusOne is not charged a PCA, CyrusOne data, both dollars and usage (kWh) should not be included in the calculations in the PCA spreadsheet.



April 2018

PCA Spreadsheet

What is the impact of the issues in the spreadsheet?

Incorrect calculations in the following rows:

- “Power Supply Costs @ Retail” (row n)
- “Calculated PCA” (row q)
- “Difference of Collection vs Expense” (row w)



April 2018

PCA Spreadsheet

The “Difference of Collection vs. Expense” is the calculation of the over collection or under collection on an ongoing basis. This value was understated in the original spreadsheet.

Previously, the spreadsheet showed an over collection of \$2,087,340 as of Jan. 2018.

In the revised spreadsheet, using correct data, the over collection is \$5,095,340 as of Jan. 2018.

Question: Where is the \$5,095,340?



April 2018

PCA Spreadsheet

Answer: The Rate Stabilization Fund (RSF)

As shown at last week's meeting, TTD added more than \$4.6 million to the RSF since Jan. 2014. These funds were used to fund various capital projects, the Fitch Street Substation and SCADA.



April 2018

PCA Analysis

What caused the large over collection?

- 1) Power costs. Lower than budgeted.
- 2) Base Fuel Cost of \$0.0958 is higher than the Actual Cost of Power.



April 2018

PCA - Power Costs

Power Costs: When the cost of service study was performed in 2014, CMEEC’s All-In Forecast showed power costs increasing year over year. Actual power costs, beginning in 2015, came in lower than budgeted.

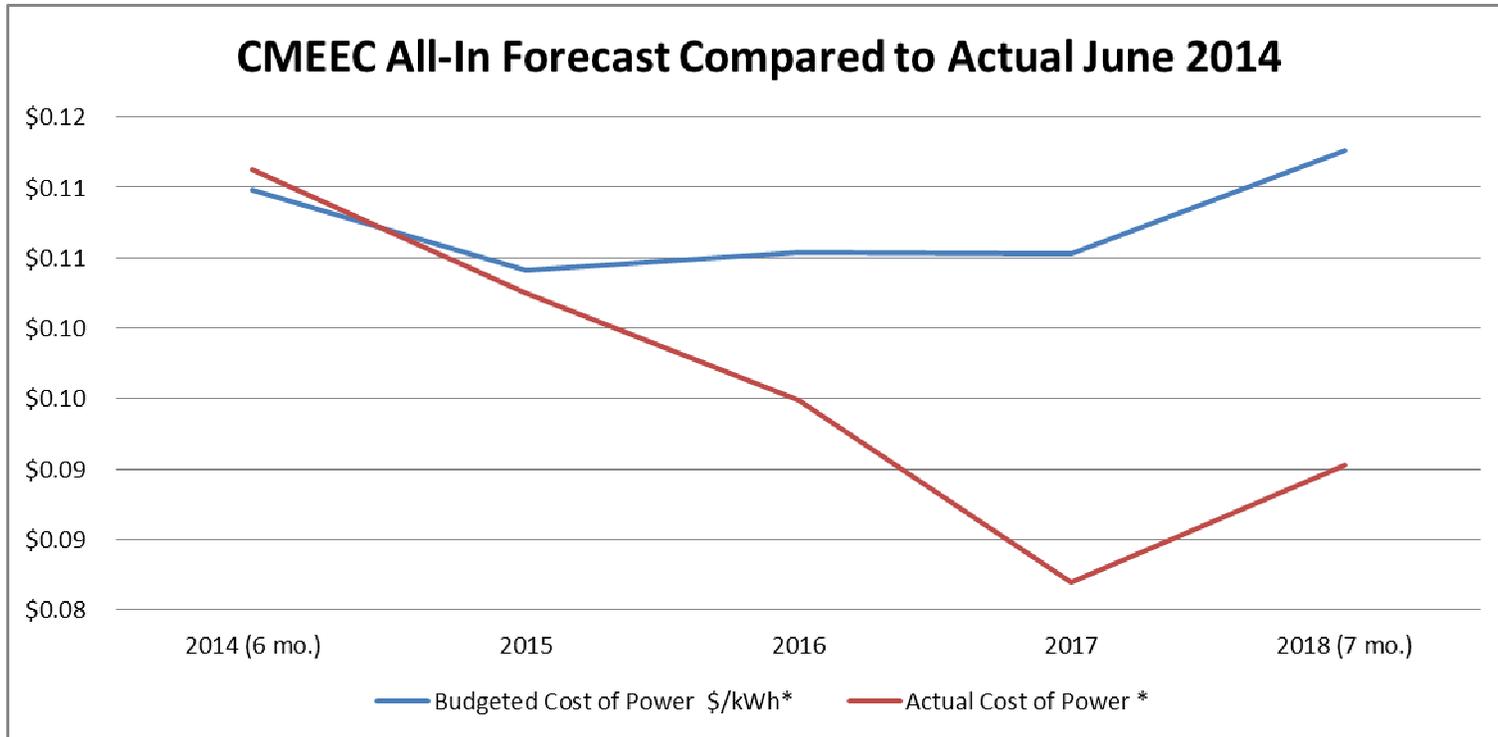
CMEEC All-In Cost Projections – from June 2014 Forecast				
Fiscal Year Ending	Budgeted Cost of Power \$/kWh*	Actual Cost of Power *	Variance Budget – Actual	Change in Costs
2014 (6 mo.)	\$0.1098	\$0.1113	(\$0.0016)	(\$49,660)
2015	\$0.1041	\$0.1025	\$0.0016	\$104,069
2016	\$0.1054	\$0.0949	\$0.0105	\$636,578
2017	\$0.1053	\$0.0820	\$0.0233	\$1,434,502
2018 (7 mo.)	\$0.1126	\$0.0903	\$0.0223	\$834,077
Total Savings when Actual is compared to CMEEC’s 2014 All-In Forecast				\$3,009,226

* Includes a loss factor of 5.6% (line loss)



April 2018

PCA - Power Costs - Continued



* Includes a loss factor of 5.6% (line loss)



April 2018

PCA – PTF Revenue

Major reason for the lower power costs?

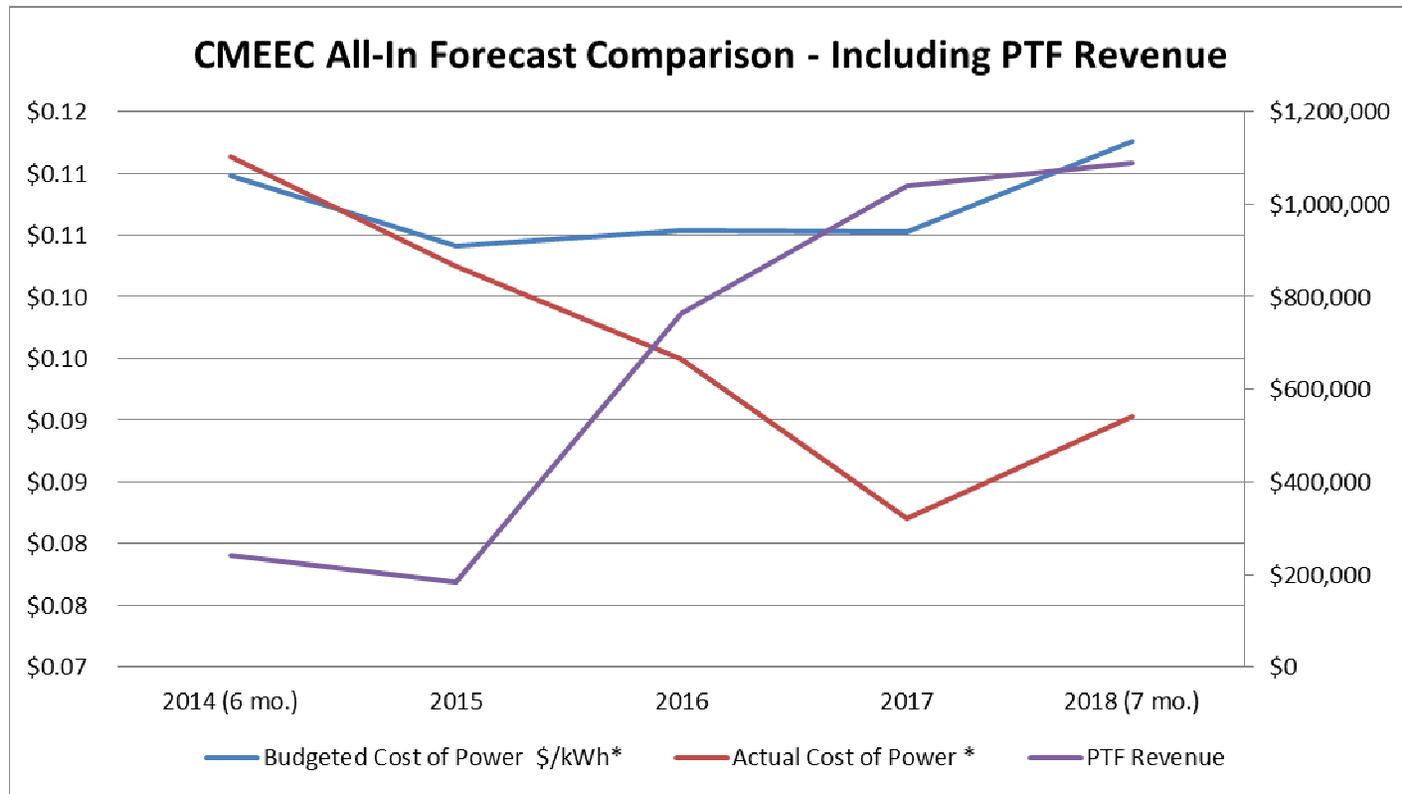
Fitch Street Substation. TTD is receiving Pooled Transmission Facility (PTF) revenue for being a transmission facility owner. Since fiscal year end 2014, TTD has received the following revenues which have reduced the Transmission charges on the monthly CMEEC power bill.

Fiscal Year Ending	PTF Revenue
2014	\$240,414
2015	\$184,388
2016	\$763,836
2017	\$1,037,964
2018 (7 mo.)	\$635,484
Total	\$2,862,086



April 2018

PCA PTF Revenue - Continued



* Includes a loss factor of 5.6% (line loss) 2018 PFT Revenue estimated for 12 months



April 2018

PCA – Base Fuel Cost

Base Fuel Cost: The Base Fuel Cost of \$0.0958/kWh was established during the 2014 cost of service study. At that time, CMEEC’s All-In Forecast showed power costs increasing year over year. The rate study also set an initial PCA of \$0.01/kWh.

Analysis of Base Fuel Costs – per kWh					
Date of PCA Change	Base Fuel Cost	PCA	Total Fuel Cost	Actual Power Costs *	Variance
Jan 2014	\$0.0958	\$0.010	\$0.1058	\$0.1045	\$0.0013
Mar 2015	\$0.0958	\$0.017	\$0.1128	\$0.1034	\$0.0094
Jun 2015	\$0.0958	\$0.020	\$0.1158	\$0.0961	\$0.0197
Jul 2015	\$0.0958	\$0.027	\$0.1228	\$0.0868	\$0.0360
Jan 2017	\$0.0958	\$0.025	\$0.1208	\$0.0848	\$0.0360
Apr 2017	\$0.0958	\$0.023	\$0.1188	\$0.0932	\$0.0256

* Includes a loss factor of 5.6% (line loss). Actual Power Costs were calculated for the period the PCA was in effect.



April 2018

PCA – Results

What is this telling us?

- 1) Based on the spreadsheet, we are over collecting on the PCA and the base fuel cost.
- 2) Base Fuel Cost – too high?
- 3) Rate Study – time for a tune up?



April 2018

PCA – Results

What are the next steps?

- 1) Budget. A determination will be made based on the fiscal year 2018-19 proposed budget and the 5 year capital budget if changes can or should be made to the PCA or the CMEEC billable rates.
- 2) Recommendations will be brought before the Commission for approvals.



April 2018

2015 September	2015 October	2015 November	2015 December	2016 January	2016 February	2016 March	2016 April	2016 May	2016 June	2016 July	2016 August	
\$ 568,377	\$ 463,677	\$ 468,977	\$ 516,466	\$ 614,916	\$ 559,587	\$ 501,206	\$ 457,783	\$ 474,985	\$ 535,454	\$ 700,154	\$ 718,571	
3,347,449	3,213,771	3,211,856	3,239,664	3,309,181	3,192,001	3,124,830	3,118,935	3,124,943	3,143,931	3,229,169	3,388,153	
5,295,186	4,309,272	4,347,256	4,809,142	5,732,210	5,199,650	4,628,845	4,204,693	4,427,132	4,995,545	6,533,151	6,298,482	
31,195,242	29,892,175	29,851,906	30,125,111	30,791,548	29,692,716	29,026,375	28,921,796	29,001,672	29,188,075	29,989,016	31,087,848	
0.11332	0.11353	0.11362	0.11356	0.1135	0.1135	0.1137	0.1139	0.1138	0.1137	0.1137	0.1151	
0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	
5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	
0.01752	0.01773	0.01782	0.01776	0.0177	0.0177	0.0179	0.0181	0.0180	0.0179	0.0179	0.0193	
\$ 0.02700	\$ 0.02700	\$ 0.02700	\$ 0.02700	\$ 0.02700	\$ 0.02700	\$ 0.02700	\$ 0.02700	\$ 0.0270	\$ 0.0270	\$ 0.0270	\$ 0.0270	
5,661,576	4,337,332	4,113,905	3,903,723	5,412,281	4,867,778	4,672,645	4,556,440	3,943,809	5,127,075	5,691,198	5,986,748	
542,379	415,516	394,112	373,977	518,497	466,333	447,639	436,507	377,817	491,174	545,217	573,530	
152,863	117,108	111,075	105,401	146,132	131,430	126,161	123,024	106,483	138,431	153,662	161,642	
695,242	532,624	505,188	479,377	664,628	597,763	573,801	559,531	484,300	629,605	698,879	735,173	
\$ (239,567)	\$ (170,620)	\$ (134,410)	\$ (171,499)	\$ (121,786)	\$ (83,610)	\$ (11,016)	\$ 90,732	\$ 100,047	\$ 194,197	\$ 192,923	\$ 209,524	

2016 September	2016 October	2016 November	2016 December	2017 January	2017 February	2017 March	2017 April	2017 May	2017 June	2017 July	2017 August
\$ 543,716	\$ 460,285	\$ 482,983	\$ 563,687	\$ 563,194	\$ 487,869	\$ 489,912	\$ 384,726	\$ 397,585	\$ 480,602	\$ 569,395	\$ 523,941
3,430,664	3,433,166	3,441,164	3,469,397	3,332,437	3,101,735	3,047,931	2,972,371	2,886,973	2,803,888	2,810,089	2,846,161
5,295,186	4,309,272	4,347,256	4,809,142	5,732,210	5,199,650	4,628,845	4,204,693	4,427,132	5,332,932	6,378,800	5,874,790
31,754,189	31,858,768	31,778,892	31,592,489	30,791,548	29,692,716	29,026,375	28,921,796	29,001,672	29,525,462	30,172,052	30,847,192
0.1141	0.1138	0.1143	0.1160	0.1143	0.1103	0.1109	0.1085	0.1051	0.1003	0.0984	0.0974
0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958
5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%
0.0183	0.0180	0.0185	0.0202	0.0185	0.0145	0.0151	0.0127	0.0093	0.0045	0.0026	0.0016
\$ 0.0270	\$ 0.0270	\$ 0.0270	\$ 0.0270	\$ 0.0250	\$ 0.0250	\$ 0.0250	\$ 0.0230	\$ 0.0230	\$ 0.0230	\$ 0.0230	\$ 0.0230
6,625,943	4,266,088	4,450,569	4,618,003	5,796,522	5,028,127	4,489,846	5,076,518	3,621,793	4,737,321	6,215,088	5,115,275
634,765	408,691	426,365	442,405	555,307	481,695	430,127	486,330	346,968	453,835	595,405	490,043
178,900	115,184	120,165	124,686	144,913	125,703	112,246	116,760	83,301	108,958	142,947	117,651
813,666	523,876	546,530	567,091	700,220	607,398	542,373	603,090	430,269	562,794	738,352	607,695
\$ 479,474	\$ 543,064	\$ 606,611	\$ 610,015	\$ 747,041	\$ 866,569	\$ 919,030	\$ 1,137,395	\$ 1,170,079	\$ 1,252,270	\$ 1,421,228	\$ 1,504,982

2017 September	2017 October	2017 November	2017 December	2018 January
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\$ 449,363	\$ 399,796	\$ 428,131	\$ 531,788	\$ 586,718
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2,805,612	2,820,682	2,851,228	2,902,414	2,919,737
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5,009,653	4,463,617	4,347,256	4,809,142	5,732,210
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31,228,000	31,486,924	31,407,048	30,883,258	30,236,668
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0.0949	0.0946	0.0959	0.0992	0.1020
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0.0958	0.0958	0.0958	0.0958	0.0958
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5.6%	5.6%	5.6%	5.6%	5.6%
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(0.0009)	(0.0012)	0.0001	0.0034	0.0062
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\$ 0.0230				
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5,446,535	4,473,296	4,316,930	4,558,741	6,271,078
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521,778	428,542	413,562	436,727	600,769
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125,270	102,886	99,289	104,851	144,235
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647,048	531,428	512,851	541,578	745,004
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\$ 1,702,667	\$ 1,834,299	\$ 1,919,019	\$ 1,928,810	\$ 2,087,096
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East Norwalk - PCA Calculation

Power Cost Adjustment Calculation

6 Month Rolling Average (starting January 2014)

Start Here

		2014 January	2014 February	2014 March	2014 April	2014 May	2014 June	2014 July	2014 August	2014 September	2014 October	2014 November	2014 December
Total Energy		kWh											
CMEEC Billable rate (\$/kWh)		\$/kWh											
		0.105	0.105	0.105	0.105	0.105	0.105	0.105	0.105	0.105	0.105	0.105	0.105
h	Grand Total (Actual) Purchased Power Costs	\$ 762,038	\$ 507,124	\$ 599,660	\$ 470,154	\$ 429,861	\$ 407,293	\$ 516,046	\$ 505,582	\$ 450,323	\$ 428,677	\$ 473,228	\$ 563,302
i	(Sum of current and previous 5 months)	762,038	1,269,162	1,868,822	2,338,976	2,768,837	3,176,130	2,930,139	2,928,598	2,779,260	2,737,783	2,781,150	2,937,159
kWh's Purchased		kWh											
l	Total Purchased Power kWh Units	6,642,006	5,530,249	5,630,088	4,418,744	4,497,861	5,138,699	6,178,717	5,689,011	4,986,415	4,328,756	4,829,348	5,537,227
m	(Sum of current and previous 5 months)	6,642,006	12,172,255	17,802,343	22,221,087	26,718,948	31,857,647	31,394,358	31,553,120	30,909,447	30,819,459	31,150,946	31,549,474
Actual Power Costs per month (\$/kWh)		\$/kWh											
		0.11473	0.09170	0.10651	0.10640	0.09557	0.07926	0.08352	0.08887	0.09031	0.09903	0.09799	0.10173
n	Power (Actual) Supply Costs @ Retail	\$ 0.12115	0.11011	0.11085	0.11115	0.10943	0.10528	0.09856	0.09801	0.09495	0.09381	0.09428	0.09831
o	Base Fuel Cost	\$ 0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958
p	Loss Factor	% 5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%
q	Calculated PCA	\$ 0.02535	0.01431	0.01505	0.01535	0.01363	0.00948	0.00276	0.00221	(0.00085)	(0.00199)	(0.00152)	0.00251
r	Actual PCA Implemented	\$ \$ 0.01000	\$ 0.01000	\$ 0.01000	\$ 0.01000	\$ 0.01000	\$ 0.01000	\$ 0.01000	\$ 0.01000	\$ 0.01000	\$ 0.01000	\$ 0.01000	\$ 0.01000
s	Total System Retail Sales (kWh's)	kWh 7,590,481	4,247,217	5,776,045	4,643,494	4,499,644	4,154,442	4,966,803	5,975,266	5,155,536	4,242,424	4,292,062	4,224,469
t	Base PCA Revenue	\$ 727,168	406,883	553,345	444,847	431,066	397,996	475,820	572,430	493,900	406,424	411,180	404,704
u	Fuel Factor Revenue	\$ 75,905	42,472	57,760	46,435	44,996	41,544	49,668	59,753	51,555	42,424	42,921	42,245
v	Total Revenues through PCA	\$ 803,073	449,356	611,106	491,282	476,062	439,540	525,488	632,183	545,456	448,848	454,100	446,949
w	Difference of Collection vs Expense	\$ \$ 41,035	\$ (16,733)	\$ (5,288)	\$ 15,839	\$ 62,041	\$ 94,288	\$ 103,729	\$ 230,330	\$ 325,462	\$ 345,634	\$ 326,506	\$ 210,153
Over collect / (Under Collect) in each month		\$41,035.17	(\$57,768.27)	\$11,445.13	\$21,127.31	\$46,201.75	\$32,246.68	\$9,441.32	\$126,600.74	\$95,132.57	\$20,171.76	(\$19,127.66)	(\$116,353.28)
RSF Balance at CMEEC													
Diff between Billed Rate and Actual Cost		\$ (0.00973)	0.01330	(0.00151)	(0.00140)	0.00943	0.02574	0.02148	0.01613	0.01469	0.00597	0.00701	0.00327
Affect on RSF - by Month		\$ (64,627.09)	73,552.32	(8,501.19)	(6,186.24)	42,414.82	132,270.12	132,718.85	91,763.76	73,250.44	25,842.68	33,853.72	18,106.74

Base Fuel Cost - cost of generation that is built into the per kWh energy charge

CMEEC started billing CyrusOne (Cervalis) in April 2014.

- CyrusOne was included in the total bill cost on line 10 (row h). Removed from totals during review of spreadsheet - KEB

Row S - Estimates on Total System Retail Sales (kWh) is based on the CMEEC monthly forecast times .944 (loss factor)

East Norwalk - PCA Calculation

Power Cost Adjustment Calculation

6 Month Rolling Average (starting January 2014)

		2015 January	2015 February	2015 March	2015 April	2015 May	2015 June	2015 July	2015 August	2015 September	2015 October	2015 November	2015 December
Total Energy		kWh											
CMEEC Billable rate (\$/kWh)	\$/kWh	0.105	0.105	0.105	0.105	0.105	0.105	0.105	0.105	0.105	0.105	0.105	0.105
Grand Total (Actual) Purchased Power Costs	\$	\$ 671,121	\$ 709,187	\$ 571,448	\$ 428,881	\$ 423,430	\$ 460,783	\$ 513,263	\$ 515,704	\$ 454,698	\$ 384,215	\$ 380,428	\$ 430,851
(Sum of current and previous 5 months)	\$	3,092,234	3,295,838	3,416,963	3,417,167	3,367,369	3,264,850	3,106,992	2,913,508	2,796,758	2,752,092	2,709,090	2,679,159
kWh's Purchased		kWh											
Total Purchased Power kWh Units	kWh	6,237,187	6,028,451	5,612,339	4,387,525	4,535,937	5,065,773	6,298,482	6,411,833	5,295,186	4,309,272	4,347,256	4,809,142
(Sum of current and previous 5 months)	kWh	31,607,944	31,947,384	32,573,308	32,632,077	32,338,666	31,867,212	31,928,507	32,311,889	31,994,736	31,916,483	31,727,802	31,471,171
Actual Power Costs per month (\$/kWh)		\$/kWh											
		0.10760	0.11764	0.10182	0.09775	0.09335	0.09096	0.08149	0.08043	0.08587	0.08916	0.08751	0.08959
Power (Actual) Supply Costs @ Retail	\$	0.10331	0.10894	0.11078	0.11058	0.10996	0.10819	0.10276	0.09522	0.09231	0.09106	0.09017	0.08990
Base Fuel Cost	\$	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958
Loss Factor	%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%
Calculated PCA	\$	0.00751	0.01314	0.01498	0.01478	0.01416	0.01239	0.00696	(0.00058)	(0.00349)	(0.00474)	(0.00563)	(0.00590)
Actual PCA Implemented	\$	\$ 0.01000	\$ 0.01000	\$ 0.01700	\$ 0.01700	\$ 0.01700	\$ 0.02000	\$ 0.02700	\$ 0.02700	\$ 0.02700	\$ 0.02700	\$ 0.02700	\$ 0.02700
Total System Retail Sales (kWh's)	kWh	6,526,590	5,660,068	5,179,815	4,353,374	3,971,453	4,394,086	5,345,565	6,236,271	5,661,576	4,337,332	4,113,905	3,903,723
Base PCA Revenue	\$	625,247	542,235	496,226	417,053	380,465	420,953	512,105	597,435	542,379	415,516	394,112	373,977
Fuel Factor Revenue	\$	65,266	56,601	88,057	74,007	67,515	87,882	144,330	168,379	152,863	117,108	111,075	105,401
Total Revenues through PCA	\$	690,513	598,835	584,283	491,061	447,980	508,835	656,435	765,814	695,242	532,624	505,188	479,377
Difference of Collection vs Expense	\$	\$ 229,545	\$ 119,193	\$ 132,028	\$ 194,208	\$ 218,758	\$ 266,811	\$ 409,983	\$ 660,093	\$ 900,637	\$ 1,049,047	\$ 1,173,806	\$ 1,222,332
Over collect / (Under Collect) in each month		\$19,391.88	(\$110,351.78)	\$12,834.76	\$62,180.02	\$24,550.16	\$48,052.43	\$143,172.08	\$250,110.35	\$240,543.90	\$148,409.67	\$124,759.16	\$48,526.15
RSF Balance at CMEEC													
Diff between Billed Rate and Actual Cost	\$	(0.00260)	(0.01264)	0.00318	0.00725	0.01165	0.01404	0.02351	0.02457	0.01913	0.01584	0.01749	0.01541
Affect on RSF - by Month	\$	(16,216.71)	(76,199.62)	17,847.23	31,809.56	52,843.65	71,123.44	148,077.31	157,538.74	101,296.90	68,258.86	76,033.51	74,108.88

East Norwalk - PCA Calculation

Power Cost Adjustment Calculation

6 Month Rolling Average (starting January 2014)

		2016 January	2016 February	2016 March	2016 April	2016 May	2016 June	2016 July	2016 August	2016 September	2016 October	2016 November	2016 December	
Total Energy		kWh												
CMEEC Billable rate (\$/kWh)		\$/kWh	0.105	0.105	0.105	0.105	0.105	0.105	0.10500	0.10500	0.10500	0.10500	0.10500	0.10000
h	Grand Total (Actual) Purchased Power Costs	\$	\$ 547,942	\$ 541,440	\$ 407,347	\$ 356,348	\$ 374,580	\$ 403,390	\$ 483,976	\$ 425,888	\$ 354,838	\$ 326,338	\$ 351,290	\$ 411,240
i	(Sum of current and previous 5 months)	\$	2,713,837	2,739,573	2,692,223	2,664,356	2,658,507	2,631,047	2,567,080	2,451,529	2,399,019	2,369,010	2,345,721	2,353,570
j	kWh's Purchased	kWh												
l	Total Purchased Power kWh Units	kWh	5,732,210	5,199,650	4,628,845	4,204,693	4,427,132	4,995,545	6,533,151	6,698,461	5,039,591	4,268,091	4,468,776	5,511,122
m	(Sum of current and previous 5 months)	kWh	30,904,899	29,692,716	29,026,375	28,921,796	29,001,672	29,188,075	29,989,016	31,487,827	31,898,573	31,961,971	32,003,615	32,519,192
Actual Power Costs per month (\$/kWh)		\$/kWh	0.09559	0.10413	0.08800	0.08475	0.08461	0.08075	0.07408	0.06358	0.07041	0.07646	0.07861	0.07462
n	Power (Actual) Supply Costs @ Retail	\$	0.0927	0.0974	0.0979	0.0973	0.0968	0.0952	0.0904	0.0822	0.0794	0.0783	0.0774	0.0764
o	Base Fuel Cost	\$	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958
p	Loss Factor	%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%
q	Calculated PCA	\$	(0.0031)	0.0016	0.0021	0.0015	0.0010	(0.0006)	(0.0054)	(0.0136)	(0.0164)	(0.0175)	(0.0184)	(0.0194)
r	Actual PCA Implemented	\$	\$ 0.02700	\$ 0.02700	\$ 0.02700	\$ 0.02700	\$ 0.0270							
s	Total System Retail Sales (kWh's)	kWh	5,412,281	4,727,012	4,524,968	4,388,105	3,764,974	4,928,398	5,492,311	5,758,913	6,378,225	4,060,341	4,239,524	4,399,614
t	Base PCA Revenue	\$	518,497	452,848	433,492	420,380	360,685	472,141	526,163	551,704	611,034	388,981	406,146	421,483
u	Fuel Factor Revenue	\$	146,132	127,629	122,174	118,479	101,654	133,067	148,292	155,491	172,212	109,629	114,467	118,790
v	Total Revenues through PCA	\$	664,628	580,477	555,666	538,859	462,339	605,207	674,456	707,195	783,246	498,610	520,614	540,273
w	Difference of Collection vs Expense	\$	\$ 1,339,018	\$ 1,378,056	\$ 1,526,374	\$ 1,708,886	\$ 1,796,645	\$ 1,998,462	\$ 2,188,942	\$ 2,470,248	\$ 2,898,657	\$ 3,070,928	\$ 3,240,252	\$ 3,369,284
Over collect / (Under Collect) in each month			\$116,686.15	\$39,037.52	\$148,318.63	\$182,511.56	\$87,759.17	\$201,817.01	\$190,479.97	\$281,306.37	\$428,408.44	\$172,271.64	\$169,323.07	\$129,032.69
RSF Balance at CMEEC														
Diff between Billed Rate and Actual Cost		\$	0.00941	0.00087	0.01700	0.02025	0.02039	0.02425	0.03092	0.04142	0.03459	0.02854	0.02639	0.02538
Affect on RSF - by Month		\$	53,940.09	4,523.70	78,681.29	85,145.04	90,269.22	121,141.97	202,005.04	277,450.26	174,319.47	121,811.33	117,931.00	139,872.29

East Norwalk - PCA Calculation

Power Cost Adjustment Calculation

6 Month Rolling Average (starting January 2014)

		2017 January	2017 February	2017 March	2017 April	2017 May	2017 June	2017 July	2017 August	2017 September	2017 October	2017 November	2017 December
Total Energy	kWh												
CMEEC Billable rate (\$/kWh)	\$/kWh	0.10000	0.10000	0.09000	0.09000	0.09000	0.09000	0.09000	0.09000	0.09000	0.09000	0.09000	0.09000
h Grand Total (Actual) Purchased Power Costs	\$	\$ 455,976	\$ 405,579	\$ 385,821	\$ 341,536	\$ 389,775	\$ 430,497	\$ 491,136	\$ 475,890	\$ 415,180	\$ 393,967	\$ 422,276	\$ 530,620
i (Sum of current and previous 5 months)	\$	2,325,570	2,305,262	2,336,245	2,351,443	2,389,927	2,409,184	2,444,343	2,514,654	2,544,013	2,596,444	2,628,946	2,729,069
j kWh's Purchased	kWh												
l Total Purchased Power kWh Units	kWh	5,493,025	4,744,728	5,286,667	4,122,340	4,279,945	5,137,194	6,143,036	5,667,380	4,825,991	4,274,352	4,611,012	5,694,565
m (Sum of current and previous 5 months)	kWh	31,479,066	29,525,333	29,772,409	29,626,658	29,437,827	29,063,899	29,713,910	30,636,562	30,175,886	30,327,898	30,658,965	31,216,336
Actual Power Costs per month (\$/kWh)	\$/kWh	0.08301	0.08548	0.07298	0.08285	0.09107	0.08380	0.07995	0.08397	0.08603	0.09217	0.09158	0.09318
n Power (Actual) Supply Costs @ Retail	\$	0.0780	0.0824	0.0829	0.0838	0.0857	0.0875	0.0869	0.0867	0.0890	0.0904	0.0905	0.0923
o Base Fuel Cost	\$	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958
p Loss Factor	%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%
q Calculated PCA	\$	(0.0178)	(0.0134)	(0.0129)	(0.0120)	(0.0101)	(0.0083)	(0.0089)	(0.0091)	(0.0068)	(0.0054)	(0.0053)	(0.0035)
r Actual PCA Implemented	\$	\$ 0.0250	\$ 0.0250	\$ 0.0250	\$ 0.0230								
s Total System Retail Sales (kWh's)	kWh	5,599,708	4,827,082	4,293,413	4,877,449	3,420,175	4,509,184	6,019,350	4,852,074	5,239,125	4,289,634	4,127,665	4,538,082
t Base PCA Revenue	\$	536,452	462,434	411,309	467,260	327,653	431,980	576,654	464,829	501,908	410,947	395,430	434,748
u Fuel Factor Revenue	\$	139,993	120,677	107,335	112,181	78,664	103,711	138,445	111,598	120,500	98,662	94,936	104,376
v Total Revenues through PCA	\$	676,445	583,112	518,644	579,441	406,317	535,691	715,099	576,426	622,408	509,609	490,367	539,124
w Difference of Collection vs Expense	\$	\$ 3,589,753	\$ 3,767,285	\$ 3,900,108	\$ 4,138,013	\$ 4,154,556	\$ 4,259,750	\$ 4,483,713	\$ 4,584,249	\$ 4,791,477	\$ 4,907,119	\$ 4,975,209	\$ 4,983,714
Over collect / (Under Collect) in each month		\$220,468.71	\$177,532.15	\$132,823.34	\$237,905.07	\$16,542.20	\$105,194.19	\$223,963.06	\$100,536.48	\$207,228.04	\$115,641.49	\$68,090.12	\$8,504.57
RSF Balance at CMEEC		5,000,819	5,090,312	3,701,066	3,749,941	3,757,406	3,812,211	3,897,708	3,955,334	3,985,898	3,984,002	3,983,510	3,961,526
Diff between Billed Rate and Actual Cost	\$	0.01699	0.01452	0.01702	0.00715	(0.00107)	0.00620	0.01005	0.00603	0.00397	(0.00217)	(0.00158)	(0.00318)
Affect on RSF - by Month	\$	93,326.48	68,893.44	89,979.08	29,474.73	(4,579.54)	31,850.59	61,737.52	34,174.29	19,159.18	(9,275.35)	(7,285.40)	(18,108.72)

East Norwalk - PCA Calculation

Power Cost Adjustment Calculation
6 Month Rolling Average (starting January 2014)

Forecast is in Yellow

Colors will change when actual numbers are received.

		2018 January	2018 February	2018 March	2018 April	2018 May	2018 June	2018 July	2018 August	2018 September	2018 October	2018 November	2018 December
Total Energy	kWh												
CMEEC Billable rate (\$/kWh)	\$/kWh	0.09000	0.09000	0.09000	0.09000	0.09000	0.09000	0.09000	0.09000	0.09000	0.09000	0.09000	0.09000
Grand Total (Actual) Purchased Power Costs	\$	\$ 613,999	\$ 501,605	\$ 435,973	\$ 366,877	\$ 359,536	\$ 401,590	\$ 466,483	\$ 462,405	\$ 399,859	\$ 384,119	\$ 380,600	\$ 451,980
(Sum of current and previous 5 months)	\$	2,851,932	2,877,647	2,898,440	2,871,350	2,808,609	2,679,580	2,532,064	2,492,863	2,456,749	2,473,992	2,495,056	2,545,446
kWh's Purchased	kWh												
Total Purchased Power kWh Units	kWh	6,237,294	4,782,202	5,006,000	4,170,000	4,186,000	4,879,000	6,109,000	5,851,000	4,775,000	4,079,000	4,551,000	5,244,000
(Sum of current and previous 5 months)	kWh	31,310,594	30,425,416	30,605,425	30,501,073	30,076,061	29,260,496	29,132,202	30,201,000	29,970,000	29,879,000	30,244,000	30,609,000
Actual Power Costs per month (\$/kWh)	\$/kWh	0.09844	0.10489	0.08709	0.08798	0.08589	0.08231	0.07636	0.07903	0.08374	0.09417	0.08363	0.08619
Power (Actual) Supply Costs @ Retail	\$	0.0962	0.0999	0.1000	0.0994	0.0986	0.0967	0.0918	0.0872	0.0866	0.0874	0.0871	0.0878
Base Fuel Cost	\$	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958
Loss Factor	%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%
Calculated PCA	\$	0.0004	0.0041	0.0042	0.0036	0.0028	0.0009	(0.0040)	(0.0086)	(0.0092)	(0.0084)	(0.0087)	(0.0080)
Actual PCA Implemented	\$	\$ 0.0230											
Total System Retail Sales (kWh's)	kWh	6,107,957	5,377,195	4,725,664	3,936,480	3,951,584	4,605,776	5,766,896	5,523,344	4,507,600	3,850,576	4,296,144	4,950,336
Base PCA Revenue	\$	585,142	515,135	452,719	377,115	378,562	441,233	552,469	529,136	431,828	368,885	411,571	474,242
Fuel Factor Revenue	\$	140,483	123,675	108,690	90,539	90,886	105,933	132,639	127,037	103,675	88,563	98,811	113,858
Total Revenues through PCA	\$	725,625	638,811	561,409	467,654	469,448	547,166	685,107	656,173	535,503	457,448	510,382	588,100
Difference of Collection vs Expense	\$	\$ 5,095,340	\$ 5,232,545	\$ 5,357,982	\$ 5,458,759	\$ 5,568,672	\$ 5,714,247	\$ 5,932,871	\$ 6,126,640	\$ 6,262,284	\$ 6,335,613	\$ 6,465,395	\$ 6,601,515
Over collect / (Under Collect) in each month		\$111,626.07	\$137,205.61	\$125,436.34	\$100,777.22	\$109,912.64	\$145,575.70	\$218,624.00	\$193,768.74	\$135,644.38	\$73,329.00	\$129,781.78	\$136,119.56
RSF Balance at CMEEC		3,866,923	3,880,386	3,894,953.46	3,903,376.86	3,920,581.32	3,958,100.83	4,041,427.59	4,105,613.06	4,135,504.56	4,118,495.13	4,147,485.00	4,167,464.64
Diff between Billed Rate and Actual Cost	\$	(0.00844)	(0.01489)	0.00291	0.00202	0.00411	0.00769	0.01364	0.01097	0.00626	(0.00417)	0.00637	0.00381
Affect on RSF - by Month	\$	(52,642.76)	(71,206.98)	14,567.46	8,423.40	17,204.46	37,519.51	83,326.76	64,185.47	29,891.50	(17,009.43)	28,989.87	19,979.64

East Norwalk - PCA Calculation

Power Cost Adjustment Calculation

6 Month Rolling Average (starting January 2014)

		2019 January	2019 February	2019 March	2019 April	2019 May	2019 June	2019 July	2019 August	2019 September	2019 October	2019 November	2019 December
Total Energy	kWh												
CMEEC Billable rate (\$/kWh)	\$/kWh	0.09000	0.09000	0.09000	0.09000	0.09000	0.09000	0.09000	0.09000	0.09000	0.09000	0.09000	0.09000
Grand Total (Actual) Purchased Power Costs	\$	\$ 570,042	\$ 548,927	\$ 453,581	\$ 381,097	\$ 367,614	\$ 354,715	\$ 422,504	\$ 416,662	\$ 352,749	\$ 336,204	\$ 334,947	\$ 414,761
(Sum of current and previous 5 months)	\$	2,649,005	2,735,527	2,789,249	2,786,227	2,773,241	2,675,976	2,528,438	2,396,173	2,295,341	2,250,448	2,217,781	2,277,827
kWh's Purchased	kWh												
Total Purchased Power kWh Units	kWh	5,717,000	5,112,000	4,955,000	4,128,000	4,144,000	4,830,000	6,047,000	5,791,000	4,726,000	4,038,000	4,505,000	5,191,000
(Sum of current and previous 5 months)	kWh	30,217,000	29,478,000	29,658,000	29,707,000	29,300,000	28,886,000	29,216,000	29,895,000	29,666,000	29,576,000	29,937,000	30,298,000
Actual Power Costs per month (\$/kWh)	\$/kWh	0.09971	0.10738	0.09154	0.09232	0.08871	0.07344	0.06987	0.07195	0.07464	0.08326	0.07435	0.0799
Power (Actual) Supply Costs @ Retail	\$	0.0926	0.0980	0.0993	0.0990	0.1000	0.0978	0.0914	0.0846	0.0817	0.0804	0.0782	0.0794
Base Fuel Cost	\$	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958	0.0958
Loss Factor	%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%
Calculated PCA	\$	(0.0032)	0.0022	0.0035	0.0032	0.0042	0.0020	(0.0044)	(0.0112)	(0.0141)	(0.0154)	(0.0176)	(0.0164)
Actual PCA Implemented	\$	\$ 0.0230											
Total System Retail Sales (kWh's)	kWh	5,396,848	4,825,728	4,677,520	3,896,832	3,911,936	4,559,520	5,708,368	5,466,704	4,461,344	3,811,872	4,252,720	4,900,304
Base PCA Revenue	\$	517,018	462,305	448,106	373,317	374,763	436,802	546,862	523,710	427,397	365,177	407,411	469,449
Fuel Factor Revenue	\$	124,128	110,992	107,583	89,627	89,975	104,869	131,292	125,734	102,611	87,673	97,813	112,707
Total Revenues through PCA	\$	641,146	573,296	555,689	462,944	464,738	541,671	678,154	649,444	530,008	452,850	505,223	582,156
Difference of Collection vs Expense	\$	\$ 6,672,618	\$ 6,696,988	\$ 6,799,097	\$ 6,880,943	\$ 6,978,067	\$ 7,165,023	\$ 7,420,673	\$ 7,653,455	\$ 7,830,714	\$ 7,947,361	\$ 8,117,637	\$ 8,285,032
Over collect / (Under Collect) in each month		\$71,103.47	\$24,369.93	\$102,108.68	\$81,846.68	\$97,123.76	\$186,955.78	\$255,650.23	\$232,781.99	\$177,259.03	\$116,646.51	\$170,276.39	\$167,395.22
RSF Balance at CMEEC		4,111,952.57	4,023,106.01	4,015,475.31	4,005,898.35	4,011,244.11	4,091,228.91	4,212,955.02	4,317,482.57	4,390,073.93	4,417,290.05	4,487,793.30	4,540,222.40
Diff between Billed Rate and Actual Cost	\$	(0.00971)	(0.01738)	(0.00154)	(0.00232)	0.00129	0.01656	0.02013	0.01805	0.01536	0.00674	0.01565	0.01010
Affect on RSF - by Month	\$	(55,512.07)	(88,846.56)	(7,630.70)	(9,576.96)	5,345.76	79,984.80	121,726.11	104,527.55	72,591.36	27,216.12	70,503.25	52,429.10



Connecticut Department of
 Energy & Environmental Protection
 Bureau of Water Protection & Land Reuse
 Office of Long Island Sound Programs

ATTACHMENT E: HARBOR MANAGEMENT COMMISSION DEEP PERMIT CONSULTATION FORM

You need to complete and submit this form only if your town has a Harbor Management Commission.

To the applicant- Prior to the submission of your permit application to the Connecticut Department of Energy and Environmental Protection- Office of Long Island Sound Programs (DEEP- OLISP), please complete Part I and submit this form to your local harbor management commission (contact the town for the appropriate contact person) with a location map of your site and project plans. Once the commission returns the completed form to you, please submit it along with your permit application to the DEEP.

Part I: To be completed by APPLICANT

1. List applicant information.			
Name: Eversource Energy			
Mailing Address: 107 Selden St			
City/Town: Berlin	State: CT	Zip Code: 06037	
Business Phone: 860-514-5642	ext.	Fax: 860-665-3009	
Contact Person: Ian Cole	Title: Env. Licensing & Permitting		
E-mail: ian.cole@eversource.com			
2. List engineer/surveyor/agent information.			
Name: Commonwealth Associates, Inc.			
Mailing Address: 2700 W. Argyle Street			
City/Town: Jackson	State: MI	Zip Code: 49202	
Business Phone: 517-796-6187	ext.	Fax:	
Contact Person: Fernando Arze-Peredo	Title: Section Manager - Transmission		
Service Provided: Engineering			
3. Site Location:			
Street Address or Location Description: Norwalk River, south of Route 136 Bridge			
City/Town: Norwalk	State: CT	Zip Code: 06851	
Tax Assessor's Reference: Map 2, 3	Block 84, 37	Lot 19, 33, 1	
4. Are plans attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide date of plans: 11/3/17			
5. Provide or attach a brief, but thorough description of the project: attached			

Part II: To be completed by HARBOR MANAGEMENT COMMISSION

This consultation form is required to be submitted as part of an application for a Structures, Dredging & Fill permit (section 22a-361 of the Connecticut General Statutes (CGS)) and/or Tidal Wetlands permit (CGS section 22a-32) to the DEEP- OLISP. The application has not yet been submitted to the DEEP. Please review the enclosed materials and determine whether the project is consistent or inconsistent with your local Harbor Management Plan. You may also provide comments or recommendations regarding the proposal. The Harbor Management Commission may still provide written comments to the Commissioner during the Department's public notice comment period. Should you have any questions regarding this process, please call DEEP-OLISP at (860) 424-3034 to speak with the analyst assigned to the town in which the work is proposed. Please return the completed form to the applicant.

HARBOR MANAGEMENT COMMISSION DETERMINATION:

Check one of the following:

- The Commission has determined that the work as described in Part I of this form and attachments is **CONSISTENT** with the harbor management plan.
- The Commission has determined that the work as described in Part I of this form and attachments is **INCONSISTENT** with the following section of the harbor management plan:

COMMENTS/RECOMMENDATIONS (or check here if attached:):

Dear Mr. Cole,
The NHMC has reviewed the proposal by Eversource regarding relocation of the two 115KV transmission lines from an overhead design to an underground configuration under the Norwalk Harbor. The attached letter discusses the comments & recommendations made by the Norwalk Harbor Commission at its March 28th Meeting

Signature of Commission Representative

John Thomas Pinto

Date

4/09/18



CITY OF NORWALK
Norwalk Harbor
Management Commission
125 East Avenue
Norwalk, CT 06851

April 9, 2018

Mr. Ian Cole
Eversource Energy
Environmental Licensing and Permitting
107 Selden Street
Berlin, Connecticut 06037

Subject: Pre-Application plans by Eversource Energy concerning proposed Norwalk Harbor crossing

Dear Mr. Cole:

The Norwalk Harbor Management Commission (NHMC) has reviewed the pre-application plans submitted by Eversource Energy (Eversource) for work affecting Norwalk Harbor. Those plans, dated November 2017, concern permanent relocation of a section of two 115-kV overhead electric transmission lines by converting those lines to an underground configuration. A portion of the proposed relocation route would pass under Norwalk Harbor and through Veteran's Memorial Park. This relocation project, described in your letter of February 20, 2018 to the NHMC and in previous materials submitted by Eversource to the NHMC, is necessary to accommodate the Connecticut Department of Transportation's proposed replacement of the Norwalk River railroad bridge (Walk Bridge).

More specifically, Eversource proposes to cross Norwalk Harbor using horizontal directional drilling that would relocate the transmission lines beneath the harbor and the harbor's federal navigation channel and "thread" them between the base of pilings supporting the Norwalk Visitor's Dock. The transmission lines then will be placed in a trench to be excavated across the public boat ramp parking area adjacent to the Visitor's Dock. This public dock on the western shore of Veteran's Memorial Park at the David S. Dunavan Boating Center is currently being completely rebuilt. This work will be finished prior to Eversources' proposed transmission line relocation.

Eversource has informed the NHMC that the proposed relocation route was previously reviewed and that several options were discussed at length with representatives of the City of Norwalk. Although this project would significantly affect property on, in, and contiguous to Norwalk Harbor, the NHMC was not involved in that previous review process as required by the Connecticut General Statutes and Norwalk Code.

Subsequently, in accordance with the coastal permitting requirements of the Connecticut Department of Energy and Environmental Protection's Land and Water Resources Division (DEEP LWRD), Eversource's pre-application plans for the proposed relocation route beneath the harbor were submitted to the NHMC for review. Our review was conducted for the purpose of preliminarily considering the consistency of the proposed plans with the Norwalk Harbor Management Plan. As stated above, it is the NHMC's responsibility, pursuant to the Connecticut General Statutes, Norwalk Code, and state-approved Harbor Management Plan, to review all proposals affecting the real property one, in or contiguous to Norwalk Harbor and provide recommendations to the appropriate state and federal regulatory agencies. The General Statutes require that a recommendation of the NHMC pursuant to and supported by the Harbor Management Plan is binding on a state official making a regulatory decision affecting Norwalk Harbor unless that official can show cause why a different course of action should be followed.

Please be advised that the NHMC has special standing and interests regarding development and review of plans and proposals concerning the Visitor's Dock and David S. Dunavan Boating Center. Among other things, the NHMC planned the establishment of the Visitor's Dock and formed the original Waterfront Advisory Committee to plan for use and management of the dock. Over the past four years, the NHMC has prepared grant applications resulting in the city's receipt of \$1.26 million of state funds applied for construction of improvements to the facility for the public, including maintenance dredging of the dock area and the on-going work to completely re-build the dock. The NHMC has reviewed numerous applications by the Recreation and Parks Department for state and federal coastal permits to enhance use and enjoyment of the Visitor's Dock, and the NHMC's recommendations for facility use are included in the Department's policy and operations plan for the dock.

In addition, any plans and proposals affecting the Visitor's Dock must recognize that the dock serves as a public landing which the city is required to provide as a condition of the Congressional authorization of the Norwalk Harbor Federal Navigation Project (FNP). The FNP includes the harbor's federal navigation channels and anchorage basins.

During its meeting on March 28, 2018, the NHMC discussed these matters and evaluated an independent peer-review of the Eversource proposal. That review, conducted at the request of the NHMC by Mitchell E. Mailman, a recognized national authority in underground electric utility construction, does not endorse Eversource's proposed underground route through the Visitor's Dock and Veteran's Memorial Park. This lack of endorsement, supported by the NHMC, is due in large part to the certainty of future conflicts with public use and city management of the dock, including loss of city control over future construction and dredging operations that would affect the protected utility right-of-way established once the transmission lines are placed under and adjacent to the dock.

In view of these considerations and concerns, the NHMC determined that it is not able to make a favorable recommendation at this time regarding the proposed relocation route under Norwalk Harbor and through the Norwalk Visitor's Dock and David S. Dunavan Boating Center. Further, the NHMC approved unanimously a motion to transmit the following comments to Eversource, DEEP, the U.S. Army Corps of Engineers (USACE), the Connecticut Siting Council (having the principal authority over the siting of electric transmission lines 69-kV or above), and Norwalk Mayor Harry W. Rilling.

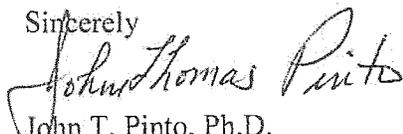
Comments:

1. The NHMC is concerned that Eversource's proposed relocation route for the electric transmission lines under the Norwalk Visitor's Dock (including between the dock pilings) and through the David S. Dunavan Boating Center parking area creates the potential for future conflicts between the transmission lines and the public boating facilities, including conflicts that will affect future repair and replacement of the docks and/or transmission lines. As such, the proposed relocation route is judged by the NHMC to be inconsistent with the policies of the Norwalk Harbor Management Plan that call for the David S. Dunavan Boating Center to be managed as the city's focal point and central facility for public boating activities and, among other things, call for continued development and enhancement of the boating facilities, including the Visitor's Dock and launching ramps. The NHMC has discussed these matters with representatives of DEEP, the USACE, and Connecticut Port Authority (the source of substantial state funds now being used to reconstruct the Visitor's Dock), all of whom expressed similar concerns.
2. The NHMC does not support Eversource moving forward with coastal permit applications for the proposed relocation route at this time due to the NHMC's concerns about the proposed route through Veteran's Memorial Park and the potential for future conflicts with the Visitor's Dock, and our understanding that it is feasible, consistent with best professional practices, to develop an alternative route that would avoid this most actively used public facility.
3. The NHMC believes it is premature for Eversource to submit plans and applications to DEEP and the USACE prior to the Connecticut Siting Council process that will provide for a proper hearing of public comments and evaluation of alternatives. If the Siting Council does not approve Eversource's currently proposed route, the DEEP pre-application plans submitted to the NHMC would not be valid and would have to be revised.

The NHMC welcomes the opportunity for additional discussion, with Eversource and others, of project alternatives to protect and maintain the public interest and the city and state investment in the Norwalk Visitor's Dock and Veteran's Memorial Park. Such discussion would be in keeping with the NHMC's right to continue to review and comment on the Eversource proposal at such time as it may be modified, when additional information concerning the proposal may be available, and during the Siting Council review process.

If you have any questions or wish to discuss this matter further at this time, please contact me (203) 984-5339 or pintoj@optonline.net.

Sincerely



John T. Pinto, Ph.D.

Chairman, Application Review Committee
Norwalk Harbor Management Commission

cc:

Mayor Harry W. Rilling
Mr. Mario Coppola, Corporation Counsel
Mr. Michael Corsello, Norwalk Common Council
Mr. Micheal Grzywinski, DEEP LWRD
Mr. Ken Hughes, Norwalk Recreation and Parks Department
Mr. Pete Johnson, Chair, Norwalk Shellfish Commission
Ms. Susan Lee, USACE
Mr. Ed O'Donnell, USACE
Mr. Joe Perella, Chair, NHMC
Mr. Joe Salvatore, CT Port Authority
Mr. Robert Stein, CT Siting Council
Mr. Frank Strauch, Norwalk Planning and Zoning



CITY OF NORWALK
Norwalk Harbor
Management Commission
125 East Avenue
Norwalk, CT 06851

April 9, 2018

**Statement of Facts and Events Relevant to the
Norwalk Harbor Management Commission's Review of the
Eversource Transmission Line Relocation Proposal¹**

In 2018, Eversource Energy (Eversource) is planning to relocate a section of two 115-kV overhead electric transmission lines currently following the Metro-North rail line by converting those lines to an underground configuration. A portion of the proposed relocation route would pass under Norwalk Harbor and through the city's David S. Dunavan Boating center and Veteran's Memorial Park. This project, as described by Eversource, is an element of the Connecticut Department of Transportation's proposed project to replace the Norwalk River railroad bridge (Walk Bridge).

Eversource proposes to cross Norwalk Harbor using a horizontal direct drill (HDD) that would place the transmission lines beneath the harbor and the harbor's federal navigation channel and "thread" them between the base of the pilings of the Norwalk Visitor's Dock. This public dock is now being completely rebuilt on the western shore of Veteran's Memorial Park at the David S. Dunavan Boating Center. The lines then will be placed in a trench to be excavated across the public boat ramp parking lot adjacent to the Visitor's Dock.

It is the responsibility of the Norwalk Harbor Management Commission (NHMC), as authorized in the Connecticut General Statutes, Norwalk Code, and Norwalk Harbor Management Plan, to review the Eversource plans and provide recommendations to the appropriate state and federal regulatory agencies. According to the General Statutes, a recommendation of the NHMC consistent with and supported by the Harbor Management Plan is binding on a state official making a regulatory decision affecting Norwalk Harbor unless that official can show cause why a different course of action should be taken.

The following statement of facts and events describes the special standing and interest of the NHMC regarding development and review of plans and proposals concerning the Visitor's Dock and David S. Dunavan Boating Center at Veteran's Memorial Park.

¹ The initial version of this report, dated March 2, 2018, was provided by the NHMC to Mayor Harry W. Rilling and others following a meeting on February 27, 2018 with the Mayor and representatives of the NHMC and other city agencies to discuss the Eversource proposal.

1. The David S. Dunavan Boating Center at Veteran's Memorial Park, including the Norwalk Visitor's Dock and boat launching ramps, is the principal facility for public boating activity in Norwalk Harbor. Managed by the Norwalk Common Council's Recreation, Parks and Cultural Affairs Committee and maintained by the city's Recreation and Parks Department, the Visitor's Dock is a public docking facility nearby the SONO commercial and historic district and Maritime Aquarium. It provides short-term and overnight docking for visiting boaters and a vessel-waste pump-out facility. In addition, the Visitor's Dock serves as a public landing which the city is required to provide as a condition of the Congressional authorization of the Norwalk Harbor Federal Navigation Project (FNP). The FNP includes the harbor's federal navigation channels and anchorage basins.
2. The NHMC planned the establishment of the Visitor's Dock and established the original Waterfront Advisory Committee to develop plans and proposals for use and management of the dock. More recently, the NHMC provided funds from the NHMC's dredging account to cover the city's cost to dredge the area of the docks in 2014. In addition, the NHMC prepared the grant application and supporting documentation resulting in a reimbursement to the city of eighty percent (\$358,386.40) of the total dredging cost of \$447,983.00 through a Connecticut Department of Transportation grant-in-aid for harbor infrastructure improvements.
3. The NHMC is the principal city agency for managing use of the Norwalk Harbor FNP, including the federal channel under which the relocated Eversource transmission lines would be placed. In this capacity, the NHMC worked with the U.S. Army Corps of Engineers to achieve the multi-year, three-phase, \$13.6 million Norwalk Harbor Maintenance Dredging Project completed in 2014. The city's project to dredge the Visitor's Dock area in 2014 was planned and conducted by the city in coordination with the federal dredging project with significant assistance from the NHMC. The city dredging project thereby was accomplished with a major cost savings as dredged material from the FNP served as the required "cap" for open water disposal of the sediment removed from the Visitor's Dock area.
4. It is a policy of the Harbor Management Plan that the David S. Dunavan Boating Center including the Norwalk Visitor's Dock and boat launching area should be managed and maintained as the city's focal point and central facility for public boating activities on the Norwalk waterfront, providing opportunities for safe and enjoyable public access to the Norwalk Harbor, a public landing for visiting boaters, and docking facilities available for special waterfront events. The Plan also calls for the NHMC to have an advisory role for planning and managing operation of the Visitor's Dock.
5. The NHMC has reviewed numerous applications by the Recreation and Parks Department for state and federal coastal permits to enhance use and enjoyment of the Visitor's Dock, including the recent application to change the facility's permitted use to allow use by commercial vessels. In that regard, the NHMC prepared recommendations for facility use included in the Department's policy and operations plan concerning the types and sizes of the commercial vessels permitted to use the Visitor's Dock in order

that such use does not unreasonably conflict with the principal use of the dock by visiting boaters.

6. In 2017, the Recreation and Parks Department completed the first phase of a major construction project to enhance the Boating Center involving replacement of the boat launching ramps, addition of fill material to raise the elevation of the parking area, and re-paving of the entire parking area. This work was conducted in accordance with an approval issued by the Connecticut Department of Energy and Environmental Protection (DEEP) including conditions recommended by the NHMC to, among other things, protect harbor water quality. The total cost of this work, conducted entirely with city funds, was \$2.1 million.
7. In April of 2018, phase two of the city's Boating Center improvement project is underway, involving complete replacement of the Visitor's Dock. Again, this work is being conducted in accordance with an approval issued by DEEP including conditions recommended by the NHMC to, among other things, ensure safe and beneficial public use of the facility. The NHMC prepared the 2017 grant application to the Connecticut Port Authority and supporting documentation resulting in a Small Harbor Improvement Projects Program (SHIPP) grant to the city in the amount of \$908,250.00 for this project.
8. During its meeting on February 28, 2018, the NHMC unanimously approved a motion to transmit its concerns to Mayor Harry W. Rilling regarding Eversource's proposed route to relocate the 115-kV transmission lines under the Visitor's Dock. The NHMC also agreed to obtain a peer review of this proposal from a recognized expert in the field of underground electric utility construction prior to preliminarily evaluating the proposal for consistency with the Norwalk Harbor Management Plan. In addition, the NHMC recommended that no further action be taken by any city agency regarding the Eversource proposal as it affects the Norwalk Harbor and Veteran's Memorial Park until such time as the NHMC completes its review of Eversource's preliminary plans with the benefit of an expert peer review.
9. On March 1, 2018, the NHMC received from Eversource, via overnight delivery, pre-application plans transmitted to the NHMC as part of the DEEP coastal permitting process. That process requires that applicants for DEEP permits, prior to submitting a permit application to DEEP, must first submit pre-application plans to the NHMC and obtain comments from the NHMC with respect to the consistency of those plans with the Norwalk Harbor Management Plan.
10. The NHMC has requested and obtained an independent peer review of the Eversource proposal. That review was conducted by Mr. Mitchell E. Mailman, a nationally recognized authority with respect to underground electric utility construction who is also recognized by the Connecticut Siting Council. His report, dated March 29, 2018, does not endorse Eversource's proposed underground route through the Visitor's Dock and Veteran's Memorial Park. This lack of endorsement, supported by the NHMC, is due in large part to the certainty of future conflicts with public use and city management of the dock, including loss of city control over future construction and dredging operations that

would affect the protected utility right-of-way established once the transmission lines are placed under and adjacent to the dock.

11. During its meeting on March 29, 2018, the NHMC considered Mr. Mailman's report and Eversource's pre-application plans and approved unanimously a motion to inform Eversource, DEEP, the U.S. Army Corps of Engineers, the Connecticut Siting Council, and Mayor Rilling that the NHMC at this time is not able to make a favorable recommendation regarding the proposed route and does not support Eversource moving forward with coastal permit applications prior to review of the proposal by the Connecticut Siting Council. The NHMC's findings in this regard are included in a letter of April 09, 2018 to Mr. Ian Cole, Eversource Energy Environmental Licensing and Permitting.

End

Federal Energy Regulatory Commission

§ 380.15

(3) Construction may proceed.

(d) *Procedures for formal consultation.*

(1) In the event that formal consultation is required pursuant to paragraphs (b)(5)(v) or (c)(2) of this section, the Commission staff will initiate formal consultation with the FWS and/or NMFS, as appropriate, and will request that the consulted agency designate a lead Regional Office, lead Field/District Office, and Project Manager, as necessary, to facilitate the formal consultation process. In addition, the Commission will designate a contact for formal consultation purposes.

(2) During formal consultation, the consulted agency, the Commission, and the project sponsor will coordinate and consult to determine potential impacts and mitigation which can be implemented to minimize impacts. The Commission and the consulted agency will schedule coordination meetings and/or field visits as necessary.

(3) The formal consultation period will last no longer than 90 days, unless the consulted agency, the Commission, and project sponsor mutually agree to an extension of this time period.

(4) The consulted agency will provide the Commission with a Biological Opinion on the proposed project, as specified in 50 CFR 402.14(e), within 45 days of the completion of formal consultation.

[Order 603, 64 FR 26617, May 14, 1999, as amended by Order 699, 72 FR 45328, Aug. 14, 2007]

§ 380.14 Compliance with the National Historic Preservation Act.

(a) Section 106 of the National Historic Preservation Act, as amended (16 U.S.C. 470(f)) (NHPA), requires the Commission take into account the effect of a proposed project on any historic property and to afford the Advisory Council on Historic Preservation (Council) an opportunity to comment on projects if required under 36 CFR 800. The project sponsor, as a non-Federal party, assists the Commission in meeting its obligations under NHPA section 106 and the implementing regulations at 36 CFR part 800 by following the procedures at § 380.12(f). The project sponsor may contact the Commission at any time for assistance. The Com-

mission will review the resultant filings.

(1) The Commission's NHPA section 106 responsibilities apply to public and private lands, unless subject to the provisions of paragraph (a)(2) of this section. The project sponsor will assist the Commission in taking into account the views of interested parties, Native Americans, and tribal leaders.

(2) If Federal or Tribal land is affected by a proposed project, the project sponsor shall adhere to any requirements for cultural resources studies of the applicable Federal land-managing agencies on Federal lands and any tribal requirements on Tribal lands. The project sponsor must identify, in Resource Report 4 filed with the application, the status of cultural resources studies on Federal or Tribal lands, as applicable.

(3) The project sponsor must consult with the SHPO(s) and THPOs, if appropriate. If the SHPO or THPO declines to consult with the project sponsor, the project sponsor shall not continue with consultations, except as instructed by the Director of the Office of Energy Projects.

(4) If the project is covered by an agreement document among the Commission, Council, SHPO(s), THPO(s), land-managing agencies, project sponsors, and interested persons, as appropriate, then that agreement will provide for compliance with NHPA section 106, as applicable.

(b) [Reserved]

[Order 603, 64 FR 26618, May 14, 1999, as amended by Order 699, 72 FR 45329, Aug. 14, 2007]

§ 380.15 Siting and maintenance requirements.

(a) *Avoidance or minimization of effects.* The siting, construction, and maintenance of facilities shall be undertaken in a way that avoids or minimizes effects on scenic, historic, wildlife, and recreational values.

(b) *Landowner consideration.* The desires of landowners should be taken into account in the planning, locating, clearing, and maintenance of rights-of-way and the construction of facilities on their property, so long as the result is consistent with applicable requirements of law, including laws relating

to land-use and any requirements imposed by the Commission.

(c) *Safety regulations.* The requirements of this paragraph do not affect a project sponsor's obligations to comply with safety regulations of the U.S. Department of Transportation and recognized safe engineering practices for Natural Gas Act projects and the National Electric Safety Code for section 216 Federal Power Act projects.

(d) *Pipeline and electric transmission facilities construction.* (1) The use, widening, or extension of existing rights-of-way must be considered in locating proposed facilities.

(2) In locating proposed facilities, the project sponsor shall, to the extent practicable, avoid places listed on, or eligible for listing on, the National Register of Historic Places; natural landmarks listed on the National Register of Natural Landmarks; officially designated parks; wetlands; and scenic, recreational, and wildlife lands. If rights-of-way must be routed near or through such places, attempts should be made to minimize visibility from areas of public view and to preserve the character and existing environment of the area.

(3) Rights-of-way should avoid forested areas and steep slopes where practical.

(4) Rights-of-way clearing should be kept to the minimum width necessary.

(5) In selecting a method to clear rights-of-way, soil stability and protection of natural vegetation and adjacent resources should be taken into account.

(6) Trees and vegetation cleared from rights-of-way in areas of public view should be disposed of without undue delay.

(7) Remaining trees and shrubs should not be unnecessarily damaged.

(8) Long foreground views of cleared rights-of-way through wooded areas that are visible from areas of public view should be avoided.

(9) Where practical, rights-of-way should avoid crossing hills and other high points at their crests where the crossing is in a forested area and the resulting notch is clearly visible in the foreground from areas of public view.

(10) Screen plantings should be employed where rights-of-way enter for-

ested areas from a clearing and where the clearing is plainly visible in the foreground from areas of public view.

(11) Temporary roads should be designed for proper drainage and built to minimize soil erosion. Upon abandonment, the road area should be restored and stabilized without undue delay.

(e) *Right-of-way maintenance.* (1) Vegetation covers established on a right-of-way should be properly maintained.

(2) Access and service roads should be maintained with proper cover, water bars, and the proper slope to minimize soil erosion. They should be jointly used with other utilities and land-management agencies where practical.

(3) Chemical control of vegetation should not be used unless authorized by the landowner or land-managing agency. When chemicals are used for control of vegetation, they should be approved by EPA for such use and used in conformance with all applicable regulations.

(f) *Construction of aboveground facilities.* (1) Unobtrusive sites should be selected for the location of aboveground facilities.

(2) Aboveground facilities should cover the minimum area practicable.

(3) Noise potential should be considered in locating compressor stations, or other aboveground facilities.

(4) The exterior of aboveground facilities should be harmonious with the surroundings and other buildings in the area.

(5) For Natural Gas Act projects, the site of above-ground facilities which are visible from nearby residences or public areas, should be planted in trees and shrubs, or other appropriate landscaping and should be installed to enhance the appearance of the facilities, consistent with operating needs.

[Order 603, 64 FR 26619, May 14, 1999, as amended by Order 689, 71 FR 69741, Dec. 1, 2006]

§ 380.16 Environmental reports for section 216 Federal Power Act Permits.

(a) *Introduction.* (1) The applicant must submit an environmental report with any application that proposes the construction or modification of any facility identified in § 380.3(c)(3). The environmental report must include the 11