Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

Date October 7, 2019

David Kooris, Acting Chairman
Connecticut Port Authority
455 Boston Post Road, Suite 215
Old Saybrook, CT 06475

SUBJECT: Certificate of Permission #201910828-COP
200 State Pier Road, New London

Dear Mr. Kooris:

Please find attached a copy of your subject license and relevant enclosures which are being issued pursuant to your application of September 11, 2019. Your attention is directed to the conditions of the license. All work must conform to that which is specifically authorized. Please do not hesitate to contact me at micheal.grzywinski@ct.gov or 860-424-3674 should you have further questions.

Any work in regulated areas of the State which has not been authorized by a valid license is a violation of state law and subject to enforcement action by the Department of Energy & Environmental Protection and the Office of the Attorney General.

Your initiation of authorized activities will be relied upon as your agreement to comply with the terms and conditions of the license.

If you have not already done so, you should contact your local Planning and Zoning Office and the U. S. Army Corps of Engineers to determine local and federal permit requirements on your project, if any. Write the Corps' New England District, Regulatory Branch, 696 Virginia Road, Concord, MA 01742-2751; http://www.nae.usace.army.mil/ or call 1-800-343-4789.

Sincerely,

M. P. Grzywinski

Micheal P. Grzywinski, Senior Environmental Analyst
Land & Water Resources Division
Bureau of Water Protection & Land Reuse

Attached: License, LWRD General Conditions, Land Record Filing, Work Commencement Form, Site Plans, Compliance Certification Form,
cc: File #201910828-COP, New London
David Kooris, Connecticut Port Authority, david.kooris@ct.gov
Joe Salvatore, Connecticut Port Authority, joseph.salvatore@ct.gov
Michael Passero, New London Mayor, mpassero@ci.New-London.ct.us
Diane Ray, ACOE, Diane.M.Ray@usace.army.mil
David Crocker, New London Harbormaster, crockerd64@gmail.com
Michael Garbolski, AECOM, michael.garbolski@aecom.com

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

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Connecticut Department of Energy and Environmental Protection License*

Certificate of Permission

Licensee(s):	Connecticut Port Authority, c/o David Kooris, Acting Chairman
Licensee Address(s):	455 Boston Post Road, Suite 204 Old Saybrook, CT 06475
License Number(s):	201910828-COP
Municipality:	City of New London
Project Description:	Remove existing derelict structures and oversheet an existing bulkhead for shoreline flood and erosion control.
Project Address/Location:	200 State Pier Road
Waters:	Thames River
Authorizing CT Statute(s) and/or Federal Law:	CGS Section 22a-359 to 363g; CGS Section 22a-90 to 112
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 dated April 8, 2019 and twelve (12) sheets of plans dated September 5, 2019.
License Enclosures:	Compliance Certification Form, Land Record Filing, LWRD General Conditions, Site Plan Set, Work Commencement Form

*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 . . .*"

Authorized Activities:

The Licensee is hereby authorized to conduct the following work as described in application # 201910828-COP and as depicted on any site plan sheets / sets cited herein:

1. using water-based equipment, remove four (4) existing pile-support mooring dolphins and timber gangway and remove the piles a minimum of 2' below the existing substrate;
2. install sedimentation and erosion control measures;
3. remove an existing approximately 47' wide by 144' long pile-supported "Northeast Annex" and cut the piles off at the existing substrate;
4. remove an existing concrete cap located on the northeast bulkhead;
5. install approximately 750 linear feet of steel sheetpile bulkhead, including a waler and tie-back system and a concrete cap, curbing, corrosion protection and energy absorbing fenders;
6. place crushed gravel or flowable material between the existing bulkhead and the bulkhead identified above; and
7. remove the sedimentation and erosion controls.

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. All work authorized herein shall be conducted in accordance with a plan entitled "Peregrine Falcon Protection Plan," prepared by AECOM dated July 2, 2019. The Plan is incorporated by reference in this License and a copy of said Plan is enclosed within this License.
3. The work authorized herein shall be conducted using land and water-based equipment and hand-held tools during periods of high water. At no time shall the Licensee allow the barge or equipment to rest on the substrate. Any such barge must move to deeper waters during periods of low water in the area of the proposed activity. It shall not be a defense to this provision for the Licensee to assert that it has no control over the operation of the barge.
4. All waste material generated by the performance of the work authorized herein shall be disposed of by the Licensee at an upland site approved for the disposal of such waste material, as applicable. The Licensee shall not allow any waste to enter the Thames River and shall immediately remove any debris that enters the water.
5. The Licensee shall cut off the support piles associated with the Northeast Annex at the mudline and shall remove the support piles associated with the mooring dolphins a minimum of 2' below the mudline.
6. The issuance of this permit does not relieve the Licensee of their obligations to obtain any other approvals required by applicable federal, state and local law.

7. Waterward encroachment of the bulkhead authorized herein shall extend no further than 18" from the waterward face of the existing bulkhead.
8. Prior to commencement of the work authorized herein, the Licensee shall install and maintain erosion and sediment controls designed in accordance with the 2002 Connecticut Erosion and Sediment Control Guidelines and shall continue to maintain such controls in good operating condition for the construction period of the project or until the site is stabilized.

Issued under the authority of the Commissioner of Energy and Environmental Protection on:

October 7, 2019
Date

Brian P. Thompson
Division Director
Land & Water Resources Division

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 Commencement[1].** 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 individually and cumulatively has minimal additional environmental impact and does not substantively alter 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.

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

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

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

Land Record Filing*

To: City of New London Clerk

Signature and Date: M.P. Lmy 10/7/19

Subject: 200 State Pier Road, New London
License #201910828-COP

Pursuant to Section 22a-363g of the Connecticut General Statutes, the Commissioner of Energy and Environmental Protection gives notice that a license has been issued to Connecticut Port Authority, c/o David Kooris, Acting Chairman, 455 Boston Post Road, Suite 204, Old Saybrook, CT 06475 to:

1. using water-based equipment, remove four (4) existing pile-support mooring dolphins and timber gangway and remove the piles a minimum of 2' below the existing substrate;
2. install sedimentation and erosion control measures;
3. remove an existing approximately 47' wide by 144' long pile-supported "Northeast Annex" and cut the piles off at the existing substrate;
4. remove an existing concrete cap located on the northeast bulkhead;
5. install approximately 750 linear feet of steel sheetpile bulkhead, including a waler and tie-back system and a concrete cap, curbing, corrosion protection and energy absorbing fenders;
6. place crushed gravel or flowable material between the existing bulkhead and the bulkhead identified above; and
7. remove the sedimentation and erosion controls.

If you have any questions pertaining to this matter, please contact the Land & Water Resources Division at 860-424-3019.

Return to:

Land & Water Resources Division
State of Connecticut
Department of Energy & Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

*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.

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

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

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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): 201910828-COP, New London

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)

Connecticut Department of
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Compliance Certification Form

The following certification must be signed by the licensee working in consultation with a Connecticut-licensed design professional and must be submitted to the address indicated at the end of this form within ninety (90) days of completion of the authorized work.

1. Licensee Name: _____
   License Number(s): 201910828-COP, New London
   Site Address: _____

2. **Check one:**
   (a) ☐ "I certify that the final site conditions and / or structures are in general conformance with the approved site plans". Identify and describe any deviations and attach to this form.
   (b) ☐ "The final site conditions and / or structures are not in general conformance with the approved site plans. The enclosed "as-built" plans note the modifications".

3. "I understand that any false statement in this certification is punishable as a criminal offence under section 53a-157b of the General Statutes and under any other applicable law."

_____ _____
Signature of Licensee Date

_____
Name of Licensee (print or type)

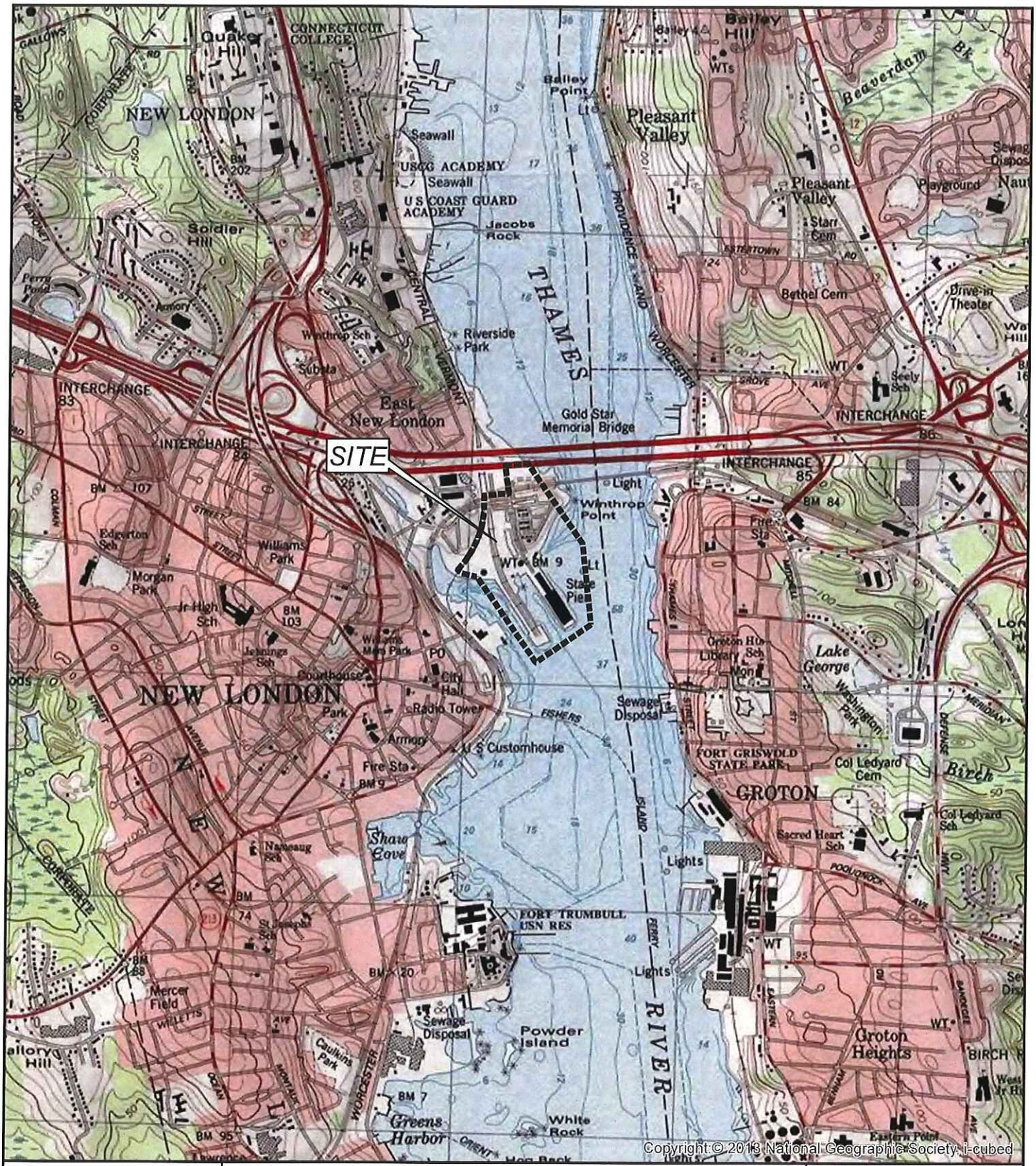
_____ _____
Signature of CT-Licensed Design Professional Date

_____
Name of CT-Licensed Design Professional (print or type)

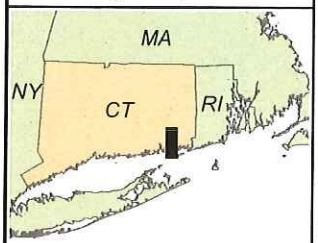
_____
Professional License Number (if applicable) Affix Stamp Here

- As-built plans shall include: elevations or tidal datums, as applicable, and structures, including any proposed elevation views and cross sections included in the approved license plans. Such as-built plans shall be the original ones and be signed and sealed by an engineer, surveyor or architect, as applicable, who is licensed in the State of Connecticut.
- The Licensee will be notified by staff of the Land and Water Resources Division (LWRD) if further compliance review is necessary. Lack of response by LWRD staff does not imply compliance.

Submit this completed form to :
Regulatory Section
Department of Energy and Environmental Protection
Land & Water Resources Division
79 Elm Street
Hartford, CT 06106-5127



Map Location



N

Site Locus Map

State Pier Infrastructure Improvements
New London, Connecticut

0 1,000 2,000 4,000 6,000 Feet

0 0.125 0.25 0.5 0.75 Miles

Map Projection: State Plane, NAD 83, feet.
Image Source: USGS Topographic Quadrangle New London and Uncasville, CT.

AECOM

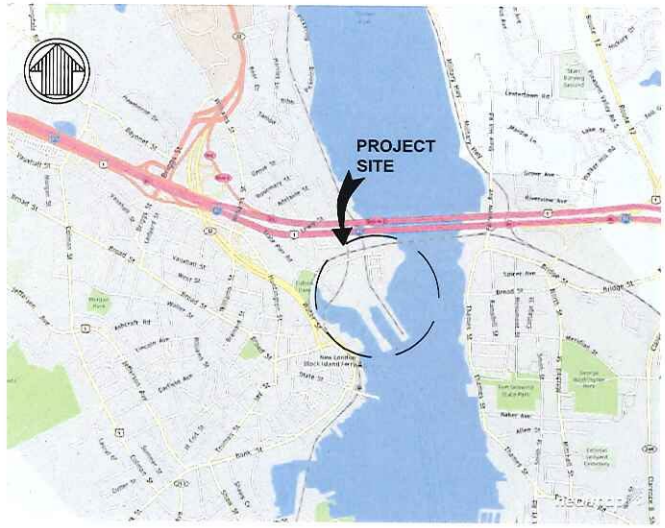
Figure 1

4/8/2019

Proj. #: 60579714

STATE PIER FACILITY
NEW LONDON, CONNECTICUT

AREA MAP



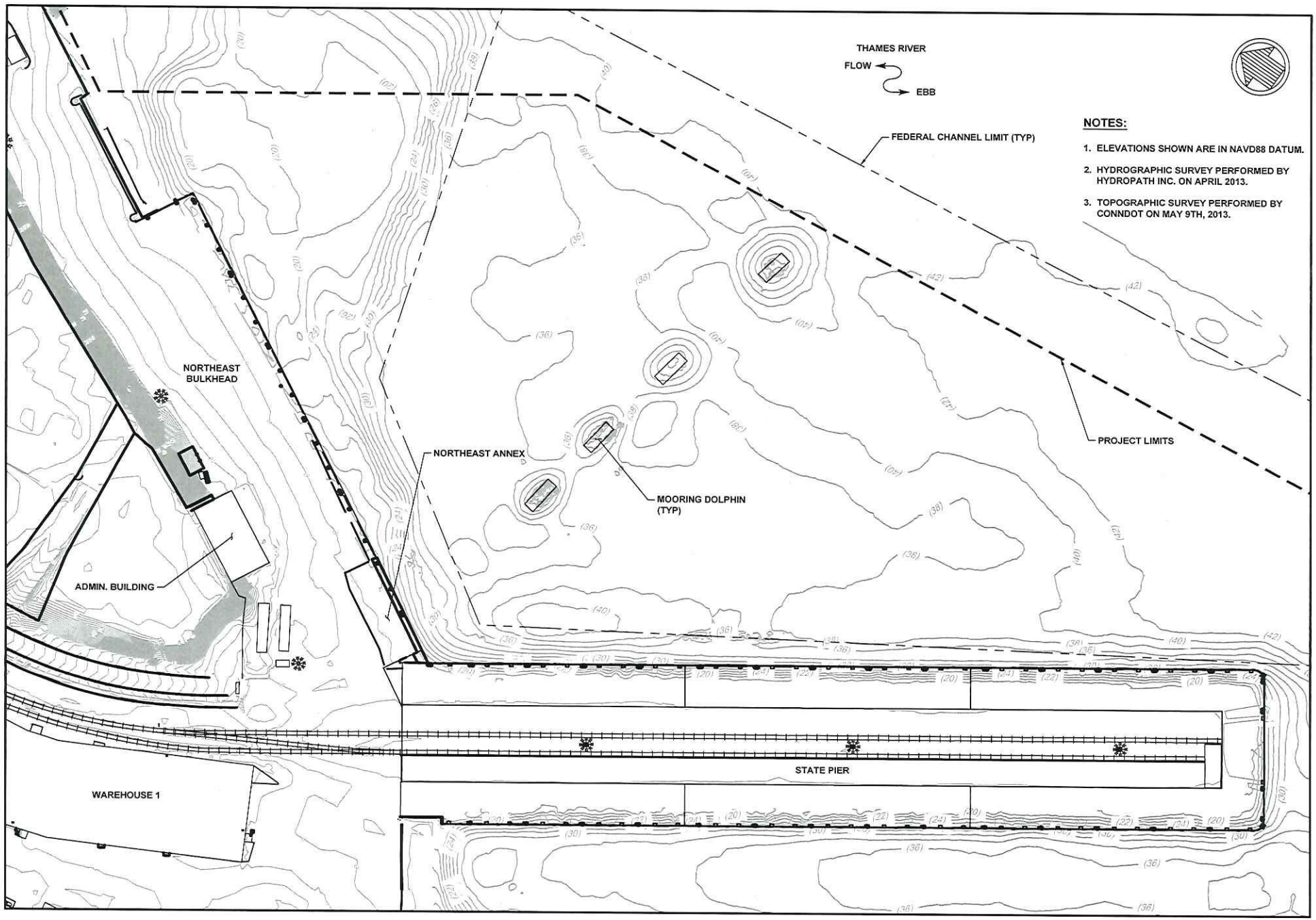
LOCATION MAP

9/5/2019

DRAWING INDEX	
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	EXISTING TOPOGRAPHIC AND HYDROGRAPHIC CONDITIONS
3	EROSION SEDIMENT CONTROL PLAN
4	NOTES - 1 OF 2
5	NOTES - 2 OF 2
6	EROSION CONTROL DETAILS - 1 OF 2
7	EROSION CONTROL DETAILS - 2 OF 2
8	WORK COVERED UNDER CERTIFICATE OF PERMISSION
9	NORTHEAST BULKHEAD SECTIONS
10	NORTHEAST BULKHEAD WALE DETAILS
11	NORTHEAST ANNEX PLAN AND SECTIONS
12	MOORING PLATFORM DEMOLITION

Connecticut PORT AUTHORITY

moffatt & nichol



Connecticut PORT AUTHORITY

moffatt & nichol

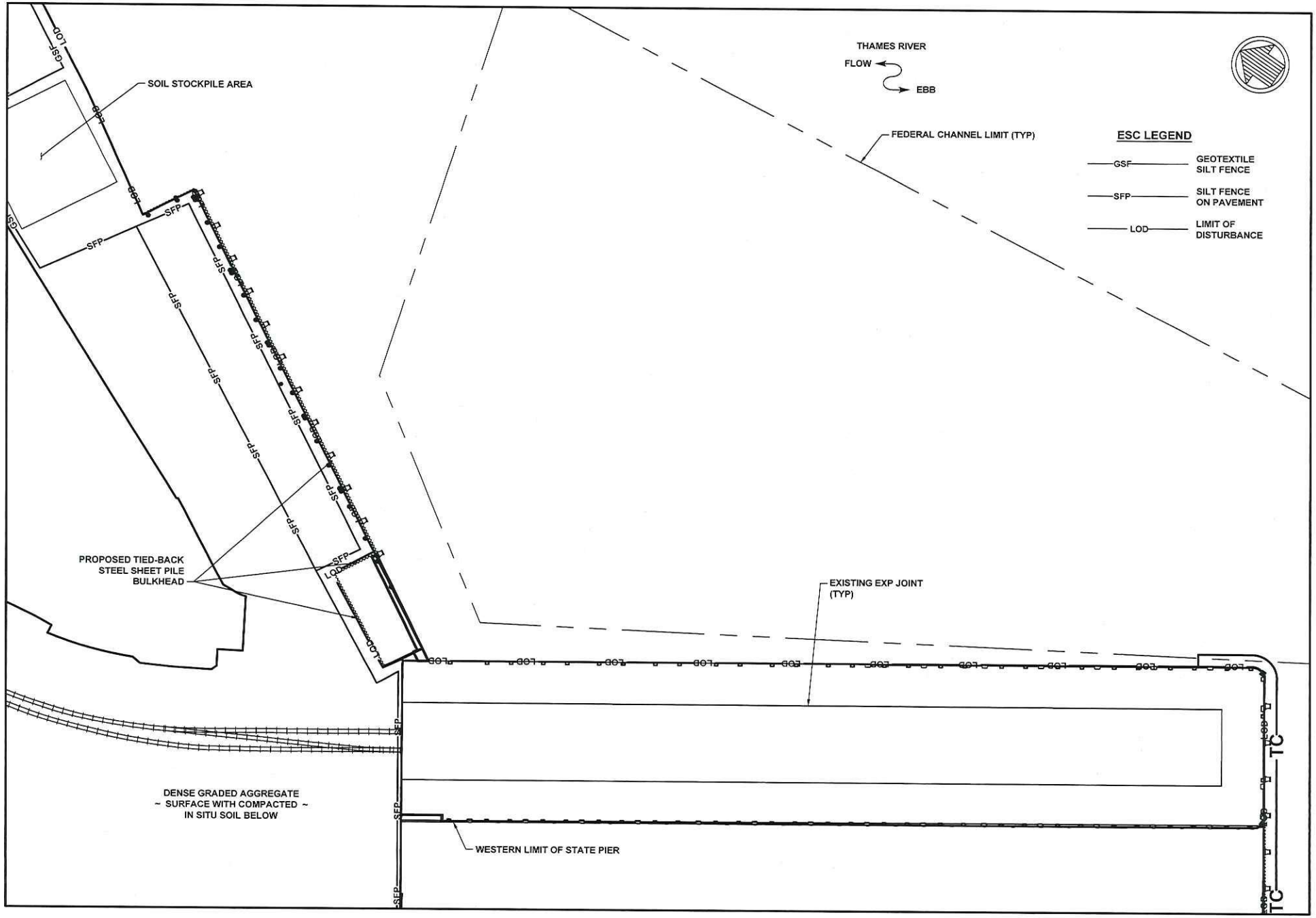
EXISTING TOPOGRAPHIC AND HYDROGRAPHIC CONDITIONS

STATE PIER FACILITY

9/5/2019

80' 0' 80' 160'

SCALE: 1"=160'



Connecticut Port Authority

moffatt & nichol

EROSION SEDIMENT CONTROL PLAN

STATE PIER FACILITY

9/5/2019

GENERAL NOTES

1. ALL FEDERAL, STATE, AND LOCAL SAFETY REGULATIONS ARE TO BE STRICTLY FOLLOWED.
2. THE CONTRACTOR SHALL ABIDE BY ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL PROTECTION STANDARDS, LAWS AND REGULATIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE CONSTRUCTION SITE AND THE AREAS OF WORK WHILE PERFORMING THE WORK OF THIS CONTRACT. CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE CONSTRUCTION SITE ON A DAILY BASIS. NO BURNING OF DEBRIS SHALL BE PERMITTED.
4. DURING ALL PHASES OF THE WORK ALL PRECAUTIONS SHALL BE TAKEN AS NECESSARY OR AS REQUIRED TO PERMANENTLY PREVENT CONTAMINATED WATER, VEHICLE FLUIDS, CONSTRUCTION DEBRIS, AND ANY OTHER CONTAMINANT FROM ENTERING THE WATERWAY.
5. CONTRACTOR SHALL INSTALL A FLOATING BOOM SYSTEM THAT FULLY ENCLOSES THE WORK AREA. THIS BOOM SHALL BE ANCHORED IN PLACE OR ATTACHED TO A FIXED STRUCTURE. THIS BOOM SHALL BE CAPABLE OF COLLECTING ANY FLOATING DEBRIS GENERATED DURING CONSTRUCTION ACTIVITIES. DEBRIS SHALL BE COLLECTED AND DISPOSED OF FROM THIS BOOM ON A DAILY BASIS.

EROSION AND SEDIMENT CONTROL NOTES

GENERAL EROSION CONTROL NOTES

1. SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN CONFORMANCE WITH THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION (CT DEEP) "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL" DEEP BULLETIN NO. 34 , LATEST REVISION, AND THE CONNECTICUT DEPARTMENT OF TRANSPORTATION (CTDOT) "2004 CONNECTICUT STORM WATER QUALITY MANUAL", LATEST REVISION, AND THE CTDOT FORM 817.
2. INSTALL ALL EROSION CONTROL MEASURES SHOWN, SPECIFIED OR REQUIRED BY THE ENGINEER PRIOR TO ANY CONSTRUCTION MEASURES UNTIL FINAL SURFACE TREATMENTS ARE IN PLACE AND/OR UNTIL ALL PERMANENT VEGETATION IS ESTABLISHED.
3. MARK WORK LIMIT LINE(S) PRIOR TO STARTING WORK. DO NOT DISTURB VEGETATION OR TOPSOIL BEYOND THE PROPOSED LIMIT LINE. COORDINATE WITH THE ENGINEER FOR THE LOCATIONS FOR THE TEMPORARY STOCKPILING OF TOPSOIL DURING CONSTRUCTION.
4. FINE GRADE AND IMMEDIATELY SEED ALL SIDE SLOPES, SHOULDER AREAS, AND DISTURBED VEGETATED AREAS. ALL GRADING TO BE A MAXIMUM SLOPE OF 2:1, COMPACTED, AND STABILIZED. SLOPES GREATER THAN 2:1 TO RECEIVE EROSION CONTROL BLANKET.
5. REMOVE ALL SEDIMENT TRACKED ON PUBLIC RIGHT-OF-WAYS AT THE END OF EACH DAY.
6. LAND DISTURBANCE SHALL BE KEPT TO A MINIMUM NECESSARY FOR CONSTRUCTION.
7. ALL CATCH BASINS SHALL BE PROTECTED WITH SILT SACKS, HAY BALE RINGS, OR SILT FENCE THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED.
8. WHENEVER POSSIBLE, EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION, ADDITIONAL CONTROL MEASURES SHALL BE INSTALLED DURING CONSTRUCTION.
9. THE CONTRACTOR SHALL USE APPROVED METHODS/MATERIALS FOR PREVENTING THE BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES ONTO ADJACENT PROPERTIES AND SITE AREAS.
10. AFTER CONSTRUCTION, EROSION AND SEDIMENTATION WITHIN PROJECT LIMITS WILL BE MANAGED BY FINISHED TERMINAL SURFACE.
11. MINIMIZING WIND EROSION AND CONTROLLING DUST WILL BE ACCOMPLISHED BY ONE OR MORE OF THE FOLLOWING METHODS:
    A. COVERING 30% OR MORE OF THE SOIL SURFACE WITH NON-ERODIBLE MATERIAL.
    B. ROUGHENING THE SOIL TO PRODUCE RIDGES PERPENDICULAR TO THE PREVAILING WIND.
    C. FREQUENT WATERING OF EXCAVATION AND FILL AREAS.
12. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1-3" OF STONE, AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.
13. CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.
14. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE AS DIRECTED BY THE ON SITE INSPECTOR OR THE CIVIL ENGINEER.
15. FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED EROSION CONTROL PLANS.
16. THE SITE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION CONTROL MEASURES INCLUDING REPLACING OR REPAIRING ANY DAMAGED DEVICES DUE TO ANY CONSTRUCTION ACTIVITY BY OTHERS.
17. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
18. SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.

INITIAL PHASE EROSION CONTROL NOTES

1. PRIOR TO THE LAND DISTURBING CONSTRUCTION, THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE OWNER.
2. THE CONTRACTOR SHALL REVIEW THE PROJECT SEQUENCE SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF ITS NATURAL COVER IS EXPOSED ONLY IN SMALL QUANTITIES.
3. A COPY OF THE APPROVED LAND DISTURBANCE PLAN SHALL BE PRESENT ON THE SITE AT ALL TIMES.
4. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.
5. PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.
6. PRIOR TO ANY OTHER CONSTRUCTION, A CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY TO OR EXIT FROM THE SITE OR ONTO ANY PUBLIC ROADWAY.
7. THE FOLLOWING INITIAL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY.
    A. THE CONSTRUCTION ENTRANCE, CONSISTING OF A MINIMUM PAD SIZE OF 12 FT BY 50 FT WITH A MINIMUM OF 6" THICK STONE. THE STONE SIZE SHOULD CONSIST OF COURSE AGGREGATE BETWEEN 1-1/2" & 3-1/2" IN DIAMETER AND OVERLAID ON A GEOTEXTILE UNDERLINER. THE GEOTEXTILE UNDERLINER SHALL MEET THE REQUIREMENTS OF AASHTO M288-96, SECTION 7.3 SEPARATION REQUIREMENTS. (ROCK INSTALLATION TO COINCIDE WITH DEMOLITION)
    B. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCE, ALL PERIMETER EROSION CONTROL AND STORM WATER MANAGEMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE INITIAL EROSION CONTROL PLAN.
    C. GEOTEXTILE SILT FENCE SHOULD BE INSTALLED AT THE PERIMETER OF THE DISTURBED AREA IF CONDITIONS WARRANT INSTALLATION OR SHOWN ON THE PLANS. THE GEOTEXTILE SILT FENCE SHOULD BE PLACED IN ACCORDANCE WITH THE CONNECTICUT EROSION & SEDIMENTATION CONTROL GUIDELINES. THE GEOTEXTILE SILT FENCE SHOULD BE KEPT ERECT AT ALL TIMES AND REPAIRED WHEN REQUESTED BY THE SITE INSPECTOR OR THE PROJECT DESIGN PROFESSIONAL OF RECORD. SILT SHOULD BE REMOVED WHEN ACCUMULATION REACHES 1/2 HEIGHT OF THE BARRIER. THE PERIMETER SILT FENCE SHOULD BE INSPECTED DAILY FOR ANY FAILURES. ANY FAILURES OF SAID FENCING SHOULD BE REPAIRED IMMEDIATELY.
    D. INLET SEDIMENT PROTECTION MEASURES SHALL BE INSTALLED ON ALL EXISTING STORM STRUCTURES AS SHOWN ON THE PLAN, SEE SEPARATE DETAILS FOR SPECIFICS ON TYPE OF INLET PROTECTION SPECIFIED.
8. AFTER INSTALLATION OF INITIAL EROSION CONTROL MEASURES THE SITE CONTRACTOR SHALL SCHEDULE AN INSPECTION BY THE PROJECT RESIDENT ENGINEER. NO OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL THE PROJECT RESIDENT ENGINEER APPROVES THE INSTALLATION OF SAID EROSION CONTROL MEASURES. IF UNFORESEEN CONDITIONS EXIST IN THE FIELD THAT WARRANT ADDITIONAL EROSION CONTROL MEASURES, THE CONTRACTOR MUST CONSTRUCT ANY ADDITIONAL EROSION CONTROL DEVICES DEEMED NECESSARY BY THE SITE INSPECTION.
9. AFTER APPROVAL OF THE INITIAL EROSION CONTROL INSTALLATION, THE CONTRACTOR MAY PROCEED WITH CONSTRUCTION, CLEARING AND GRUBBING ACTIVITIES.
10. NO BURN OR BURY PITS SHALL BE PERMITTED ON THE CONSTRUCTION SITE.

GRADING AND FINAL PHASE EROSION CONTROL NOTES

1. DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF ITS NATURAL GROUND COVER IS EXPOSED ONLY IN SMALL QUANTITIES AND THEREFORE LIMITED DURATIONS, BEFORE PERMANENT EROSION PROTECTION IS ESTABLISHED.
2. SEDIMENT SHALL NOT BE WASHED INTO INLETS. IT SHALL BE REMOVED FROM THE SEDIMENT TRAPS AND DISPOSED OF AND STABILIZED SO THAT IT WILL NOT ENTER THE INLETS AGAIN.
3. EROSION CONTROL DEVICES SHALL BE INSTALLED IMMEDIATELY AFTER GROUND DISTURBANCE OCCURS. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE DESIGN PROFESSIONAL IMMEDIATELY.
4. CUT AND FILL SLOPES ARE TO BE AS SHOWN ON PLAN BUT SHALL NOT EXCEED "2H:1V"
5. THE FOLLOWING EROSION CONTROL MEASURES SHALL BE IMPLEMENTED DURING THE PRELIMINARY GRADING PHASE OF CONSTRUCTION.
    A. GEOTEXTILE SILT FENCE SHALL BE PLACED AS SHOWN ON THE PLANS AND PER THE DETAIL SHOWN ON SHEET 6.
    B. INLET SEDIMENT PROTECTION MEASURES SHALL BE INSTALLED ON ALL STORM STRUCTURES AS THEY ARE CONSTRUCTED/MODIFIED. SEE PLAN VIEW FOR SPECIFIC TYPE AND SEPARATE DETAILS FOR ADDITIONAL INFORMATION ON TYPE OF INLET PROTECTION SPECIFIED.
    C. ALL DRAINAGE SWALES SHALL BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS ACHIEVED.
    D. ALL GRADED AREAS SHALL BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS ACHIEVED.
6. THE FOLLOWING EROSION CONTROL MEASURES SHALL BE IMPLEMENTED DURING THE FINAL EROSION CONTROL PHASE OF CONSTRUCTION.
    A. ALL GEOTEXTILE SILT FENCE SHALL BE REMOVED AT PROJECT COMPLETION.
    B. INLET SEDIMENT PROTECTION MEASURES SHALL BE REMOVED.
    C. ALL PERMANENT VEGETATIVE COVER WILL BE FULLY ESTABLISHED.
    D. CONSTRUCTION ENTRANCE WILL BE ABANDONED AT PROJECT COMPLETION.
7. UPON COMPLETION OF THE PROJECT AND RECEIPT OF CERTIFICATE OF OCCUPANCY, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND DISPOSE OF THEM UNLESS NOTED ON PLANS.

Connecticut PORT AUTHORITY

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STATE PIER FACILITY
9/5/2019

EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN (ESPC)

CONTROLS

EROSION AND SEDIMENT CONTROLS

1. ALL PERIMETER GEOTEXTILE SILT FENCES AND CONSTRUCTION EXITS SHALL BE IN PLACE PRIOR TO ANY LAND DISTURBING ACTIVITIES.
2. WHEN CONSTRUCTION ACTIVITIES HAVE CEASED IN AN AREA, THAT AREA SHALL BE STABILIZED WITHIN 14 DAYS.

OTHER CONTROLS

NO WASTE WILL BE DISPOSED OF INTO STORMWATER INLETS OR WATERS OF THE STATE.

WASTE MATERIALS

1. ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED A MINIMUM OF ONCE PER WEEK OR MORE OFTEN IF NECESSARY AND TRASH WILL BE HAULED AS REQUIRED BY LOCAL REGULATIONS. NO CONSTRUCTION WASTE WILL BE BURIED ON-SITE.
2. ALL PERSONNEL WILL BE INSTRUCTED ON PROPER PROCEDURES FOR WASTE DISPOSAL. A NOTICE STATING THESE PRACTICES WILL BE POSTED AT THE JOBSITE AND THE CONTRACTOR WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

HAZARDOUS WASTE

1. ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL STATE, AND/OR FEDERAL REGULATIONS AND BY THE MANUFACTURER OF SUCH PRODUCTS. THE JOB SITE SUPERINTENDENT, WHO WILL ALSO BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED, WILL INSTRUCT SITE PERSONNEL IN THESE PRACTICES. MATERIAL SAFETY DATA SHEETS (MSDS'S) FOR EACH SUBSTANCE WITH HAZARDOUS PROPERTIES THAT IS USED ON THE JOB SITE WILL BE OBTAINED AND USED FOR THE PROPER MANAGEMENT OF POTENTIAL WASTES THAT MAY RESULT FROM THESE PRODUCTS. AN MSDS WILL BE POSTED IN THE IMMEDIATE AREA WHERE SUCH PRODUCT IS STORED AND/OR USED AND ANOTHER COPY OF EACH MSDS WILL BE MAINTAINED IN THE ESPCP FILE AT THE JOB SITE CONSTRUCTION TRAILER OFFICE. EACH EMPLOYEE WHO MUST HANDLE A SUBSTANCE WITH HAZARDOUS PROPERTIES WILL BE INSTRUCTED ON THE USE OF MSDS SHEETS AND THE SPECIFIC INFORMATION IN THE APPLICABLE MSDS FOR THE PRODUCT HE/SHE IS USING, PARTICULARLY REGARDING SPILL CONTROL TECHNIQUES.
2. THE CONTRACTOR WILL IMPLEMENT THE SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) PLAN FOUND WITHIN THE ESPCP AND WILL TRAIN ALL PERSONNEL IN THE PROPER CLEANUP AND HANDLING OF SPILLED MATERIALS. NO SPILLED HAZARDOUS MATERIALS OR HAZARDOUS WASTES WILL BE ALLOWED TO COME IN CONTACT WITH STORMWATER DISCHARGES. IF SUCH CONTACT OCCURS, THE STORMWATER DISCHARGE WILL BE CONTAINED ON SITE UNTIL APPROPRIATE MEASURES IN COMPLIANCE WITH STATE AND FEDERAL REGULATIONS ARE TAKEN TO DISPOSE OF SUCH CONTAMINATED STORMWATER. IT SHALL BE THE RESPONSIBILITY OF THE JOB SITE SUPERINTENDENT TO PROPERLY TRAIN ALL PERSONNEL IN THE USE OF THE SPCC PLAN.

SANITARY WASTES

1. A MINIMUM OF ONE PORTABLE SANITARY UNIT WILL BE PROVIDED FOR EVERY TEN (10) WORKERS ON THE SITE. ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE SANITARY UNITS A MINIMUM OF ONE TIME PER WEEK BY A LICENSED PORTABLE FACILITY PROVIDER IN COMPLETE COMPLIANCE WITH LOCAL AND STATE REGULATIONS.
2. ALL SANITARY WASTE UNITS WILL BE LOCATED IN AN AREA WHERE THE LIKELIHOOD OF THE UNIT CONTRIBUTING TO STORMWATER DISCHARGE IS NEGLIGIBLE. ADDITIONAL CONTAINMENT BMPs MUST BE IMPLEMENTED, SUCH AS GRAVEL BAGS OR SPECIALLY DESIGNED PLASTIC SKID CONTAINERS AROUND THE BASE, TO PREVENT WASTES FROM CONTRIBUTING TO STORMWATER DISCHARGES. THE LOCATION OF THE SANITARY WASTES UNITS MUST BE IDENTIFIED ON THE EROSION CONTROL PLAN GRADING PHASE BY THE CONTRACTOR ONCE THE LOCATIONS HAVE BEEN DETERMINED.

OFFSITE VEHICLE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE IS TO BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENT. SEE SHEET 4 FOR CONSTRUCTION ENTRANCE DETAILS. THE PAVED STREET ADJACENT TO THE SITE EXIT WILL BE INSPECTED DAILY FOR TRACKING OF MUD, DIRT OR ROCK. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPAULIN.

INVENTORY FOR POLLUTION PRVENTION PLAN

THE FOLLOWING MATERIALS ARE EXPECTED ON-SITE DURING CONSTRUCTION: CONCRETE PRODUCTS, ASPHALT, PETROLEUM BASED FUELS AND LUBRICANTS FOR EQUIPMENT, TAR, METAL REINFORCING, PAINTS/FINISHES, PAINT SOLVENTS, LUMBER, CRUSHED STONE, PLASTIC, METAL, AND CONCRETE PIPES.

SPILL PREVENTION

PRACTICES SUCH AS GOOD HOUSEKEEPING, PROPER HANDLING OF HAZARDOUS PRODUCTS AND PROPER SPILL CONTROL PRACTICES WILL BE FOLLOWED TO REDUCE THE RISK OF SPILLS AND SPILLS FROM DISCHARGING INTO STORMWATER RUNOFF.

GOOD HOUSEKEEPING

1. QUANTITIES OF PRODUCTS STORED ON-SITE WILL BE LIMITED TO THE AMOUNT NEEDED FOR THE JOB.
2. PRODUCTS AND MATERIALS WILL BE STORED IN A NEAT, ORDERLY MANNER IN APPROPRIATE CONTAINERS PROTECTED FROM RAINFALL, WHERE POSSIBLE.
3. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH MANUFACTURER LABELS LEGIBLE AND VISIBLE.
4. PRODUCTS MIXING, DISPOSAL AND DISPOSAL OF PRODUCT CONTAINERS WILL BE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
5. THE CONTRACTOR WILL INSPECT SUCH MATERIALS TO ENSURE PROPER USE, STORAGE AND DISPOSAL.

PRODUCT SPECIFIC PRACTICES

1. PETROLEUM BASED PRODUCTS - CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON-SITE VEHICLE AND MACHINERY DAILY INSPECTION AND REGULAR PREVENTIVE MAINTENANCE OF SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATER, NATURAL DRAINS AND STORMWATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.
2. PAINTS/FINISHES/SOLVENTS - ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE. EXCESS PRODUCT WILL NOT BE DISCHARGED TO THE STORMWATER COLLECTION SYSTEM. EXCESS PRODUCT, MATERIALS USED WITH THESE PRODUCTS AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
3. CONCRETE TRUCK WASHING - NO CONCRETE TRUCKS WILL BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE OWNER'S PROPERTY.
4. FERTILIZER/HERBICIDES - THESE PRODUCTS WILL BE APPLIED AT RATES THAT DO NOT EXCEED THAT MANUFACTURER'S SPECIFICATIONS OR ABOVE THE GUIDELINES SET FORTH IN THE CROP .
5. BUILDING MATERIALS/FORMWORK - NO BUILDING OR CONSTRUCTION MATERIALS WILL BE BURIED OR DISPOSED OF ON-SITE. ALL SUCH MATERIAL WILL BE DISPOSED OF IN PROPER WASTE DISPOSAL PROCEDURES.

SPILL CLEANUP AND CONTROL PRACTICES

- LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO SITE PERSONNEL.
- MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS.
- SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS.
- ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTS AS REQUIRED BY LOCAL, STAT, AND FEDERAL REGULATIONS.
- FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.
- FOR SPILLS OF UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.
- FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.

INSPECTIONS

1. EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT THE CONTRACTOR'S SITE, QUALIFIED PERSONNEL PROVIDED BY THE CONTRACTOR SHALL INSPECT: (A) ALL AREAS AT THE CONTRACTOR'S SITE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT; (B) ALL LOCATIONS AT THE CONTRACTOR'S SITE WHERE VEHICLES ENTER OF EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING; AND (C) MEASURE RAINFALL ONCE EACH TWENTY-FOUR HOUR PERIOD AT THE SITE. THESE INSPECTIONS MUST BE CONDUCTED UNTIL PROJECT COMPLETION.
2. QUALIFIED PERSONNEL (PROVIDED BY THE CONTRACTOR) SHALL INSPECT AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER THE FOLLOWING: (A) DISTURBED AREAS OF THE CONTRACTOR'S CONSTRUCTION SITE THAT HAVE NOT UNDERGONE FINAL STABILIZATION; (B) AREAS USED BY THE CONTRACTOR FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION THAT HAVE NOT UNDERGONE FINAL STABILIZATION; AND (C) STRUCTURAL CONTROL MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE CONTRACTOR'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S).
3. QUALIFIED PERSONNEL (PROVIDED BY THE CONTRACTOR) SHALL INSPECT AT LEAST ONCE PER MONTH UNTIL PROJECT COMPLETION THE AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM AND THE RECEIVING WATER(S). EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S).
4. BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION.
5. A REPORT SUMMARIZING THE SCOPE OF EACH INSPECTION AND THE NAME(S) OF PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN AND ACTIONS TAKEN SHALL BE MADE AND RETAINED AT THE SITE OR BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION UNTIL THE ENTIRE SITE OR THAT PORTION OF A CONSTRUCTION PROJECT THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION. SUCH REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE, THE REPORT SHALL CONTAIN A CERTIFICATION THAT THE FACILITY IS IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN.

Connecticut Port Authority

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STATE PIER FACILITY
9/5/2019

SEDIMENT FENCE (Sd1)

DEFINITION

A TEMPORARY SEDIMENT BARRIER CONSISTING OF A FILTER FABRIC STRETCHED ACROSS AND ATTACHED TO SUPPORTING POSTS AND ENTRENCHED. THE SEDIMENT FENCE IS CONSTRUCTED OF STAKES AND SYNTHETIC FILTER FABRIC WITH A RIGID WIRE FENCE BACKING WHERE NECESSARY FOR SUPPORT. SEDIMENT FENCE CAN BE PURCHASED WITH POCKETS PRESEWN TO ACCEPT USE OF STEEL FENCE POSTS.

PURPOSE

A SEDIMENT FENCE INTERCEPTS AND DETAINS SMALL AMOUNTS OF SEDIMENT FROM DISTURBED AREAS DURING CONSTRUCTION OPERATIONS AND REDUCES RUNOFF VELOCITY DOWN A SLOPE. SEDIMENT FENCES MAY ALSO BE USED TO CATCH WIND-BLOWN SAND AND TO CREATE AN ANCHOR FOR SAND DUNE CREATION.

DESIGN RECOMMENDATIONS

DEPTH OF IMPOUNDED WATER SHOULD NOT EXCEED 1.5 FEET AT ANY POINT ALONG THE FENCE.
DRAINAGE AREA LIMITED TO ¼ ACRE PER 100 FT OF FENCE, AND NO MORE THAN 1.5 ACRES IN TOTAL; OR IN COMBINATION WITH A SEDIMENT BASIN ON A LARGER SITE. AREA IS FURTHER RESTRICTED BY SLOPE STEEPNESS AS SHOWN IN THE FOLLOWING TABLE.

MAXIMUM SLOPE	
LAND SLOPE (%)	DISTANCE ABOVE FENCE (FEET)
2	250
5	180
10	100
20	50
30	30

MATERIALS AND USE

FILTER FABRIC
THE FILTER FABRIC USED IN A SEDIMENT FENCE MUST HAVE SUFFICIENT STRENGTH TO WITHSTAND VARIOUS STRESS CONDITIONS. IT ALSO MUST HAVE THE ABILITY TO ALLOW PASSAGE OF WATER WHILE RETAINING SOIL PARTICLES. FILTER FABRIC FOR A SEDIMENT FENCE IS AVAILABLE COMMERCIALLY.

SUPPORT POSTS
FOUR-INCH DIAMETER PINE, 1.33 LB./LINEAR FT. STEEL, OR SOUND QUALITY HARDWOOD WITH A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQUARE INCHES. STEEL POSTS SHOULD HAVE PROJECTIONS FOR FASTENING FABRIC. DRIVE POSTS SECURELY, AT LEAST 16 INCHES INTO THE GROUND, ON THE DOWNSLOPE SIDE OF THE TRENCH. SPACE POSTS A MAXIMUM OF 8 FEET IF FENCE IS SUPPORTED BY WIRE, 6 FEET IF EXTRA-STRENGTH FABRIC IS USED WITHOUT SUPPORT WIRE. ADJUST SPACING TO PLACE POSTS AT LOW POINTS ALONG THE FENCE LINE.

SUPPORT WIRE
WIRE FENCE (14 GAUGE WITH 6-INCH MESH) IS REQUIRED TO SUPPORT STANDARD STRENGTH FABRIC.

REINFORCED, STABILIZED OUTLETS
ANY OUTLET WHERE STORM FLOW BYPASS OCCURS MUST BE STABILIZED AGAINST EROSION.
SET OUTLET ELEVATION SO THAT WATER DEPTH CANNOT EXCEED 1.5 FEET AT THE LOWEST POINT ALONG THE FENCE LINE.

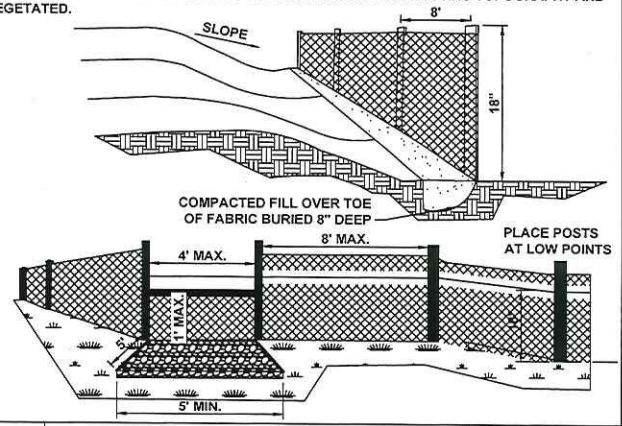
SET FABRIC HEIGHT AT 1 FOOT MAXIMUM BETWEEN SUPPORT POSTS SPACED NO MORE THAN 4 FEET APART. INSTALL A HORIZONTAL BRACE BETWEEN THE SUPPORT POSTS TO SERVE AS AN OVERFLOW WEIR AND TO SUPPORT TOP OF FABRIC. PROVIDE A RIPRAP SPLASH PAD A MINIMUM 5 FEET WIDE, 1 FOOT DEEP, AND 5 FEET LONG ON LEVEL GRADE. THE FINISHED SURFACE OF THE RIPRAP SHOULD BLEND WITH SURROUNDING AREA, ALLOWING NO OVERFALL. THE AREA AROUND THE PAD MUST BE STABLE.

CONSTRUCTION RECOMMENDATIONS

DIG A TRENCH APPROXIMATELY 8 INCHES DEEP AND 4 INCHES WIDE, OR A V-TRENCH; ALONG THE LINE OF THE FENCE, UPSLOPE SIDE.
FASTEN SUPPORT WIRE FENCE SECURELY TO THE UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES. WIRE SHOULD EXTEND 6 INCHES INTO THE TRENCH.
ATTACH CONTINUOUS LENGTH OF FABRIC TO UPSLOPE SIDE OF FENCE POSTS. AVOID JOINTS, PARTICULARLY AT LOW POINTS IN THE FENCE LINE. WHERE JOINTS ARE NECESSARY, FASTEN FABRIC SECURELY TO SUPPORT POSTS AND OVERLAP TO THE NEXT POST.
PLACE THE BOTTOM ONE FOOT OF FABRIC IN THE TRENCH. BACKFILL WITH COMPACTED EARTH OR GRAVEL.
FILTER CLOTH SHALL BE FASTENED SECURELY TO THE WOVEN WIRE FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP, MID-SECTION, AND BOTTOM.
TO REDUCE MAINTENANCE, A SHALLOW SEDIMENT STORAGE AREA MAY BE EXCAVATED ON THE UPSLOPE SIDE OF FENCE WHERE SEDIMENTATION IS EXPECTED.
PROVIDE GOOD ACCESS TO DEPOSITION AREAS FOR CLEANOUT AND MAINTENANCE.
SEDIMENT FENCES SHOULD BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED. RETAINED SEDIMENT MUST BE REMOVED AND PROPERLY DISPOSED OF, OR MULCHED AND SEEDED.

MAINTENANCE

A SEDIMENT FENCE REQUIRES A GREAT DEAL OF MAINTENANCE. SILT FENCES SHOULD BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. REPAIR AS NECESSARY.
REMOVE SEDIMENT DEPOSITS PROMPTLY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON FENCE. TAKE CARE TO AVOID UNDERMINING FENCE DURING CLEANOUT.
IF THE FABRIC TEARS, DECOMPOSES, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE IT IMMEDIATELY.
REPLACE BURLAP USED IN SEDIMENT FENCES AFTER NO MORE THAN 60 DAYS.
REMOVE ALL FENCING MATERIALS AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED. SEDIMENT DEPOSITS REMAINING AFTER THE FABRIC HAS BEEN REMOVED SHOULD BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.



SEDIMENT FENCE
SCALE: N.T.S.

CONSTRUCTION ENTRANCE (Co)

DEFINITION

A TEMPORARY STONE-STABILIZED PAD LOCATED AT POINTS OF VEHICULAR INGRESS AND EGRESS ON A CONSTRUCTION SITE.

PURPOSE

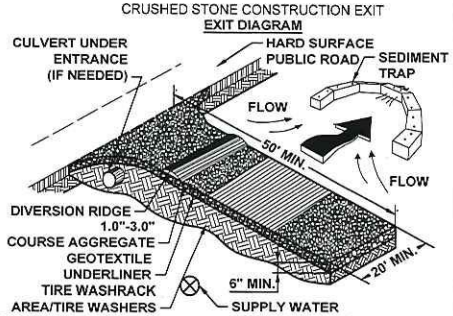
TO PROVIDE A STABLE ENTRANCE AND EXIT FROM A CONSTRUCTION SITE AND KEEP MUD AND SEDIMENT OFF PUBLIC ROADS.

DESIGN RECOMMENDATIONS

REMOVE ALL VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. GRADE AND CROWN FOUNDATION FOR POSITIVE DRAINAGE.
STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 1 TO 3-INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT PLACED ON A STABLE FOUNDATION AS SPECIFIED IN THE PLAN.
PAD DIMENSIONS: THE MINIMUM LENGTH OF THE GRAVEL PAD SHOULD BE 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH MAY BE USED. LONGER ENTRANCES WILL PROVIDE BETTER CLEANING ACTION. THE PAD SHOULD EXTEND THE FULL WIDTH OF THE CONSTRUCTION ACCESS ROAD OR 10 FEET WHICHEVER IS GREATER. THE AGGREGATE SHOULD BE PLACED AT LEAST SIX INCHES THICK. A GEOTEXTILE FILTER FABRIC SHALL BE PLACED BETWEEN THE STONE FILL AND THE EARTH SURFACE BELOW THE PAD TO REDUCE THE MIGRATION OF SOIL PARTICLES FROM THE UNDERLYING SOIL INTO THE STONE AND VICE VERSA. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
IF THE SLOPE TOWARD THE ROAD EXCEEDS 2%, CONSTRUCT A RIDGE, 6 TO 8 INCHES HIGH WITH 3:1 SIDE SLOPES, ACROSS THE FOUNDATION APPROXIMATELY 15 FT FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD.
ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHOULD BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
WASHING: IF THE SITE CONDITIONS ARE SUCH THAT THE MAJORITY OF MUD IS NOT REMOVED FROM THE VEHICLE TIRES BY THE GRAVEL PAD, THEN THE TIRES SHOULD BE WASHED BEFORE THE VEHICLE ENTERS THE ROAD OR STREET. THE WASH AREA SHOULD BE A LEVEL AREA WITH 3-INCH WASHED STONE MINIMUM, OR A COMMERCIAL RACK.
WASH WATER SHOULD BE DIRECTED INTO A SEDIMENT TRAP, A VEGETATED FILTER STRIP, OR OTHER APPROVED SEDIMENT TRAPPING DEVICE. SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY WATERCOURSES.
A FILTER FABRIC FENCE SHOULD BE INSTALLED DOWN-GRADIENT FROM THE CONSTRUCTION ENTRANCE IN ORDER TO CONTAIN ANY SEDIMENT-LADEN RUNOFF FROM THE ENTRANCE.

MAINTENANCE

THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE.
INSPECT ENTRANCE/EXIT PAD AND SEDIMENT DISPOSAL AREA WEEKLY AND AFTER HEAVY RAINS OR HEAVY USE.
REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROAD IMMEDIATELY.
MUD AND SOIL PARTICLES WILL EVENTUALLY CLOG THE VOIDS IN THE GRAVEL AND THE EFFECTIVENESS OF THE GRAVEL PAD WILL NOT BE SATISFACTORY. WHEN THIS OCCURS, THE PAD SHOULD BE TOP-DRESSED WITH NEW STONE. COMPLETE REPLACEMENT OF THE PAD MAY BE NECESSARY WHEN THE PAD BECOMES COMPLETELY CLOGGED.
IF WASHING FACILITIES ARE USED, THE SEDIMENT TRAPS SHOULD BE CLEANED OUT AS OFTEN AS NECESSARY TO ASSURE THAT ADEQUATE TRAPPING EFFICIENCY AND STORAGE VOLUME IS AVAILABLE. VEGETATIVE FILTER STRIPS SHOULD BE MAINTAINED TO INSURE A VIGOROUS STAND OF VEGETATION AT ALL TIMES.
RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.
REPAIR ANY BROKEN ROAD PAVEMENT IMMEDIATELY.
ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY PRACTICES ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE PERMANENTLY STABILIZED.



CONSTRUCTION ENTRANCE
SCALE: N.T.S.

DUST CONTROL ON DISTURBED AREAS (Du)

DEFINITION

CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITES, ROADS, AND DEMOLITION SITES.

PURPOSE

TO PREVENT SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES.

TO REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES THAT MAY BE HARMFUL OR INJURIOUS TO HUMAN HEALTH, WELFARE, OR SAFETY, OR TO ANIMALS OR PLANT LIFE.

CONDITIONS

THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST WHERE ON AND OFF-SITE DAMAGE MAY OCCUR WITHOUT TREATMENT.

METHOD AND MATERIALS

VEGETATIVE COVER. SEE SPECIFICATION DS2 - DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING).

TILLAGE
THIS PRACTICE IS DESIGNED TO ROUGHEN AND BRING CLODS TO THE SURFACE. IT IS AN EMERGENCY MEASURE THAT SHOULD BE USED BEFORE WIND EROSION STARTS. BEGIN PLOWING ON WINDWARD SIDE OF CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT THAT MAY PRODUCE THE DESIRED EFFECT.

IRRIGATION
THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED.

BARRIERS
SOLID BOARD FENCES, SNOWFENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 15 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING WIND EROSION.

CALCIUM CHLORIDE
APPLY AT RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

PERMANENT VEGETATION
SEE SPECIFICATION DS3-DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION). EXISTING TREES AND LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.

DUST CONTROL ON DISTURBED AREAS
SCALE: N.T.S.

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EROSION CONTROL DETAILS - 1 OF 2
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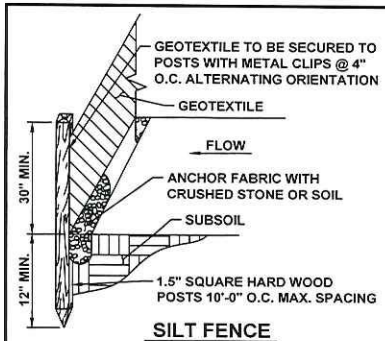
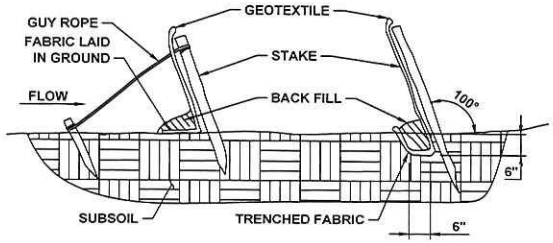
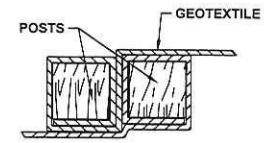


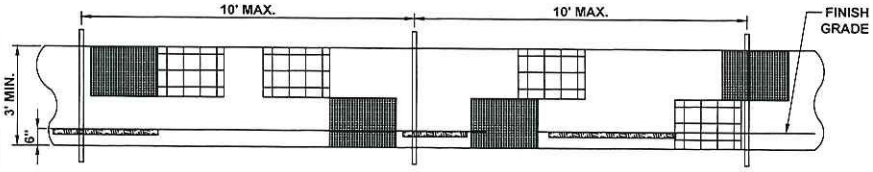
SILT FENCE



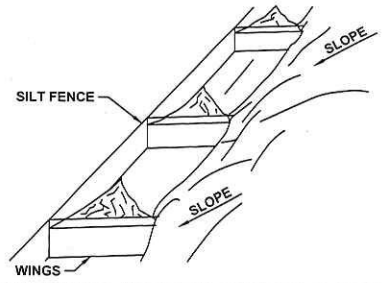
BACK FILL OR TRENCH FABRIC TOE



FENCE JOINT PLAN VIEW



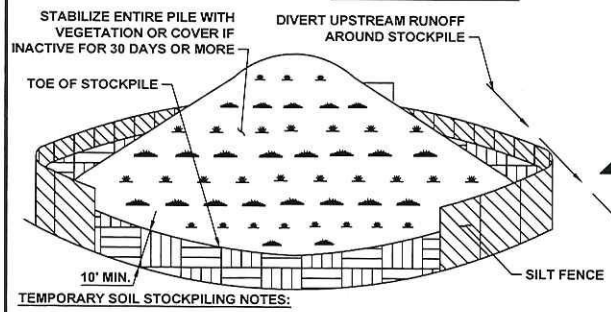
ELEVATION VIEW



SILT FENCE SYSTEM PLACEMENT ON TOE OF SLOPE

GEOTEXTILE SILT FENCE NOTES:

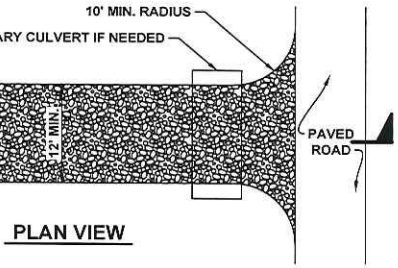
1. GEOTEXTILE FENCE SHOULD BE PLACED SO THE FENCE LEANS TOWARD THE SOURCE OF SEDIMENT.
2. MAXIMUM SPACING FOR WOODEN STAKES OR STEEL POSTS IS 10'-0".
3. WOOD STAKES SHALL HAVE A MINIMUM CROSS-SECTION SIZE OF 1.5"x1.5" AND A MINIMUM LENGTH OF 3'-6". SILT FENCE SUBJECT TO HEAVY LOADS SHALL BE REINFORCED WITH STEEL POSTS AT LEAST 0.5 LB. PER FOOT WITH A MINIMUM LENGTH OF 4 FT.
4. WOODEN STAKES OR STEEL POSTS SHALL BE DRIVEN TO A MINIMUM OF 12" INTO THE GROUND.
5. 6" OF GEOTEXTILE SHALL BE BURIED BY BACK FILLING OR TRENCHING AND AT LEAST 30" IN HEIGHT OF GEOTEXTILE SHALL BE EXPOSED.
6. FABRIC SHALL BE JOINED ONLY AT A SUPPORT POST WITH A MINIMUM OF 6" OVERLAP AND SECURELY SEALED.
7. UPON REESTABLISHMENT OF GROUND COVER IN DISTURBED AREAS AND WHEN DIRECTED BE YHE ENGINEER OR UPON FINAL INSPECTION, FENCE AND ANY SEDIMENT SHALL BE REMOVED. AT NO TIME WILL THE FENCE REMAIN IN PLACE AFTER PROJECT COMPLETION.
8. GEOTEXTILE FENCE SHALL NOT BE USED IN A WATER COURSE.
9. ONLY GEOTEXTILE FROM THE DEPARTMENTS APPROVED PRODUCT LIST SHALL BE USED.
10. BACK FILLING OF GEOTEXTILE SHALL ONLY BE USED WHEN GROUND IS FROZEN OR WHERE OTHER OBSTRUCTIONS ARE ENCOUNTERED THAT PROHIBIT TRENCHING; E.G., STUMPS OR ROCKS.
11. CLEAN OUT ACCUMULATED SEDIMENT WHEN ONE-HALF OF THE ORIGINAL HEIGHT OF THE GE3OTEZTILE FENCE BECOMES FILLED WITH SEDIMENT OR AS DIRECTED BY THE ENGINEER.
12. POSITION POSTS TO OVERLAP MAKING CERTAIN THAT FABRIC FOLDS AROUND EACH POST ONE FULL TURN.
13. DRIVE POSTS TIGHTLY TOGETHER AND SECURE TOPS OF POSTS BY TYING OFF WITH CORD OR WIRE TO PREVENT FLOW-THROUGH OF BUILT-UP SEDIMENT AT JOINTS.
14. WHEN USING SILT FENCE ALONG TOE OF SLOPE, ADD WINGS TO PREVENT SEDIMENT FROM MOVING ALONG THE FENCE AND OFF THE SITE.



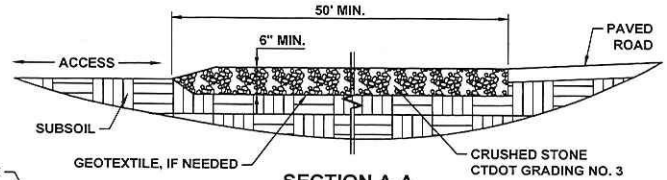
TEMPORARY SOIL STOCKPILING NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2H:1V.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR HAY BALES, THEN STABILIZED WITH VEGETATION OR COVERED WITH POLYETHYLENE SHEETING AND SANDBAGS.
4. A POLYETHYLENE MEMBRANE UNDERLAYMENT MAY BE REQUIRED PER ENGINEER REQUESTS.

TEMPORARY SOIL STOCKPILING



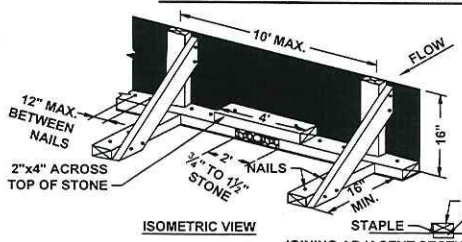
PLAN VIEW



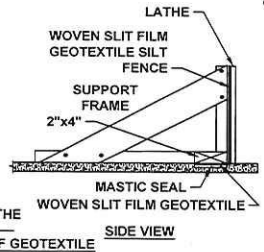
SECTION A-A

CONSTRUCTION ENTRANCE NOTES:

1. TOPSOIL AND ORGANICS SHOULD BE REMOVED PRIOR TO INSTALLATION.
2. CONSTRUCTION ENTRANCE TO BE LOCATED WHERE ACCESS ROAD MEETS PAVED ACCESS/DRIVEWAY.
3. AFTER CONSTRUCTION, ANY DEBRIS SHOULD BE CLEARED FROM THE TRACKING PAD, THE PAD RE-LEVELED AND 2'-4" OF 3/4" CRUSHED GRAVEL SHOULD BE ADDED TO FILL VOIDS AND CREATE A SMOOTH SURFACE WITH A 2% CROWN OR CROSS-SLOPE.



ISOMETRIC VIEW



SIDE VIEW

JOINING ADJACENT SECTIONS OF GEOTEXTILE

SILT FENCE ON PAVEMENT

CONSTRUCTION SPECIFICATIONS

1. USE NOMINAL 2 INCH X 4 INCH LUMBER.
2. USE WOVEN SLIT FILM GEOTEXTILE, SUCH AS POLYPROPYLENE, NYLON, POLYESTER, ETHYLENE, OR APPROVED SIMILAR MATERIAL.
3. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS.
4. SPACE UPRIGHT SUPPORTS NO MORE THAN 10 FEET APART.
5. PROVIDE A TWO FOOT OPENING BETWEEN EVERY SET OF SUPPORTS AND PLACE STONE IN THE OPENING OVER GEOTEXTILE.
6. KEEP SILT FENCE TAUT AND SECURELY STAPLE TO THE UPSLOPE SIDE OF UPRIGHT SUPPORTS. EXTEND GEOTEXTILE UNDER 2x4.
7. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, FOLD, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL. ATTACH LATHE.
8. PROVIDE A MASTIC SEAL BETWEEN PAVEMENT, GEOTEXTILE, AND 2x4 TO PREVENT SEDIMENT-LADEN WATER FROM ESCAPING BENEATH SILT FENCE INSTALLATION.
9. SECURE BOARDS TO PAVEMENT WITH 40D 5 INCH MINIMUM LENGTH NAILS.
10. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. MAINTAIN WATER TIGHT SEAL ALONG BOTTOM. REPLACE STONE IF DISPLACED.

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EROSION CONTROL DETAILS - 2 OF 2

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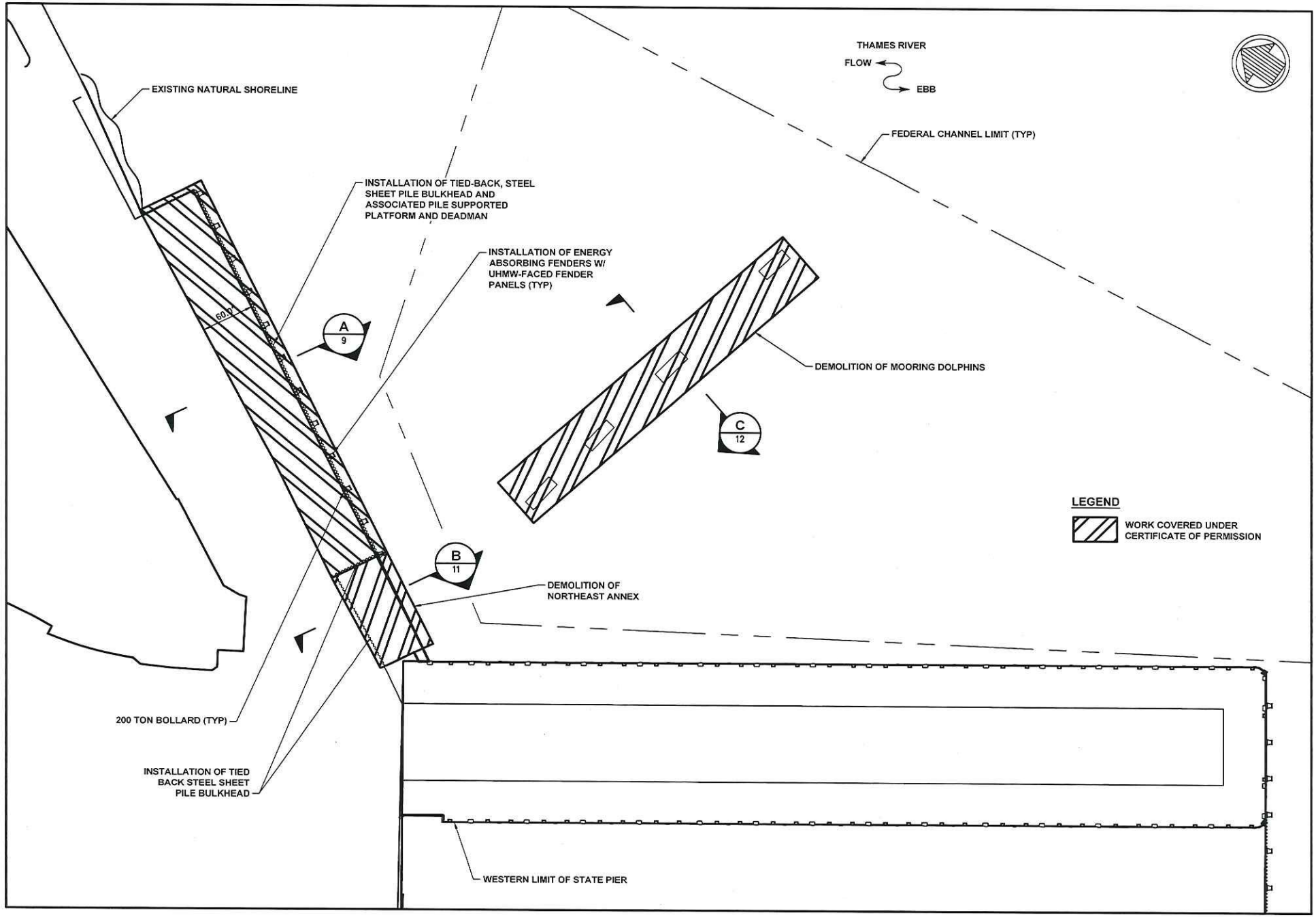

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WORK COVERED UNDER CERTIFICATE OF PERMISSION

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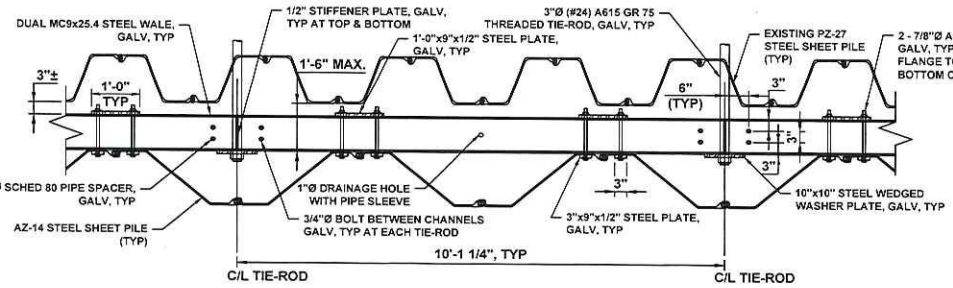
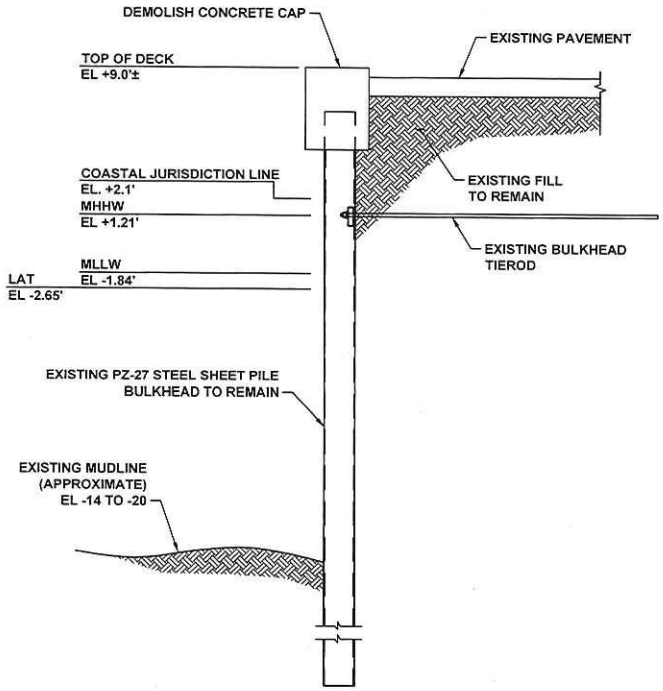
80' 0' 80' 160'

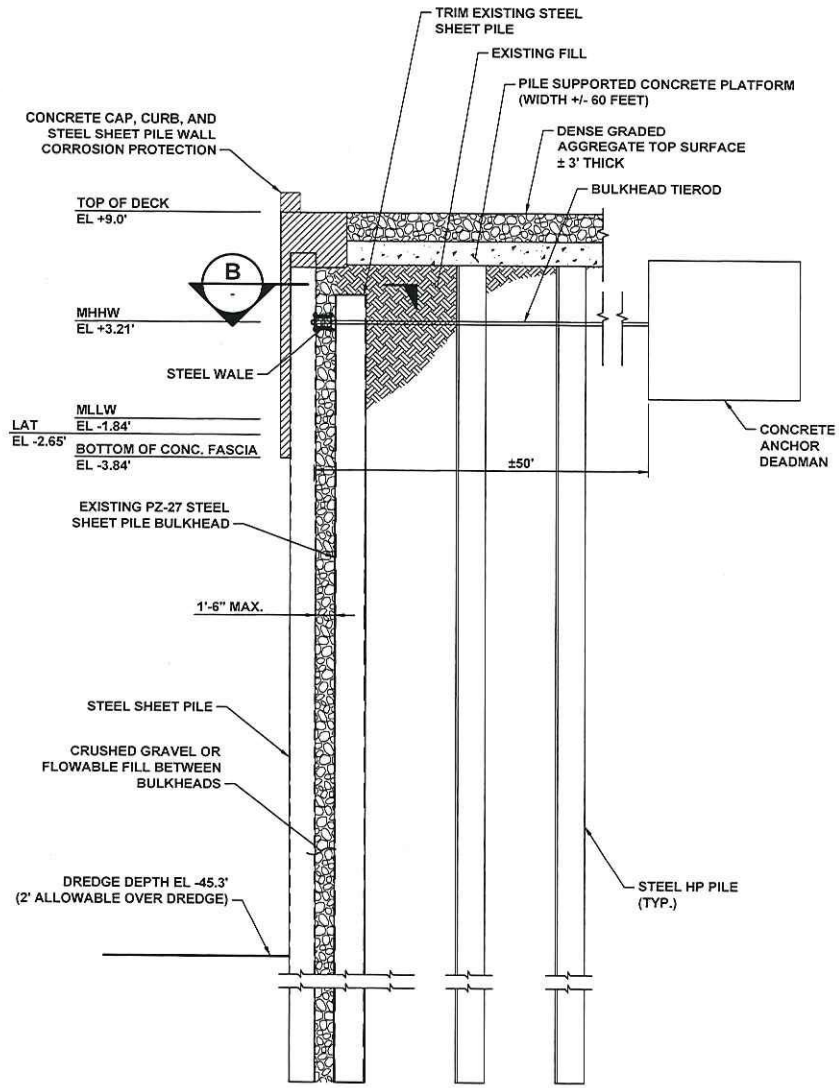
SCALE: 1"=160'



B / - **PROPOSED PLAN - STEEL SHEET PILE BULKHEAD**
SCALE: 1/4" = 1'-0"



EXISTING - STEEL SHEET PILE BULKHEAD
SCALE: 1" = 10'



A / 9 **SECTION**
SCALE: 1" = 10'

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NORTHEAST BULKHEAD SECTIONS

STATE PIER FACILITY

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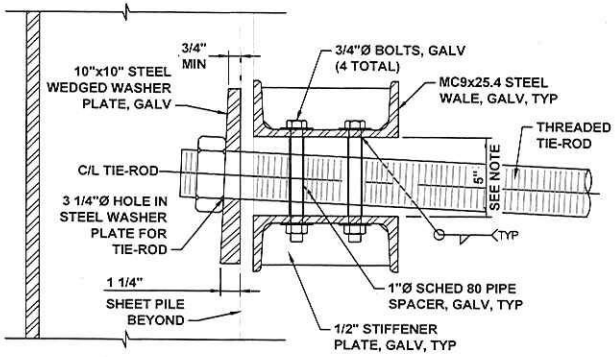
5' 0' 5' 10'
SCALE: 1"=10'

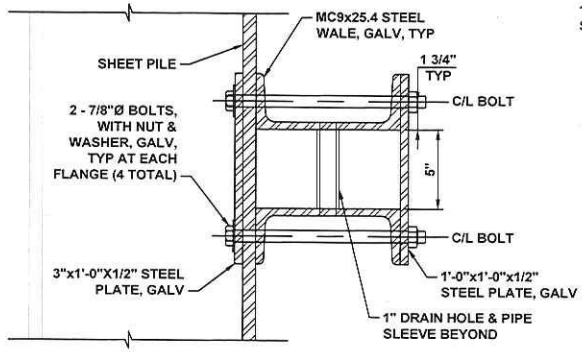
2'-0" 0'-0" 2'-0" 4'-0"
SCALE: 1/4"=1'-0"



NOTE:
CONTRACTOR SHALL VERIFY DIMENSION PRIOR TO INSTALLING WALES.

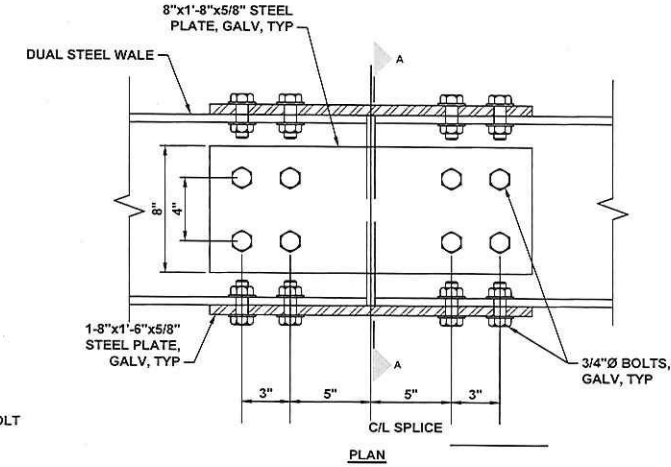
TIE-ROD CONNECTION @ WALE DETAIL

SCALE: 1" = 1'-0"



WALE-SHEET PILE CONNECTION DETAIL

SCALE: 1" = 1'-0"



NOTE:
POSITION SPLICE AT CENTER OF SHEET PILE POCKET BETWEEN TIE-ROD LOCATION AS NECESSARY.

WALE SPLICE DETAIL

SCALE: 1" = 1'-0"

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NORTHEAST BULKHEAD WALE DETAILS

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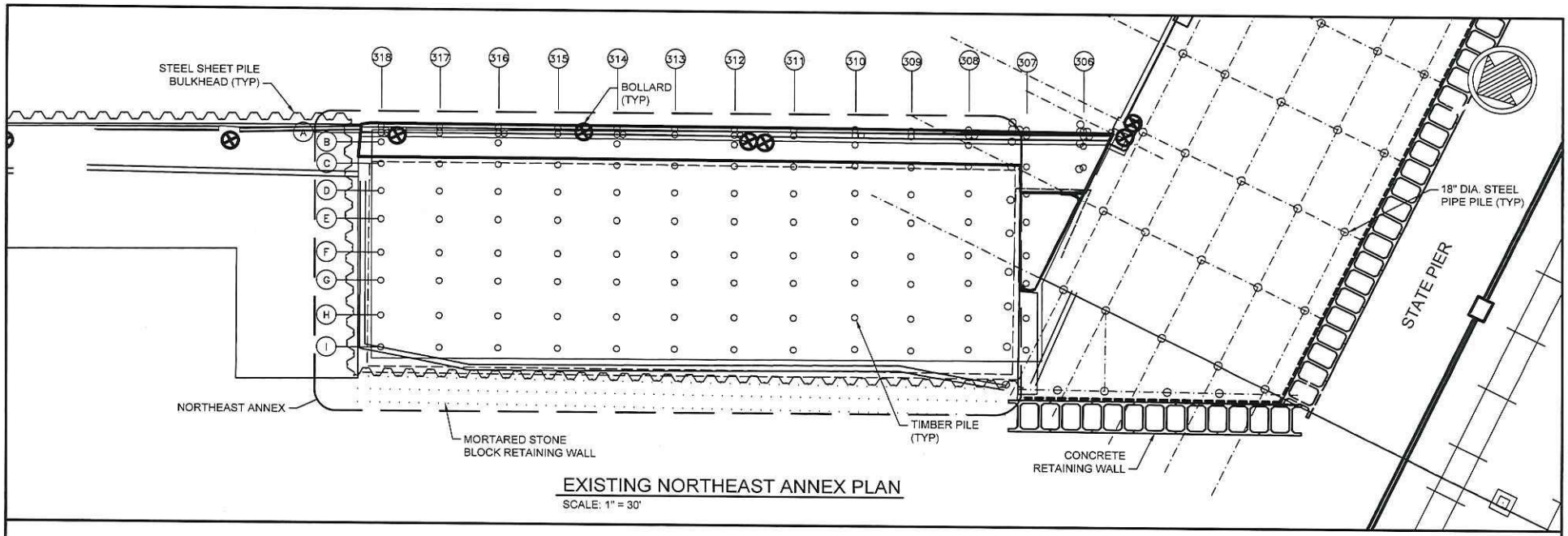
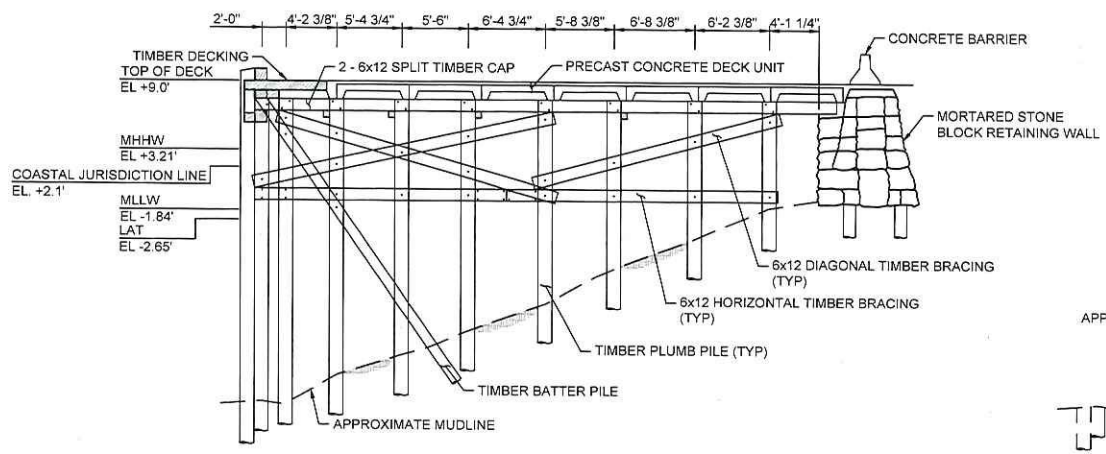
6" 0'-0" 6" 1'-0"

SCALE: 1"=1'-0"



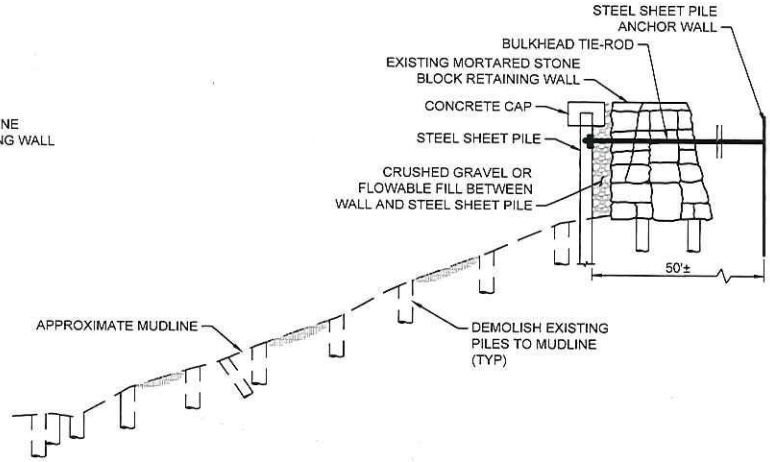
EXISTING NORTHEAST ANNEX PLAN

SCALE: 1" = 30'



B — EXISTING SECTION

SCALE: 1/16" = 1'-0"



PROPOSED SECTION

SCALE: 1/16" = 1'-0"

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NORTHEAST ANNEX PLAN AND SECTIONS

STATE PIER FACILITY

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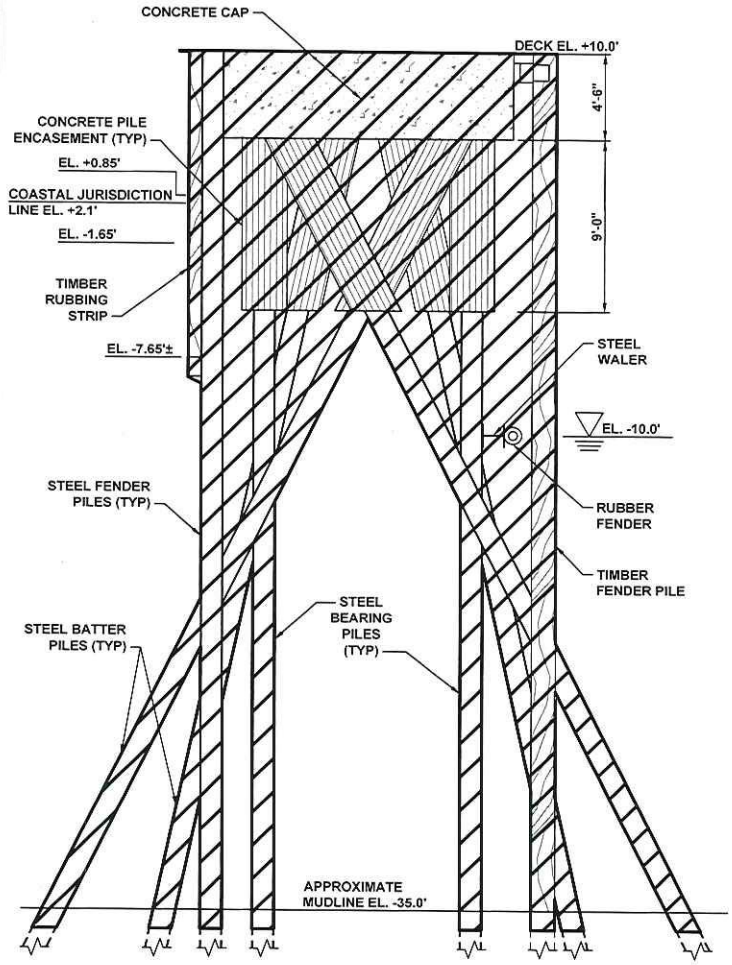

C
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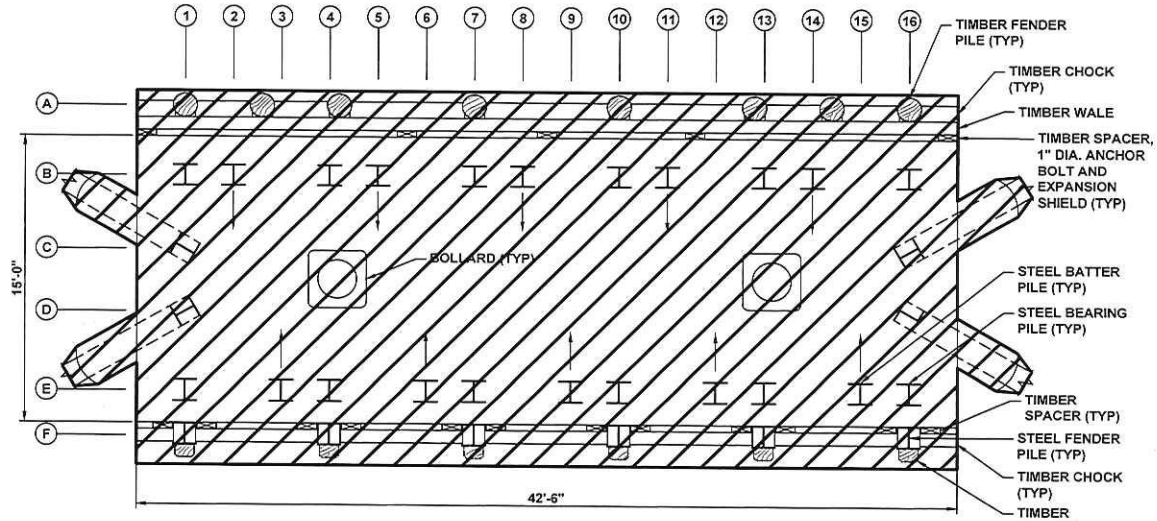
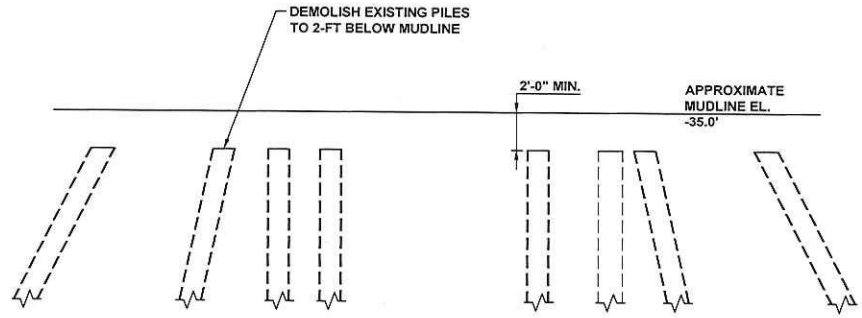
TYPICAL PLATFORM SECTION (LOOKING WEST)

SCALE: 1" = 10'



TYPICAL PLATFORM PLAN

SCALE: 1" = 10'



TYPICAL PLATFORM SECTION AFTER DEMO (LOOKING WEST)

SCALE: 1" = 10'

LEGEND

DEMOLISH

NOTES:

1. ELEVATIONS ARE IN NAVD88.
2. TOTAL OF 4 MOORING PLATFORMS EACH WITH 12 SUPPORT PILES, 14 BATTER PILES, AND 8 FENDER PILES TO BE DEMOLISHED.

Connecticut PORT AUTHORITY

moffatt & nichol

MOORING PLATFORM DEMOLITION

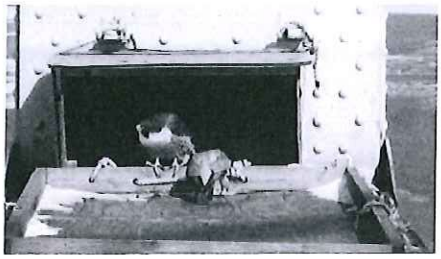
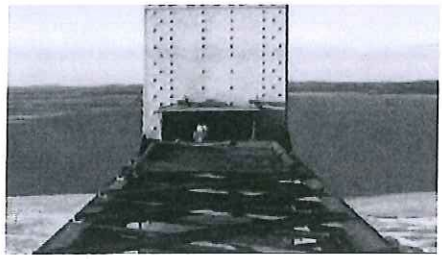
STATE PIER FACILITY

9/5/2019

5'-0" 0'-0" 5'-0" 10'-0"

SCALE: 1"=10'

AECOM Imagine it. Delivered.


Peregrine Falcon Protection Plan

State Pier Infrastructure Improvements
New London, Connecticut

July 2, 2019

Table of Contents

1.0 Introduction and Project Description

The existing State Pier Facility in New London Connecticut (Attachment A) encompasses nearly 30 acres and has three general operational areas: the piers (State Pier and Central Vermont Railroad), near dock shoreline areas, and offsite areas. The offsite areas comprise about one-fourth of the overall acreage and are situated north of and separated from the main port facility by State Pier Road and Amtrak's rail corridor embankment. The property generally consists of unpaved, gravel surfaces that are uneven or contain small depressions that pond water during storm events. The offsite areas are segmented by the rail siding to State Pier and bisected by the bridge piers for I-95's Gold Star Memorial Bridge. The property is bounded to the west by the New England Central Railroad (NECR) tracks and to the east by the Thames River.

The near-dock shoreline areas are south of State Pier Road and accommodate most of the port's cargo intermodal activity. This area contains two heavy load warehouse buildings totaling 102,000 square feet with railcar and truck loading docks, two 3,200-square-foot equipment/forklift maintenance buildings and an administration building. The area located at the head of the two piers is largely paved to facilitate forklift and tractor trailer movements. The shore edge consists of a combination of sheet piling, pile-supported docks, and stone block quay walls. The western portion of the site adjoining the NECR siding yard is largely unpaved areas, with irregular topography.

The work currently proposed by the Connecticut Port Authority (CPA), known as the State Pier Infrastructure Improvements (SPII or the Project), is anticipated to occur in two phases. Phase One "Upland Area" will occur primarily within upland portions of the site and will include the following actions:

- Demolition of various buildings and roads and rails,
- Site grading and installation of stormwater collection and treatment systems,
- Installation of potable and fire suppression water systems,
- Installation of perimeter fencing and associated lighting and security systems,
- Installation of electrical infrastructure to meet site requirements,
- Installation of dense graded aggregate top surface,
- Demolition of existing pile supported platform at western end of Northeast Bulkhead (NE BH),
- Installation of anchored combination wall bulkhead directly outshore of existing NE BH,
- Installation of energy absorbing fenders and bollards at NE BH,
- Demolition of four existing mooring dolphins in Thames River, and
- Installation of steel sheet pile wall directly outshore of existing Northwest Bulkhead granite block retaining wall.

Phase Two, "Waterfront Works" will consist of water based work, accomplished either from onshore or from barges, depending on the location and requirements of the task. This work will occur outshore of the upland NE BH, bulkheads on the State and CVRR Piers and the area between these two piers and will consist of the following actions:

- Dredging at NE BH to accommodate import and installation vessels,
- Selective demolition of SW corner of State Pier and SE corner of CVRR pier to accommodate the king pile wall,

3.0 Peregrine Falcon Protection Provisions

During the construction period for the Project, the following measures are proposed:

- Construction Phase Contractor Awareness Program;
- Construction Phase Survey and Monitoring Plan;
- Coordination with CT DEEP; and,
- Reporting.

The measures are described separately below.

3.1 Construction Phase Contractor Awareness Program

A contractor awareness program will be implemented to ensure all personnel working on the Project are aware of the potential presence of an active Peregrine Falcon nest site on or proximal to the site. As part of site specific training, all personnel will be given a copy of the Peregrine Falcon fact sheet, produced by the CT DEEP (Attachment C of this document) and will be directed to stop work if activity is occurring within 600 feet of any suspected falcon nest site. Construction personnel would be further instructed to notify CPA's on-site environmental personnel of the suspected observation. Work would not resume until a determination has been made by a qualified wildlife biologist/ornithologist regarding the reported observation.

3.2 Construction Phase Survey and Monitoring Plan

In all years with active construction scheduled to occur within the identified nesting period (April 1 through June 30), CPA will make reasonable efforts, through on-site surveys by a qualified wildlife biologist/ornithologist and in coordination with CT DEEP, to determine if falcons are nesting on or proximal to the site and/or within 600 feet of planned and/or active construction. For the purposes of this plan, "pass through" construction vehicle traffic shall not be considered active construction.

Peregrine Falcons nesting in urban settings and/or areas with significant human presence/activities have become habituated and acclimated to theses disturbances. The exposure and habituation of the falcons nesting on the Gold Star Bridge to high levels of baseline noise consisting of I-95 vehicular traffic, periodic maintenance activities on the bridge, high noise levels associated with wind passing through and around the bridge, passage of trains on the adjacent active railroad track and vessel traffic on the Thames River below has likely resulted in a high disturbance threshold for the individuals nesting on the bridge. Additionally, the difference in elevation between a potential bridge nest site and the elevation of the work itself is significant, further reducing the potential impact of construction related noise disturbance.

Peregrine Falcon studies conducted for the Hudson River Crossing Project have determined that bridge nesting Peregrine Falcons have a very high tolerance of human disturbance and are not easily impacted by human activity, including construction activity associated with heavy equipment in a maritime environment (Attachment D). Behavioral observations of the resident Peregrine Falcons on the Tappan Zee Bridge crossing of the Hudson River, carried out before and during implementation of a Pile Installation Demonstration Program, determined there was no observable difference in falcon behavior as a result of construction activity and anecdotally, there was no evidence to suggest the breeding pair was in any way disturbed.

Therefore, in the event an active falcon nest is confirmed proximal to active construction, under the full time supervision of a qualified wildlife biologist/ornithologist, CPA proposes to allow construction activities to proceed to within 300 feet of any active Peregrine Falcon nest site. If it is determined by the biologist,

through observation of falcon behavior, that construction activity may be negatively impacting the birds in any way, the full 600 feet of buffer will automatically go into effect, with the previously noted exception of "pass through" construction vehicle traffic.

3.3 Coordination with CT DEEP

In the event that an active peregrine falcon nest site is discovered proximal to the Project, CPA will immediately contact the CT DEEP NDDB Program. The NDDB will be provided with relevant nest site details such as location, distance to active and/or proposed construction, observed falcon behavior/activity, and photographic evidence, if possible. CPA will coordinate closely with the CT DEEP in order to seek guidance to perform the work safely and specify monitoring requirements.

3.4 Reporting Requirements

Immediately after conducting daily falcon monitoring, the monitor shall complete a Daily Construction Monitoring Report (Attachment E). After completion, the report shall be placed in a designated area. All Daily Construction Monitoring Reports shall be compiled and included in a final Peregrine Falcon Monitoring Report and submitted to the CT DEEP/NDDB before the end of the calendar year. Since CPA does not anticipate the need to handle falcons at any time, no Scientific Collection Permit is anticipated for the monitoring work.