



Connecticut Department of Energy and Environmental Protection License*

Certificate of Permission

Licensee(s): City of New Haven

Licensee Address(s): 165 Church Street
New Haven, CT 06510

License Number(s): 202407415-COP

Municipality: New Haven

Project Description: Replace a pedestrian bridge for public access and replace an outfall for flood and erosion control.

Project Address/Location: Edgewood Park, Mid-Bridge (pedestrian)

Waters: West River

Authorizing CT Statute(s) and/or Federal Law: 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: 14 sheets of plans prepared by the City of New Haven Department of Engineering, with an undated cover sheet, sheet S-1 dated 6/5/2023, sheets N, D2, DT, and PLNT dated 09/12/2024, sheets C&G, ENVT, S&E, D1, CS, and SP dated 09/30/2024, sheet S dated 10/28/2024 and sheet DRG dated 10/30/2024

*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 . . ."

License Enclosures: LWRD Compliance Certification Form; Land Record Filing;
LWRD General Conditions; Site Plan Set; LWRD Work
Commencement Form;

Authorized Activities:

The Licensee is hereby authorized to conduct the following work as described in application # 202407415-COP and as depicted on any site plan sheets / sets cited herein:

1. install a cofferdam and an overflow pipe to redirect the existing stormwater line during construction;
2. replace the existing stormwater outfall by:
 - a. excavating landward of the headwall to expose broken section;
 - b. removing and replacing the broken pipe section;
 - c. replacing the headwall;
 - d. backfilling landward of the wingwall with approximately 1 cubic yard of sand, topped with 6"-18" angular rocks and soil;
3. replace the pedestrian bridge as follows:
 - a. install new abutments landward of the existing ones by excavating to remove asphalt approaches for the installation of granite block walls with the void between the old abutment and block wall to be filled with concrete;
 - b. place tarp or other debris collection material within the cofferdam;
 - c. rebuild east wingwalls;
 - d. repoint west wingwalls;
 - e. remove existing 9'x 48' pedestrian bridge superstructure, with access from the upland northeast embankment;
 - f. demolish the 2' x 12'x 6' center pier with hand tools in sections for crane removal,
 - g. remove the cofferdam; and
 - h. install a 9' x 48.5' bridge superstructure on the new abutments.

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. **Time-of-Year Restrictions.** Work authorized herein is prohibited between April 1st and June 30th, inclusive, of any year in order to protect migration of diadromous fish in the area unless otherwise authorized in writing by the Commissioner.

3. **Dewatering License.** Prior to the commencement of the work authorized herein, the Licensee shall obtain any appropriate license for dewatering pursuant to CGS section 22a-430 or 22a-6k.
4. **Debris Capture and Relocation.** Prior to the commencement of activities within a cofferdam, a tarp shall be placed below the work area to catch all debris. The tarp and any debris shall be removed prior to tidal water exposure. Upon work completion, the tarp and any debris shall be removed to an upland site approved for the disposal of such waste material, as applicable.
5. **Final Construction Methodology.** No later than 60 days prior to work commencement, the Licensee shall submit to DEEP.LWRDRegulatory@ct.gov, a detailed construction methodology, including cofferdam installation and water handling, for the Commissioner's review and written approval.

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

November 4, 2024

Date



Brian P. Thompson
Division Director
Land & Water Resources Division



LWRD General Conditions

- 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 DEEP.LWRDRegulatory@ct.gov 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 DEEP.LWRDRegulatory@ct.gov, 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 deposited, placed or stored in any wetland or watercourse on or off-site. The Licensee may not

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

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. **Management of Materials.** Any materials removed from the site shall be managed in accordance with all federal, state, and local requirements, including Chapter 446K Water Pollution Control, Chapter 445 Hazardous Waste, and Chapter 446d Solid Waste of the Connecticut General Statutes.
7. **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.
8. **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.
9. **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.
10. **Excavated Materials.** Unless otherwise authorized, all excavated material shall be staged and

managed in a manner which prevents additional impacts to wetlands and watercourses.

- 11. 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.
- 12. In-Water Work Vessel Staging and Storage. (for Structures Dredging & Fill, Tidal Wetlands, Certificate of Permission, and Long Island Sound General Permit Licenses only).** For any barge, vessel, skiff or floating work platform (“work vessels”) utilized in the execution of the work authorized herein, the Licensee shall ensure that such work vessels:

 - do not rest on, or come in contact with, the substrate at any time, unless specifically authorized in the license.
 - are not stored over intertidal flats, submerged aquatic vegetation or tidal wetland vegetation or in a location that interferes with navigation. In the event any work vessel is grounded, no dragging or prop dredging shall occur to free it.
- 13. Work Site Restoration.** Upon completion of any authorized work, the Licensee shall restore all areas temporarily 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.
- 14. 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.
- 15. 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.
- 16. 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.

17. Extension Request. The Licensee may request an extension of the license expiration date. Such request shall be in writing and shall be submitted to DEEP.LWRDRegulatory@ct.gov 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. The Commissioner may extend the expiration date of this license for a period of up to one year, in order for the Licensee to complete the authorized activities. It shall be at the Commissioner's sole discretion to grant or deny such request. No more than three (3) one-year extensions will be granted under this license.

18. Compliance Certification². Not later than 90 days after completion of the authorized work, the Licensee shall prepare and submit to DEEP.LWRDRegulatory@ct.gov, 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.

19. 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.

20. 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.

21. 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.

22. 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:

DEEP.LWRDRegulatory@ct.gov or

² The Work Commencement condition and the need for a Work Commencement Form is not applicable to Flood Management Certification approvals.

Regulatory Section
Land & Water Resources Division
Department of Energy and Environmental Protection
79 Elm Street
Hartford, Connecticut 06106-5127
860-424-3019

- 23. 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.
- 24. 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.”
- 25. 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.
- 26. 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.
- 27. 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.

- 28. Revocation/Suspension/Modification.** The license may be revoked, suspended, or modified in accordance with applicable law.
- 29. 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.
- 30. 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.
- 31. 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.



CITY OF NEW HAVEN
DEPARTMENT OF ENGINEERING
EDGEWOOD PARK MID-BRIDGE
PROJECT NUMBER 22-099-09

Sheet List Table	
Sheet Number	Sheet Title
1	COVER SHEET
N	NOTES
S-1	EXISTING CONDITIONS
SP	SITE PLAN
S&E	SEDIMENT AND EROSION
ENVT	ENVIRONMENTAL
C&G	CLEARING AND GRUBBING
D1	DEMOLITION PLAN
D2	DEMOLITION ELEVATION
CS	CONSTRUCTION SEQUENCE
S	STRUCTURAL
PLNT	LANDSCAPING
DRG	DRAINAGE
DT	TYPICAL DETAILS

HONORABLE JUSTIN ELICKER, MAYOR
GIOVANNI ZINN, P.E.
CITY ENGINEER

APPROVED: _____ DATE _____
 CITY OF NEW HAVEN
 CONNECTICUT
 GIOVANNI ZINN, P.E.



No.	Revision/Issue	Date
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CITY OF NEW HAVEN
DEPARTMENT OF ENGINEERING
THE HONORABLE JUSTIN ELICKER, MAYOR
GIOVANNI ZINN, P.E., CITY ENGINEER



EDGEWOOD PARK
MID BRIDGE

Drawn by: ZSHAPRO
 Checked by: ZSHAPRO



PROJECT DESCRIPTION:
This project is to replace an existing pedestrian bridge over the West River on new abutments, strengthen the existing abutments and wingwalls, demolish the existing center pier and remove various debris materials accumulated on it. Contractor is responsible for visiting site prior to bid and for confirming dimensions/geometry, existing conditions, calculating quantities, and understanding intended scope of work.

DESIGN BASIS:
AASHTO LRFD Bridge Design Specifications, 7th Edition
AASHTO LRFD Pedestrian Bridge Design Specifications
Presumptive soil bearing pressure of 1,500 psf per IBC 1806.2.5
See Structure sheet S notes for design load requirements for pedestrian bridge.

PERMITS & CONDITIONS:
Inland wetlands and watercourses permit, and coastal site plan review issued by the City of New Haven have been obtained for this project. The permit documents are included in the bid documents and the Contractor is subject to all permit requirements.

Contractor is required to submit for approval a disposal facility for all spoils, organic matter, and a decontamination plan for all equipment leaving the site to control the spread of invasive species.

FLOOD PLAIN:
Contractor work will take place within the flood plain. Contractor is responsible for monitoring weather systems and taking precautions prior to any significant precipitation events to move all debris, materials, and equipment upland.

ACCESS:
Edgewood Park Mid-Bridge may be accessed by vehicle off Whalley Ave. at Fitch St. and taking the carriage road approximately 1/4 mile South. Work on the site is permitted between 7am and 7pm on weekdays, excluding holidays.
The existing bridge superstructure has been checked for a track mounted CAT 304 mini excavator weighing 9,867lb and carrying a single 2'x2'x3' concrete block. Contractor must submit actual equipment and plan to engineer prior to putting construction loads on bridge. Contractor should verify decking is adequate prior to loading existing bridge, and reinforce with lagging if necessary.

Contractor is responsible for placing signs and barricades redirecting pedestrians on the walking path approaches from the East and West to the bridge.

Contractor is responsible for documenting condition of carriage road prior to mobilization and performing any/all restoration work to road necessary to repair construction related damages.

SUBMITTALS:
Contractor must provide submittals for all materials permanently incorporated into the project, or specified by pay item. The following list is not intended to be all inclusive.
Stamped shop drawings and calculations for bridge superstructure
Concrete mix design/bag mix components for stem wall

Reinforcement material certification and bar schedule
Cofferdam materials, layout, and dimensions
Turbidity curtain material
Demolition plan
Crane size, location, swing chart
Planting and seed material and source

PLANTINGS:
Wetland seed mix shall be spread over disturbed areas at conclusion of construction. Contractor must submit mix prior to purchase. Mix design provided by New England Wetland Plants, Inc. Contractor shall supply seed mix as specified or approved equal.
Trees are to be planted at 8' on center in 3 gallon containers in locations determined by the engineer. Trees may be chosen based on availability from the following list:

- Amelanchier canadensis
- Betula populifolia
- Pinus rigida
- Prunus maritima
- Quercus alba
- Quercus stellata

BID ITEMS & SPECIFICATIONS:
CLEARING AND GRUBBING- Contractor may not remove any trees unless noted on plans or given written permission from City tree warden. Minor branch trimming for crane swing may be performed with express permission from Engineering and Park's Dept. representatives. Contractor is responsible for removal of any vegetation that would otherwise inhibit work, and restoration of the site at the conclusion of work. Contractor should include in this price the removal and disposal of any debris within the waterway adjacent to the bridge. Wetland seeding and landscape plantings will be paid for elsewhere.

COFFERDAM- Contractor is to provide plan and details for cofferdam within river banks for work zone. At a minimum cofferdam must extend to limits shown on sheet S&E and be sized to overtop normal water height by one foot (elevation 4). Cofferdam and S&E controls must be checked and reestablished/maintained within 24 hours of any perception event. Contractor must include in this price all work associated with designing, procuring, installing and maintaining cofferdam, as well as turbidity curtain, pipe extension, and any dewatering necessary.

DEMOLISH PIER TO 2' BELOW MUDLINE- Contractor must submit demolition plan with staging and access. All debris materials shall be the responsibility of the contractor to remove and dispose. No heavy equipment may enter the waterway, contractor is to use jackhammer, demo saw, or other means to breakdown pier for removal. All rubble must be continuously removed, contractor must ensure no debris enter waterway.

DEMOLISH EXISTING BRIDGE SUPERSTRUCTURE- Remove bridge superstructure, decking, baseplates, and cut anchor bolts flush with abutment concrete and coat exposed anchor bolt end with zinc spray.
REBUILD MASONRY PIPE OUTFALL- Contractor may reuse existing stones or furnish new similar stones for work. Existing wall and penetration may be rebuilt in-kind or a new concrete pipe extension placed with interlocking rock placed over and around it.
REPOINT WINGWALLS- Engineer will mark out areas for repointing.

Joints must be cleaned and raked to a minimum depth of 3 inches, or until all loose materials have been removed. Contractor must collect and remove mortar debris from waterway. Mortar must type S and be used within 1 hour of mix.
ABUTMENTS - Price for abutments must include all excavation, backfill, furnishing and installation of materials and details shown on sheet S, layout for elevation and geometry of bridge, granite backwall, and asphalt path tie-in. Contractor must submit material certifications and cut sheets for all materials used.
PRE-FABRICATED BRIDGE- See notes on sheet S for design requirements for the pedestrian bridge. Contractor must submit stamped and sealed calculations and shop drawings for pedestrian bridge. Price for pre-fabricated bridge must include material and equipment to deliver, lift, and set bridge on abutments with anchor bolts, and staining of the wood deck after pressure treatment has dried.
LANDSCAPING TREES- Contractor must provide source of trees and provide Chief Landscape Architect an opportunity to see and approve of the species prior to bringing them onsite. Include in this item all excavation, furnishing, planting, and provide a one-year warranty on the trees.
WETLAND SEEDING- Seed mix is provided on landscaping sheet PLNT. Chief Landscape Architect will delineate areas for wetland seeding, contractor must provide seed mix, and source prior to furnishing. Area must be prepared by scarification and/or roto-tilled to six inch depth and seed spread per nursery's recommendations.

LEGEND

- NON-WETLANDS AREA
- DEMOLITION LIMITS
- PERMITTED DISTURBANCE AREA

TIDAL ELEVATIONS NAVD88:	
CIL	4.6'
MHW	2.8'
MLW	-3.4'
HTL	4.4'



No.	Revision/Date	Date
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CITY OF NEW HAVEN
DEPARTMENT OF ENGINEERING
THE HONORABLE JUSTIN ELICKER, MAYOR
GIOVANNI ZINN, P. E., CITY ENGINEER

EDGEWOOD PARK
MID BRIDGE

Drawn by ZSHAPRO
Checked by ZSHAPRO
9/17/2024
22-099-09

NOTES
N



Plan	Revision/Issue	Date

QTY OF NEW HAVEN
DEPARTMENT OF ENGINEERING
 THE HONORABLE JUSTIN E. CROCKER, MAYOR
 GOVANNI Z. N. P. E., CITY ENGINEER

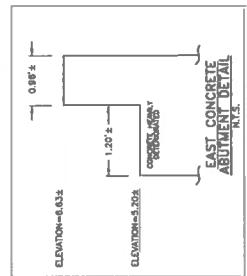
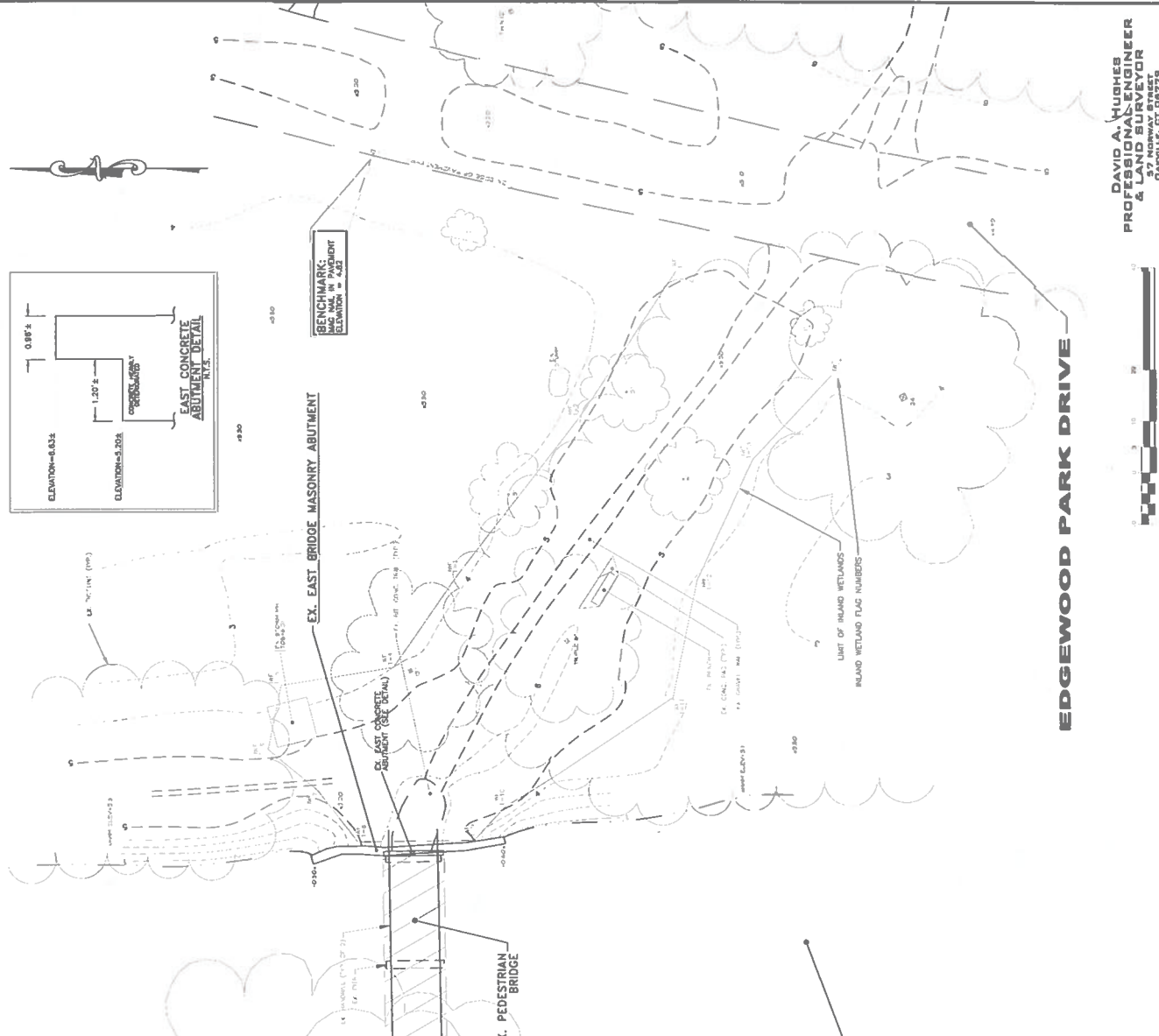
TOPOGRAPHIC SURVEY
 EDGEWOOD PARK
 MID BRIDGE
 NEW HAVEN, CT

Drawn by: D.A.H.
 Checked by: _____
 Date: 06/05/23
 Project No.: 0368

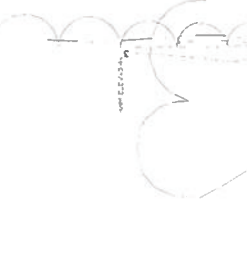
This is the best of my knowledge and belief, and I am not a party to any fraud or other illegal act.
 I am a duly Licensed Professional Engineer and Land Surveyor in the State of Connecticut.

EXISTING CONDITIONS PLAN
 S-1

DAVID A. HUGHES
PROFESSIONAL ENGINEER
& LAND SURVEYOR
 1000 HULLY, CT 06479
 (860) 681-7483



BENCHMARK:
 MAG NAIL IN PAVEMENT
 ELEVATION = 4.83



- NOTES:**
- The map has been prepared pursuant to the Regulations of Connecticut State Agencies Sections 20-300b-1 through 20-300b-6, and the State of Connecticut is not responsible for the accuracy of the map.
 - The intent of this map is to depict the topography and the location of existing structures and utilities. It is not intended to be used for the design of future improvements.
 - Horizontal datum is based on the North American Datum of 1983. Vertical datum is based on the National Geodetic Vertical Datum of 1988.
 - Contour interval is one (1) foot.
 - This survey was conducted in the field by David A. Hughes P.E., L.S. on June 5, 2023.
 - This survey does not include the location of any underground improvements or encroachments, subsurface utility lines or buried debris, other than the poles appearing as being "in-built" or "in-situ". This survey does not include the location of any existing or proposed structures, utilities, or other improvements. However, the indicated existing utilities are based on limited information and are not guaranteed. Notify "CALL BEFORE YOU DIG" and any other agencies and not guaranteed. Notify "CALL BEFORE YOU DIG" prior to any excavation operations.
 - Location of existing utilities have been taken from utility maps or by other means, actual utility dimensions, field locations and elevations are not guaranteed. Notify "CALL BEFORE YOU DIG" prior to any construction.
 - This survey does not include the location of any underground improvements or encroachments, subsurface utility lines or buried debris, nor does it reflect the existence of any waste dumps or hazardous materials.
 - This property is subject to any and all local, state and federal ordinances, statutes, rules and/or regulations, restrictions, public or private use or easement(s), or claims of adverse possession which may affect the premises.

GENERAL LEGEND

Symbol	Feature
(Symbol)	Boundary
(Symbol)	Spot Elevation
(Symbol)	Contour Line
(Symbol)	Water
(Symbol)	Wetland
(Symbol)	Structure
(Symbol)	Utility
(Symbol)	Other

WEST RIVER

EDGEWOOD PARK DRIVE



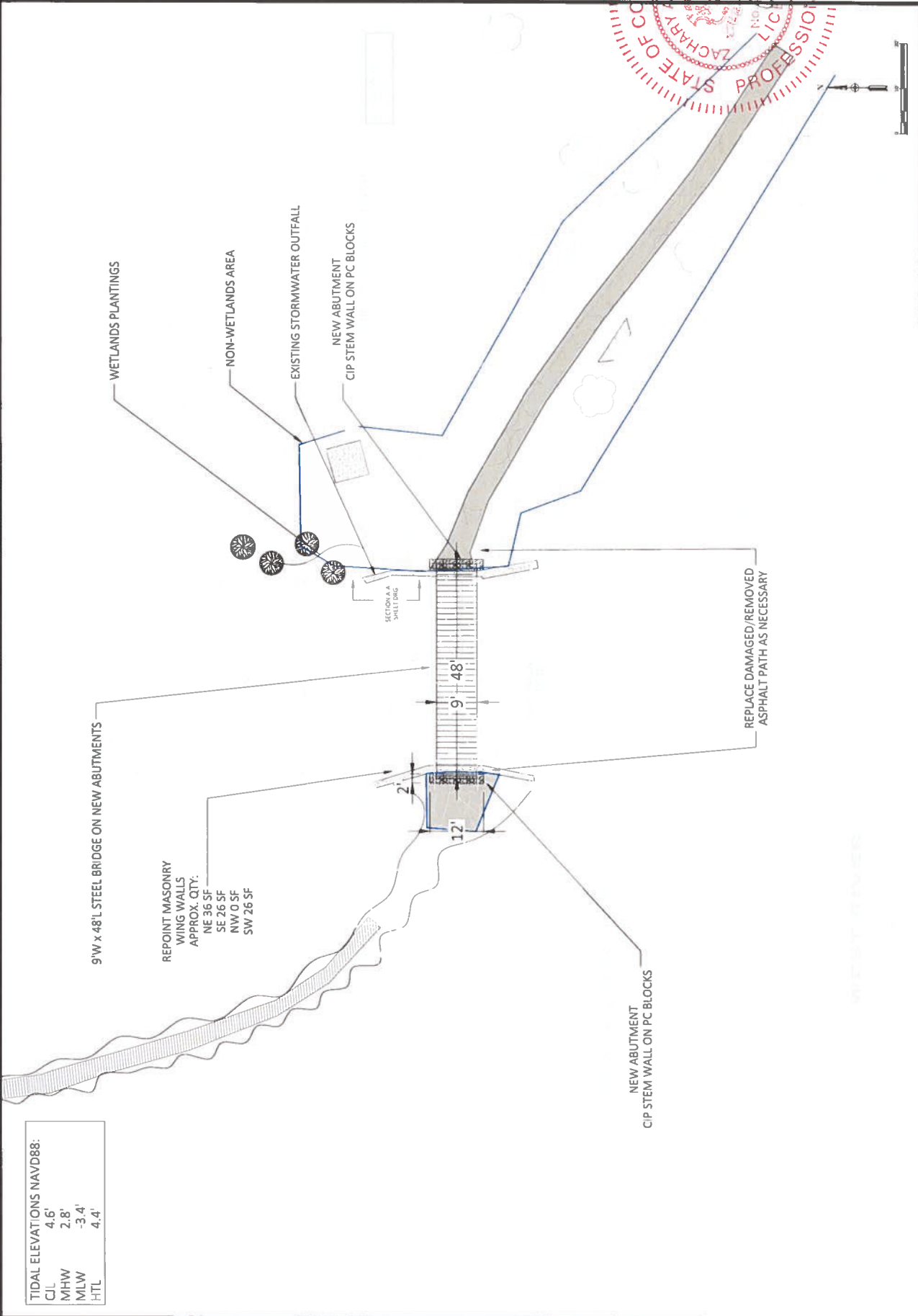


CITY OF NEW HAVEN
 DEPARTMENT OF ENGINEERING
 GIOVANNI ZINN, P.E., CITY ENGINEER
 THE HONORABLE JUSTIN EICKER, MAYOR

EDGEWOOD PARK
 MID BRIDGE

Professional Engineer
 ZSHAPIRO
 No. 12000
 Exp. 12/31/2024
 State of Connecticut
 ZACHARY S. SHAPIRO
 No. 17000
 Exp. 12/31/2024
 State of Connecticut

SP



TIDAL ELEVATIONS NAVD88:

C/L	4.6'
MHW	2.8'
MLW	-3.4'
HTL	4.4'



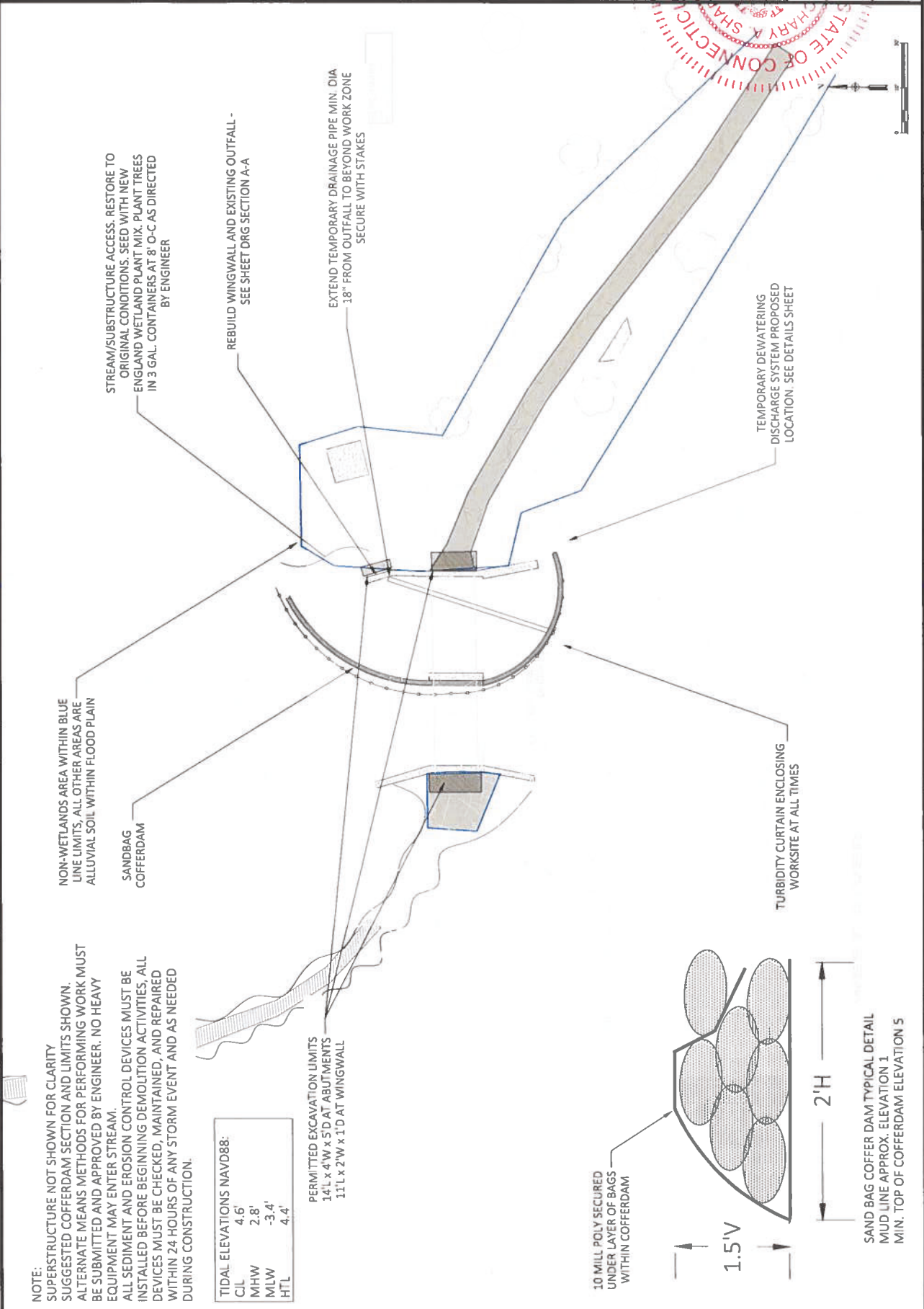
CITY OF NEW HAVEN
DEPARTMENT OF ENGINEERING

MADE IN NEW HAVEN

THE HONORABLE JUSTIN ELICKER, MAYOR
GIOVANNI ZINN, P.E., CITY ENGINEER

EDGEWOOD PARK
MID BRIDGE

Drawn By: ZSHAPRO
Checked By: ZSHAPRO
Date: 9/30/2024
Project No: 23-099-04





Revision/Date	Date

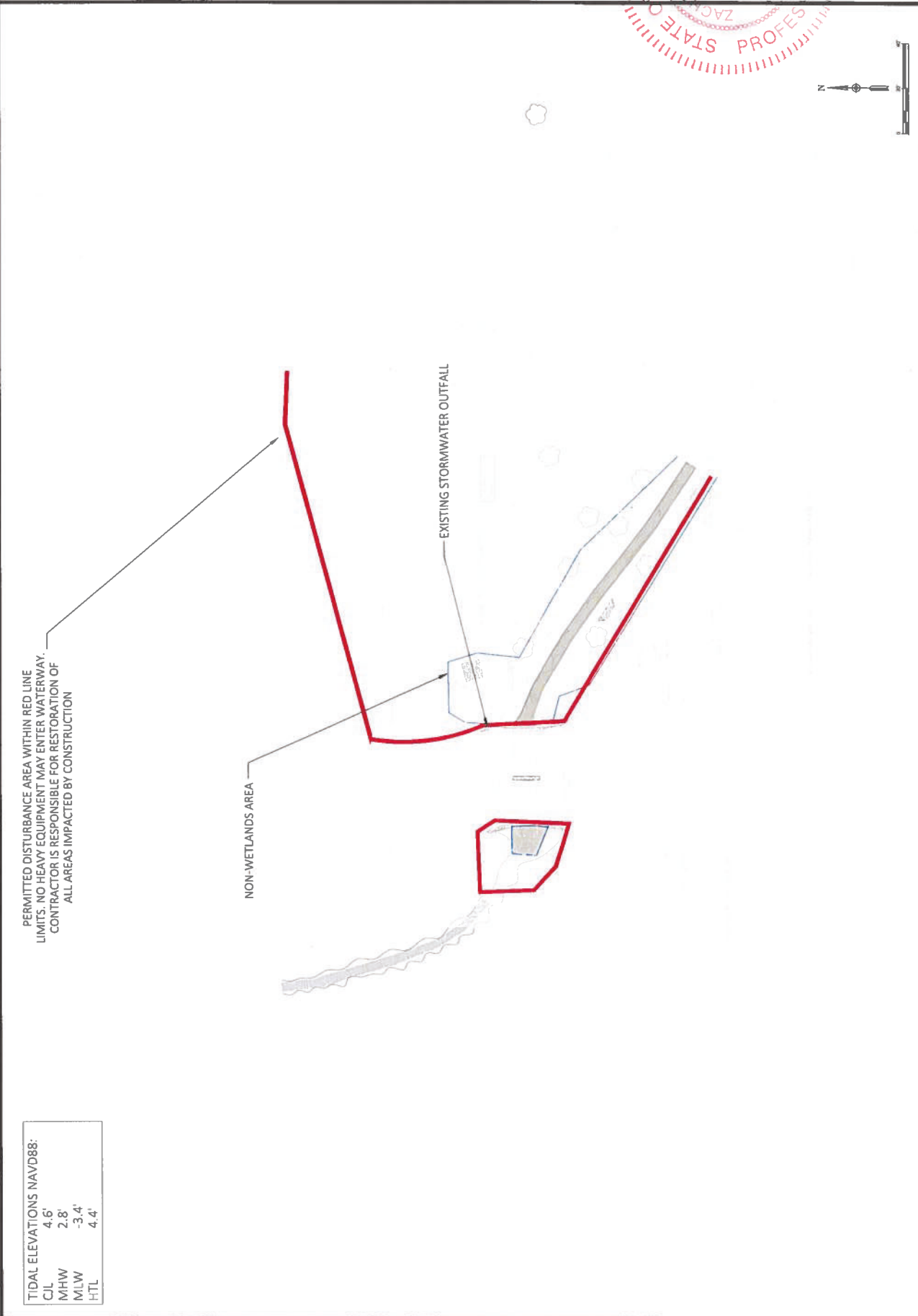
MADE IN NEW HAVEN
 CITY OF NEW HAVEN
 DEPARTMENT OF ENGINEERING
 THE HONORABLE JUSTIN ELICKER, MAYOR
 GIOVANNI ZINN, P.E., CITY ENGINEER

EDGEWOOD PARK
 MID BRIDGE

Drawn By: ZSHAPRO
 Checked: ZSHAPRO
 9/30/2024
 22-099-09

ENVIRONMENTAL
 RESTRICTIONS

ENVT



TIDAL ELEVATIONS NAVD88:

CIL	4.6'
MHW	2.8'
MLW	-3.4'
HTL	4.4'



No.	Revision/Issue	Date

CITY OF NEW HAVEN
DEPARTMENT OF ENGINEERING
THE HONORABLE JUSTIN ELICKER, MAYOR
GIOVANNI ZINN, P. E. CITY ENGINEER

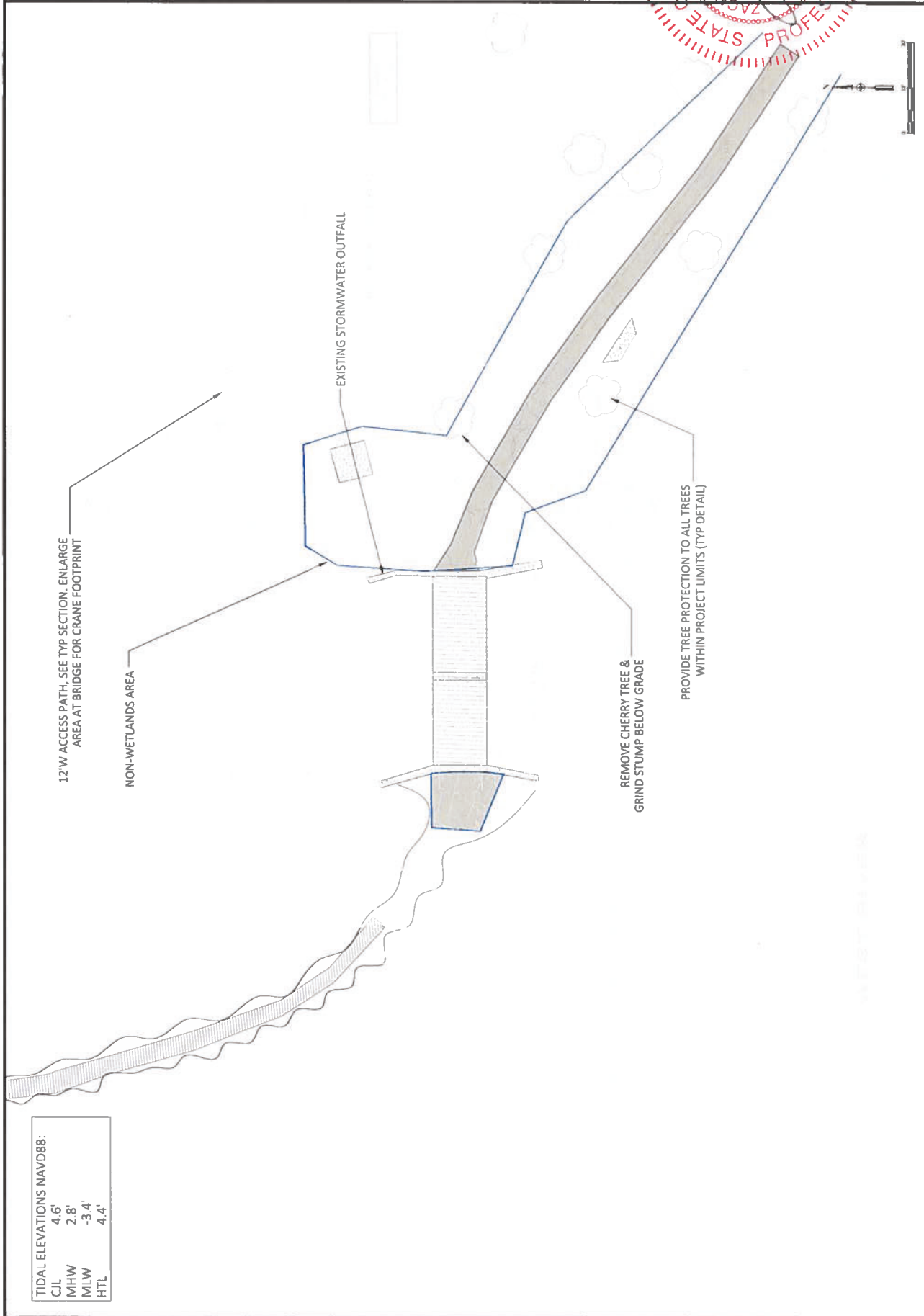


EDGEWOOD PARK
MID BRIDGE

Drawn by: ZHAPRO
Checked by: ZHAPRO
9/30/2024



C&G



TIDAL ELEVATIONS NAVD88:

C/L	4.6'
MHW	2.8'
MLW	-3.4'
HTL	4.4'



No.	Revision/Date	Date

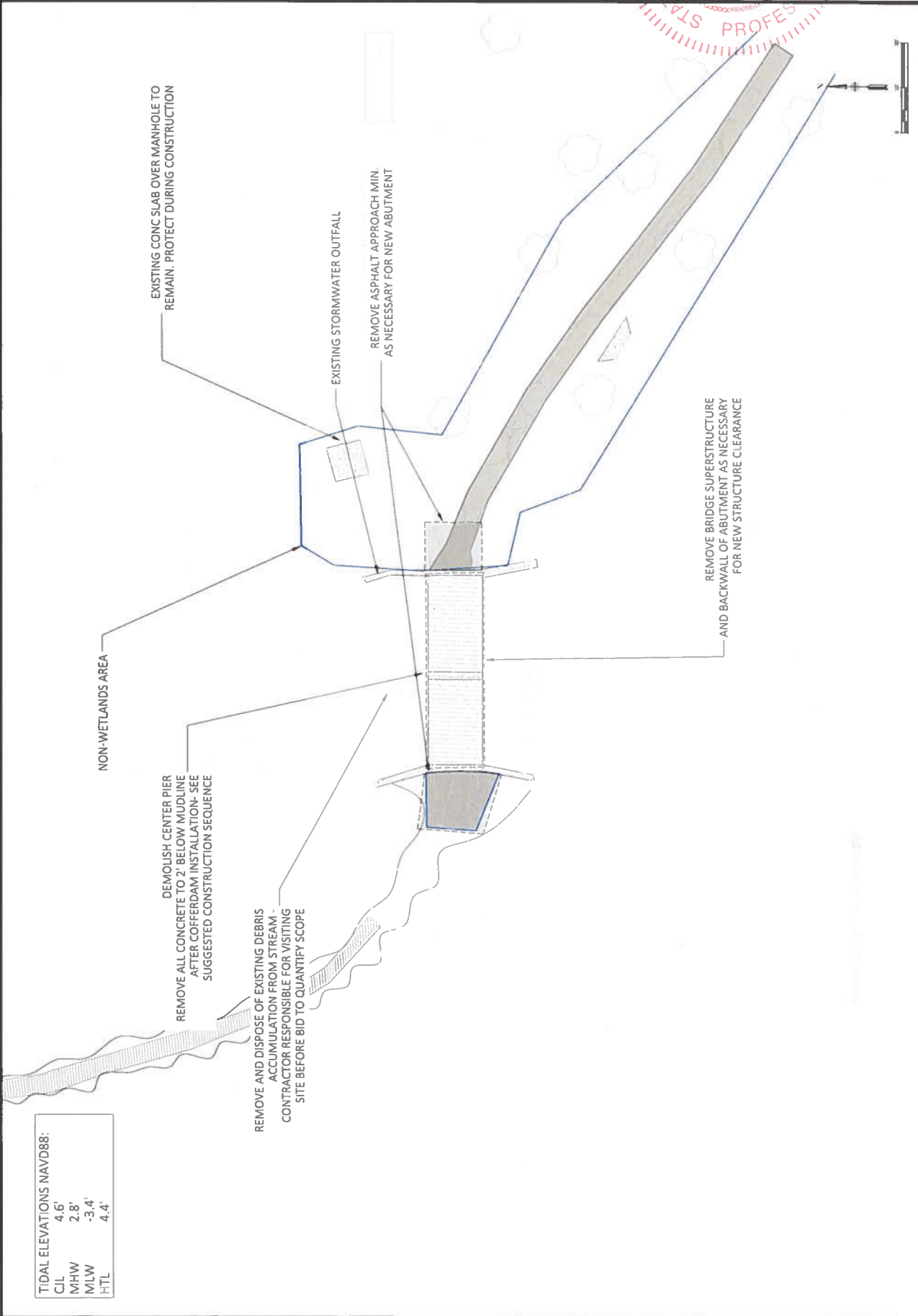
CITY OF NEW HAVEN
 DEPARTMENT OF ENGINEERING
 GIOVANNI ZINN, P. E., CITY ENGINEER
 THE HONORABLE JUSTIN ELICKER, MAYOR

EDGEWOOD PARK
 MID BRIDGE

Drawn By: ZSHAPRO
 Date: 10/18/2024
 21,999.00



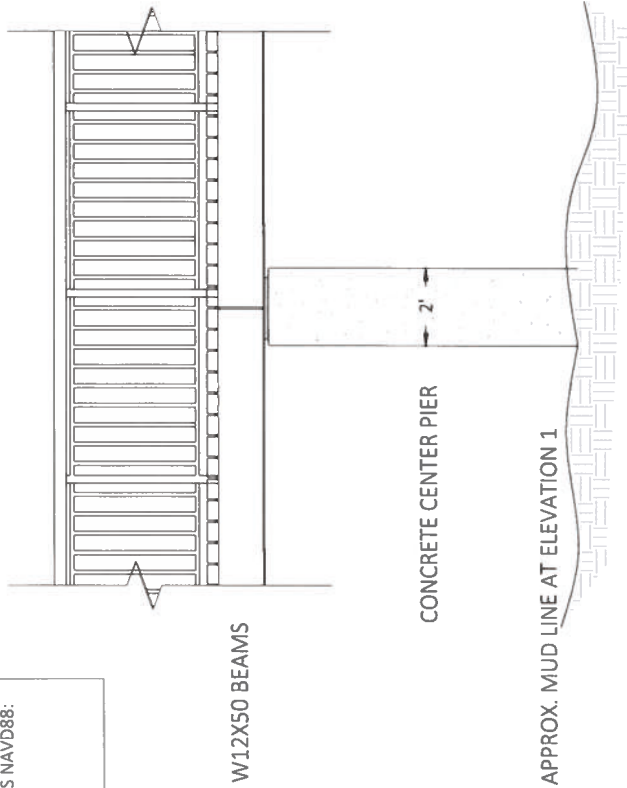
DEMOLITION PLAN
 D1



TIDAL ELEVATIONS NAVD88:

CIL	4.6'
MHW	2.8'
M/LW	-3.4'
HTL	4.4'

TIDAL ELEVATIONS NAVD88:	
CIL	4.6'
MHW	2.8'
MLW	-3.4'
HTL	4.4'

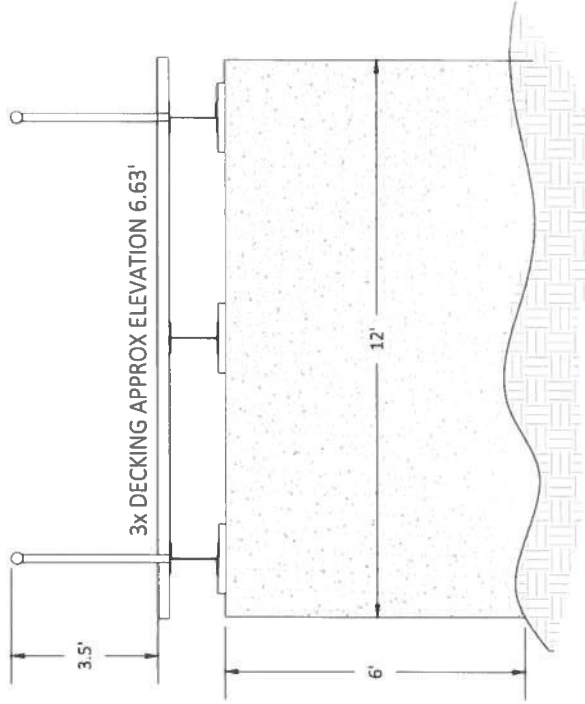


CENTER PIER SECTION

- NOTES:**
- CONTRACTOR IS RESPONSIBLE FOR INSPECTING, QUANTIFYING AND CONFIRMING EXISTING CONDITIONS PRIOR TO BID.
 - CUT EXISTING ANCHOR BOLTS FLUSH IN ALL LOCATIONS BEFORE BEGINNING SUPERSTRUCTURE DEMOLITION
 - REMOVE BASE PLATE AND ZINC SPRAY EXPOSED TOP OF ANCHOR BOLTS
 - EXISTING SUPERSTRUCTURE APPROXIMATE WEIGHT OF 12,000 LBS
 - PIER IS TO BE DEMOLISHED TO 2' BELOW EXISTING MUD LINE
 - HEAVY EQUIPMENT IS NOT PERMITTED WITHIN STREAM
 - SUBMIT NARRATIVE OF DEMOLITION, AND CRANE PICK PLAN IF APPLICABLE, FOR APPROVAL

SUGGESTED SUPERSTRUCTURE DEMOLITION SEQUENCE ALTERNATES:

- SUPERSTRUCTURE DEMOLITION ONSITE
 - UNBOLT AND REMOVE HANDRAIL IN 8' SECTIONS BY HAND OR WITH SMALL MACHINE
 - REMOVE NAILER, THROUGH BOLTS, AND DECKING FROM WESTERN ABUTMENT TO CENTER PIER
 - CUT ANCHOR BOLTS FROM BELOW SUPERSTRUCTURE
 - USE CHAIN FALL AND WINCH FROM LULL OR LARGE MACHINE EAST OF EXISTING ABUTMENT TO LIFT INDIVIDUAL BEAMS OFF WESTERN SPAN AND ONTO TRUCK OR LAYDOWN AREA.
 - REPEAT STEPS 1-4 FOR EASTERN SPAN.
- SUPERSTRUCTURE DEMOLITION OFFSITE
 - UNBOLT AND REMOVE HANDRAIL IN 8' SECTIONS BY HAND OR WITH SMALL MACHINE
 - CUT ANCHOR BOLTS FROM BELOW SUPERSTRUCTURE
 - MOBILIZE CRANE TO A MAXIMUM OF 60' RADIUS OF CENTER OF EXISTING BRIDGE
 - LAY SPREADER BEAM ON EXISTING BRIDGE DECK OVER CENTER PIER
 - ATTACH RIGGING AT 4 LOCATIONS, 2 PER SPAN, PASSING UNDER THREE GIRDER SECTION
 - LIFT BRIDGE BY CRANE AND DIRECTLY LOAD ONTO HAULING TRUCK FOR DISPOSAL OFFSITE



CENTER PIER ELEVATION

SUGGESTED SUBSTRUCTURE DEMOLITION SEQUENCE:

- SUBSTRUCTURE DEMOLITION WITHIN RIVER
 - WET PIER DOWN ON ALL EXPOSED SIDES
 - PLACE TEMPORARY WORK PLATFORM AS NECESSARY ADJACENT TO PIER, WITHIN COFFERDAM, TO FACILITATE REMOVAL WORK ON PIER AT COMFORTABLE WORKING HEIGHT
 - USING DEMO SAW PLUNGE CUT PERIMETER OF PIER EVERY TWO VERTICAL FEET
 - USING JACKHAMMER AND/OR HAND TOOLS CHIP SECTIONS OF PIER TO SECTIONS NO SMALLER THAN 1" DIAMETER
 - THROUGHOUT DEMOLITION CONTINUALLY HAUL DEBRIS FROM RIVER TO LAY DOWN AREA BY WINCH AND BUCKET OR WHEELBARROW
- SUBSTRUCTURE DEMOLITION OFFSITE
 - WET PIER DOWN ON ALL EXPOSED SIDES
 - PLACE TEMPORARY WORK PLATFORM AS NECESSARY FOR ACCESS
 - USING DEMO SAW PLUNGE CUT PERIMETER OF PIER EVERY TWO VERTICAL FEET
 - DRILL AND EPOXY LIFTING HOOKS INTO PIER SEGMENTS
 - USE RIGGING AT MINIMUM OF 2 POINTS PER SEGMENT TO LIFT PIER BY CRANE FROM RIVER DIRECTLY ONTO HAULING TRUCK FOR DISPOSAL OFFSITE.



CITY OF NEW HAVEN
DEPARTMENT OF ENGINEERING
THE HONORABLE JUSTIN ELICKER, MAYOR
GIOVANNI ZINN, P.E., CITY ENGINEER

EDGEWOOD PARK
MID BRIDGE



D2



No.	Revision/Issue	Date

CITY OF NEW HAVEN
DEPARTMENT OF ENGINEERING

THE HONORABLE JUSTIN ELICKER, MAYOR
GIOVANNI ZINN, P. E., CITY ENGINEER

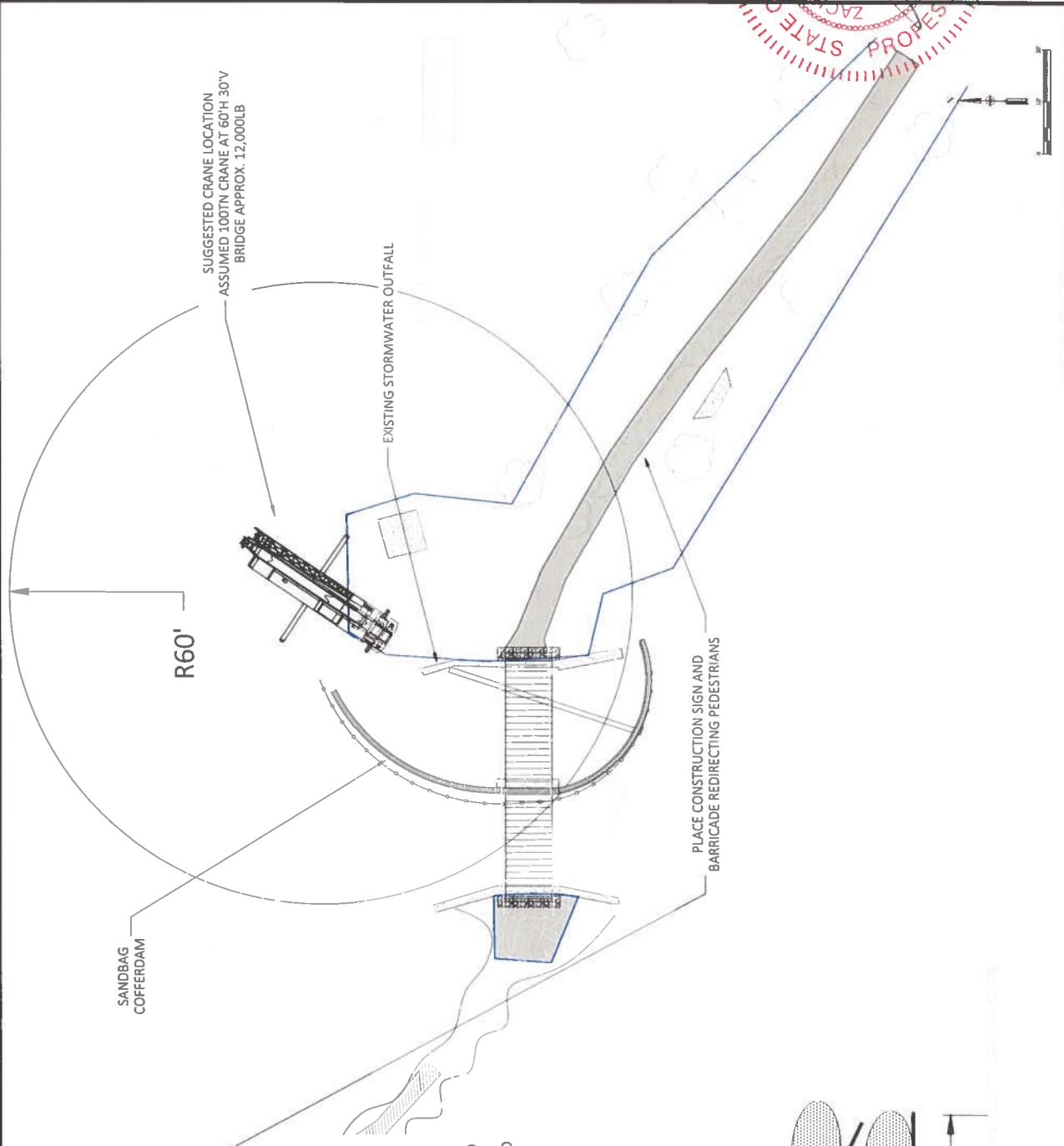
EDGEWOOD PARK
MID BRIDGE

Drawn by: ZSHAPRO
Designed by: ZSHAPRO
Date: 01/01/2024
Scale: 1"=10'-0"

Professional Engineer
No. 31328
Exp. 12/31/2024

CONSTRUCTION SEQUENCE

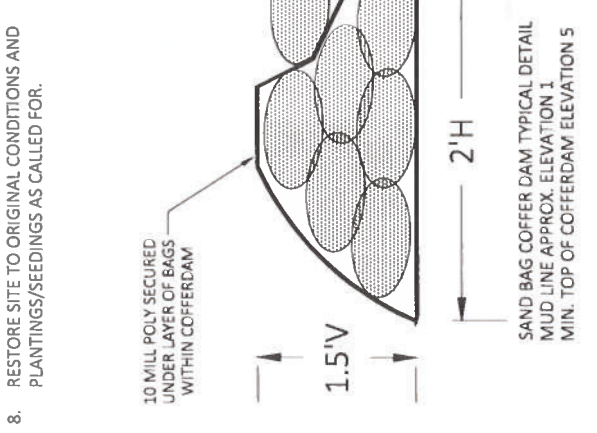
CS



TIDAL ELEVATIONS NAVD88:

CJL	4.6'
MHW	2.8'
MLW	-3.4'
HTL	4.4'

- SUGGESTED SEQUENCE OF CONSTRUCTION:
1. ESTABLISH SANDBAG COFFERDAM
 2. RESET STONES AS NECESSARY AND REPOINT WINGWALLS
 3. CONSTRUCT WESTERN ABUTMENT.
 4. REMOVE SUPERSTRUCTURE USING WINCH AND BACKHOE FROM BEHIND EASTERN ABUTMENT
 5. CONSTRUCT EASTERN ABUTMENT.
 6. CUT CENTER PIER WITH DEMO SAW AS CLOSE TO MUDLINE AS POSSIBLE, CHIP REMAINING EXPOSED PIER TO 2' BELOW MUDLINE. DRILL AND EPOXY LIFTING HOOKS INTO PIER.
 7. MOBILIZE CRANE TO SITE. REMOVE CENTER PIER AND PLACE NEW BRIDGE SUPERSTRUCTURE.
 8. RESTORE SITE TO ORIGINAL CONDITIONS AND PLANTINGS/SEEDINGS AS CALLED FOR.

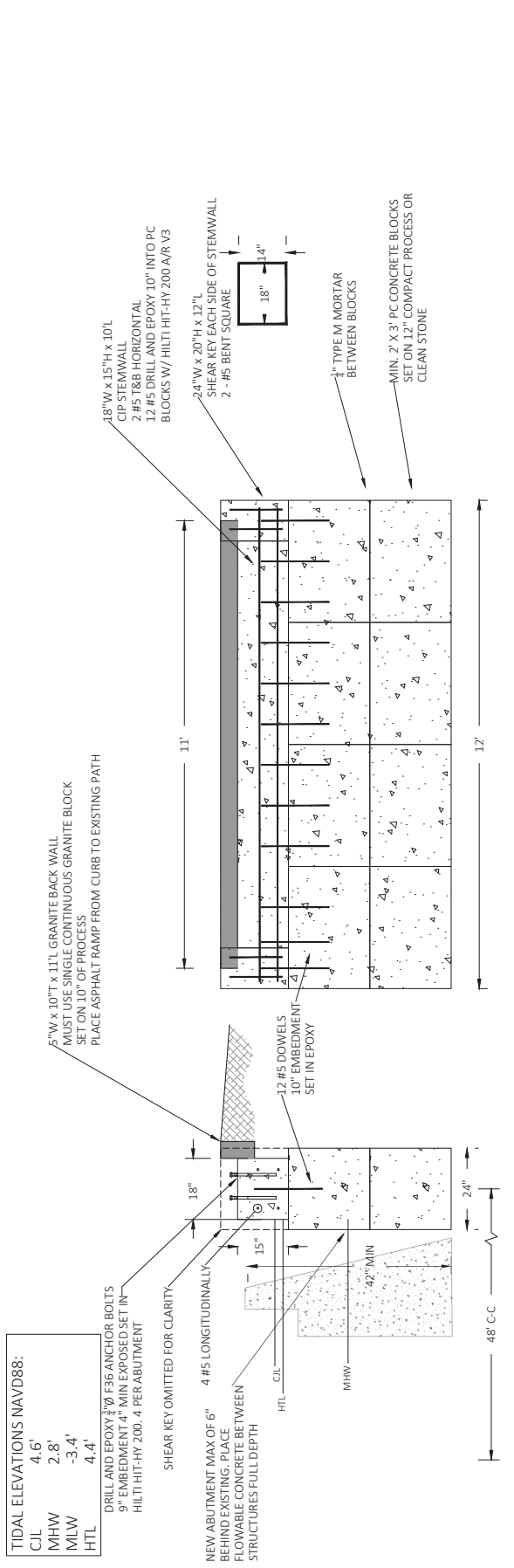




CITY OF NEW HAVEN
 DEPARTMENT OF ENGINEERING
 THE HONORABLE JUSTIN ELICKER, MAYOR
 GIOVANNI ZINN, P.E., CITY ENGINEER

PROJECT: ZSHAPIRO
 DRAWING NO.: ZSHAPIRO
 DATE: 10/28/2024
 PROJECT NUMBER: 22-099-09

EDGEWOOD PARK
 MID BRIDGE



- TIDAL ELEVATIONS NAVD88:**
- | | |
|-----|-------|
| C/L | 4.6' |
| MHW | 2.8' |
| MLW | -3.4' |
| HTL | 4.4' |
- DRILL AND EPOXY $\frac{1}{4}$ " F36 ANCHOR BOLTS
 9" EMBEDMENT 4" MIN EXPOSED SET IN
 HILTI HIT-HY 200. 4 PER ABUTMENT
- NEW ABUTMENT MAX OF 6"
 BEHIND EXISTING. PLACE
 FLOWABLE CONCRETE BETWEEN
 STRUCTURES FULL DEPTH
- HTL
 C/L
 MHW
- 42" MIN
- 48" C-C
- 24"
- 18"
- 15"
- 12 #5 DOWELS
 10" EMBEDMENT
 SET IN EPOXY
- 5" W x 10" x 11' L GRANITE BACK WALL
 MUST USE SINGLE CONTINUOUS GRANITE BLOCK
 SET ON 10" OF PROCESS
 PLACE ASPHALT RAMP FROM CURB TO EXISTING PATH
- 11'
- 18" W x 15" H x 10' L
 CIP STEM WALL
 2 #5 T&B HORIZONTAL
 12 #5 DRILL AND EPOXY 10" INTO PC
 BLOCKS W/ HILTI HIT-HY 200 A/R V3
- 24" W x 20" H x 12" L
 SHEAR KEY EACH SIDE OF STEM WALL
 2 - #5 BENT SQUARE
- 1/2" TYPE M MORTAR
 BETWEEN BLOCKS
- MIN. 2" X 3" PC CONCRETE BLOCKS
 SET ON 12" COMPACT PROCESS OR
 CLEAN STONE
10. CONTRACTOR MUST ALERT ENGINEER FOR INSPECTION OF SOIL CONDITIONS PRIOR TO
 PLACING PC BLOCKS OR BACKFILL. CONTRACTOR MAY REUSE SPOILS AS BACKFILL IF FREE OF
 DEBRIS AND ORGANICS. ALL BASE MATERIAL TO BE CTDOT CLASSIFICATION TYPE B
 COMPACTED BY MECHANICAL MEANS IN LIFTS OF 4" OR LESS.
11. DESIGN RELIES ON EXISTING ABUTMENT FOR SLIDING RESISTANCE. EXISTING ABUTMENT
 MUST BE PROTECTED DURING ALL WORK. CONTRACTOR MUST BE CAREFUL NOT TO
 UNDERMINE EXISTING ABUTMENT FOUNDATION DURING EXCAVATION FOR NEW WORK.
 ALERT ENGINEER FOR INSPECTION DURING EXCAVATION PRIOR TO THE START OF WORK.
- 3.0"
- 18"
- 12"
- 3.0"
- 7.5"
- 4.5"
- 2.5"
- 5.5"
- 97"
- 107.5"
- 132"
- 12.0"
- ASSUMED BASE PLATE LAYOUT. SUBMIT BRIDGE PLANS TO ENGINEER FOR APPROVAL
- NOTES:**
- 3" CLEAR COVER ON ALL REINFORCEMENT UNLESS OTHERWISE NOTED
 - PC CONCRETE BLOCKS TO BE MIN. 1,800LB EACH
 - CIP STEM WALL & SHEAR KEYS:
 EXPOSURE CLASS F2
 MAX W/C OF 0.45
 F' C MIN = 4,500 PSI
 AIR ENTRAINMENT 5% +/-1
 BEVEL ALL EXPOSED EDGES 1:1
 - DEFORMED REINFORCEMENT SHALL BE GRADE 60 UNCOATED FY = 60,000 PSI
 - ANCHOR BOLTS SHALL BE GRADE 36 STEEL WITH F1554 HARDWARE (DOUBLE NUT AND
 DOUBLE WASHER FOR EACH BOLT) ALL HARDWARE HOT DIP GALVANIZED
 - BACK OF EXISTING ABUTMENT AND ADJACENT WINGWALL SHALL BE EXPOSED AND
 INSPECTED BY ENGINEER PRIOR TO PLACING PRE-CAST BLOCKS. BLOCKS SHOULD BE MIN. 6"
 OFF BACK FACE OF EXISTING WALL TO ALLOW CONCRETE SLURRY PLACEMENT.
 - ABUTMENTS TO BE 48" C-C. SUBMIT BRIDGE SHOP DRAWINGS FOR APPROVAL PRIOR TO
 FABRICATION.
 - BRIDGE BASIS OF DESIGN:
 48'-6" LONG OUT-OUT
 9' WIDE OUT-OUT
 8' MIN INT. CLEARANCE
 BRIDGE RAIL MUST MEET IBC REQUIREMENTS FOR HANDRAIL
 BRIDGE TYPE TO BE TRUSS WITH BOW/ARCH TYPE SUPERSTRUCTURE AND UNPAINTED
 WEATHERING STEEL FINISH
 PEDESTRIAN 90 PSF
 H5 MOVING VEHICLE LOAD
 GROUND SNOW OF 30 PSF
 LOAD CASES MUST INCLUDE COMBINED SNOW AND VEHICLE
 BRIDGE DECKING TO BE PRESSURE TREATED TIMBER
 CONTRACTOR MUST STAIN DECK LUMBER ONCE DRY
 EXISTING BRIDGE BOTTOM CHORD ELEVATION 5.35', PROPOSED BRIDGE SEAT ELEVATION
 AT NEW ABUTMENTS TO BE E 5.2', MIN. 2" ABOVE EXISTING ABUTMENT SEAT

SCALE AS NOTED

S

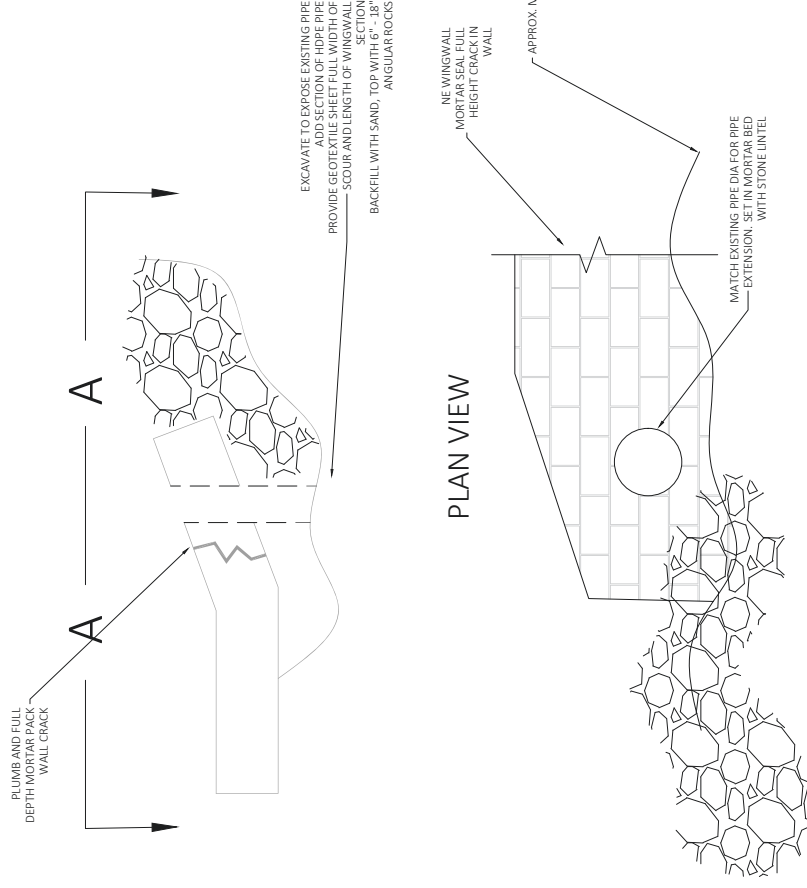
STRUCTURAL



REBUILD MASONRY PIPE OUTFALL

SOW & NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR VISITING THE SITE PRIOR TO BID TO FAMILIARIZE THEMSELVES WITH SCOPE OF WORK, EXISTING CONDITIONS, AND QUANTITIES.
2. NORTHEASTERN WINGWALL HAS FULL HEIGHT VERTICAL SHEAR CRACK AND SEPARATION, LOSS OF BACKFILL MATERIAL, LOOSE AND MISSING MASONRY STONES, AND NON-CONTINUOUS FLOW OF AN EMBED DRAINAGE PIPE.
3. CONTRACTOR IS TO PLUMB, AS NEAR AS IS PRACTICAL, THE BROKEN SECTION OF MASONRY WALL. REPOINT THE CRACKED JOINT. REPLACE AND EXTEND THE DRAINAGE PIPE. REPLACE BACKFILL BEHIND THE WALL.



NTS



No.	Revised Issue	Date

MADE IN NEW HAVEN

CITY OF NEW HAVEN
DEPARTMENT OF ENGINEERING

THE HONORABLE JUSTIN ELICKER, MAYOR
GIOVANNI ZINN, P.E., CITY ENGINEER

EDGEWOOD PARK
MID BRIDGE

DESIGNED BY	ZSHAPIRO
DRAWN BY	ZSHAPIRO
DATE	10/30/2024
PROJECT NUMBER	22-099-09

PROJECT TITLE	
PROJECT NUMBER	
DATE	
PROJECT LOCATION	

DATE PLOTTED	
SCALE	
PROJECT NUMBER	
PROJECT TITLE	
DRAINAGE	
DRG	



Land Record Filing*

To: DO NOT FILE

Signature and

NOTE: Due to the electronic delivery of this license and the legal requirement to have a live signature on this document, the “Land Record Filing” as detailed in General Condition #1 will be sent to the Licensee via U.S. Mail for the Licensee to file with the city/town clerk.

Date:

Subject: _____
License # _____

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.



LWRD Work Commencement Form

To: DEEP.LWRDRegulatory@ct.gov or
Regulatory Section
Department of Energy and Environmental Protection
Land & Water Resources Division
79 Elm Street
Hartford, CT 06106-5127

Licensee Name: City of New Haven

Municipality in which the project is occurring: New Haven

DEEP License No(s): 202407415-COP

CONTRACTOR(s):

1 Name: _____
Address: _____
Telephone: _____
E-mail: _____

2 Name: _____
Address: _____
Telephone: _____
E-mail: _____

3 Name: _____
Address: _____

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)

