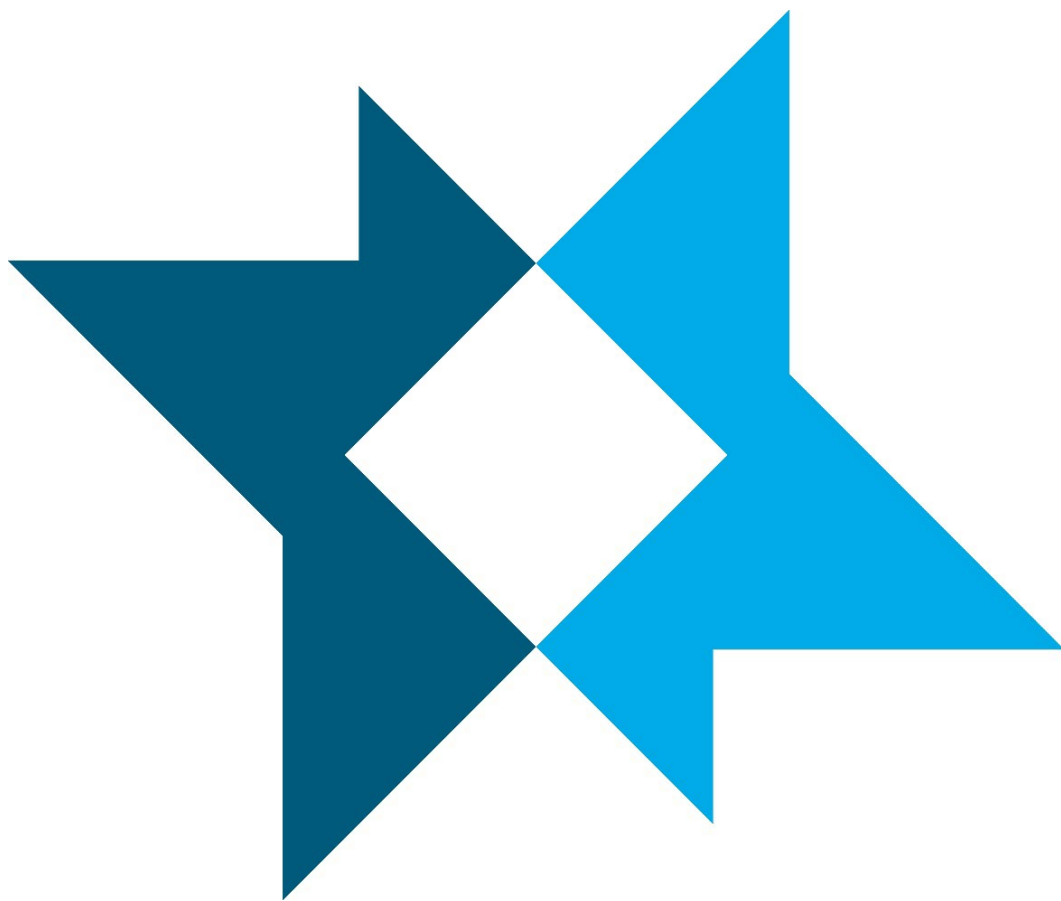




INVITATION FOR BID

Chatham Fish Pier – South Jog Pedestrian Walkway



Town of Chatham
Chatham, Massachusetts

December 10, 2025

Project I.D.: 21C036.01

**Solving our clients' toughest
science and engineering challenges.**

Chatham Fish Pier – South Jog Pedestrian Walkway

Project ID: 21C036.01

Prepared for
Town of Chatham
Chatham, Massachusetts

Prepared by
Foth Infrastructure & Environment, LLC

December 10, 2025



December 10, 2025

Alex I Mora, PE, D.PE
Engineer of Record
Foth Infrastructure & Environment, LLC

REUSE OF DOCUMENTS

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Chatham Fish Pier – South Jog Pedestrian Walkway
Chatham, Massachusetts
Town of Chatham

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SECTION 00 10 10

NOTICE TO BIDDERS

Notice is hereby given that the Town of Chatham (Owner) will receive bids for furnishing all labor, materials, transportation, and services for the project known as:

CHATHAM FISH PIER
SOUTH JOG PEDESTRIAN WALKWAY PROJECT

The project is located on 45 Barcliff Avenue Ext. in Chatham, Massachusetts. Each bid to be in accordance with the plans, specifications, and other Contract Documents, now on file at the office of the Engineer, Foth Infrastructure & Environment, LLC (Foth), located at 15 Creek Road, Marion, MA 02738, where they may be examined.

- A. Notice is also hereby given that all Bidders may be required to furnish a sworn statement of their financial responsibility, technical ability and experience before award is made to any particular Bidder.
- B. The project generally consists of the installation of a 79' long pile supported concrete pedestrian walkway addition along the southern end of the South Jog. The project includes, but is not limited to, the demolition of an existing gangway platform, the construction of a new reinforced concrete pedestrian walkway supported by SYP CCA treated timber piles and a combination of stainless steel and fiberglass reinforced plastic structural members and includes a timber whale and timber chock fender system. The existing gangway assembly will be reinstalled on the new walkway and handrail will be constructed along the length of the walkway. A 19' long concrete foundation wall will be constructed, extending the southern wall of the South Jog landward. A Tensar Marine Mattress will be installed at the base of the new foundation wall. In addition to the piles utilized to support the walkway, an additional pile and mounting assembly will be installed for the purpose of supporting an (owner installed) jib crane. Other aspects of the project include, but are not limited to, excavation and backfill, walkway area painting, repair of a washed out section of the asphalt parking lot, and installation of additional guardrail.
- C. Invitation for Bid documents are available electronically by contacting **Beth Schuh**, via email at: **beth.schuh@foth.com**, with subject: "CHATHAM FISH PIER: IFB REQUEST" on or after **DECEMBER 10, 2025**.
- D. A non-mandatory **Pre-bid Conference and On Site Walk Through** will be performed by the Engineer on **DECEMBER 15, 2025, at 12:00 noon** (local time) which will overview and acquaint the Bidder with the work set forth hereunder. All prospective bidders are highly encouraged to attend.

- E. Each bid shall be submitted using Section 00 41 00, Bid Form, and submitted to the Town of Chatham at the Office of the Town Manager, 549 Main Street, Chatham, MA 02633, on or before **JANUARY 7, 2026, by 10:00 A.M** (local time). **CASH WILL NOT BE ACCEPTED.** Each bid shall be in a separate sealed envelope, addressed to the Town of Chatham and will then be publicly opened and read aloud.
- F. Bids will be awarded based on the Base Bid only.
- G. The Owner reserves the right to reject any or all bids or waive any informality in a bid.
- H. No bidder may withdraw his/her bid for a period of 60 days after the date set for the opening thereof.
- I. Bidders should be aware that all Contractors performing work for the Owners are required to present evidence of Workers' Compensation and Employers' Liability Insurance coverages; a certificate of insurance and copies of the information or declaration page(s) for Broad Form Comprehensive General Liability or Commercial General Liability, and Business Automobile Liability Insurance policies of not less than **\$1,000,000** for bodily injury or death arising out of any one occurrence and property damage limits of not less than **\$3,000,000** arising out of any occurrence for each type of coverage; as well as excess liability coverage in an amount to be no less than **\$3,000,000**; as well as copies for said General Liability and Business Auto Liability Insurance Policies or an endorsement naming the **Town of Chatham, its commissions, committees, boards, officers, employees, and agents, along with Foth Infrastructure & Environment, LLC, as additional insureds**, a standard cross-liability endorsement, an endorsement precluding cancellation or reduction in coverage before the expiration of 30 days after Owner has received written notification by first class mail from the insurance carrier of such cancellation or reduction, and an endorsement stating that the insurance afforded thereby to Owners and its officers, agents and employees shall be primary insurance to the full limits of the policy, and that if Owners and its officers and employees have other insurance against a loss covered by such a policy, such other insurance shall be excess insurance only. Contractor shall further procure for the Owner's benefit, course of construction insurance coverage for all risks of loss in an amount equal to the completed value of the project. The certificates of insurance and copies of information or declaration page(s) and of endorsements are to be reviewed and approved as to form by the Owners before work commences. The award of a contract is subject to the Owner's receipt of all regulatory approvals from local, state, and federal agencies.
- J. If Contractor shall neglect, refuse, or fail to substantially complete the Project scope of work by the Substantial Completion date (as duly adjusted pursuant to the Contract), Contractor shall pay the Owner **\$500** in liquidated damages for each day that expires after such time until this phase of the Work is completed.
- K. The "Contract Documents" consist of this Notice to Bidders, Bid Form, List of Subcontractors, Non-Collision Affidavit, Bidding Requirements, Form for Sub Bid, Agreement, Performance Bond, Payment Bond, General and Special Conditions, plans

and specifications, and any and all Attachments provided with any of the above listed documents. Contract Documents may also be examined at, but not removed or taken from, the office of the Engineer, Foth Infrastructure & Environment, LLC, (Foth) located at 15 Creek Road, Marion, MA 02738 (tel: 508-748-0937) between the hours of 10 a.m. and 4 p.m., Monday through Friday. Copies of Addenda will be provided to registered bidders.

- L. Any questions pertaining to the plans, specifications, or any of the Contract Documents shall be submitted in writing to **Beth Schuh** at: **beth.schuh@foth.com**. To be given consideration, every question must be received by **DECEMBER 18, 2025, at 5:00 P.M.** (local time). Any and all interpretations and any supplemental instructions will be in the form of written Addenda to the Contract Documents which, if issued, will be provided to all persons on record as having received a complete set of Contract Documents at the respective addresses furnished for such purposes. Failure of any Bidder to receive any Addendum or interpretation shall not relieve such bidder from any obligation under his Bid as submitted.
- M. A successful bidder shall provide proof of a current business license issued by the jurisdiction where the work of improvement is to be conducted upon award of the Contract.
- N. The Contract will be awarded to the responsible contractor offering to perform the work at the lowest price. Under G.L. c, 30, §39M, "lowest responsible and eligible bidder" shall mean the bidder: 1) whose bid is the lowest of those bidders possessing the skill, ability and integrity necessary for the faithful performance of the work; 2) who shall certify, that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; 3) who shall certify that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; 4) who, where the provisions of section 8B of Chapter 29 apply, shall have been determined to be qualified thereunder; and 5) who obtains within 10 days of the notification of contract award the security by bond required under section 29 of Chapter 149.
- O. A successful bidder shall, within 10 days from the date of a request by the Owners, enter into a Contract with the Owners, which contract shall be accompanied by a Performance Bond in a sum equal to at least 100% of the Contract price, a labor and materials Payment Bond in a sum equal to at least 50% of the Contract price, and all documents evidencing insurance coverage requested by the Owners - each of a surety company qualified to do business under the laws of the Commonwealth of MA, satisfactory to the Owner, will be required of the successful general bidder.
- P. If the Owner accepts a bid, it anticipates issuing a "Notice of Award" on or about **JANUARY 13, 2026**. After final contracts are fully executed, a "Notice to Proceed" shall be issued on or about **JANUARY 23, 2026**. After the "Notice to Proceed" is

issued, the Contractor may begin procuring materials for Construction to begin on or about **FEBRUARY 23, 2026**.

- Q. The Substantial Completion date for the Project shall be **MAY 15, 2026**, with the Final Completion for the overall Project being **JUNE 1, 2026**.
- R. The prevailing wages to be paid to mechanics, apprentices, teamsters, chauffeurs, and laborers on the Project shall be established by the Prevailing Wage Schedule, as determined by the Commissioner of Labor and Industries, pursuant to the provisions of M.G.L. Chapter 149, section 26 to 27D, inclusive, as amended, which schedule is included as an Attachment to the Invitation for Bids.
- S. All procurement procedures will be in accordance with the Massachusetts General Laws Chapter 149, sections 26-27D and General Laws Chapter 30, sections 39M, which are incorporated herein by reference.

SECTION 00 41 00

BID FORM

Dear Owner:

The undersigned, as a bidder, declares that he/she has carefully examined the location of the proposed work, the bid form, Agreement, and Contract Documents, and he/she proposes and agrees that, if this bid is accepted, he/she will contract with the Owner to provide all necessary machinery, tools and apparatus, to perform all the work and furnish all the materials specified in the Contract Documents in the manner and time therein set forth required to complete the following project:

CHATHAM FISH PIER
SOUTH JOG PEDESTRIAN WALKWAY PROJECT
TOWN OF CHATHAM, MA

The work to be performed pursuant to this bid shall be in strict conformity with the Contract Documents prepared therefore by the Owner, copies of which are on file in the office of the Engineer, which Contract Documents are hereby made a part thereof, and incorporated by this reference as if fully set forth herein.

The bidder proposes and agrees to contract with the Owner to furnish and perform all of the above-described work, for the following price:

_____ U.S. Dollars

A breakdown of the Contract price is attached hereto marked Exhibit “A” and incorporated by this reference.

Owner reserves the right to add or delete items from this list. The price of the contract shall be adjusted accordingly. The price set forth herein includes any and all costs and expenses of whatever source or nature for the work to be performed pursuant to the terms and conditions of the Contract Documents.

If awarded the contract, the undersigned hereby agrees to sign said contract and to furnish the necessary bonds within ten (10) days after being requested to do so by the Owner.

The undersigned has examined the location of the proposed work and is familiar with the Contract Documents and the local conditions at the place where the work is to be done.

The undersigned has carefully checked all of the figures and understands that the Owner will not be responsible for any errors or omissions on the part of the undersigned in making up this bid.

The undersigned certifies under penalties of perjury that this Bid has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the

word person shall mean any natural person, business, partnership, corporation, union, committee, club or other organization, entity, or group or individuals.

The undersigned has satisfied him/herself by personal examination of the location of proposed work, and by such other measures as they may prefer, as to the actual conditions and requirements of the work, and shall not, after submission of the bid, dispute, complain or assert that there was any misunderstanding in regard to the nature or amount of the work to be done.

Contractor acknowledges receipt of Addenda Nos. _____ through _____.

Contractor : _____

Signature : _____

Signed by : _____

Title : _____

Address: _____

Telephone : _____

Facsimile : _____

Dated this _____ day of _____, 20_____

License No. _____ Class(es) _____

Exp. Date: _____

NOTE: Bidders must hold current licenses as required under the laws of the Commonwealth of Massachusetts and all Federal Statutes.

EXHIBIT “A”

Bidder's Name: _____

Date: _____

BASE BID

Bid Item	Description	Estimated Quantity	Unit	Unit Price	Estimated Price
1	Mobilization / Demobilization	1	LS	NA	\$
2	Selective Demolition and Disposal	1	LS	NA	\$
3	Furnish and install reinforced concrete pedestrian walkway	15	CY	\$	\$
4	Furnish and install SYP CCA timber piles	10	EA	\$	\$
5	Furnish and install pedestrian walkway SST and composite supporting members, endplates, and hardware	79	LF	\$	\$
6	Furnish and install pedestrian walkway handrail and safety chains systems	79	LF	\$	\$
7	Furnish and install bituminous pavement, not limited to parking lot scour repair and miscellaneous project area asphalt repairs.	10	SY (VIF)	\$	\$
8	Furnish and install Tensar Marine Mattress	1	LS	NA	\$
9	Furnish and install vehicular guardrail system	35	LF (VIF)	\$	\$
10	Furnish and install pedestrian walkway paint/stripping	375	SF (VIF)	\$	\$

Bid Item	Description	Estimated Quantity	Unit	Unit Price	Estimated Price
11	Furnish and install timber whale and chock fender system	79	LF	\$	\$
12	Excavation and backfilling	70	CY	\$	\$
13	Reinstall gangway	1	LS	NA	\$
14	Reinforced concrete foundation wall	4	CY	\$	\$
15	Jib Crane mounting assembly	1	LS	NA	\$
TOTAL BASE BID PRICE		\$			

LIST OF SUBCONTRACTORS

Any person making a bid or offer to perform the work, shall in his or her bid or offer, set forth:

(a) The name and location of the place of business of each subcontractor who will perform work or labor or render service to the prime Contractor in or about the construction of the work or improvement, or a subcontractor licensed by the Commonwealth of Massachusetts who, under subcontract to the primary Contractor specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half of 1 percent of the prime Contractor's total bid; (b) The portion of the work which will be done by each such subcontractor under this contract. The prime Contractor shall list only one subcontractor for each such portion as defined by the prime Contractor in his or her bid.

Any item of work, which does not set forth a designated Sub-Contractor will be done by the Prime Contractor.

Name & Address

Portion of Work

(Prime Contractor)

Signed by: _____

Title: _____

NON-COLLUSION AFFIDAVIT
(TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID)

Commonwealth of Massachusetts

County of _____

_____, being first duly sworn, deposes and says that he or she is _____ of _____, the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation, that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the Owner awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Signature

(NOTARY) I, _____ as a notary public certify under the pains and penalties of perjury that I witnessed the signature of the aforementioned signatory on behalf of the Bidder, and the individual's identity was verified, on this date: _____, 20 _____. My commission expires on:

OR

(CORPORATE CLERK) I, _____ as corporate clerk of the Bidder/Contractor certify under the pains and penalties of perjury that I witnessed the signature of the aforementioned signatory and the signatory is authorized to execute contracts and other instruments and legally bind the Bidder/Contractor. This date: _____, 20 _____.

AFFIX NOTARY SEAL OR CORPORATE SEAL HERE:

BIDDER CERTIFICATIONS

1.01 GENERAL

A. The undersigned Bidder certifies to the Owner, as set forth in sections 1 through 12 below.

1. Certificate of Non-Discrimination

By my signature hereunder, on behalf of the Bidder making this Bid, the undersigned certifies that there will be no discrimination in employment with regard to race, color, religion, gender, sexual orientation, or national origin; that all federal, state, and local directives and executive orders regarding non-discrimination in employment will be complied with; and that the principle of equal opportunity in employment will be demonstrated positively and aggressively.

2. State of Convictions

By my signature hereunder, I hereby swear, under penalty of perjury, that no more than one final, unappealable finding of contempt of court by a Federal Court has been issued against Bidder within the past two years because of failure to comply with an order of a Federal Court or to comply with an order of the National Labor Relations Board.

3. Previous Disqualifications

By my signature hereunder, I hereby swear, under penalty of perjury, that the below-indicated Bidder, any officer of such Bidder, or any employee of such Bidder who has a proprietary interest in such Bidder, has never been disqualified, removed or otherwise prevented from bidding on, or completing a Federal, State, or local government project because of a violation of law or a safety regulation except as indicated on the separate sheet attached hereto entitled "Previous Disqualifications." If such exceptions are attached, please explain the circumstances.

4. Certification of Workers Compensation Insurance

By my signature hereunder, as the Contractor, I certify that I am aware of the provisions of **Title 28-29 Labor and Labor Relations of the General Laws of Massachusetts** which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that law, and I will comply with such provisions before commencing the performance of the Work of this Contract.

5. Certificate of Non-Collusion

In accordance with Massachusetts General Law Chapter 30, Section 39M: Undersigned certifies under penalties of perjury that this bid or bid is in all respects bona fide and fair and has been made and submitted in good faith without collusion or fraud with any other person. As used in this certification, the work "person" shall mean any natural person, joint venture, business, partnership, corporation, union, committee, club, organization, group of individuals, or other business or legal entity.

6. Conflict of Interest

The bidder must certify that no official or employee of the Town of Chatham has a financial interest in the bidder's bid or executed Contract, or in the expected profit to arise therefrom, unless there has been compliance with the provisions of MGL c. 43,

Section 27 (Interest in Public Contracts by Public Employees) and of provisions of MGL c. 268A, Section 20 (Conflict of Interest Law).

7. Indemnification Agreement

The contracted Bidder hereby indemnifies and shall at all times save and hold harmless the Town of Chatham, and its officers, attorneys, employees, and agents from and against any and all claims (including workers' compensation and wage claims), demands, suits, actions, liabilities, damages, penalties, judgments, and costs and expenses, including without limitation the costs and expenses of litigation, of or by anyone that in any way is caused by, arises out of, or is occasioned by the performance, activities, operations, conducts, negligence, or omissions of the contracted Bidder, or any of its agents or employees.

8. Taxes Paid

Pursuant to Massachusetts General Laws, Chapter 62C, Section 49A, the undersigned certifies under the penalties of perjury that, to the best of my knowledge and belief, all Massachusetts State Tax returns and all Massachusetts State Taxes required under law have been paid, and I have complied with the reporting of employees and contractors, and withholding and remitting of child support.

9. Right to Know Law

Bidder agrees to submit a Safety Data Sheet (SDS) for each toxic or hazardous substance or mixture containing such substance, pursuant to MGL Chapter 111F, Sections 8, 9, 10 and the regulations contained in 454 CMR 21.06 when deliveries are made; and agrees to deliver all containers properly labeled pursuant to MGL Chapter 111F, Section 7 and 454 CMR 21.05. Failure to submit an SDS and/or label on each container will place the vendor in non-compliance with the Purchase Order and/or Contract. Failure to furnish SDS and/or labels on each container may result in civil or criminal penalties. All vendors furnishing substances or mixtures subject to MGL Chapter 111F or 454 CMR are cautioned to obtain and read the Law and Rules and Regulations. Failure to comply with these requirements could result in cancellation of Contract.

10. Foreign Corporation

In Accordance with Massachusetts General Laws Chapter 30, Section 39L, any foreign contractor or subcontractor is required to provide a certificate from the Secretary of State stating that such corporation has complied with Massachusetts General Laws Chapter 156D, including the date of compliance. Further, bidder's attention is called to Massachusetts General Laws Chapter 268A, in connection with which the bidder is requested to submit the information requested in the signature section of this document.

11. Compliance

The undersigned is in compliance with all of the provisions and shall remain in full compliance with the provisions for the life of any Contract resulting from this solicitation. Bidder is qualified to perform any such Contract and possesses, or shall obtain, all requisite licenses and/or permits to complete performance; shall maintain all unemployment, workers' compensation, and personal liability insurance policies sufficient to cover its performance under any such Contract; and shall comply with relevant prevailing wage rates and employment laws. To the best of its knowledge

and belief has paid all local taxes, tax titles, utilities, motor vehicle excise taxes, water and wastewater bills in Massachusetts as required by Law.

12. Affirmative Action Plan:

In witness whereof, the bidder certifies under the pains and penalties of perjury, that as an employer, it is committed to non-discrimination in employment and if selected to execute contracts with the Commonwealth of Massachusetts and/or the Town of Chatham shall also be committed to procure commodities, services and supplies from certified minority and women-owned business enterprises, businesses owned by individuals with disabilities and businesses owned and controlled by socially or economically disadvantaged individuals, both in the performance of contracts with the Commonwealth of Massachusetts and/or the Town of Chatham and in the performance of its business generally, as certified by the execution of this certification by an authorized signatory of the bidder as of the last date indicated below.

13. Bidder Qualifications

Bidders must be pre-qualified by the Massachusetts Dept. of Transportation (MassDOT) Highway Division in MARINE CONSTRUCTION to bid on the above project. An award will not be made to a Contractor who is not pre-qualified by MassDOT prior to the opening of Proposals.

1.02 INSURANCE AND BOND VERIFICATION

A. The undersigned Bidder Certifies that he has the following insurance coverage:

1. Workers' Compensation:

Carrier: _____

Address: _____

Phone and Fax: _____

Policy Number: _____

2. General Liability:

Carrier: _____

Address: _____

Phone and Fax: _____

Policy Number: _____

Policy Limits: \$ _____

A.M. Best Rating: _____

3. Automotive Liability:

Carrier: _____

Address: _____

Phone and Fax: _____

Policy Number: _____

Policy Limits: \$ _____

A.M. Best Rating: _____

4. All-risk Course of Construction:

Carrier: _____

Address: _____

Phone and Fax: _____

Policy Number: _____

Policy Limits: \$ _____

A.M. Best Rating: _____

5. Excess Liability (if applicable):

Carrier: _____

Address: _____

Phone and Fax: _____

Policy Number: _____

Policy Limits: \$ _____

A.M. Best Rating: _____

B. Additional endorsements to insurance are required for the following coverages:

1. **Additional Insured**

It is hereby understood and agreed that Additional Insureds for General Liability and Auto Liability Coverage shall include: The Town of Chatham, its commissions, committees, boards, officers, employees, and agents, along with Foth Infrastructure & Environment, LLC, as respect to work done by Named Insured.

2. **Primary Coverage**

With respect to claims arising out of the operations of the Name Insured, such insurance as afforded by the policy is primary, and is not additional to or contributing with any other insurance carried by or for the benefit of the above Additional Insureds.

3. **Cross Liability/Severability of Interest**

The naming of more than one person, firm or corporation as insured under this policy shall not, for that reason alone, extinguish any rights of the insured against another, but this endorsement, and the naming of multiple insureds, shall not increase the total liability of the Company under this policy.

4. **Notice of Cancellation for General Liability and Auto Liability**

It is understood and agreed that in the event of cancellation of or reduction in the policy for any reason, including non-payment of premium, 30 days' written notice will be sent to the Project Engineer.

A. The name of the Bidder's Bonding Company is as follows:

Carrier/Surety:

Address: _____

Phone and Fax: _____

A.M. Best Rating: _____

1.03 RELEVANT EXPERIENCE

- A. List Bidder's comparable projects completed by Bidder in the last three years, with Owner contact information. (Attach separate sheets if necessary).
- B. List any projects where Bidder has been default terminated by an Owner or has been involved in arbitration/litigation with an Owner on a construction project. Provide Owner contact information:

1.04 SAFETY & EXPERIENCE RECORD

- A. The following statements as to the safety and experience of Bidder are submitted, and Bidder guarantees the truthfulness and accuracy of the information:

1. **Safety**

- a. List Bidder's Interstate Experience Modification Rate for the last three years.

2023: _____

2024: _____

2025: _____

- b. State the name of Bidder's safety engineer/manager or Site Safety Officer:

1.05 CONTRACTOR EXPLANATION OR NOTES ON ANY OF THE ABOVE:**1.06 LIST OF ALL EQUIPMENT TO BE USED ON THIS PROJECT (include year, type, size and condition):****1.07 CONTRACTOR'S NARRATIVE ON CONSTRUCTION SCHEDULE AND METHODOLOGY:** (Please describe in as much detail as possible how your firm/company will proceed with the work as described within the contract documents. Attach or utilize additional sheets if necessary. The Construction Schedule will be requested upon the award of the Contract).

BIDDER CERTIFIES, UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE **COMMONWEALTH OF MASSACHUSETTS**, THAT THE FOREGOING INFORMATION IS CURRENT AND ACCURATE AND AUTHORIZES OWNER AND ITS AGENTS AND REPRESENTATIVES TO OBTAIN A CREDIT REPORT AND/OR VERIFY ANY OF THE ABOVE INFORMATION.

BIDDER: _____
(COMPANY NAME)

BY: _____
NAME TITLE

BY: _____
SIGNATURE DATE

NOTE: This bid must bear the written signature of the Bidder. If the Bidder is a partnership, the bid must be signed by a partner. If the Bidder is a corporation, the bid must be signed by a duly authorized officer or agent of such corporation.

CERTIFICATE OF VOTE OF AUTHORIZATION

I, Clerk of _____
(Name of Corporation)

the principal office of which is located at:

(Address of Principal Office)

do hereby certify that a duly authorized meeting of the Board of Directors of the above-named corporation held on: _____, at which all Directors were
(Date)

present or waived notice, it was VOTED that:

(Name)
_____ of this corporation be and hereby is authorized
to
(Office)

execute contracts, bonds, and other instruments in the name and behalf of said corporation and affix its corporate seal thereto, and such execution of any contract or other instrument or obligation in this corporation's name on its behalf by the above-named officer shall be valid and binding on this corporation.

I hereby certify that I am the Clerk of this corporation and that the above-named officer was duly elected to the above-stated office and that the above-stated VOTE has not been amended or rescinded and remains in full force and effect as of the date of this contract executed with the Town of Chatham.

A true copy,

Attest: _____
, Clerk

(Corporate Seal)

SECTION 00 43 93

BIDDING REQUIREMENTS

1.1 SECURING DOCUMENTS

Invitation for Bid documents are available electronically by contacting **Beth Schuh, via email at: beth.schuh@foth.com**, with subject: “CHATHAM FISH PIER: IFB REQUEST” on or after **DECEMBER 10, 2025**. Contract documents may also be examined at, but not removed or taken from the office of the Engineer, Foth Infrastructure & Environment, LLC, (Foth) located at 15 Creek Road, Marion, MA 02738 (tel: 508-748-0937) between the hours of 10 a.m. and 4 p.m., Monday through Friday.

1.2 BID REQUIREMENTS

In order to receive consideration, bids shall be prepared and submitted in conformance with these requirements and instructions:

1. Bidders shall carefully examine the site of the proposed work and the Contract Documents. It will be assumed that the bidder has investigated and is satisfied as to the conditions to be encountered, and as to the character, quality and quantities of work to be performed, materials to be furnished, and as to the requirements of these Contract Documents.
2. Specific data required in regard to the location of existing public utility companies' pipes, conduits and structures as required to perform the work shall be obtained by the Contractor from the respective public utility companies.
3. Bids shall be prepared and submitted only on the forms supplied by the Owner and shall be signed by the bidder. Contractors must complete all bid items; no incomplete bids will be accepted. Written amounts shall prevail over numbers. If the unit price and the total amount named by the bidder for any item do not agree, the unit price shall govern. The Bidder Certification, fully completed and executed by the bidder, shall accompany the bid.
4. If the bid is by an individual, his/her name and address shall be shown; if by a firm, the firm or partnership name shall be shown; or if by a corporation, the bid shall show the name and the State under the laws of which the corporation is chartered and addresses of the President and of the Secretary and/or Treasurer. All bids shall be signed in long-hand and executed by a principal duly authorized to make contracts. Verbal or telephonic bids or modifications will not be considered. Bidders shall include with their bid a completed Certificate of Vote of Authorization. Such forms are included with the bid documents. Electronic bids will not be accepted.
5. Bids shall not contain any recapitulation of the work to be done. Alternative bids will not be considered, unless called for. The completed form shall be without interlineations or alterations.
6. All bids shall be presented to the Owner under sealed cover, and plainly marked on the outside with the title of the work being proposed and the name of the

BIDDING REQUIREMENTS

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bidder. It is the sole responsibility of the bidder to ensure that his/her bid is received by the Owner prior to the time specified for receipt of bids. Any bid received after the scheduled closing time for receipt of bids shall be returned to the bidder unopened and will be deemed unresponsive and thus rejected by the Owner(s).

7. Every bid shall be accompanied by a bid deposit in the form of: 1) a bid bond, 2) cash, or 3) a certified check on, or a treasurer's or cashier's check issued by, a responsible bank or trust company, payable to the awarding authority. The amount of the bid deposit shall be 5% of the value of the bid.

1.3 BID QUANTITIES

Refer to Section 00 41 00, Bid Form.

1.4 CONTRACTOR'S LICENSE

Prior to submitting bids, bidders shall be licensed (if applicable) as contractors under the laws of the Commonwealth of Massachusetts to perform the type and class of work contemplated by the Contract Documents.

Subcontractors of bidding general contractors shall be licensed under the laws of the Commonwealth of Massachusetts to perform the type and class of work contemplated by the Contract Documents.

1.5 WITHDRAWAL OF BID

Any bid may be withdrawn by the bidder prior to, but not after, the time fixed for the opening of bids, either personally or by telegraphic or written request. The withdrawal of a bid shall not prejudice the right of a bidder to file a new bid. No bid may be withdrawn for a period of 60 calendar days after the bid opening. Any withdrawal after that time shall be in writing and shall not be effective until received by Owner.

1.6 INTERPRETATION OF DOCUMENTS AND PLANS

If any person contemplating submitting a bid for the proposed contract is in doubt as the true meaning of any part of the plans, specifications, or other Contract Documents, or finds discrepancies in, or omissions from the plans or specifications, he/she may submit a written request for an interpretation or corrections thereof to **Beth Schuh, via email at: beth.schuh@foth.com, by 5:00 P.M. (local time), on DECEMBER 18, 2025.** The person submitting the request will be responsible for its prompt delivery. Any interpretation or corrections of the proposed documents will be made only by addendum duly issued and a copy of such addendum will be mailed, emailed, or delivered to all persons known by the Project Engineer to have received a set of Contract Documents. Neither the Owner nor the Project Engineer will be responsible for any other explanations or interpretations of the proposed Contract Documents.

1.7 ADDENDA

The Contract Documents are subject to revision prior to the time fixed for opening bids by submitting the revision, in writing, to all persons who are known by Owner to have secured such documents for purposes of submitting bids. All addenda issued shall become an integral and integrated part of the contract documents and shall be included in any bid submitted. Bidders are responsible for verifying that they have received all addenda.

1.8 OPENING OF BIDS

Written Bids for the Contract will be received by the Town of Chatham's Office of the Town Manager, 549 Main Street, Chatham, MA 02633, on or before **10:00 A.M. (local time), on JANUARY 7, 2026**, and at that time and place will be publicly opened and read aloud.

1.9 AWARD OF CONTRACT OR REJECTION OF BIDS

Bids will be awarded based on the Base Bid only.

Bids may be rejected if they show any alterations of form, additions not called for, conditional bids, incomplete bids, erasures, or irregularities of any kind. The Owner reserves the right to waive any irregularities in the bids as received.

The Owner reserves the right to reject any or all bids. More than one bid from an individual, firm or partnership, corporation, or association, under the same or different name, will not be considered. Reasonable grounds for believing that a bidder is interested in more than one bid for work contemplated, will cause the rejection of all bids in which said bidder is interested. Bids in which prices are obviously unbalanced may be rejected by the Owner.

1.10 COMPETENCY OF BIDDERS

Bidders shall furnish evidence of financial competency, organizational ability, and experience to enable him/her to undertake and successfully complete the work to be performed, including past performance which shall include past performance on projects performed for the Owner.

1.11 BONDS AND INSURANCE

Bidder's attention is directed to the provisions of the Contract Documents relating to the requirements of contract bonds. The successful bidder, simultaneously with execution of the Agreement, will be required to furnish a faithful Performance Bond in an amount equal to at least 100% of the contract price, and a labor and material Payment Bond in an amount equal to at least 50% of the contract price; both said bonds to be secured from a corporate surety admitted in the Commonwealth of Massachusetts and shall be satisfactory to the Owner.

Bidder's attention is further directed to the provisions relating to the Contractor's insurance requirements, and the prescribed form of Bidder's Bond, Agreement, Contract Bonds, and insurance documentation.

1.12 CONTRACT PROGRESS SCHEDULE

Bidder's attention is directed to the provisions of the Contract Documents relating to the requirement for the submission of a contract progress schedule after the receipt of the Notice to Proceed.

1.13 LEGAL RELATIONS AND RESPONSIBILITIES

Bidder's attention is specifically directed to the provisions of the General Conditions concerning laws to be observed, hours of labor, minimum wages, employment of labor, safety codes, patents, taxes, and other matters of concern to the bidder.

The prevailing wages to be paid to mechanics, apprentices, teamsters, chauffeurs, and laborers on the Project shall be established by the Prevailing Wage Schedule, as determined by the Commissioner of Labor and Industries, pursuant to the provisions of M.G.L. Chapter 149, Section 26 to 27D, inclusive, as amended, which schedule is included as an Attachment to the Invitation for Bids.

1.14 SUBCONTRACTORS

Each bidder must state in his/her bid the subcontractors he/she intends to employ to perform any work or labor or render service to the Contractor for the construction of the work or improvement in an amount in excess of one half of one percent of the Contractor's bid. This statement shall include the name of each subcontractor, the location of his/her place of business, and the nature of the work to be performed by him/her.

END OF SECTION

SECTION 00 52 00

AGREEMENT

Town of Chatham (the "Owner") and _____, hereinafter referred to as "Contractor," for the consideration hereinafter stated, hereby agree as follows:

1. **PROJECT.** Contractor shall perform everything required to be performed, shall provide and furnish all of the labor, equipment, materials, and tools to perform, within one hundred and twelve (112) calendar days, all project work after the NOTICE TO PROCEED, which is anticipated to be given no later than **JANUARY 23, 2026** for the following work:

**CHATHAM FISH PIER –
SOUTH JOG PEDESTRIAN WALKWAY PROJECT
TOWN OF CHATHAM, MA**

in strict accordance with the Contract Documents pertaining thereto and signed by the Engineer for the Owner, which Documents are incorporated herein and made a part of this Agreement as if herein fully set forth. Subject to all authorized modifications, completion of construction activities must be achieved no later than **MAY 15, 2026**.

CONTRACT AMOUNT. Owner shall pay to Contractor, as full consideration for the faithful performance by Contractor of the aforementioned work, the amount of _____ Dollars (\$ _____) computed in accordance with Contractor's accepted Bid dated _____, which accepted Bid is incorporated herein by reference thereto as if herein fully set forth.

2. **SUPERVISION.** All of the work to be done shall be done under the direction and supervision of, and to the approval of, Owner or its authorized representative, and the work shall be done in the best workmanlike manner, conforming strictly to the provisions of the specifications and plans made thereof.
3. **COMPLIANCE WITH LAWS.** (a) Contractor shall comply with all applicable provisions of the Massachusetts General Laws inclusionary of any and all Labor and Labor Relations Statutes.

Before the Agreement between Owner and Contractor is entered into, Contractor shall submit written evidence that it and any subcontractors have obtained for the period of the Contract, full Workers' Compensation insurance coverage for all persons whom they employ or may employ in carrying out the work under this Contract. This insurance shall be in accordance with the requirements of the most current and applicable state Workers' Compensation insurance laws. The Contractor in signing this Agreement certifies to Owner as true the following statement:

I am aware of the provisions of Massachusetts General Laws, which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the work of this Contract.

5. **PERFORMANCE STANDARDS.** The Work must be performed and completed in accordance with all requirements of law and no Work shall be undertaken until Contractor has been issued all required permits from all applicable municipal, state and federal governmental bodies. “Completion” of the Work includes obtaining all certificates, or amendments of existing certificates, as the case may be, which relate to the performance of the Work. Unless otherwise specified in this Agreement, the Work must be performed in a good and workmanlike manner and in accordance with the best modern practice and with materials and workmanship of the highest quality. Contractor shall check and verify all dimensions, grades, and levels before commencement of performance and whenever necessary during the progress thereof.
6. **PAYMENTS.** Owner shall pay the Contractor for complete and accepted performance of the Work, subject to additions and deductions by Change Orders. The Contractor agrees to provide with each payment application (invoice), lien waivers sufficient to discharge any liability from the Owner to Contractor. Partial payments shall cover work completed through the 25th calendar day of each month for contracts where the number of working days exceeds twenty (20). No partial payments will be made for contracts having a time limit of twenty (20) days or less, unless completion has been significantly delayed by causes which are clearly not the fault of the Contractor. When partial payments are to be made, the Contractor shall submit to the Owner, on Owner’ forms, an estimate of the total amount of work accomplished, which will show the computed amount due less a retention which shall be 10% of the value of the work accomplished. No partial payments will be made for materials stored on the job but not yet installed, unless otherwise provided in the Contract Documents. Each request for payment application must be approved by the Project Engineer and will not be considered as submitted until the Owner, Contractor and Project Engineer agree to unit quantities covered by the payment application. Once Owner has received the approved request for payment application, Owner shall process the Contractor’s invoice and pay Contractor any undisputed amount within thirty (30) calendar days from the date of receipt of a complete application for payment from Contractor.
7. **JOB SITE.** The Contractor shall at all times enforce strict discipline and good order among its employees and shall not employ on the Work any unfit person or anyone not skilled in the assigned task. The Contractor at all times shall keep the job site free from accumulation of waste materials or rubbish caused by its operations. At the completion of the Work, it shall remove all its waste materials and rubbish from and about the job site as well as its tools, construction equipment, machinery and surplus materials. The Contractor shall comply with all laws, bylaws, rules, regulations, and lawful orders of any public authority bearing on the performance of the Work, the safety of persons and property and their protection from damage, injury, or loss. Contractor shall provide repair response within twenty-four (24) hours of request by Owner during the course of performance of the Work under this Agreement for any repair work that has been poorly constructed and or performed or any work that results in either consequential or actual damage to any property associated with the Contractor’s operations.
8. **STORAGE OF MATERIALS.** Materials and equipment shall be stored in a neat and orderly manner at locations designated by the Owner, taking all necessary precautions to prevent fire hazards and spontaneous combustion and to conform to the requirements of all applicable regulatory agencies and insurance policies.

9. **EQUIPMENT AND MATERIALS.** Contractor shall furnish all labor, tools, scaffolding, ladders, equipment, supplies and materials required in performing all Work under this Agreement. Owner assumes no liability or responsibility for the care, safety, or preservation of any tools, machinery, equipment, material or supplies and all risks thereof are assumed by Contractor.
10. **SAFETY PROCEDURES.** Contractor shall at all times take all necessary and customary precautions in introducing and maintaining safety measures to protect the persons and property of others on or adjacent to the Work site against all damage, loss, or injury resulting from the Work involved under this Agreement. Contractor shall comply with any site-specific safety plans for the individual project properties. Protective arrangements will be taken in all instances to prevent Work operations from in any way damaging the premises or any personal property or any other work or operations, and from causing or allowing any pollution to leak, flow, or escape into any waterway or sewer. Contractor's obligation to protect shall include the duty to provide, place, and adequately maintain at or about the Worksite suitable and sufficient guards, lights, barricades, and enclosures. Contractor shall dispose of all hazardous materials used or produced in connection with this Agreement in the manner required by law.
11. **PERMITS AND TAXES.** The Contractor shall pay any and all federal, state, and municipal taxes for which the Contractor may be liable in carrying out this Agreement.
12. **LIQUIDATED DAMAGES.** Subject to all authorized modifications, It is hereby agreed by the parties to the Agreement that in case all work called for under the Agreement is not finished or completed on or before the time set forth in this Agreement, damage will be sustained by Owner, and that it is and will be impracticable and extremely difficult to ascertain and determine the actual damage which the Owner will sustain in event of and by reason of such delay; Liquidated damages have been read, negotiated and agreed to by both parties and are stated as follows:

If Contractor shall neglect, refuse, or fail to substantially complete the South Jog Pedestrian Walkway Project **scope of work (including piles, substructure, walkway, fendering, handrail, gangway, foundation wall, marine mattress, scour repair, guardrail, and painting/stripping) by the Substantial Completion date of May 15, 2026** (as duly adjusted pursuant to the Contract), Contractor shall pay the Owner \$500 for each day that expires after such time until this phase of the Work is completed as determined by a pay request submitted by the Contractor and approved by the Construction Manager. The number of calendar days between Notice to Proceed (assumed January 23, 2026) and Substantial Completion is one-hundred and twelve (112) days. See Section 00 10 10, Notice to Bidders.

Time is of the essence in all respects on this Contract. Contractor shall accordingly prosecute all Work diligently, using such means and methods of construction as will assure Substantial Completion not later than the respective dates set forth above, as such dates may for good cause (as set forth in the Construction Documents) be extended by the Owner. Nothing in this Article, however, grants the Contractor the privilege to use means or methods that do not accord with sound and accepted practices.

In the event that the Contractor fails, refuses, or neglects to fully and finally complete the Work to the satisfaction of the Owner (Final Completion) as required in the Contract for

each of the aforementioned categories of Work within fifteen (15) days of the respective Substantial Completion dates for each such category, the Owner may, in its sole discretion, assess additional liquidated damages in the amount of \$250 for each day that expires after the date of Substantial Completion of each phase of the Work up through the date of Final Completion thereof.

The amounts of liquidated damages imposed hereunder shall be cumulative and may, at Owner's option, be deducted and retained in whole or in part as a credit from any Contract Sum amounts then owed Contractor or which may have been paid to the Contractor. If no amounts are then owed to Contractor, Contractor shall pay to Owner the amount of liquidated damages upon written demand therefor. The liquidated damages shall cease once the Contractor has fully and completely any breach as set forth hereunder.

13. **ABANDONMENT; INCREASE.** All Work shall be performed according to a mutually agreed upon schedule. The suspension of work by the Contractor for any reason (other than the sole fault of the Owner), which exceeds four hundred and eighty hours (480) hours, shall be deemed abandonment of the project by the Contractor, and the Owner shall have available any and all remedies, including but not limited to surety participation pursuant to the terms of the faithful Performance Bond.

It is further agreed that in case the work called for under this Agreement is not completed in all of its parts and requirements within the number of calendar days specified, Owner shall have the right to increase the number of calendar days or not, as may seem best to serve the interest of Owner; and if it is decided to increase the said number of calendar days, Owner shall further have the right to charge to Contractor, and deduct from the final payment for the work, all or any part, as Owner may deem proper, of the actual cost of engineering, inspection, superintendence, and other overhead expenses of Owner which are directly chargeable to this Agreement, except that the cost of final surveys and the preparation of the final estimate shall not be included in such charges to be paid by Contractor.

14. **GUARANTY.** Except as otherwise may be provided herein, Contractor hereby expressly guarantees for two (2) full years from the date of the final completion of the work under this Agreement and acceptance thereof by Owner, to repair or replace any part of the work performed hereunder which constitutes a defect resulting from the use of inferior or defective materials, equipment or workmanship. If, within said period, any repairs or replacements in connection with the work are, in the opinion of the Project Engineer, rendered necessary as a result of the use of inferior or defective materials, equipment or workmanship, Contractor agrees, upon receipt of notice from Owner, and without expense to Owner, to promptly repair or replace such material or workmanship and/or correct any and all defects therein. If Contractor, after such notice, fails to proceed promptly to comply with the terms of this guarantee, Owner may perform the work necessary to effectuate such correction and recover the cost thereof from Contractor or his sureties.

Any and all other special guarantees which may be applicable to definite parts of the work under this Agreement shall be considered as an additional guarantee and shall not reduce or limit the guarantee as provided by Contractor pursuant to this paragraph during the first year of the life of such guarantee.

As security for the faithful performance by the Contractor for maintenance for the period herein required, the Contractor shall, upon acceptance of the work performed under the Contract, in addition to the faithful Performance Bond and labor and material Payment Bond required.

15. **INDEMNIFICATION.** The Contractor hereby indemnifies and shall at all times save and hold harmless the Town of Chatham, its commissions, committees, boards, officers, employees, and agents, along with Foth Infrastructure & Environment, LLC from and against any and all claims (including workers' compensation and wage claims), demands, suits, actions, liabilities, damages, penalties, judgments, and costs and expenses, including without limitation additional engineering costs and attorney's fees and the costs and expenses of litigation, of or by anyone that in any way is caused by, arises out of, or is occasioned by the performance, activities, operations, conducts, negligence, or omissions of the Contractor, or any of its agents or employees, including subcontractors.
16. **INSURANCE.** Contractor, at its sole cost and expense, shall acquire and maintain in full force and effect throughout the term of this Agreement Workers' Compensation, employer's liability, commercial general liability, and owned, non-owned and hired automobile liability insurance coverage relating to Contractor's Work to be performed hereunder covering Owner' and Department's respective risks, as their interest may appear, in form subject to the approval of the Owner. The minimum amounts of coverage corresponding to the aforesaid categories of insurance per insurable event shall be as follows:

Insurance Category	Minimum Limits
Workers' Compensation	Statutory minimum and endorsement for United States Longshoremen's & Harbor Workers Act, the Jones Act Coverages
Employer's Liability	\$1,000,000.00 per accident for bodily injury or disease.
Commercial General Liability	\$3,000,000.00 per occurrence for bodily injury, personal injury and property damage.
Excess Liability (Umbrella)	\$3,000,000.00 per occurrence for bodily injury, personal injury and property damage.
Automobile Liability	\$1,000,000.00 per accident for bodily injury and property damage (coverage required to the extent applicable to Contractor's vehicle usage in performing work hereunder).

Any deductibles or self-insured retentions must be declared to and approved by Owner. At the option of Owner either Contractor's insurer shall reduce or eliminate the deductibles or self-insured retentions with respect to Owner, it's Board, commissions, boards, committees, officers, agents and employees, or Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

Concurrently with the execution of this Agreement, Contractor shall furnish Owner with certificates of the insurance required hereunder and, with respect to evidence of commercial general liability automobile liability and fire insurance coverage, original endorsements:

- a. Precluding cancellation or reduction in coverage before the expiration of thirty (30) days after Owner shall have received written notification of cancellation or reduction in coverage first class mail;
 - b. Providing that Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability (cross liability endorsements);
 - c. **Naming the Town of Chatham, its commissions, committees, boards, officers, employees, and agents, along with Foth Infrastructure & Environment, LLC as additional insureds;** and
 - d. Providing that Contractor's insurance shall be primary insurance relating to Contractor's work hereunder with respect to Owner, and further providing that any insurance or self-insurance maintained by Owner shall not be excess of Contractor's insurance and shall not be contributory with it.
17. **PERFORMANCE BOND.** Contractor shall provide, on the execution of this Agreement, a good and sufficient corporate surety bond in the penal sum of one hundred percent (100%) of amount bid, which bond shall be conditioned upon the faithful performance of all work required to be performed by Contractor under this Agreement. Said bond shall be liable for any and all penalties and obligations which may be incurred by Contractor under this Agreement. Acceptance of the bond by the Owner is subject to the review and approval of the bond by the Owner Counsel's office.
18. **PAYMENT BOND.** In addition to the faithful Performance Bond required herein, Contractor shall furnish a good and sufficient corporate surety bond in the penal sum of fifty percent (50%) of amount of bid. Acceptance of the bond by the Owner is subject to the review and approval of the bond by the Owner Counsel's office.
19. **TIME DELAYS.** If the Contractor is delayed in the performance of the Work due to changes ordered in the Work by the Owner or, by labor disputes, fire, unusual delay in transportation, unavoidable casualties, certified natural disasters, then the contract time may be extended by a Change Order for such reasonable time as both parties have mutually agreed upon. **Winter weather conditions are not a reason for a delay in the performance of work.** Contractor agrees, as a special inducement to the Owner, to make no claim for damages for delay in the performance of this Contract occasioned by the Owner's act, or omission to act, or anyone acting on the Owner's behalf; and Contractor

agrees that any claim for delays by the Owner shall be exclusively and fully compensated for by an extension of time to complete performance of the Contract Work.

20. **PAYMENT OF MATERIALMAN AND LABORERS.** The Contractor shall make prompt payment of all claims for labor performed and materials furnished, used or consumed in the Work, including without limitation fuel, lumber, building materials, machinery, vehicles, tractors, equipment, fixtures, apparatus, tools, appliances, supplies, electric energy, gasoline and other motor oil, lubricating oil and greases, and the premiums for Worker's Compensation insurance. Contractor shall indemnify and hold Owner harmless for any and all losses or expenses from any and all mechanic's or material man's liens from being filed on any Owner's Property. Should any mechanic's liens or materials man's liens be filed by Contractor agrees to have any and all releases cleared and satisfied prior to any payments being released. The Owner shall, in its discretion notify Contractor and or Contractor's representative of any lien and require Contractor to release liens as a condition precedent to further monthly progress payments.
21. **FINAL PAYMENT.** Upon completion of all the Work included under the Contract, the Contractor shall submit its final invoice. The Owner will, at the expiration of thirty (30) days after delivery of the approved payment application and acceptance, pay, and hereby binds itself to pay the Contractor for accepted work, except such sum or sums of money as may have been already paid, and as may be lawfully retained under any of the provisions of the Agreement herein set forth. Prior to the final payment, Contractor will deliver to the Owner waivers of lien from all those who supplied labor, material, or services in completion of the Contract, together with satisfactory proof of full payment to such suppliers.
22. **PAYMENTS AND COMPLETION.** Payments may be withheld on account of (1) Work defects not remedied, (2) claims filed, (3) failure of the Contractor to make payments properly to sub-Contractor's or for labor, materials or equipment, (4) damage of the Owner's property or neighboring property, or (5) failure to carry out the Work in accordance with this Agreement or any other breach of this Agreement.
23. **CHANGE ORDERS.** (a) Contractor understands that the Owner may modify or change the details of the Project so as to require the performance of extra Work. All change orders or modifications to the Agreement shall be in writing, signed by the Contractor and the Owner. If any changes are made, Contractor will perform the same but only after receiving a written order for such performance from the Owner, it being understood by Contractor that under no circumstances shall any extra Work be performed unless and until such written order is given to Contractor by the Owner. For any such extra Work performed, Contractor shall be compensated by the Owner at the unit prices set forth in the Contract Documents, or for unspecified items shall be negotiated by the Owner and Contractor in a commercially reasonable amount at the time the Change Order is signed. The Owner may at its election omit items from the Contract Work whenever the Owner deems it advisable to do so. And if the Owner shall notify Contractor of such omission, the omitted Work shall not be performed and there shall be deducted from the Contract price at the stated amounts set forth in the Contract Documents or for unspecified items, a commercially reasonable amount at the time the Change Order is signed to compensate for the omission.

If any dispute shall arise at any time on a claim by Contractor that an item of Work is not Contract Work but extra Work, Contractor shall nevertheless perform the same if directed

to do so by the Owner. However, to preserve Contractor's right to claim extra compensation for the disputed Work, Contractor must, prior to the commencement of the disputed Work, notify the Owner in writing that Contractor is performing the same under protest. The same procedure shall prevail as to any dispute as to a deduction for omitted Work (or as the case may be, to sustain Contractor's contention as to the appropriate compensation for extra Work that is not disputed to be an "extra" as long as the Contractor so notifies the Owner prior to commencement of the "extra") the notice in that circumstance to be given no later than ten (10) days after the tender of payment by the Owner to Contractor of the reduced amount (failing such written protest, it shall be deemed that Contractor has acquiesced to the Owner's contention that the Work is not extra but Contract Work or that the reduction (or amount of compensation for a non-disputed "extra" is correct, as the case may be). The giving of the protest provided for above, and giving it timely, are express conditions precedent to maintaining any remedial procedure, whether arbitration or otherwise, pertaining to Contractor's claim.

Pursuant to M.G.L. c. 44 Section 31C, "No contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building or public work by any city or town costing more than two thousand dollars shall be deemed to have been made until the auditor or accountant or other officer of the city or town having similar duties has certified thereon that an appropriation in the amount of such contract is available therefor and that an officer or agent of the city, town or awarding authority has been authorized to execute said contract and approve all requisitions and change orders. No order to the contractor for a change in or addition to the work to be performed under a contract subject to this section, whether in the form of a drawing, plan, detail or any other written instruction, unless it is an order which the contractor is willing to perform without any increase in the contract price, shall be deemed to have been given until the auditor or accountant, or other officer of the city or town having similar duties, has certified thereon that an appropriation in the amount of such order is available therefor."

24. **WARRANTIES AND CORRECTION OF WORK.** Contractor warrants materials and workmanship to be in compliance with all applicable codes, ordinances and laws, constructed according to sound engineering and construction standards, in a workmanlike manner, and to be free from defects and liens at the time of installation and performance and as of the Completion Date. Contractor shall promptly perform such work and supply such materials necessary to correct, at its own expense, defects in materials and workmanship, and any Work failing to conform to the Agreement. In the event that Contractor fails to perform any Warranty Work within thirty (30) days of written notice by the Owner, or in the event that performance is not possible within such time period because of weather or other unavoidable delays and if the Contractor fails to provide a written undertaking to the Owner to perform such Warranty Work within a specific time period after notice, then the Owner shall be entitled to contract for the repairs or replacement of the defective work with a third party and Contractor agrees to reimburse the Owner for the costs of such Warranty Work promptly upon demand, together with interest at the rate provided herein on any sums unpaid under the Agreement and all costs of collection, including reasonable attorney's fees, if such reimbursement is not made within thirty (30) days of written demand therefore by the Owner.
25. **COOPERATION WITH CONSULTANT.** Contractor understands and agrees that the Owner has hired Foth Infrastructure & Environment, LLC (Foth) as Construction Manager,

Project Engineer, and Project Consultant. Contractor agrees to fully cooperate with the Licensed Site Professional (LSP), Foth, or any other such person or organization with regard to such oversight.

26. **DEFAULT AND TERMINATION.** The following shall be considered to be Events of Default under the Contract:

- a. Contractor's failure to progress with the work in accordance with the agreed upon schedule or to achieve Substantial Completion or Final Completion of the respective categories of the Work in accordance with the schedule provided for in the Agreement;
- b. Contractor's failure to perform the Work described in the Agreement in accordance with the scope of services and specifications provided;
- c. The dissolution, termination of existence, insolvency, or business failure of the Contractor;
- d. The appointment of a receiver for any property belonging to Contractor;
- e. Contractor's making of an assignment for the benefit of creditors, or the commencement of proceedings under a bankruptcy or insolvency law by or against the Contractor;
- f. The failure of the Contractor to obtain or maintain any insurance coverage required under the contract; and
- g. Contractor's failure to comply with any of the Agreement terms as set forth in the specifications plans and permits required.

If an Event of Default is not corrected or remedied within five (5) working days of written notice of such default, then the Owner shall be entitled to terminate this Agreement without further notice. In such event, the Owner shall be entitled to contract for the completion of the Work to be performed under the Agreement by a third party and Contractor shall be responsible for all extra costs and damages, including liquidated damages, incurred by the Owner.

27. **NOTICES.** Notices to be given under this Agreement shall be in writing and addressed to the respective party at the address set forth above, or to such other addresses that the parties shall designate in writing from time to time.
28. **CAPTIONS.** Any captions to or headings of the sections, paragraphs or subparagraphs of this Agreement are solely for the convenience of the parties, are not a part of this Agreement and shall not be used for the interpretation or determination of the validity of this Agreement or any provision hereof.
29. **INCONSISTENCIES.** To the extent that any term or provision of the Contractor's Bid is inconsistent with any term or provision contained in this document, the terms and provisions contained in this document shall supersede and control this Agreement. To the extent that any term or provision in this agreement is found to be void or unenforceable, nevertheless any and all remaining terms shall remain in full force.
30. **DEFINITIONS.** Terms and phrases, which are defined in any part of this Agreement, shall have the defined meanings wherever used throughout this Agreement. The terms

“hereunder” and “herein” and similar terms used in this Agreement shall refer to this Agreement in its entirety and not merely the article, section, sub-section, paragraph or sub-paragraph in which they are used.

31. **GOVERNING LAW.** This Contract and any performance herein shall be governed by and be construed in accordance with the laws of the Commonwealth of Massachusetts. Any and all proceedings or actions relating to subject matter herein shall be brought and maintained in the courts of the Commonwealth of Massachusetts in Barnstable County or the federal district court sitting in the Commonwealth of Massachusetts, which shall have exclusive jurisdiction thereof. This paragraph shall not be construed to limit any other legal rights of the parties.
32. **ENTIRE AGREEMENT; INTEGRATION.** This Agreement supersedes any and all other Agreements, either oral or in writing, and contains all of the covenants and agreements between the parties. Each party to this Agreement acknowledges that no representations, inducements, promises or agreements, orally or otherwise, have been made by either party or anyone acting on behalf of any party to this Agreement, which are not embodied herein, and that no other agreement, statement or promise not contained in this Agreement shall be valid or binding. Any modification of this Agreement will be effective only if it is in writing, signed by the party to be charged. If any provision in this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions will nevertheless continue in full force without being impaired or invalidated in any way. Failure of any party hereto at any time to require performance by the other party of any provision of this Agreement shall not affect the right of such party to require performance of that provision, and any waiver by any party of any breach of any provision of this Agreement shall not be construed as a waiver of any continuing or succeeding breach of such provision, a waiver of the provision itself, or a waiver of any right under this Agreement. This Agreement may be executed in any number of counterparts by different parties hereto in separate counterparts, each of which when so executed and delivered shall be deemed to an original and all of which counterparts of this Agreement, taken together, shall constitute but one and the same instrument. Neither Contractor nor Owner shall assign, sublet or transfer any rights under or interest of this Agreement (including, but without limitation, moneys that may become due or moneys that are due) without the prior written consent of the other, except to the extent that any assignment, subletting or transfer is mandated by law or the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement. Contractor and Owner each is hereby bound, and the partners, successors, approved assigns, executors, administrators, and legal representatives of each are hereby bound to the other party to this Agreement and to the partners, successors, approved assigns, executors, administrators, and legal representatives of such other party, in respect to all covenants, agreements and obligations of this Agreement.

The documents listed below are part of the Contract Documents and are incorporated by this reference as if fully set forth herein. Contractor shall pay particular attention to any and all mitigation measures set forth in the permit documents and shall comply with same.

- A. Contract Specifications
- B. Contract Plans
- C. Addendums

- D. Notice to Bidders
 - E. Bidding Requirements
 - F. Bid Form
 - G. Notice of Award
 - H. Notice to Proceed
 - I. Agreement
 - J. Faithful Performance and Payment Bonds
 - K. General and Special Conditions
 - L. Submittals and Substitutions
 - M. Temporary Facilities and Controls
 - N. Environmental Protection
 - O. Health and Safety
 - P. Prevailing Wage Rates
 - Q. Contractor's Certifications
33. UNDISPUTED PAYMENTS. The acceptance by Contractor of an undisputed payment made under the terms of the Contract shall operate as, and shall be, a release to Owner, and their duly authorized agents, from all claim of and/or liability to Contractor arising by virtue of the Contract related to those amounts. Disputed contract claims in stated amounts may be, specifically excluded by Contractor from the operation of the release.
34. SUBSTITUTION OF SECURITIES. The Contractor may substitute securities for the amounts retained by the Owner to ensure performance of the Contract in a form acceptable to the Owner(s).
35. STATEMENT UNDER PENALTY OF PERJURY. The representations made herein, including the Contractor's licensing information hereinafter furnished, are made under penalty of perjury. The undersigned understands that any bid not containing said licensing information, or containing any information, which is subsequently proven false, shall be considered non-responsive, and shall cause for termination.
36. UNENFORCEABILITY. In the event that any provision of this Agreement is unenforceable or held to be unenforceable, then the parties agree that all other provisions of this Agreement have full force and effect and shall not be affected thereby.
37. FINAL PAYMENT SUBJECT TO ACCEPTANCE. Final Payment is subject to acceptance of the Project by Owner.
38. FORCE MAJEURE. Either party's performance under this agreement is subject to acts of God, war (declared or undeclared), government regulation, terrorism, disaster, strikes, civil disorder, curtailment of transportation facilities, or similar occurrence beyond the party's control, making it impossible, illegal or commercially impracticable for one or both parties to perform its obligations under this agreement, in whole or in part. Either party may terminate this agreement without liability for any one or more of such reasons upon written

notice to the other party within ten (10) days of such occurrence or receipt of notice of any of the above occurrences. Increases in costs or tariffs as a result of government action shall be excluded from this paragraph and shall be the responsibility of the Contractor.

39. AUTHORIZATION. Each party by signing below hereby warrants that they are fully and duly authorized to enter into this agreement, do so freely and have read and understand the conditions and terms set forth herein along with any and all other documents forming the Contract Documents.

IN WITNESS WHEREOF, the respective parties hereto have hereinto set their hands and seals

the day _____ of _____, 20____.

OWNER (TOWN OF CHATHAM)

ATTEST:

BY: _____
(Name) (Title)

CONTRACTOR

ATTEST:

BY: _____
(Name) (Title)

END OF SECTION

SECTION 00 61 13

PERFORMANCE BOND

This document certifies that the Town of Chatham (the “Owner”), located in the Commonwealth of Massachusetts, has awarded a contract to _____, hereinafter designated as the "Principal", a contract (the “Contract”), the terms and provisions of which Contract are incorporated herein by reference, for constructing the following project:

**CHATHAM FISH PIER –
SOUTH JOG PEDESTRIAN WALKWAY PROJECT
TOWN OF CHATHAM, MA**

WHEREAS, said Principal is required under the terms of said Contract to furnish a bond for the faithful performance of said Contract;

NOW, THEREFORE, we, the Principal, and _____, as surety, are held and firmly bound unto Owner, in the penal sum of _____ and _____/100 Dollars (\$ _____), lawful money of the United States, being one hundred percent (100%) of the Contract amount, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the above bounden Principal, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and will truly keep and faithfully perform the covenants, conditions, and agreements in the said Contract and any alterations made as therein provided, on his or their part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless, Owner, its Board, officers, employees and agents, as therein stipulated, then this obligation shall be null and void; otherwise it shall be and remain in full force and virtue.

As a condition precedent to the satisfactory completion of the said Contract, the above obligation shall hold good for a period of one (1) year after the completion and acceptance of the said work, during which time if the above bounded Principal, his or its heirs, executors, administrators, successors or assigns shall fail to make full, complete and satisfactory repair and replacements or totally protect the said Owner from loss or damage made evident during said period of one (1) year from the date of acceptance of said work, and resulting from or caused by defective materials or faulty workmanship, in the prosecution of the work done, the above obligation shall be and remain in full force and virtue.

The above guaranty shall serve as security for the faithful performance by the Contractor for maintenance for the period herein required in addition to the faithful Performance Bond and labor and material Payment Bond required..

PERFORMANCE BOND

00 61 13 - 1

In the event Owner, or its successors or assigns, shall be the prevailing party in an action brought upon this bond, then, in addition to the penal sum hereinabove specified, we agree to pay to the said Owner, or its successors or assigns, a reasonable sum on account of attorney's fees in such action, which sum shall be fixed by the court.

IN WITNESS THEREOF, the above bounden parties have executed this instrument under their seals this day of _____, 20_____, the name and corporate seal of each corporate party being hereto affixed, and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Principal

Witness as to Principal

By:

Address

Surety

ATTEST:

Witness to Surety

Attorney-in-Fact

(Seal)

If **Contractor** is partnership, all partners must execute **BOND**.

END OF SECTION

SECTION 00 61 14

PAYMENT BOND

This document certifies that we, _____
as Principal, and, _____ organized and existing
under the laws of the Commonwealth of Massachusetts, and authorized to execute bonds and
undertaking as sole surety, as Surety, are held and firmly bound unto any and all persons named
whose claim has not been paid by the Contractor, company or corporation in the aggregate total
of _____ and _____/100 Dollars (\$ _____)
(being 50% of the Contract amount) for the payment whereof, well and truly to be made, said
Principal and Surety bond themselves, their heirs, administrators, successors, and assigns, jointly
and severally, firmly by these presents.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, whereas the
above with Town of Chatham ("Owner") to do the following work, to-wit:

**CHATHAM FISH PIER –
SOUTH JOG PEDESTRIAN WALKWAY PROJECT
TOWN OF CHATHAM, MA**

NOW, THEREFORE, if the above-bounden Principal or his subcontractors fail to pay any of
the persons named or unnamed, or amounts due under the Unemployment Insurance Code with
respect to work or labor performed under the Contract, or for any amounts required to be
deducted, withheld, and paid over to the Employment Development Department from the wages
of employees of the Contractor and his subcontractor pursuant to the Unemployment Insurance
Code of the Commonwealth of Massachusetts, with respect to such work and labor, the surety
will pay for the same, in the amount not exceeding the sum specified in this bond, and also, in
case suit is brought upon this bond, a reasonable attorney's fee, to be fixed by the Court.

This bond shall ensure to the benefit of any person named or who has provided goods or services
so as to give a right of action to them or their assignees in suit brought upon this bond.

And the said Surety, for value received, hereby stipulates and agrees to waive the provisions
regarding consent to change, extension of time alteration, or addition to the terms of the
Contract, or to the work to be performed thereunder, or the Specifications accompanying the
same, and such changes shall not in any way affect its obligations on this bond; and it does
hereby waive notice of any such change, extension of time, alteration, or addition to the terms of
the Contract, or to the work, or to the Specifications.

PAYMENT BOND

00 61 14 - 1

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their seals this _____ day of _____, 20____ the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Principal

Witness as to Principal

By:

Address

Surety

ATTEST:

Witness to Surety

Attorney-in-Fact

(Seal)

If **Contractor** is partnership, all partners must execute **BOND**.

END OF SECTION

SECTION 00 70 00

GENERAL AND SPECIAL CONDITIONS (WATERFRONT WORK)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Special Conditions and Specifications sections, apply to work of this section.

1.2 INTRODUCTION

- A. If, during the performance of the Work, the Contractor finds a conflict, error, or discrepancy in the Contract Documents, the Contractor shall so report to the Engineer in writing at once. Before proceeding with the Work affected thereby, the Contractor shall obtain a written interpretation or clarification from the Engineer. Any work done before the Engineer renders their decision is at the Contractor's sole risk.
- B. In case of an inconsistency between Drawings and Specifications, or within either document not clarified by Addendum, the better quality or greater quantity of work shall be provided in accordance with the Engineer's interpretation.
- C. The Contractor guarantees that in the performance of work, them and every person in their direct or indirect employment (i.e., subcontractors) shall abide by and comply with all Federal, State, and local laws including the Occupational Safety and Health Act.
- D. The term Owner, as used throughout the Contract Documents, designates the Owner as the Town of Chatham, or its duly authorized representative.
- E. The term Owner's Representative, as used throughout these Specifications, indicates the Owner's authorized representative for a particular activity.
- F. The term Engineer or Engineer-of-Record, as used throughout the Contract Documents, designates Foth Infrastructure & Environment, LLC, or its duly authorized representative.
- G. The Work shall be substantially complete no later than the date specified in Section 00 10 10, Notice to Bidders. If, in the opinion of the Owner, the Contractor has not mobilized sufficient plant or material and/or if the Contractor does not demonstrate that sufficient work is underway within 30 days after Award of Contract, the Owner reserves the right to terminate the Contract.
- H. In the event of termination of the Contract pursuant to the conditions set forth herein, such termination shall not act so as to relieve the Contractor from liability for any

GENERAL AND SPECIAL CONDITIONS (WATERFRONT WORK)

00 70 00 - 1

damages sustained by the Owner as a result of any breach by the Contractor of the terms of the Contract.

I. Definitions

Work:	Material, equipment and labor required for the project, or the part of the project considered.
Provide:	Furnish and install; provide in place.
Furnish:	Furnish only, not including installation.
Install:	Install in place materials or structures furnished by others.
Shall:	Mandatory requirement (understood to be applicable whether or not “shall” is used in the sentence structure): omission of “shall” does not make the Specification or Contract Drawing non-mandatory.
Contract Sum:	This shall be read as the Total Base Bid amount including any Owner accepted Alternates as included in the Form of Bid.
Day:	For the purposes of this Contract a “day” shall equal a “calendar day” including weekends, holidays, and any other non-work periods.

1.3 DESCRIPTION OF WORK

The Work shall include, but not be limited to

- A. Mobilization to and demobilization from the site.
- B. Selective demolition of items scheduled for removal and/or reuse.
- C. Furbishing and Installation of reinforced concrete pedestrian walkway, including but not limited to:
 - 1. FRP Reinforced concrete walkway
 - 2. SYP CCA treated timber piles
 - 3. Composite and stainless steel supporting members
 - 4. Timber fendering whale and chock
 - 5. Hand rail system
 - 6. Jib crane mounting pile and mounting weldment and jib crane (supplied by others)
- D. Furnishing and Installation of foundation wall and marine mattress scope, including but not limited to:
 - 1. FRP Reinforced concrete foundation wall
 - 2. Marine mattress
 - 3. Guardrail
 - 4. Excavation and backfill
 - 5. Repairs to scoured area of lower parking lot

6. Selective pavement painting to lower parking lot

1.4 SCOPE OF WORK

A. Schedule

The following submittal schedule of all shop drawings, etc., for review by the Engineer, shall be as follows:

1. Contractor's Submittal

Certain critical items are to be submitted by the Contractor within time frames listed in these Specifications. Unless specifically noted as such, the Contractor shall be responsible for the timely submittal of all required items, taking into account the Engineer's review period as outlined herein, in order to maintain satisfactory progress of the Work.

2. Engineer Review and Comments

Within 14 days after receipt of Contractor's submittal.

- B. The Work shall be performed in a general sequence developed by the Contractor and submitted to the Engineer for review, in accordance with the requirements of the Contract. The Contractor is solely responsible for the means and methods of construction and for the sequences and procedures to be used.
- C. The Contractor shall furnish and coordinate all plant, labor, supervision, materials, or shall furnish and coordinate all plant, labor, supervision, materials, equipment and appliances for all demolition and/or construction work in connection with the demolition and/or construction of the marine facilities.
- D. It is the responsibility of the Contractor to coordinate work with other activities at the site to complete all work in a timely and cost-effective manner.

1.5 EXAMINATION OF EXISTING CONDITIONS

Before submitting a bid, it is a requirement of this Contract that each bidder visit the site to determine the conditions under which the Work is to be done. Such examination shall include, but not be limited to:

- A. Structural detail of the existing structures and related facilities.
- B. Various onsite utilities and structures not within the Scope of this Contract, but that may impact the execution of the Work. These will remain fully operational throughout the construction period.
- C. The layout and structural condition of the existing structures and water depths.

- D. Access space and possible work areas.

1.6 LIST OF CONTRACT DRAWINGS

The Contract Drawings, which form part of these Contract Documents, are listed in the Table of Contents.

1.7 PERMITS

The Owner has secured certain permits required by Federal and State authorities for the proposed activities. Copies of these permits are provided in **Attachment 2 of the Invitation for Bid**. It is the responsibility of the Contractor to perform the Work in accordance with the terms and conditions of the permits. The Contractor shall post copies of the permits at the site throughout the course of the Work. The Contractor is responsible to obtain all permits associated with the legal disposal of construction debris. The Contractor shall secure all required authorizations and permits.

1.8 CONTRACTOR FURNISHED MATERIALS

- A. The Contractor shall furnish all materials for installation in the completed Work as specified hereinafter.
- B. The Contractor shall handle these materials as they are delivered to the site or off-site work areas and shall store them in a designated storage area.
- C. The Contractor furnished material is subject to review by the Owner or Engineer at the plant of manufacture at the Owner's option. Review by the Owner or Engineer is not to be construed as technical in nature and in no way shall be deemed to relieve the Contractor from its obligation herein to ensure the quality and integrity of the materials supplied by the Contractor for this project.
- D. Project material furnished by the Contractor shall conform to the requirements of the Specifications stated hereinafter. The Contractor shall, as part of the Contract fee, also furnish all consumable materials necessary to complete the Work, such as, but not limited to, welding electrodes, safety equipment, etc.

1.9 INDEMNITY BY CONTRACTOR

The Contractor will indemnify and save harmless the Owner and Engineer from and against all losses and all claims, demands, payments, suits, actions, recoveries, and judgments of every nature and description brought or recovered against the Owner and Engineer by reason of any act or omission of the Contractor, or of any subcontractor to the Contractor, or of any person directly or indirectly employed by the Contractor or any such subcontractor, in the performance of any work for, or the rendering of any services to, the Owner.

1.10 INSURANCES

Contractor agrees that, at its own cost and expense, it shall procure and continue in force, insurance coverage. Such insurance shall be written by a company or companies authorized to engage in the business of general liability insurance in the state in which the demised premises are located, and there shall be delivered to the Owner with the bid customary certificates evidencing such paid-up insurance, which certificates are to be issued by the insurance companies. Such insurance shall be written by good and responsible companies reasonably acceptable to the Owner. Refer to Section 00 10 10, Notice to Bidders, for specific insurance coverages and requirements.

1.11 LAYOUT

- A. The Contractor shall be solely responsible for the accuracy of all locations, dimensions, and levels and no plea as to instructions or order received from any other sources other than information contained on Contract Drawings, Specifications or in written orders of the Owner or Engineer shall justify departure from the dimensions and elevations required by the Contract Drawings.
- B. The Contractor shall take their own measurements at the site, verifying same with the Contract Drawings and existing facilities, and will be held responsible for the proper fit and alignment of completed work in position.

1.12 GUARANTEE

- A. The Contractor shall guarantee to the Owner all materials and workmanship against original defects, or against injury from proper and usual wear when used for the purpose intended, for 18 months after date of final payment certifications and shall maintain all items in perfect condition during the period of guarantee.
- B. Defects appearing during the period of guarantee shall be made good by the Contractor at their expense upon demand of the Owner, it being required that all work shall be in perfect condition when the period of guarantee shall have elapsed. In the event of default by the Contractor, the Company shall have the right to make good any and all defects and bill the Contractor cost plus 15% for administration fees.

1.13 PARKING, STORAGE, AND ACCESS TO WORK AREA

The Contractor shall coordinate with the Owner available parking, storage, and access to the work area. In no event shall these areas interrupt or disturb the Owner's operations. The Contractor shall protect the stored equipment and material from the elements in such a manner as to be satisfactory to the manufacturer of the equipment or material and the Owner.

1.14 SUBCONTRACTORS

- A. A list of Subcontractors, pre-qualified by the Contractor, shall be submitted to the Owner by the Contractor with their bid. The Owner has the ultimate right to accept or reject any one or more of the subcontractors and must do so in writing after receipt of said list from the Contractor. No deviations shall be allowed from this list without approval of the Owner. Valid insurance certificates for subcontractors shall be submitted by the Contractor to the Owner with their bid.
- B. The Owner shall receive, upon completion of this Contract in full from the Contractor, any reduction in the Subcontractor's price, which may result from a reduced scope of the Contractor's work.

1.15 NEATNESS OF THE SITE

At the Contractor's expense, the Contractor's working areas shall be cleaned on a day-to-day basis, with all rubbish removed from the site and all work areas cleaned at the end of each day. At final completion of all work the Contractor shall leave the entire premises, within the site of their operations, clean and free from the rubbish resulting from their construction operations.

1.16 COMPENSATION

Compensation shall be based upon the Owner-accepted Schedule of Values and bid prices.

1.17 UTILITIES

The Contractor is responsible to provide and maintain any and all utilities deemed necessary to affect the Work. It is the responsibility of the Bidder to verify the suitability of existing site utilities for their needs.

1.18 FIRE PROTECTION

The Contractor shall provide and maintain at their expense all required fire protection systems and devices as necessary to safely perform the Work in accord with the applicable regulations. It shall be operational throughout the period of construction.

1.19 COMPLIANCE WITH CONTRACT

The Owner shall have the right to withhold without penalty any payment described above, or sections referenced herein, for completed work should the Contractor fail to meet any obligations or requirements of the Contract. Any withheld payment shall be promptly made upon the Contractor's full compliance with the Contract.

1.20 ENVIRONMENTAL PROTECTION

The Contractor shall comply with all Local, State, and Federal requirements for protection of the environment during the Work. No later than 21 days following award of Contract, Contractor shall submit a comprehensive plan describing the means and methods to be employed for protection, containment, and clean up and shall ensure that personnel are properly trained and that sufficient equipment and materials are readily available for use if required. The Contractor shall abide by State and Federal spill reporting requirements.

1.21 EROSION AND SEDIMENTATION CONTROL

During execution of the Work, the Contractor is required to install and maintain any and all required sedimentation and erosion control measures to protect adjacent waterways, streets, and properties and comply with all requirements of any and all permits for the project. Measures include but are not limited to temporary berms, hay bales, silt fences, containment booms, and turbidity curtains. In accordance with State regulatory authorizations, the Contractor shall furnish, install, and maintain temporary turbidity curtains during construction. Temporary materials and equipment shall conform to requirements for Temporary Work.

1.22 TEMPORARY WORK

Labor, equipment, and materials required to perform the Work that, upon completion, are not a part of the Work, shall be furnished, installed, and subsequently removed from the site by the Contractor.

1.23 HEALTH AND SAFETY PLAN

No later than 21 days following award of Contract, the Contractor shall submit the Contractor's project-specific Health and Safety Plan.

1.24 SAFETY DATA SHEETS

No later than 21 days following award of Contract, the Contractor shall submit all Safety Data Sheets (SDS) for materials anticipated for use in execution of the Work. As the Work progresses and new materials are used on the project, Contractor shall submit those corresponding SDSs no later than the time of arrival of the materials on site.

1.25 WORK SCHEDULE REQUIREMENTS

Access to the site and acceptable working hours are limited to those agreed with the Owner.

1.26 ENGINEERING SERVICES CHARGEABLE TO THE CONTRACTOR

The Owner reserves the right to charge the Contractor for additional engineering services if required due to the Contractor's actions or inactions.

1.27 CONTRACTOR'S REPRESENTATIVE

The Contractor shall assign an individual to be the single point of contact for all job-related correspondence and issues. This individual shall be assigned to the project from start to finish and shall not be replaced without permission from the Owner. This individual shall be responsible to disseminate information to other members of the Contractor's staff and to applicable subcontractors as necessary. This individual shall be the Contractor's designated representative at the site, and shall be authorized to conclude all matters, financial and otherwise, on the Contractor's behalf. The Contractor's Representative shall attend all project meetings and shall be on site at all times while the Contractor or their Subcontractors are present on site. This individual shall be replaced by Contractor if deemed unsuitable by the Owner for just cause.

1.28 MEANS AND METHODS

The structures have been designed to be self-supporting and stable after construction is complete. The stability of the structures prior to completion is solely the responsibility of the Contractor. This responsibility extends to related aspects of the construction activity including, but not limited to, erection methods, erection sequence, connections, temporary bracing, forms, shoring, use of equipment, and similar construction procedures. Review of construction by the Owner and Engineer is for general conformance with the Contract Documents only. Lack of comment by the Owner and Engineer with regard to construction procedures shall not be interpreted as approval or acceptance of any such procedures.

1.29 PRECEDENCE

It is expressly understood and agreed that failure by the Owner or Engineer to exercise their authority or prerogative to order the Contractor for any duly authorized purpose shall not be considered to set a precedent for any other activities.

1.30 SAFETY OF PERSONS AND PROPERTY

The Contractor is solely responsible for the safety of their operations. The Contractor shall take reasonable precautions for the safety of, and shall provide reasonable protection to prevent damage, injury, or loss to:

- A. Persons employed by the Contractor in performance of the Work, and persons nearby that may be affected by the Contractor's operations or the Work.
- B. The Work, including all equipment and materials which will be incorporated in the Work.

- C. Other properties and structures at the site, or on adjacent properties.

Failure to maintain a safe worksite shall be deemed grounds for immediate termination and Contractor shall indemnify the Owner for all claims or injuries related to the same. Said indemnity shall survive termination or expiration of the contract as it relates to the work.

1.31 UNCOVERING WORK

If any Work is covered prior to acceptance by the Owner or Engineer, the Work shall, if requested by the Owner, be uncovered for the Owner's observation and then be re-covered at the Contractor's sole cost and expense.

1.32 DAILY CONSTRUCTION REPORTS

For each day that Work is performed at the site, prepare and submit a Daily Construction Report to the Engineer. Include the following information in the report, as a minimum:

- A. Project name
- B. Contractor's name
- C. Date
- D. Hours worked
- E. Weather condition
- F. Subcontractors working on site
- G. Materials deliveries (material, quantities, and vendor)
- H. Trades working on site (trade and number of workers per trade)
- I. Equipment on site (manufacturer and model number, with notation of whether the equipment was idle or was used in the Work)
- J. Specific work performed, location and type of work
- K. Visitors to the site
- L. Materials or equipment leaving the site (including debris removal)
- M. Submit reports no later than 12:00 noon for the previous day's work

1.33 MONITORING OF EXISTING STRUCTURES DURING CONSTRUCTION

The Owner reserves the right to establish an independent monitoring program in order to evaluate the effect of the Work on the existing structures to remain on site. Such monitoring may include, but are not necessarily limited to settlement gauges, tilt plates, and crack gauges.

The Owner reserves the right to suspend the Contractor's operations at any time based upon the monitoring data.

1.34 SUBSURFACE OBSTRUCTIONS

Obstructions are defined as unforeseen objects, which impede progress. Objects that are made known to the Contractor will not be considered to be obstructions. Notify the Engineer immediately upon encountering unforeseen objects. No consideration will be given for additional compensation on this account without this timely notification.

END OF SECTION

SECTION 01 11 00

SUMMARY OF WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Special Conditions and Specification sections, apply to the work of this section.

1.2 SUMMARY

A. Description of work:

The Scope of Work in the South Jog Pedestrian Walkway Project at the Chatham Fish Pier located at 45 Barcliff Avenue Extension in Chatham, MA includes but is not necessarily limited to the following:

1. Carefully demolish and remove from the site those items scheduled to be demolished and removed.
2. Carefully remove and store off or on site those items scheduled to be reused. Replace those items as indicated on the drawings such that they are undamaged and fit for their intended purpose.
3. All utility lines that are altered or relocated during the construction are to be of an equal standard to those now existing and are to be acceptable to the Owner and the appropriate Utility Company. The Contractor is to inform and liaise with the Owner regarding all work that may affect the existing utilities. The Owner will make arrangements with the Utility Company for services to be cut-off if required during construction. The Contractor is responsible for notification of local utilities.
4. Excavate, backfill, compact, and grade the site to the elevations and limits shown on the Drawings, as specified herein, and as needed to meet the requirements of the construction shown on the Contract Documents.
5. Furnish and install new SYP CCA treated timber piles as shown on the Contract Documents.
6. Furnish and install all stainless steel and fiberglass reinforced plastic structural members.
7. Furnish and install the timber whale and timber chock fender system.
8. Reinstall existing gangway and mount assembly per the Contract Documents.
9. Furnish and install a new reinforced concrete pedestrian walkway.
10. Furnish and install a handrail system long the length of the walkway.
11. Furnish and construct a 19' long concrete foundation wall extending the South Jog southern wall landward.
12. Furnish and install a Tensar Marine Mattress at the base of the new foundation wall.

13. Repair of a washed-out section of the asphalt parking lot, as indicated on the Contract Documents. Construction is to match that of the surrounding parking lot.
14. Furnish and install approximately 35' of additional guardrail along the southern boundary of the lower parking lot.
15. Revise the site pavement painting as indicated on the Contract Documents and repair any painting that was damaged as a result of project work.
16. All work shall be completed in full compliance with the permit requirements.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION

SECTION 01 14 19

USE OF SITE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Special Conditions and Specification sections, apply to work of this section.

1.2 SUMMARY

This Section applies to situations in which the Contractor or his representatives including, but not necessarily limited to, suppliers, subcontractors, employees, and field engineers, enter upon the Project Location.

1.3 QUALITY ASSURANCE

- A. Promptly upon award of the Contract, notify all pertinent personnel regarding requirements of this Section.
- B. Require that all personnel who will enter upon the Project Location certify their awareness of and familiarity with the requirements of this Section.
- C. Require that all personnel (including subcontractors, visitors, suppliers, etc.) who will enter upon the Project Location abide by the project insurance requirements.

1.4 SUBMITTALS

Submit a detailed Site Utilization Plan containing a drawing depicting, as a minimum, the following:

- A. Staging areas for equipment, both upland and waterborne.
- B. Parking areas for project personnel.
- C. Material storage areas.
- D. Location of Contractor's field office(s).
- E. Access roads throughout the site.
- F. Lay-out of temporary utilities.
- G. Location of refuse container(s).

1.5 TRANSPORTATION FACILITIES

- A. Truck and equipment access:
 - 1. Provide adequate protection for curbs and sidewalks over which trucks and equipment pass to reach the Project Location.
- B. Contractor's vehicles:
 - 1. Require Contractor's vehicles, vehicles belonging to employees of the Contractor, and all other vehicles entering upon the Project Location in performance of the Work of the Contract, to use only the Owner designated site access way and parking areas.
 - 2. Do not permit such vehicles to park on any street or other area of the Project Location except in the area or areas designated by the Owner for such use.

1.6 SECURITY

- A. Restrict the access of all persons entering upon the Project Location in connection with the Work to the Owner designated areas.
- B. Use of existing buildings on site is restricted. Should the Contractor need access to these areas, permission must be requested and granted in advance by the Owner.

1.7 SITE ACCESS

Maintain clear vehicular access to all portions of the site at all times, at no time shall access be restricted. Access ways shall be detailed in the Site Utilization Plan described in Paragraph 1.4 above.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION

SECTION 01 22 00

MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.1 UNIT PRICE PAYMENT ITEMS

- A. Payment items for the Work of this contract on which the contract unit price payments will be made are listed in the Bid Form, as the Unit Price Bid Schedule, and described below. The unit price and payment made for each item listed shall constitute full compensation for furnishing all supervision, plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all Work required for each of the unit price items.

1.2 LUMP SUM PAYMENT ITEMS

- A. Payment items for the Work for which contract lump sum payments will be made are listed in the Bid Form, as the Unit Price Bid Schedule, and described below. All costs for items of Work, which are not specifically mentioned to be included in a particular lump sum or unit price payment item, shall be included in the listed item most closely associated with the Work involved. The lump sum price and payment made for each item listed shall constitute full and final compensation for furnishing all supervision, plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all Work required for which separate payment is not otherwise provided.

1.3 BIDDING SCHEDULE

- A. Payment Items for the Work of this contract on which the contract progress payments will be based are listed in the Bid Form, as the Unit Price Bid Schedule, and described below. All costs for items of Work, which are not specifically mentioned to be included in a particular Bidding Schedule payment item shall be included in the listed item most closely associated with the Work involved.

1.4 GENERAL WORK ITEMS

If there is a specific Work Item for any of the following items, then the work item shall be included with that specific Item. If there is not a unit line item, the work shall be considered as incidental to the contract, such as but not limited to:

- A. Maintenance, protection, replacement and/or repair of facilities not designated for alteration on the Site.

- B. Management of stockpiles, dewatering, and loading of excess unclassified (uncontaminated) excavated materials and excavated materials requiring Special Handling.
- C. Maintenance, protection, replacement and/or repair of facilities and utilities not designated for alteration on the Site.
- D. Site clearing, grubbing, removal and disposal of surplus excavated material and surface materials, abandon utility materials and structures to a legally approved disposal facility.
- E. Utility exploration and locating, as required for project construction.
- F. Perform exploratory locating, potholing and trenching including backfilling to locate unknown and discovered utilities.
- G. Dewatering.
- H. Excavation.
- I. Pipe bedding and backfill.
- J. Dune and/or Surface Restoration - grass/turf establishment surface restoration and trees and bushes damaged during construction.
- K. Maintenance, protection, replacement and/or repair of facilities not designated for alteration on the Site.
- L. Site access requirements including temporary aggregate material as required for local traffic access.
- M. If crossing or undermining of existing public or private utility, then include: maintaining the utility in service, replacing of existing utilities, if damaged and providing support and bedding material, as required.
- N. Flowable fill for in-place abandonment of existing utility pipe and structure bases, excavation void areas and other ancillary construction backfill.
- O. Protection of construction site from erosion.
- P. Ground freezing.
- Q. Compaction or stabilization of the site for Contractor's equipment use.
- R. Dust control (construction site and adjacent streets).
- S. Traffic control.
- T. Erosion control including permitting, monitoring and agency coordination.

- U. Suppression of dust onsite, as necessary.
- V. Management of odors and noise, as necessary.
- W. Easement and right-of-way requirements.
- X. Regulatory requirements.
- Y. Construction surveys, staking, and other field survey work (not provided by Owner, Owner's Representative and Owner's Engineer).
- Z. Quality assurance and quality control testing and inspections (by independent third-party contractor).
- AA. Shop Drawings and other submittals.
- BB. Temporary facilities and utilities.
- CC. Excavation sheeting, shoring, falsework and formwork.
- DD. Pile driving templates and survey as required to ensure accuracy of pile locations during installation.
- EE. Final cleanup and restoration of project site to preconstruction conditions.
- FF. Project close-out requirements including but not limited to warranties, operational manual's, close-out inspections and building occupancy permits.

1.5 **BID ITEM 1 – MOBILIZATION**

A. **WORK COVERED BY BID ITEM CONTRACT PRICE**

1. All work associated with the mobilization of the Contractor's materials, equipment, site preparation/restoration and temporary facilities furnished for this project shall be included in the contract lump-sum prices for Items of mobilization as listed in the Unit Price Schedule. Mobilization shall include all costs for operations accomplished prior to commencement of actual construction operations, i.e. transfer of materials and equipment to site; coordination and submittals as required; notifications, installation and maintenance of work area fencing and traffic controls, maintaining access for Owner operations, establishing horizontal and vertical control for all proposed work and any other work that is necessary in advance of the actual construction operations.
2. Mobilization shall include all work to identify site conditions including but not limited the completion of pre-construction submittals, obtaining any necessary permits and approvals not already in place for the work specified in accordance with the Contract, full reimbursement for the premiums actually paid for Performance and Payment Bonds, all costs connected with the mobilization of the Contractor's equipment, barges, scows, coordination, submittals and

MEASUREMENT AND PAYMENT

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preparation for access to the offloading area(s) as required; support equipment or vessels (including all equipment needed for debris handling, separation and disposal), procurement of materials needed for construction, temporary facilities, installation of security measures, and registration/ training of project personnel, compliance with on-site security measures, and construction of environmental controls required by the Permits with respect to protection of the environment; and the coordination with the regulatory agencies, and any other work that is necessary.

3. There will be only one mobilization paid for. If for any reason the Contractor must shut down and remove their equipment from the site then remobilize again, the Owner will not be responsible for payment of any additional costs associated with such work or any remobilization costs.

B. MEASUREMENT

1. Unit of Measure: LUMP SUM (LS)
2. Mobilization will be measured as the Lump Sum to include compensation for project preparations, procurement and assembly of all equipment, erosion controls, materials, supplies, permits, labor and bonds required for the prosecution of the work not otherwise included in other pay items and upon completion of the work as specified and directed, the clean-up of the work areas, removal of equipment, materials and supplies from the work area.
3. Payment will be made for costs associated with mobilization for operations including all incidental work described in the specifications and contract documents.

1.6 BID ITEM 2 – SELECTIVE DEMOLITION

A. WORK COVERED BY BID ITEM CONTRACT PRICE

1. This item is not limited to: the demolition of the gangway system located on the south side of South Jog. The gangway itself and the mounting assembly will be carefully removed and stored on site. These will be reinstalled onto the new pedestrian walkway. The small gangway platform will be demolished and disposed offsite.
2. The Contractor shall be responsible for coordination of onsite storage for the gangway and gangway mounting with the Owner. The owner will specify a space on the premises of the Chatham Fish Pier.
3. The Contractor shall be responsible for coordination, removal, and proper offsite disposal of all materials.

B. MEASUREMENT

1. Unit of Measure: LUMP SUM (LS)
2. Measurement shall be made as a Lump Sum for all work associated with the selective demolition of all equipment and personnel and the coordination, removal, and proper offsite disposal of all materials.

3. Payment shall be for all costs, including but not limited to, furnishing all labor, materials, equipment, design and incidentals as required for this bid item.
4. The total amount of material removed and paid for under the contract for this item will be measured by the cubic yard removed by computing the volume.
5. The Contract Drawings are believed to accurately represent conditions existing on the date of the last survey shown on the Drawings.

1.7 BID ITEM 3 – FURNISH AND INSTALL REINFORCED CONCRETE PEDESTRIAN WALKWAY

A. WORK COVERED BY BID ITEM CONTRACT PRICE

1. The Contractor will furnish and install (15) cubic yards of FRP reinforced concrete as detailed in the Engineering Plans.
2. The Contractor shall provide for concrete testing which complies with ACI-318. The Contractor shall take a minimum of five-cylinder samples to be tested at 7, 14, 21, and 28 days, leaving the last cylinder for a 56-day test if needed. Test reports shall be submitted to the Engineer for review.

B. MEASUREMENT

1. Unit of Measure: Cubic Yard (CY)
2. Measurement for payment will be the completed installation of the pedestrian walkway concrete.
3. Payment shall be for all costs, including but not limited to, furnishing all labor, materials, equipment, disposal of waste and excess materials, and incidentals as required for this bid item.

1.8 BID ITEM 4 – FURNISH AND INSTALL SYP CCA TREATED TIMBER PILES

A. WORK COVERED BY BID ITEM CONTRACT PRICE

1. Contractor is responsible to furnish and install (10) SYP CCA treated timber piles per the Engineering Plans.

B. MEASUREMENT

1. Unit of Measure: EACH (EA)
2. Measurement for payment will be the completed installation of the timber piles.
3. Payment shall be for all costs, including but not limited to, furnishing all labor, materials, equipment, and incidentals as required for this bid item.

1.9 BID ITEM 5 – STAINLESS STEEL AND COMPOSITE SUPPORTING MEMBERS AND HARDWARE**A. WORK COVERED BY BID ITEM CONTRACT PRICE**

1. This item is not limited to: the furnishing and installation of all stainless-steel support members, composite support members, end plates for gangway mount, connecting clips, anchors, and connecting hardware along the (79) linear foot length of the pedestrian walkway and as detailed in the Engineering Plans.

B. MEASUREMENT

1. Unit of Measure: LINEAR FOOT (LF)
2. Measurement shall be made as a lump sum for all work associated with the completed installation of the supporting members, endplates, anchors, and connecting hardware.
3. Payment shall be for all costs, including but not limited to, furnishing all labor, materials, equipment, design and incidentals as required for this bid item.

1.10 BID ITEM 6 – PEDESTRIAN WALKWAY HANDRAIL AND SAFETY CHAINS**A. WORK COVERED BY BID ITEM CONTRACT PRICE**

1. This item is not limited to: the furnishing and installation of the pedestrian walkway handrail and safety chains along the (79) linear foot length of the pedestrian walkway and as detailed in the Engineering plans.

B. MEASUREMENT

1. Unit of Measure: LINEAR FOOT (LF)
2. Measurement for payment will be the completed installation of the pedestrian walkway handrail and safety chains.
3. Payment shall be for all costs, including but not limited to furnishing all labor, materials, equipment, design and incidentals as required for this bid item.

1.11 BID ITEM 7 – FURNISH AND INSTALL BITUMINOUS PAVEMENT**A. WORK COVERED BY BID ITEM CONTRACT PRICE**

1. This item is not limited to: furnish and install new bituminous pavement to the lower parking lot to repair the area damaged by scour and any areas needing repairs as a result of project activities. This area is estimated to be approximately (10) square yards at the time of developing this document.

B. MEASUREMENT

1. Unit of Measure: SQUARE YARD (SY)
2. Measurement for payment will be for the completed bituminous pavement repairs as described in the Engineering Plans.
3. Payment shall be for all costs, including but not limited to, furnishing all labor, materials, equipment, and incidentals as required for this bid item.

1.12 BID ITEM 8 – FURNISH AND INSTALL TENSAR MARINE MATTRESS**A. WORK COVERED BY BID ITEM CONTRACT PRICE**

1. This item is not limited to: the furnishing and installation of a 5' x 20' Tensar Marine Mattress along the base of the new foundation wall.

B. MEASUREMENT

1. Unit of Measure: LUMP SUM (LS)
2. Measurement for payment will be for the complete installation of the Tensar Marine Mattress as described in the Engineering Plans.
3. Payment shall be for all costs, including but not limited to, furnishing all labor, materials, equipment, and incidentals as required for this bid item.

1.13 BID ITEM 9 – FURNISH AND INSTALL VEHICULAR GUARDRAIL SYSTEM**A. WORK COVERED BY BID ITEM CONTRACT PRICE**

1. This item is not limited to: the furnishing and installation of lower parking lot guardrail extension. The existing guardrail will be extended approximately (35) linear feet and terminate at the end of the existing concrete wall on the South Jog. There will be a 12' wide section that does not have any posts in order to allow for equipment passage if the guardrail is removed.

B. MEASUREMENT

1. Unit of Measure: LINEAR FOOT (LF)
2. Measurement for payment will be for the completed installation of the vehicular guardrail system as described in the Engineering Plans.
3. Payment shall be for all costs, including but not limited to, furnishing all labor, materials, equipment, and incidentals as required for this bid item.

1.14 BID ITEM 10 – FURNISH AND INSTALL LOWER LOT LINE STRIPING/PAINTING**A. WORK COVERED BY BID ITEM CONTRACT PRICE**

1. This item is not limited to: the furnishing and placement of approximately (375) square feet of pavement paint as described in the Engineering plans as well as touch up of any areas needing repairs as a result of project activities.

B. MEASUREMENT

1. Unit of Measure: SQUARE FOOT (SF).
2. Measurement for payment will be for the completed placement of the pavement paint as described in the Engineering Plans.
3. Payment shall be for all costs, including but not limited to, furnishing all labor, materials, equipment, and incidentals as required for this bid item.

1.15 BID ITEM 11 – FURNISH AND INSTALL TIMBER FENDER SYSTEM**A. WORK COVERED BY BID ITEM CONTRACT PRICE**

1. Contractor is responsible for furnishing and install the (79) linear feet of 12x12 timber wale and of 8x12 timber chock along the southern edge of the new pedestrian walkway.

B. MEASUREMENT

1. Unit of Measure: LINEAR FOOT (LF)
2. Measurement for payment will be the completed installation of the timber wale and chock systems.
3. Payment shall be for all costs, including but not limited to, furnishing all labor, materials, equipment, and incidentals as required for this bid item.

1.16 BID ITEM 12 – ECAVATION AND BACKFILLING**A. WORK COVERED BY BID ITEM CONTRACT PRICE**

1. The Contractor to excavate, backfill, compact, and grade the site to the elevations and limits shown on the Drawings, as specified herein, and as needed to meet the requirements of the construction shown on the Contract Documents. The approximate volume of project excavation requirements is estimated at (70) cubic yards.

B. MEASUREMENT

1. Unit of Measure: CUBIC YARD (CY)

2. Measurement for payment will be completion of the project excavation, compaction, and grading requirements.
3. Payment shall be for all costs, including but not limited to, furnishing all labor, materials, equipment, and incidentals as required for this bid item.

1.17 BID ITEM 13 – REINSTALL GANGWAY

A. WORK COVERED BY BID ITEM CONTRACT PRICE

1. The Contractor to reinstall the gangway per the Engineering Plans. Contractor to furnish, locate, and install (2) new padeye plates for mounting the gangway.

B. MEASUREMENT

1. Unit of Measure: Lump Sum (LS)
2. Measurement for payment will be completion of the gangway assembly installation.
3. Payment shall be for all costs, including but not limited to, furnishing all labor, materials, equipment, and incidentals as required for this bid item.

1.18 BID ITEM 14 – FURNISH AND INSTALL CONCRETE FOUNDATION WALL

A. WORK COVERED BY BID ITEM CONTRACT PRICE

1. The Contractor will furnish and install (4) cubic yards of reinforced concrete as detailed in the Engineering Plans to construct the foundation wall.
2. The Contractor shall provide for concrete testing which complies with ACI-318. The Contractor shall take a minimum of five-cylinder samples to be tested at 7, 14, 21, and 28 days, leaving the last cylinder for a 56-day test if needed. Test reports shall be submitted to the Engineer for review.

B. MEASUREMENT

1. Unit of Measure: Cubic Yard (CY)
2. Measurement for payment will be the complete installation of the reinforced concrete foundation wall.
3. Payment shall be for all costs, including but not limited to, furnishing all labor, materials, equipment, disposal of waste and excess materials, and incidentals as required for this bid item.

1.19 BID ITEM 15 – FURNISH AND INSTALL JIB CRANE MOUNTING ASSEMBLY

A. WORK COVERED BY BID ITEM CONTRACT PRICE

1. The Contractor to furnish a jib crane mounting assembly. The Contractor to install the mounting assembly and jib crane (supplied by others) as detailed in the Engineering Plans.

B. MEASUREMENT

1. Unit of Measure: Lump Sum (LS)
2. Measurement for payment will be completion of the jib crane and jib crane mounting assembly installation.
3. Payment shall be for all costs, including but not limited to, furnishing all labor, materials, equipment, and incidentals as required for this bid item.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 33 00

SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Special Conditions and Specification sections, apply to the work of this section.

1.2 SUMMARY

- A. Work included:

- 1. Make submittals required by the Contract Documents, and revise and resubmit as necessary to establish compliance with the specified requirements.

- B. Work not included:

- 1. Non-required submittals will not be reviewed by the Engineer.
 - 2. The Contractor may require his subcontractors to provide drawings, setting diagrams, and similar information to help coordinate the Work, but such data shall remain between the Contractor and his subcontractors and will not be reviewed by the Engineer.

- C. Definitions:

- 1. “Or equivalent”:
 - a. Where the phrase “or equivalent,” or “or equivalent as accepted by the Engineer,” occurs in the Contract Documents, do not assume that the materials, equipment, or methods will be approved as equivalent unless the item has been specifically so accepted for this Work by the Engineer.
 - b. The decision of the Engineer shall be final.

1.3 QUALITY ASSURANCE

- A. Coordination of submittals:

- 1. Prior to each submittal, carefully review and coordinate all aspects of each item being submitted.
 - 2. Verify that each item and the submittal for it conform in all respects with the specified requirements.

3. The Contractor shall procure a rubber stamp with identical wording to the sample Contractor's submittal stamp shown below:

Contractor: _____

This submittal is required per section _____ of the Specifications. The submitted items have been reviewed in detail and are correct and in strict conformance with the contract documents. The submitted items have been coordinated with other work of this contract, existing structures, and work of other contracts.

By: _____

Date: _____

4. By affixing the Contractor's submittal stamp to each submittal, certify that this coordination has been performed. Submittals that do not bear the requisite stamp will be returned to the Contractor non-reviewed.

B. Substitutions

1. The Contract is based on the standards of quality established in the Contract Documents. Substitutions will be considered only when listed at time of bidding, on the form provided therefore in the bidding documents, and when substantiated by the Contractor's submittal of required data.
2. Do not substitute materials, equipment, or methods unless such substitution has been specifically accepted in writing for this Work by the Engineer.

1.4 SUBMITTALS

Make submittals of Shop Drawings, Samples, substitution requests, and other items in accordance with the provisions of this Section.

PART 2 - PRODUCTS

2.1 SHOP DRAWINGS

- A. Scale and measurements: Make Shop Drawings accurately to a scale sufficiently large to show all pertinent aspects of the item and its method of connection to the Work.
- B. Types of prints required:
 1. Submit Shop Drawings in the form of four (4) blue line or black line prints of each sheet. Electronic submittals (PDF format) are acceptable.
 2. Blueprints will not be acceptable.
- C. One (1) print or electronic file with the Engineer's review comments will be returned to the Contractor. The Contractor may make and distribute such copies as are required for his purposes.

SUBMITTAL PROCEDURES

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2.2 MANUFACTURER’S LITERATURE

- A. Where contents of submitted literature from manufacturers include data not pertinent to the submittal, clearly show which portions of the contents is being submitted for review.
- B. Submit one (1) copy or an electronic submittal (PDF format) of manufacturers’ data for review. One (1) copy with the Engineer’s review comments will be returned to the Contractor. The Contractor may make and distribute such copies as are required for their purposes

2.3 SAMPLES

- A. Provide Sample or Samples identical to the precise article proposed to be provided. Identify as described under “Identification of submittals” below.
- B. Number of Samples required:
 - 1. Unless otherwise specified, submit Samples in the quantity, which is required to be returned, plus one, which will be retained by the Engineer.
 - 2. By prearrangement in specific cases, a single Sample may be submitted for review and, when accepted, be installed in the Work at a location agreed upon by the Engineer.

2.4 COLORS AND PATTERNS

Unless the precise color and pattern is specifically called out in the Contract Documents, and whenever a choice of color or pattern is available in the specified products, submit accurate color and pattern charts to the Engineer for selection.

PART 3 - EXECUTION

3.1 IDENTIFICATION OF SUBMITTALS

- A. Consecutively number all submittals
 - 1. When material is resubmitted for any reason, transmit under a new letter of transmittal and with a new transmittal number.
 - 2. On re-submittals, cite the original submittal number for reference.
- B. Clearly label each submittal with a reference to the appropriate Specification Section for which the submittal is made.
- C. Accompany each submittal with a letter of transmittal showing all information required for identification and checking.

- D. On at least the first page of each submittal, and elsewhere as required for positive identification, show the submittal number in which the item was included.
- E. Maintain an accurate submittal log for the duration of the Work, showing current status of all submittals at all times. Make the submittal log available to the Engineer for his review upon request.

3.2 GROUPING OF SUBMITTALS

- A. Unless otherwise specified, make submittals in groups containing all associated items to assure that information is available for checking each item when it is received.
- B. Partial submittals may be rejected as not complying with the provisions of the Contract.
- C. The Contractor may be held liable for delays so occasioned.

3.3 TIMING OF SUBMITTALS

- A. Make submittals far enough in advance of scheduled dates for installation to provide time required for reviews, for securing necessary approvals, for possible revisions and re-submittals, and for placing orders and securing delivery.
- B. In scheduling, allow at least 14 days for review by the Engineer following his receipt of the submittal.

3.4 ENGINEER'S REVIEW

- A. Review by the Engineer does not relieve the Contractor from responsibility for errors or omissions that may exist in the submitted data.
- B. Revisions:
 - 1. Make revisions required by the Engineer.
 - 2. If the Contractor considers any required revision to be a change, he shall so notify the Engineer.
 - 3. Make only those revisions directed or accepted by the Engineer.
- C. Reimbursement of Engineer's Costs:
 - 1. In the event substitutions are proposed to the Engineer after the Contract has been awarded, the Engineer will record all time used by him and by his consultants in the evaluation of each such proposed substitution.
 - 2. Whether or not the Engineer accepts a proposed substitution, the Contractor shall be responsible for the costs of the Engineer and his consultants for all time spent by them in evaluating the proposed substitution, plus administrative fees. The

costs will be deducted from outstanding pay requests due to the Contractor by way of a Change Order.

- D. Engineer's Review Stamp: The Engineer's review stamp will indicate the status of the submittal, and corresponding action to be taken by the Contractor as follows:
1. No Exceptions Taken: When the Engineer marks the submittal "No Exceptions Taken", the Work covered by the submittal may proceed, provided it complies with the requirements of the Contract Documents. The final payment depends on that compliance.
 2. Revise, Re-submittal Not Required: When the Engineer marks the submittal "Revise, Re-submittal Not Required", the Work covered by the submittal may proceed provided it complies with the notations on the submittal and requirements of the Contract Documents. Final payment depends on that compliance.
 3. Revise, Resubmit for Record: When the Engineer marks the submittal "Revise, Resubmit For Record", the Work covered by the submittal may proceed provided it complies with the notations on the submittal and requirements of the Contract Documents. The submittal must be revised to comply with the notations on the submittal and requirements of the Contract Documents and must then be resubmitted to the Engineer. Final payment depends on that compliance.
 4. Resubmit: When the Engineer marks the submittal "Resubmit", do not proceed with the Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise and prepare a new submittal according to the notations, resubmit without delay. Repeat if necessary to obtain a different action mark.
 - a. Do not use or allow others to use submittals marked "Resubmit" at the Project Site or elsewhere where Work is in progress.

END OF SECTION

SECTION 01 35 29

HEALTH, SAFETY, AND EMERGENCY RESPONSE PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Conditions and Specification sections, apply to the work of this section.

1.2 SUMMARY

- A. This Section describes health and safety requirements, as well as personnel protection requirements for activities on the project. Direct contact with soil, groundwater, surface water or sediment contaminated with oil and/or hazardous materials is not anticipated during the course of the work.

1.3 HEALTH AND SAFETY REQUIREMENTS

- A. Construction site safety is the sole responsibility of the Contractor.
- B. Contractor to supply a Health and Safety Plan (HASP) for each discipline or trade under their contract (or sub-contract).
- C. Employees who will be in direct contact with hazardous materials, or soil, groundwater, surface water or sediment contaminated with oil and/or hazardous materials must conduct the work in accordance with the Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120, as implemented through the Contractor's HASP.
- D. It is anticipated that work will be performed in Personnel Protection Level D. This includes hard hat, safety glasses, hearing protection, gloves, and work boots. In the event that the Contractor determines that a level of protection higher than Level D is required, the Contractor's personnel will take the necessary steps outlined in the Contractor's HASP. Notify the Owner and Engineer immediately of the need to upgrade levels of protection.
- E. Immediately correct violations of the health and safety requirements contained in the Specifications or standards referenced above. Notification of violations noted by the Owner may be verbal or written. Failure of the Owner to provide notification of health and safety violations does not relieve the Contractor from responsibility for conformance with the regulations and the safety of personnel and property.
- F. If the Contractor fails to promptly correct violations of the health and safety standards and requirements noted by the Owner, the Owner will issue an order to stop all or part

of the Work. When satisfactory corrective action is taken, an order to resume work will be issued. The Contractor shall not be entitled to any extension of time, or to any claim for damage or additional compensation by reason of either the notification of a violation or the stop-work order.

- G. Maintain an accurate record of, and report to the Owner immediately, all cases of death and, within 24 hours, all cases of occupational diseases or traumatic injury to employees or the public involved, and property damage incident to the performance of work under this Contract. Report using OSHA Form 300, Log of Work-Related Injuries and Illnesses. The rights and remedies of the Owner provided in the Specifications are in addition to any other rights and remedies proved by law or under this Contract.
- H. In the event there is a conflict between the requirements contained in the OSHA Health and Safety Codes and Standards, the U.S. Department of Labor Construction Health and Safety Codes and Standards, promulgated under Section 108 of the Contract Work Hours and Safety Act (40 U.S.C. 327 et seq.), as amended, the more stringent requirement will prevail.
- I. Examine all Drawings and Sections of the Specifications for requirements and provisions of the work that this Section affects.

1.4 SUBMITTALS

- A. Upon request of the Engineer, submit:
 - 1. Data demonstrating qualifications of persons proposed to be engaged for field engineering services.
 - 2. Documentation verifying the accuracy of field engineering work.
 - 3. Certification, signed by the Contractor's retained field engineer, certifying that elevations and locations of improvements are in conformance or non-conformance with requirements of the Contract Documents.

1.5 APPLICABLE REGULATIONS

- A. Comply with all applicable health and safety regulations, including but not limited to:
 - 1. "United States OSHA Code of Federal Regulations 29 CFR 1910.120 for Hazardous Waste Operations (HAZWOPER).
 - 2. U.S. Environmental Protection Agency (EPA) Executive orders 1440.2 and 1440.3.
 - 3. OSHA Guidance Manual for Hazardous Waste Site Activities, DHHS/NIOSH Pub. No.85-115, 10/85.
 - 4. 29 CFR 1926: Safety and Health Requirements for Construction, OSHA.
 - 5. EPA/625/9-85/006, Protection of Health and Safety at Hazardous Waste Sites: An Overview.
 - 6. 40 CFR 761: TSCA.
 - 7. 454 CMR 10, Massachusetts Division of Labor and Industry.
 - 8. 105 CMR 670.0000 and 441 CMR 21.00 (Right to Know).

9. 310 CMR 40.0000 (Massachusetts Contingency Plan; MCP).

- B. Conduct the work in compliance with the above regulations and policies as well as any changes or addenda to the same as set forth prior to the completion of work.
- C. Comply with all applicable regulations, this Specification, and recognized standards and regulatory practices. The Owner and the Engineer will not be responsible at any time for the Contractor's violation of any applicable local, state, or federal regulations, or endangerment of laborers or others.

1.6 INFORMATIONAL SUBMITTALS

- A. If oil or hazardous materials are discovered on site, submit a Contractor's HASP for encountering oil and hazardous materials (OHM) including exposure monitoring and prevention methods, and emergency response procedures. Include the name, title, and affiliation of the Contractor's designated Health and Safety Officer. The HASP will be prepared by a qualified professional and comply with the requirements of 29 CFR 1910.120 and all other applicable regulations, including, but not limited to those listed in Paragraph 1.5-A (above).
- B. Prior to beginning work submit one completed Safety Data Sheet (SDS) for each material as required by Federal Standards No. 313 (Preparation and Submission of Material Safety Data Sheet), as amended. Department of Labor Form OSHA-174, or GSA-approved Alternate Form A will be submitted. Follow the information on the MSDS to assure safe use, handling, storage, and environmentally acceptable disposal of hazardous materials. A complete set of SDSs will be maintained on site.
- C. Accident Reporting: Submit a copy of each accident report that the Contractor or Subcontractors submits to their insurance carriers within 7 calendar days of date of the accident.

PART 2 - PRODUCTS

2.1 PERSONAL PROTECTIVE EQUIPMENT

Provide Personal Protective Equipment (PPE) for all Contractor and Subcontractor personnel in accordance with the Contractor's HASP. Delays in the Work due to inability to provide PPE as site conditions require shall be at no additional cost to the Owner.

PART 3 - EXECUTION

3.1 GENERAL

- A. Designate an on-site, full-time Health and Safety Officer who will be responsible for implementing and enforcing the HASP. Perform air quality monitoring as required by the HASP, and as conditions warrant.
- B. Conduct work to prevent any on-site employee or others who may be in the general vicinity from exposure to conditions that are unsanitary, hazardous, or dangerous to health and safety, as determined under Construction Safety and Health Standards promulgated by the Secretary of Labor under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327 et seq.) as amended. Construction Safety and Health Standards promulgated by the Secretary of Labor may be obtained from the regional or area office of the OSHA of the U.S. Department of Labor.
- C. Immediately correct violations of the health and safety requirements contained in the Specifications or Standards referenced above. Notification of violations noted by the Owner may be verbal or written. Failure of the Owner to provide notification of health and safety violations does not relieve the Contractor from responsibility for conformance with the regulations and the safety of personnel and property.
- D. If the Contractor fails to promptly correct violations of the health and safety standards and requirements noted by the Owner, the Owner will issue an order to stop all or part of the Work. When satisfactory corrective action is taken, an order to resume work will be issued. The Contractor shall not be entitled to any extension of time, or to any claim for damage or additional compensation by reason of either the notification of a violation or the stop-work order.
- E. Maintain an accurate record of, and report to the Owner immediately, all cases of death and, within 2 hours, all cases of occupational diseases or traumatic injury to employees or the public involved, and property damage incident to performance of work under this Contract. Report using OSHA Form 300, Log of Work-Related Injuries and Illnesses.

END OF SECTION

SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Conditions and Specification sections, apply to the work of this section.

1.2 SUMMARY

- B. Provide temporary facilities and controls needed for the Work including, but not necessarily limited to:
 - 1. Temporary utilities such as heat, water, electricity, and telephone.
 - 2. Field office for the Contractor's personnel.
 - 3. Sanitary facilities.
 - 4. Enclosures such as tarpaulins, barricades, and canopies.
 - 5. Temporary fencing of the construction site.
- B. Definitions
 - 1. Temporary: Labor, equipment, and materials required for the installation of facilities and controls which, upon completion of the Work, are not a part of the completed Work, shall be furnished, installed, and subsequently removed from the site by the Contractor.

1.3 PRODUCT HANDLING

Maintain temporary facilities and controls in proper and safe condition throughout the progress of the Work.

PART 2 - PRODUCTS

2.1 UTILITIES

- A. Water
 - 1. Limited fresh water supply is available at the site.
 - 2. Provide necessary temporary service and piping.
- B. Electricity
 - 1. Provide and pay for temporary electrical service and electricity used in construction.
 - 2. Provide necessary temporary wiring.

3. Provide temporary area distribution boxes so located that the individual trades may furnish and use extension cords to obtain power and lighting at points where needed for work, inspection, and safety.
- C. Heating
 1. Provide and maintain temporary heat necessary for the proper conduct of operations needed in the Work.
- D. Telephone
 1. Provide and maintain temporary telephone service to the Contractor's office at the site.

2.2 FIELD OFFICES AND SHEDS

- A. Contractor's facilities
 1. Provide a temporary field office building and sheds adequate in size and accommodation for the Contractor's offices, supply, and storage. As a minimum, equip the Contractor's field office with a telephone, telephone answering machine, facsimile machine, and photocopier which shall remain in operation throughout the Work.
- B. Sanitary facilities
 1. Provide temporary sanitary facilities in the quantity required by applicable health regulations for use by all personnel.
 2. Maintain in a sanitary condition at all times.

2.3 ENCLOSURES

Provide and maintain for the duration of construction all temporary scaffolds, tarpaulins, canopies, warning signs, steps, platforms, bridges, and other temporary construction necessary for proper completion of the Work in compliance with pertinent safety and other regulations.

2.4 CONTAINERS FOR DEBRIS & REFUSE REMOVAL

Provide and maintain suitable containers for the collection and disposal of trash and debris generated from demolition and construction. Do not use containers that are the property of the Owner, or the property of others that may be present on site.

PART 3 - EXECUTION

3.1 MAINTENANCE AND REMOVAL

- A. Maintain temporary facilities and controls as long as needed for safe and proper completion of the Work.

- B. Remove such temporary facilities and controls as rapidly as progress of the Work will permit, or as directed by the Engineer.

END OF SECTION

SECTION 01 71 23

FIELD ENGINEERING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Special Conditions and Specification sections, apply to work of this section.

1.2 SUMMARY

- A. Provide such field engineering services as are required for proper completion of the Work including, but not necessarily limited to:
 - 1. Establishing and maintaining lines and levels.
 - 2. Structural design of shores, forms, and similar items provided by the Contractor as part of his means and methods of construction.

1.3 QUALITY ASSURANCE

- A. Use adequate numbers of skilled resources who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

1.4 SUBMITTALS

- A. Upon request of the Engineer, submit:
 - 1. Data demonstrating qualifications of persons proposed to be engaged for field engineering services.
 - 2. Documentation verifying accuracy of field engineering work.
 - 3. Certification, signed by the Contractor's retained field engineer, certifying that elevations and locations of improvements are in conformance or non-conformance with requirements of the Contract Documents.

PART 2 - PRODUCTS

2.1 MATERIALS

Provide materials, not specifically described but required for a complete and proper execution of the Work, as selected by the Contractor subject to the review of the Engineer.

PART 3 - EXECUTION

3.1 PROCEDURES

In addition to procedures directed by the Contractor for proper performance of the Contractor's responsibilities:

- A. Locate and protect control points before starting work on the site.
- B. Preserve permanent reference points during progress of the Work.
- C. Do not change or relocate reference points or items of the Work without specific direction from the Engineer.
- D. Promptly advise the Engineer when a reference point is lost or destroyed or requires relocation because of other changes in the Work.
 - 1. Upon direction of the Engineer, require the field engineer to replace reference stakes or markers.
 - 2. Locate such replacements according to the original survey control.

END OF SECTION

SECTION 01 73 29

CUTTING AND PATCHING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Special Conditions and Specification sections, apply to the work of this section.

1.2 SUMMARY

This Section establishes general requirements pertaining to cutting (including excavating), fitting, and patching of the Work required to:

- A. Make the several parts fit properly.
- B. Uncover work to provide for installing, review, or both, of ill-timed work.
- C. Remove and replace work not conforming to requirements of the Contract Documents.
- D. Remove and replace defective work.

1.3 QUALITY ASSURANCE

Use adequate numbers of skilled resources who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

1.4 SUBMITTALS

- A. Request for Engineer's consent:
 - 1. Prior to cutting which affects structural safety, submit written request to the Engineer and secure written authorization to proceed cutting.
 - 2. Should conditions of the Work, or schedule, indicate a required change of materials or methods for cutting and patching, so notify the Engineer and secure their written authorization and the required Change Order prior to proceeding.
- B. Notices to the Engineer:
 - 1. Prior to cutting and patching performed pursuant to the Engineer's instructions, submit cost estimate to the Engineer. Secure the Engineer's written authorization before proceeding with cutting and patching.
 - 2. Submit written notice to the Engineer designating the time the Work will be uncovered, to provide for the Engineer's observation.

PART 2 - PRODUCTS

2.1 MATERIALS

For replacement of items removed, use materials complying with pertinent Sections of these Specifications.

2.2 PAYMENT FOR COSTS

The Owner will reimburse the Contractor for cutting and patching performed pursuant to the written Change Order, after claim for such reimbursement is submitted by the Contractor. Perform other cutting and patching needed to comply with the Contract Documents at no additional cost to the Owner.

PART 3 - EXECUTION

3.1 SURFACE CONDITIONS

- A. Inspection by the Contractor:
 - 1. Inspect existing conditions, including elements subject to movement or damage during cutting, excavating, patching, and backfilling.
 - 2. After uncovering the work, inspect conditions affecting the installation of new work.
- B. Discrepancies:
 - 1. If uncovered conditions are not as anticipated, immediately notify the Engineer in writing and secure the Engineer's written directions.
 - 2. Do not proceed until unsatisfactory conditions are corrected.

3.2 PREPARATION PRIOR TO CUTTING

- A. Provide required protection including, but not necessarily limited to, shoring, bracing, and support to maintain the structural integrity of the Work.
- B. Prior to cutting new or existing elements, carefully lay out the work required. Verify that the layout is correct and accurate as necessary to perform the construction safely and within the tolerances required.

3.3 PERFORMANCE

- A. Perform required excavating and backfilling as required under pertinent other Sections of these Specifications.

- B. Perform cutting and demolition by methods that will prevent damage to other portions of the Work and provide proper surfaces to receive installation of repair and new work.
- C. Perform fitting and adjusting of products to provide finished installation complying with the specified tolerances and finishes.
- D. Prevent migration of soils into waterways. Do not affect water quality of waterways.

END OF SECTION

SECTION 01 74 00

CLEANING AND WASTE MANAGEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Conditions and Specification sections, apply to the work of this section.

1.2 SUMMARY

- A. Throughout the construction period, maintain the buildings and site in a standard of cleanliness as described in this Section.

1.3 QUALITY ASSURANCE

- A. Conduct daily inspection, and more often, if necessary, to verify that requirements for cleanliness are being met.
- B. In addition to the standards described in this Section, comply with pertinent requirements of governmental agencies having jurisdiction.

PART 2 - PRODUCTS

2.1 CLEANING MATERIALS AND EQUIPMENT

- A. Provide required personnel, equipment, and materials needed to maintain the specified standard of cleanliness.

2.2 COMPATIBILITY

- A. Use only the cleaning materials and equipment that are compatible with the surface being cleaned, as recommended by the manufacturer of the material.

PART 3 - EXECUTION

3.1 PROGRESS CLEANING

- A. General
 - 1. Retain stored items in an orderly arrangement allowing maximum access, not impeding traffic or drainage, and providing required protection of materials.

2. Do not allow accumulation of scrap, debris, waste material, and other items not required for construction of this Work.
3. At least twice each month, and more often, if necessary, completely remove all scrap, debris, and waste material from the job site.
4. Provide adequate storage for all items awaiting removal from the job site, observing requirements for fire protection and protection of the ecology.

B. Site

1. Daily, more often, if necessary, inspect the site and pick up all scrap, debris, and waste material. Remove such items to the place designated for their storage.
2. Weekly, and more often, if necessary, inspect all arrangements of materials stored on the site. Re-stack, tidy, or otherwise service arrangements to meet the requirements of Subparagraph 3.1-A-1 above.
3. Maintain the site in a neat and orderly condition at all times.

C. Structures

1. Weekly, and more often, if necessary, inspect the structures and pick up all scrap, debris, and waste material. Remove such items to the place designated for their storage.
2. As required preparatory to installation of succeeding materials, clean the structures or pertinent portions thereof to the degree of cleanliness recommended by the manufacturer of the succeeding material, using equipment and materials required to achieve the necessary cleanliness.

3.2 FINAL CLEANING

- A. Prior to completion of the Work, remove from the job site all tools, surplus materials, equipment, scrap, debris, and waste. Conduct final progress cleaning as described in Article 3.1 above.

B. Site

1. Unless otherwise specifically directed by the Engineer, broom clean paved areas on the site and public paved areas adjacent to the site.
2. Completely remove resultant debris.

C. Structures

1. Exteriors
 - a. Visually inspect exterior surfaces and remove all traces of soil, cement-based materials, waste materials, smudges, and other foreign matter.
 - b. Remove all traces of splashed materials from adjacent surfaces.
 - c. If necessary to achieve a uniform degree of cleanliness, hose down the exterior of the structure.
 - d. In the event of stubborn stains not removable with water, the Engineer may require light sandblasting or other cleanings at no additional cost to the Owner.

- D. Schedule final cleaning as approved by the Engineer to enable the Owner to accept completely clean Work.

3.3 CLEANING DURING OWNER'S OCCUPANCY

- A. Should the Owner occupy the Work or any portion thereof prior to its completion by the Contractor and acceptance by the Owner, responsibilities for interim and final cleaning shall be as determined by the Engineer in accordance with the General Conditions of the Contract.

END OF SECTION

SECTION 01 77 00

CONTRACT CLOSEOUT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Special Conditions and Specification sections, apply to the work of this section.

1.2 SUMMARY

Provide an orderly and efficient transfer of the completed Work to the Owner.

1.3 QUALITY ASSURANCE

- A. Prior to requesting review by the Engineer, use adequate means to assure that the Work is completed in accordance with the specified requirements and is ready for the requested review.
- B. Submit written certification that Contract Documents have been reviewed by the Contractor, the Work has been inspected by the Contractor, and that the Work is complete and in accordance with the Contract Documents.

1.4 PROCEDURES

- A. Substantial Completion
 - 1. Substantial Completion is defined as the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the Work for its intended use.
 - 2. When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Engineer a comprehensive list of items to be completed or corrected.
 - 3. Prepare and submit the list required by Paragraph 1.4-A-2 above.
 - 4. Within a reasonable time after receipt of the list, the Engineer will review to determine the status of completion.
 - 5. Should the Engineer determine that the Work is not substantially complete:
 - a. The Engineer promptly will so notify the Contractor, in writing, giving the reasons, therefore.
 - b. Remedy the deficiencies and notify the Engineer when ready for additional review.
 - c. The Engineer will review the Work.
 - 6. When the Engineer concurs that the Work is substantially complete

- a. The Engineer will prepare a “Certificate of Substantial Completion”, accompanied by the Contractor’s list of items to be completed or corrected, as verified by the Engineer.
 - b. The Engineer will submit the Certificate to the Owner and to the Contractor for their written acceptance of the responsibilities assigned to them in the Certificate.
- B. Final Completion
 1. Prepare and submit to the Engineer a notice that the Work is complete and ready for final review and acceptance.
 2. Certify that
 - a. Contract Documents have been reviewed.
 - b. Work has been reviewed for compliance with the Contract Documents.
 - c. Work has been completed in accordance with the Contract Documents.
 - d. Equipment and systems have been tested as required and are operational.
 - e. Work is completed and ready for final review.
 3. The Engineer will make a review to verify status of completion.
 4. Should the Engineer determine that the Work is incomplete or defective
 - a. The Engineer promptly will so notify the Contractor, in writing, listing the incomplete or defective work.
 - b. Remedy the deficiencies promptly and notify the Engineer when ready for additional review.
 5. When the Engineer determines that the Work is acceptable under the Contract Documents, he will request the Contractor to make closeout submittals.
- C. Closeout submittals include, but are not necessarily limited to
 1. Operation and maintenance data for items so listed in pertinent other Sections of these Specifications, and for other items when so directed by the Engineer.
 2. Warranties and bonds.
 3. Spare parts and materials extra stock.
 4. Evidence of compliance with requirements of governmental agencies having jurisdiction including, but not necessarily limited to
 - a. Certificates of Inspection.
 - b. Certificates of Occupancy.
 5. Certificates of Insurance for products and completed operations.
 6. Evidence of payment and release of liens.
 7. List of subcontractors, service organizations, and principal vendors, including names, address, and telephone numbers where they can be reached for emergency service at all times including nights, weekends, and holidays.
 8. As built drawings and surveys.
- D. Final adjustment of accounts
 1. Submit a final statement of accounting to the Engineer, showing all adjustments to the Contract Sum.
 2. If so required, the Engineer will prepare a final Change Order showing adjustments to the Contract Sum that were not made previously by Change Orders.

1.5 INSTRUCTION

Instruct the Owner's personnel in proper operation and maintenance of systems, equipment, and similar items which were provided as part of the Work.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION

SECTION 01 78 39

PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Conditions and Specification sections, apply to the work of this section.

1.2 SUMMARY

- B. Throughout the progress of the Work, maintain an accurate record of changes in the Contract Documents.
- C. Upon completion of the Work, transfer the recorded changes to a set of Record Documents.

1.3 QUALITY ASSURANCE

- A. Accuracy of Records
 - 1. Thoroughly coordinate changes within the Record Documents, making adequate and proper entries on each page of Specifications and each sheet of Drawings and other Documents where such entry is required to show the change properly.
 - 2. Accuracy of records shall be such that future searches for items shown in the Contract Documents may rely reasonably on information obtained from the approved Project Record Documents.
- B. Make entries within 24 hours after receipt of information that the change has occurred.

1.4 SUBMITTALS

- A. The Engineer's review of the current status of Project Record Documents may be a prerequisite to the Engineer's review of requests for progress payment and request for final payment under the Contract.
- B. Prior to submitting each request for progress payment, secure the Engineer's review of the current status of the Project Record Documents.
- C. Prior to submitting request for final payment, submit the final Project Record Documents to the Engineer and secure his review.

1.5 PRODUCT HANDLING

- A. Maintain the job set of Record Documents completely protected from deterioration and from loss and damage until completion of the Work and transfer of all recorded data to the final Project Record Documents.
- B. In the event of loss of recorded data, use the means necessary to again secure the data for the Engineer's review.
 - 1. Such means shall include, if necessary, in the opinion of the Engineer, removal and replacement of concealing materials.
 - 2. In such case, provide replacements to the standards originally required by the Contract Documents.

PART 2 - PRODUCTS

2.1 RECORD DOCUMENTS

- A. Job set: Promptly following receipt of the Contract, secure from the Engineer at no charge to the Contractor one complete set of all Documents comprising the Contract.
- B. Final Record Documents: At a time nearing the completion of the Work, secure from the Engineer at no charge to the Contractor one complete set of Drawings in the Contract.

PART 3 - EXECUTION

3.1 MAINTENANCE OF JOB SET

- A. Immediately upon receipt of the job set described in Paragraph 2.1-A above, identify each of the Documents with the title, "RECORD DOCUMENTS - JOB SET".
- B. Preservation
 - 1. Considering the Contract completion time, the probable number of occasions upon which the job set must be taken out for new entries and for examination, and the conditions under which these activities will be performed, devise a suitable method for protecting the job set.
 - 2. Do not use the job set for any purpose except entry of new data and for review by the Engineer, until start of transfer of data to final Project Record Documents.
 - 3. Maintain the job set at the site of Work as designated by the Engineer.
- C. Making entries on the drawings
 - 1. Using an erasable colored pencil (not ink or indelible pencil), clearly describe the change by graphic line and note as required.
 - 2. Date all entries.
 - 3. Call attention to the entry by a "cloud" drawn around the area or areas affected.

4. In the event of overlapping changes, use different colors for the overlapping changes.
- D. Make entries in the pertinent other Documents
- E. Conversion of schematic layouts
1. In some cases on the Drawings, arrangements of conduits, circuits, piping, ducts, and similar items are shown schematically and are not intended to portray a precise physical layout.
 - a. Final physical arrangement is determined by the Contractor, subject to the Engineer's review.
 - b. However, design of future modifications of the facility may require accurate information as to the final physical layout of items that are shown only schematically on the Drawings.
 2. Show on the job set of Record Drawings, by dimension accurate to within one inch, the centerline of each run of items such as is described in Sub-paragraph 3.1-E-1 above.
 - a. Clearly identify the item by an accurate note such as "cast iron drain," "galv. water," and the like.
 - b. Show, by symbol or note, the vertical location of the item ("under slab," "in ceiling plenum," "exposed," and the like).
 - c. Make all identification sufficiently descriptive that it may be related reliably to the Specifications.
 3. The Engineer may waive the requirements for conversion of schematic layouts where, in the Engineer's judgment, conversion serves no useful purpose. However, do not rely upon waivers being issued except as specifically issued in writing by the Engineer.

3.2 FINAL PROJECT RECORD DOCUMENTS

- A. The purpose of the final Project Record Documents is to provide factual information regarding all aspects of the Work, both concealed and visible, to enable future modification of the Work to proceed without lengthy and expensive site measurement, investigation, and examination.
- B. Engineer's review of recorded data prior to transfer
1. Following receipt of the Drawings described in Paragraph 2.01-B above, and prior to start of transfer of recorded data thereto, secure the Engineer's review of all recorded data.
 2. Make required revisions.
- C. Transfer of data to Drawings
1. Carefully transfer change data shown on the job set of Record Drawings to the corresponding final set of Record Drawings, coordinating the changes as required.

2. Clearly indicate at each affected detail and other Drawing a full description of changes made during construction, and the actual location of items described in subparagraph 3.1-E-1 above.
 3. Call attention to each entry by drawing a “cloud” around the area or areas affected.
 4. Make changes neatly, consistently, and with the proper media to assure longevity and clear reproduction.
- D. Transfer of data to other Documents
1. If the Documents other than Drawings have been kept clean during progress of the Work, and if entries thereon have been orderly to the acceptance of the Engineer, the job set of those Documents other than Drawings will be accepted as final Record Documents.
 2. If any such Document is not so accepted by the Engineer, secure a new copy of that Document from the Engineer at the Engineer’s usual charge for reproduction and handling, and carefully transfer the change data to the new copy to the acceptance of the Engineer.
- E. Review and submittal
1. Submit the completed set of Project Record Documents to the Engineer as described in Paragraph 1.4-C above.
 2. Participate in review meetings as required.
 3. Make required changes and promptly deliver the final Project Record Documents to the Engineer.

3.3 CHANGES SUBSEQUENT TO ACCEPTANCE

The Contractor has no responsibility for recording changes in the Work subsequent to Final Completion, except for changes resulting from work performed under Warranty.

END OF SECTION

SECTION 02 20 00

EARTHWORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specifications sections, apply to the work of this section.

1.2 SUMMARY

The work covered under this Section of these Specifications consists of providing all plant, labor, supervision, equipment, appliances, and materials, and in performing all operations in connection with the excavation of unsuitable organic soils, subgrade preparation, and placement and compaction of fill materials.

1.3 SUBMITTALS

A. Earthwork Operation and Sequence Plan

1. Submit an earthwork plan outlining types of equipment, daily volumes, and grading, excavation, subgrade preparation, proof-compacting, backfilling, and compaction sequence to the Owner's Representative for review at least 10 working days prior to commencement of construction.
2. Where excavation to design subgrade elevation results in the generation of suitable granular fill, indicate the proposed location (in plan and elevation) where granular fill will be reused on site.

B. Shoring and Bracing Plan

1. If the Contractor selects to use shoring and bracing, submit the support of the excavation plan to the Owner for review at least 10 working days prior to commencement of construction. The support of the excavation system shall be prepared by a Professional Engineer, registered in the Commonwealth of Massachusetts.

1.4 DEFINITIONS

- A. SOURCE shall mean those areas from which any material brought to the site is derived. All material brought to the site shall be certified in writing as clean and free from environmental contaminants. The sources and test results shall meet with the approval of the Owner's Representative before any material is delivered to the project. The following tests shall be performed on a sample of material from each source from

which the material is derived: Sieve Analysis, VOCs, SVOCs, TPH, PCBs and total and TCLP RCRA 8 metals.

- B. SUITABLE MATERIALS, for reuse on-site, shall generally consist of predominantly granular (sand, gravel, silt, and rock) material free of organic material, peat, dredge debris, organic silt, and other objectionable material. Suitable materials shall be reused on-site as compacted or densified fill as designated on the Drawings.
- C. ORGANIC MATERIAL shall mean fibrous mats of roots, decaying vegetation, organic silt, peat, timber piles, planks, wharf or fendering, garbage and sanitary wastes.
- D. UNSTABLE MATERIAL shall mean organic debris, frozen materials, topsoil, and organic silts.
- E. SUITABLE CONSTRUCTION DEBRIS shall mean on-site concrete, brick, or asphalt debris, processed to be less than 6 inches in size that is suitable for compaction when mixed with granular material.
- F. UNSUITABLE CONSTRUCTION DEBRIS shall mean on-site organic debris such as wood, stumps, organic material, roofing debris, or other miscellaneous debris that is unsuitable for compaction when mixed with granular material.

1.5 PREPARATION

- A. Examine the site thoroughly and determine the existing conditions and difficulty of work to be performed.
- B. Before commencing earthwork operations, determine that preparatory work has been completed.
- C. Perform field surveys required to accomplish the work.

1.6 DEGREE OF COMPACTION

- A. Expressed as a percentage of the maximum dry density obtained by the test procedure presented in ASTM D1557 Standard Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lb/ft³ (2700 kN-m/m³)).
- B. Abbreviated in this Specification as a percent of laboratory maximum dry density.

1.7 FIELD QUALITY CONTROL

- A. Quality control compaction testing of material placed in the dry during construction will be provided by the Owner's Representative. The Owner's Representative shall be notified 48 hours prior to any excavation, fill, backfill, or compaction operations.

1. Permit the Owner's Representative to observe all subgrades for each layer of fill or backfill. Additional fill or backfill should not be placed unless the Owner's Representative has approved the subgrade and/or the previous layer of fill.
 2. When required or requested by the Owner's Representative, the Contractor shall provide field elevations of the compacted subgrade or fill layer.
- B. Compacted materials that are below specified density shall be re-compacted at no additional expense to the Owner.
- C. The Contractor shall bear the cost of removal of all unsuitable material placed without approval by the Owner's Representative that fails to conform to the specifications.

1.8 RESPONSIBILITY OF THE CONTRACTOR

- A. The Contractor is responsible for adhering to regulations, Specifications, and recognized standard practices related to the management of contaminated and potentially contaminated material during excavation and removal activities. The Owner and Owner's Representative will not be responsible at any time for the Contractor's violation of pertinent State or Federal regulations or endangerment of laborers, passers-by, or any others.
- B. The Owner will not be held negligent or liable for any inadequacies or deficiencies in the Contractor's site-specific worker health and safety plan or for any oversight or inadequacies in the Contractor's implementation of the safety plan.
- C. Provide labor, materials, and equipment necessary to complete the work including:
1. Excavation, backfilling, on-site transportation, stockpiling, and maintenance of excavated material.
 2. The Contractor is responsible for all construction, protection, and maintenance of soil stockpiles from excavation through chemical testing and on-site re-use or off-site disposal (if required). The Contractor shall stockpile material only in areas designated by the Owner.
 3. The Contractor is responsible for providing all documentation to track potentially contaminated material from the time of excavation until it is accepted by and disposed of at the disposal facility.
 4. The Contractor shall backfill excavations with suitable materials in accordance with this section and the limits and elevations shown in the Contract Drawings.
- D. The Contractor is responsible for all disposal costs at the disposal facility.

1.9 REGULATORY REQUIREMENTS

A. Permits and Licenses

1. The Contractor shall obtain required federal, state, and local permits for excavation, storage, and disposal of contaminated material. Permits shall be obtained at no additional cost to the Owner.

PART 2 – PRODUCTS

2.1 SAND-GRAVEL FILL

- A. SAND-GRAVEL FILL shall consist of hard, durable sand and gravel, and shall be free from ice and snow, roots, sod, rubbish, and other deleterious or organic matter. It shall conform to the following gradation requirements:

SIEVE SIZE	PERCENT FINER BY WEIGHT
*	100
1/2-inch	50-85
No. 4	40-75
No. 10	30-60
No. 40	10-35
No. 100	5-20**
No. 200	2-8

* Four inches (4") where placed as base below slab and pavement; elsewhere, two-thirds (2/3) of the loose lift thickness.

** The amount passing the No. 100 sieve should be between 40% and 70% of that amount passing the No. 40 sieve.

2.2 GRANULAR FILL

- A. GRANULAR FILL shall be free from ice and snow, roots, sod, rubbish, and other deleterious or organic matter. It shall conform to the following gradation requirements:

SIEVE SIZE	PERCENT FINER BY WEIGHT
2/3 of the loose lift thickness	100
No. 10	30-95
No. 40	10-70
No. 200	0-10

Granular Fill if placed 4 feet below finish grade, at the discretion of the Owner's Representative, provided it is properly moisture controlled and can meet the required compaction. It should be noted, however, that these materials are very sensitive to changes in moisture content and may be difficult to properly compact using ordinary means and equipment.

2.3 DENSE GRADED AGGREGATE

- A. DENSE GRADED AGGREGATE shall meet M2.01.7 in the Massachusetts Highway Department, Standard Specifications for Highways and Bridges, and shall conform to the gradation requirements below.

SIEVE SIZE	PERCENT FINER BY WEIGHT
2-inch	100
1 1/2 inch	70-100
3/4 inch	50-85
No. 4	30-55
No. 50	8-24
No. 200	3-10

2.4 CRUSHED STONE

- A. CRUSHED STONE shall consist of one or the other of the following material:
- Durable crushed rock consists of the granular fragments obtained by breaking and crushing solid or shattered natural rock, and free from a detrimental quantity of thin, flat, elongated*, or other objectionable pieces.
 - Thin or elongated pieces are defined as follows: Thin stones shall be considered to be such stones whose average width exceeds 4 times their average thickness. Elongated stones shall be such stones whose average length is in excess of 4 times their average width.
 - Durable crushed gravel stone obtained by artificial crushing of cobbles, boulders, or field stone with a minimum diameter before crushing of 8 inches.
 - The crushed stone shall be reasonably free from clay, loam or deleterious material and not more than 1.0% of satisfactory material passing a No. 200 sieve will be allowed to adhere to the crushed stone.
 - Crushed stone shall be uniformly blended according to the following grading requirements:

SIEVE SIZE	PERCENT FINER BY WEIGHT	
	3/4" INCH CRUSHED STONE	1-1/2" CRUSHED STONE
1 1/2-Inch	--	100
1 1/4-Inch	--	85-100
1-Inch	100	--
3/4-Inch	90-100	10-40
1/2-Inch	10-50	0-8
3/8-Inch	0-20	--
No. 4	0-5	--
No. 200	<1	<1

5. All crushed stone referred to on the Drawings shall be 3/4-inch crushed stone unless otherwise specified.
6. “1-1/2-inch crushed rock aggregate” referred to on the Drawings shall be 1-1/2-inch crushed stone.

2.5 COMMON FILL

- A. Common fill shall consist of sand, silt, gravel, or similar materials free from trash, topsoil, organic or compressible material, roots, and vegetation. Stones, rock, brick, and concrete fragments not exceeding 6 inches in their largest dimension are acceptable provided they are not nested when placed for compaction and can be readily spread and compacted during filling. Common fill may be acceptable for use as Granular Fill at the discretion of the Owner’s Representative, provided it can be placed and properly compacted.

2.6 SAND FILL

- A. Sand Fill shall be free from ice and snow, roots, sod, rubbish and other deleterious or organic material. Sand Fill shall be a well-graded, medium to coarse sand with a maximum diameter of 1/4 inch and less than 10% passing the #200 sieve by weight.

PART 3 - EXECUTION

3.1 PROTECTION

- A. Contact all utility companies and property owners who might have installations in the area to determine the location of all utilities and structures.
- B. Protect above and below-grade utilities which are to remain.
- C. Protect plant life, trees, lawns, and other features remaining as a portion of final landscaping.
- D. Protect benchmarks, existing structures, fences, sidewalks, paving, and curbs from excavation equipment and vehicular traffic.
- E. Implement temporary erosion control measures such as silt fencing, hay bales, sediment traps, etc. as required to minimize the effects of erosion and sedimentation in excavations.
- F. Excavation cut shall be sloped sufficiently to prevent material from sliding into the excavation and to comply with local, state and Federal codes and regulations. Sheet piling and bracing shall be placed as dictated by conditions.
- G. The bottom of excavations shall be protected from frost action and surface drainage. Frozen material shall be removed and replaced with granular fill or concrete. Protect

excavation bottoms against freezing when atmospheric temperature is less than 35 degrees F.

- H. All rock surfaces shall be level and cleaned of loose materials.
- I. Slope Side of excavations to comply with OSHA requirements and local codes and ordinances having jurisdiction. Shore and brace where sloping is not possible either because of space restrictions, stability of material excavated, or where shoring and bracing is more economical than sloping. Shoring and bracing shall be designed by a Professional Engineer, Registered in the Commonwealth of Massachusetts. Maintain sides and slopes of excavations in a safe condition until completion of backfilling.
- J. If requested by the Owner's Representative, the Contractor shall place a 12-inch to 18-inch layer of Granular Fill or 6 inch of crushed stone and a layer of non-woven filter fabric over the natural underlying soil to stabilize areas which may become disturbed.

3.2 DISPOSAL

- A. Remove all unsuitable and organic materials (as determined by the Owner's Representative) from the property and dispose offsite as required by local, State and Federal codes, rules and regulations. Remove existing foundations, demolition debris, abandoned utility piping, slabs, pavements, and other debris encountered in areas of construction. Dispose of excess or unsuitable material as part of the Contract price.

3.3 DRAINAGE

- A. Direct surface water away from excavations, existing buildings, roadways and construction sites to prevent erosion and undermining of foundations.
- B. Protect excavated slopes and backfill surfaces to prevent erosion and sloughing.
- C. Perform excavation so that the site and the area immediately surrounding the site shall be continually and effectively drained.

3.4 DUST SUPPRESSION

- A. Owner's Representative shall determine if dust generated at the site is significant enough to require dust suppression.
- B. Dust suppression shall require application of water by Contractor. Contractor shall at all times keep machinery, and a sufficient supply of water onsite to suppress dust generated at the site, as necessary.
- C. Contractor shall suppress dust as necessary throughout construction, and until vegetation or other surface treatments have been established, if necessary.

- D. Uniformly apply water to surface, subgrade or layer of soil material requiring dust suppression.

3.5 COMPACTION

- A. Heavily surface compact subgrade with a minimum of 6 passes of a vibratory roller having a drum weight of at least 10,000 pounds and a dynamic force of at least 20,000 pounds prior to placing fill.
- B. Soft areas shall be excavated and filled with compacted granular fill.
- C. Subgrade shall be uniform throughout. There shall not be hard spots or soft spots.
- D. Prevent free water from appearing on surface during or subsequent to compaction operations.
- E. Soil material too wet to permit compaction to specified density shall be removed and replaced or scarified and air dried.

3.6 FILLING AND BACKFILLING IN-THE-DRY OR ABOVE MEAN HIGH WATER

- A. Material placement shall begin after approval of the subgrade by the Owner's Representative.
- B. Use satisfactory materials to replace unsatisfactory materials.
- C. Place satisfactory materials in horizontal layers not exceeding 12 inches in loose thickness where self-propelled or towed mechanical compaction equipment is used, or 9-inch loose lift thickness when hand-operated compactors are used.
- D. Do not begin backfilling until construction below finish grade has been approved and the excavation is clean of trash and debris.
- E. Place and compact fill and backfill to indicated finish grade within a tolerance of one foot horizontally and 1 inch vertically.
- F. Do not place successive layers of earth fill material until the compaction requirements of the previous layer have been satisfied.
- G. Maintain positive drainage on the surface of unfinished earth fills. Blade the unfinished surfaces smooth to a crown at the conclusion of each day's work.
- H. Uniformly grade the finished earth fill surfaces such that they are smooth, compacted, and free from irregular surface changes.
- I. Unless otherwise noted compact fill and backfill material to a minimum of 95 percent of the maximum dry density per ASTM D1557.

- J. Moisture control:
 - 1. Where subgrade or layer of soil material must be moisture-conditioned before compaction, uniformly apply water to surface of subgrade or layer of soil material as needed to obtain optimum moisture content.
 - 2. Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density.
- K. The Contractor shall use extra care when compacting adjacent to walls. Where walls are buried on both sides, backfill and compaction shall proceed on both sides of the wall so that the difference in top of fill level on either side of the wall shall not exceed 2 feet at any stage of construction. Where backfill of a buried wall is only on one side, only hand-operated roller or plate compactor shall be used within a lateral distance of 5 feet of back of wall.
- L. In freezing weather, a layer of fill shall not be left in an uncompacted state at the close of a day's operations. Prior to terminating operations for the day, the final layer of fill, after compaction, shall be rolled with a smooth-wheeled roller to eliminate ridges of soil left by tractors, trucks, and compaction equipment.
- M. The Contractor shall not place a layer of compacted fill on snow, ice or soil that was permitted to freeze prior to compaction. Removal of these unsatisfactory materials will be required as directed by the Owner.

3.7 DENSE GRADED AGGREGATE PLACEMENT, SPREADING, AND COMPACTION

- A. Spread Dense Graded Aggregate over prepared subgrade.
- B. Compact to a dry density of not less than 95 percent of the maximum density as determined by the Modified Proctor ASTM D1557, unless otherwise noted. Alternate blading and rolling will be required to obtain a smooth, even, and uniformly compacted course.
- C. The final surface compaction shall be with a smooth wheeled power roller to obtain a firm and smooth surface finish.
- D. Level and contour surfaces to elevation and gradients indicated.
- E. Add water to assist compaction. If excess water is apparent, remove aggregate and aerate to reduce moisture content.
- F. Use mechanical tamping equipment in areas inaccessible to compaction equipment.

3.8 MAINTENANCE

- A. Protect newly graded areas from traffic and erosion and keep free of trash and debris. Repair and reestablish grades in settled, eroded, and rutted areas to specified tolerances.
- B. Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, remove to sound material, reshape, and compact to required density prior to further construction.

3.9 EROSION CONTROL

- A. Protect disturbed areas from erosion.

3.10 DAMAGE

- A. Any damage resulting from excavation, backfill and compaction shall be repaired by the Contractor to the satisfaction of the Owner's Representative and at the Contractor's expense.

END OF SECTION

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COMPOSITE REINFORCEMENT BARS

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

The Work covered by this Section of the Specification covers the requirements for the fabrication and placing of glass fiber reinforced polymer (GFRP) reinforcing bar as internal reinforcement for concrete components.

1.2 QUALITY ASSURANCE

A. General

The acceptance of bars shall be according to the requirements of this specification. Bars not meeting the requirements of the Contract Documents shall be rejected and shall not be included in the Work.

B. Manufacturer Quality Control

The GFRP Manufacturer shall hold a current FRP Manufacturer Quality Audit Certificate of Completion from the FRP Institute for Civil Infrastructure of Westfield, Indiana.

C. Sampling

Prior to placing the GFRP, the Contract Administrator shall randomly select 5 samples for quality assurance testing from each lot. The straight bar samples shall be cut to a length of 7 feet by the Contractor. If a lot of straight bars does not contain any pieces that may be cut down to a length of 7 feet, then the length requirement shall be waived, and samples shall be taken from the available lengths as supplied. For bent bars and anchor-headed bars, the Contract Administrator shall select 5 samples at random from each lot. Samples are not required for bent bars of a particular diameter and shape, or anchor headed bars, if the total number required in the Contract for each respective bar type is less than 50.

D. Testing

At the discretion of the Owner, quality assurance testing for any number of lots, and for any number of properties listed in Table 2 for each lot, shall be conducted by a laboratory designated by the Owner. The testing shall be performed according to the methods and requirements listed in Table 2 and shall be performed on the 5 quality assurance samples. The results will be provided to the Contractor when they are available.

E. Test Results

A GFRP lot shall be rejected if any one of the tested quality assurance samples fails to meet the limits in Table 2 for the tested property.

F. Visual & Dimensioning

GFRP that does not meet the specified finishing, surface conditions, or dimensional tolerances shall be rejected. The “Glass Fiber Reinforced Polymer (GFRP) Reinforcing Bars Inspector Package”, prepared by the American Concrete Institute, shall also be used as a basis for field inspection and rejection of bars.

G. Consequences of Rejection

All rejected GFRP lots or bars shall be replaced. The replacements shall be subjected to the requirements of this specification. If any Work incorporates rejected GFRP lots or bars, then that Work shall be rejected.

1.3 SUBMITTALS

A. QRFT Quality Control Report

1. Two copies of the GFRP Quality Control Report, signed and sealed by the suppliers’ Engineer for all the materials delivered to the site shall be submitted to the Contract Administrator prior to the placement of the reinforcement. The report shall contain the following information:
 - a. Production information including:
 - i. Supplier
 - ii. Lot number of bars
 - iii. Batch number of resin
 - iv. The start and end date of production for each production lot of material;
 - v. The total linear feet produced in each lot for straight bars or the total number of bars in each lot for bent bars and anchor headed bars.
 - b. Summary of all material test results listed in order as identified in Table 2 with the following information for each property:
 - i. The actual number of samples tested for each lot.
 - ii. The result of every test as specified in the Quality Control subsection of this specification.
 - iii. The average and standard deviation of test results.
 - iv. The minimum result for tensile strength, tensile elongation, transverse shear strength, and bend strength obtained from testing of the required samples.

B. Working Drawings

1. One hard copy set and one electronic PDF of GFRP Working Drawings, including supporting documentation, shall be submitted to the Contract Administrator for information purposes at least 7 days prior to delivery of bars. An Engineer’s seal

- and signature shall be affixed on the Working Drawings verifying that they are consistent with the Contract Documents.
2. The Working Drawings shall include the following information:
 - a. Bar placing drawings that include quantity, bar size, location and spacing for all bars.
 - b. Proposed splices and locations thereof.
 - c. Description of reinforcement supports.
 - d. Bar schedule that includes quantity, bar size, type, length and bending dimensions.
 3. The supporting documentation shall include the following information:
 - a. Manufacturer's instructions on how to deliver, handle, store, and protect the bars.
 - b. Manufacturer's recommended materials and procedures for removal of unacceptable material present on the bars.
 4. A sealed and signed copy of the Working Drawings shall be kept at the site before and during the placing of bars.
 5. When the Contractor intends to substitute bars, a proposal shall be submitted for approval by the Owner. Submission of the proposal and the Working Drawings shall be at least 3 weeks before bar installation.

C. Protection Plan for Placed and Partially Embedded Bars

1. At least 7 days prior to the commencement of installation of bars, a plan describing the methods to be used to protect bars shall be submitted to the Contract Administrator. The protection plan shall address the following hazards and situations:
 - a. Contamination of placed or partially embedded bars from concrete splatter from an adjacent concreting operation.
 - b. Movement of bars from concreting operations that will leave partially embedded bars out of tolerance for subsequent work.

PART 2 - PRODUCTS

2.1 MATERIALS

A. GFRP Reinforcing Bars

1. Bars shall meet the specifications of ASTM D7957.
2. All bars in the same structural component shall be supplied by the same manufacturer; there shall be no mixing of products from different manufacturers in a component unless permitted in the Contract Documents.
3. Where the Contract Documents specify a particular product, there shall be no substitution unless approved by the Owner. Companies and products that are conditionally prequalified might not have been in full production yet; it is the responsibility of the Contractor to ensure that the contractual requirements can be met, including all quality control testing and delivery schedule.

B. Material Requirements of GFRP Bars

1. Bars shall be according to the qualification requirements in ASTM D7957, and Tables 1 and 2 of this specification. In case of discrepancies between ASTM D7957 and Tables 1 and 2, the more stringent requirement shall apply.
2. Binding material for bars shall be composed of thermoset vinyl ester resin that is homogeneous throughout the cross-section of the bar. Fiber reinforcement in the bars shall be continuous E-glass or E-CR glass fibers according to ASTM D578.

C. Bar Identification

1. All bars to be used in the Work shall be legibly stamped by the manufacturer with the following information at no more than 8 feet spacing for straight bars, and at least once per piece for bent bars and anchor headed bars:
 - a. Manufacturer's name and symbol
 - b. Type of fiber
 - c. Designated bar diameter
 - d. Grade designation
 - e. Designated modulus of elasticity
 - f. Production lot or batch number

D. Associated Hardware

1. Fastening of bars shall be with coated tie wire, stainless steel wire, or nylon ties.
2. Bar chairs for supporting bars shall be plastic.

E. GFRP Workmanship and Finish

1. The bars shall be uniform in diameter/size and free of defects that would be detrimental to the mechanical properties and durability. The surface finish shall be uniform, free of voids and air pockets, and similar to the product tested for qualification. Defects include, but are not limited to, exposed fibers, cracks, kinks, surface pitting, and discoloration.

TABLE 1
TENSILE STRENGTH AND MODULUS OF GFRP BARS

STRAIGHT BARS					
Designated Bar Diameters (in)	Minimum Specified Longitudinal Tensile Strength (ksi)	Minimum Longitudinal Modulus of Elasticity (ksi)	Ultimate Tensile Strain (in/in)	Minimum Transverse Shear Strength (ksi)	Minimum Bond Strength (ksi)
No. 3 (0.375)	120	6500	0.011	19	1.1
No. 4 (0.5)	108				
No. 5 (0.625)	94				
TYPICAL	80	6000	--	--	--

COMPOSITE REINFORCED BARS

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TABLE 2
QUALITY CONTROL TEST REQUIREMENTS

Property	Standard for Test	Specified Limits
Cross-sectional area	ASTM D7205, Test Method for Tensile Properties of FRP Reinforcements	Minimum area not less than 95% of the nominal cross-sectional area. Maximum area not more than 120% of the nominal cross-sectional area for bar diameter 0.5 to 0.75 in; 115% for bar diameter greater than 0.75 in; and 145% for bar diameter less than 0.5 in. Nominal cross-sectional area shall be according to CSA-S807.
Longitudinal tensile strength for straight bars and straight portion of the bent bars	ASTM D7205; Test Method for Tensile Properties of FRP Reinforcements.	Minimum values defined in Table 1
Longitudinal tensile modulus and ultimate elongation (for straight bars and straight portion of the bent bars)	ASTM D7205; Test Method for Tensile Properties of FRP Reinforcements.	Minimum values of tensile modulus defined in Table 1; the ultimate elongation shall not be less than 1.1%.
Transverse shear strength	ASTM D7617; Standard Test Method for Transverse Shear Strength of Fiber-reinforced Polymer Matrix Composite Bars	≥ 19 ksi
Longitudinal tensile strength of FRP bent bars at bend locations	ACI 440.3R-04, Test Method B.5, Test Method for Strength of FRP Bent Bars and Stirrups at Bend Locations (Note 1) or ACI 440.3R-04, Test Method B.12, Test Method for Determining the Effect of Corner Radius on Tensile Strength of FRP Bars.	Minimum strength at the bend shall be at least 45% of the minimum strength of straight portion of bent bars. (Note 4)
Fiber content	The relevant of the following: ASTM D3171 (Method I of Procedure G), ASTM E1131, and ASTM D 2584.	Glass Fiber content ≥ 70% by Weight.
Void content	ASTM D2734 or ASTM D5117	≤ 1% (ASTM D 2734); or if no voids or longitudinal cracks are observed after 15 min. of ASTM D 5117 test, this criterion shall be deemed to have been met.
Water absorption at 50°C for straight bars, straight portion and curved portion of bent bars and grids	ASTM D570 Water Absorption of Plastics: Procedures 7.1 & 7.4, except that both tests shall be conducted at 50°C (Note 2)	< 0.25% for 24-hour immersion ≤ 0.45% after 1 week immersion (168 hours) for the long-term immersion test.

Cure ratio for straight bars, straight portion and curved portion of bent bars and grids	ASTM D5028; Standard Test Method for Curing Properties of Pultrusion Resins by Thermal Analysis	≥ 95% of Cure Required for all straight bars and bent bars.
Wet glass transition temperature	ASTM D3418; Standard Test Method for Transition Temperatures and Enthalpies of Fusion and Crystallization of Polymers by Differential Scanning Calorimetry (Note 3) or ASTM E1640; Standard Test Method for Assignment of the Glass Transition Temperature by Dynamic Mechanical Analysis	DSC ≥ 100°C DMA ≥ 110°C
Pullout Capacity of anchor headed bars	Embedded in concrete block (Note 1)	100 kN for 15 mm diameter bar with a maximum slip of 0.5 mm.

Note 1: Test may be conducted with high early strength concrete after the concrete reaches 4,000 psi compressive strength.

Note 2: Test is conducted at 50°C for both 24-hour immersion and long-term immersion, to shorten the time required for the test.

Note 3: Samples shall be saturated according to ASTM D570, except that the temperature of 50°C shall be used for conditioning. A hermetically sealed pan shall be used to prevent volatilization.

Note 4: Minimum strength of straight portion according to Table 1.

PART 3 - EXECUTION

3.1 DELIVERY, HANDLING, STORAGE, AND PROTECTION OF BARS

- A. Delivery, handling, storage, and protection of bars shall be according to the manufacturer's instructions and the following to prevent damage:
 1. Bars shall be lifted, transported, and stored using multiple support points to prevent damage to the bars from sagging. Support points shall be no more than 12 feet from one another. Bars shall be lifted using nylon slings or padded wire rope slings. Lifting of bundles of bars shall be with a strong back, spreader bar, multiple supports, or a platform bridge. Bars shall be bundled and supported to prevent damage during transportation. Bars shall be stored clear of the ground on suitable protective cribbing. Stacks or bundles of bars shall have adequate blocking to prevent contact between the layers of bundles. Bars shall be stored separately from reinforcing steel bars with the bar tags maintained and clearly visible until ready for placing.
 2. Bars shall not be dragged, dropped, or impacted. Bars shall not be struck by hammers or any other equipment at any time. Bars that have been subjected to any of the previous unacceptable actions, or that show obvious signs of damage, shall be rejected, removed, and replaced. Bars subject to removal shall be marked and removed in the presence of the Contract Administrator.
 3. Bars shall be covered with opaque white polyethylene during storage. Bars installed in the structure or formwork, including those partially embedded in

COMPOSITE REINFORCED BARS

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concrete, shall be protected from the elements by covering with opaque white polyethylene sheeting or equivalent protective material when the exposure time is expected to exceed or exceeds 30 days. The protection shall be adequately supported and secured in place. This protection shall be maintained until its removal is required for preparation for subsequent concrete placement.

4. Bars shall be protected from any abrasive blasting or pressure washing operation in their immediate vicinity by adequate covering or wrapping with protective material.
5. Bars, after placing, shall be protected from construction operations and traffic such that the bar and its finishing are not damaged. The surfaces shall be kept free of contamination and damage, and the bars shall be protected from loading which may damage the bars.

3.2 SURFACE CONDITION OF BARS

- A. Bars shall be free of mud, oil, concrete or other contaminants, and surface finish defects that adversely affect bonding strength or other properties at the time the concrete is placed.
 1. Bars shall be protected from contamination caused by concrete splatter during adjacent placements. Any concrete contamination shall be removed immediately while the concrete is still plastic without damaging the bars. Removal of other materials present on the bars shall be according to the materials and methods recommended by the bar manufacturer.

3.3 PLACING

- A. The bars shall be placed according to CRSI, “Placing Reinforcing Bars” with the following modifications unless otherwise specified in the Contract Documents:
 1. Bars shall be accurately placed in the positions shown in the Contract Documents and held in the correct location during the operations of placing and consolidating concrete.
 - a. Bars shall be tied at least at every third intersection.
 - b. The maximum untied length of any bar shall be 3 feet.
 - c. Bar support chairs shall not exceed 3 feet average spacing in each direction.
 - d. Bars within formwork shall be secured to prevent movement during concrete placement.
 2. The bars shall be supported or tied to resist settlement, floating upward, or movement in any direction during concrete placement. For overlays and other horizontal placement where there is no bottom mat of steel reinforcement to tie down the GFRP, the GFRP mat shall be anchored down directly to the concrete or formwork to prevent it from floating upward.
 - a. Field bending or straightening shall not be permitted.
 - b. Lap splices shall be staggered.
 - c. Do not exceed the placing tolerances specified in ACI 117 before concrete is placed.

3. Placing tolerances shall not reduce cover requirements except as specified in ACI 117.

3.4 REPAIR OF GFRP BARS

Any damage to a GFRP reinforcing bar resulting in visible fibers (other than at cut ends) or any cut or defect greater than 0.04 inch deep shall be cause for rejection of the bar. All visible damage to the GFRP reinforcing bars exceeding 2 percent of surface area per foot of bar and not resulting in rejection by the Engineer shall be repaired. The remedy for a damaged GFRP reinforcing bar is to lap splice a new GFRP reinforcing bar adjacent to the damaged portion. The appropriate lap length shall be provided on either side of the damage in accordance with the Contract Documents.

3.5 FIELD CUTTING OF GFRP BARS

Field cut GFRP reinforcement only when specifically permitted by the Engineer. Cutting methods shall be with a high-speed abrasive wheel, fine blade saw, diamond blade, or masonry saw as specified by or acceptable to the Engineer. When GFRP reinforcing bars are cut in the field, shear or flame cutting is not permitted. Bent bars shall not be cut. Use appropriate safety measures such as dust masks, gloves, and glasses during cutting. Cut ends shall be sealed if required by GFRP reinforcing bar manufacturer or Engineer, and all surface damage due to cutting shall be inspected by the Engineer and repaired.

END OF SECTION

SECTION 03 30 00

CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification sections, apply to the work of this section.

1.2 SUMMARY

The Work covered under this Section of these Specifications consists of furnishing all plant, labor, supervision, equipment, appliances, and materials and performing all operations in connection with the installation of reinforced concrete for all aspects of the project, in strict accordance with the Contract Documents.

1.3 SUBMITTALS

A. Shop Drawing and Product Data

Shop drawings and product data showing all fabricated dimensions and locations for placing the reinforcing steel and accessories shall be submitted for review. Shop Drawings shall provide sufficient technical data to demonstrate compliance with the specified requirements. Products, materials, or information submitted for review shall not be used or fabricated until after receipt of the Engineer's review comments. Distribute only reviewed shop drawings to the job site.

B. Mix Design

Submit concrete mix design, with known test results, to the Engineer for review. The concrete mix design submittal shall consist of at least the following:

1. Type of cement.
2. Dry weight of cement.
3. Saturated surface-dry weights of fine and coarse aggregates.
4. Specific gravity of fine and coarse aggregates.
5. Quantities, type, name, and producer of admixtures, as applicable.
6. Total weight of water, including the water that is absorbed by and on the surface of the aggregates.
7. Water to cement ratio.
8. Slump: Maximum slump, taken at the truck, will be determined based on the pump hose length. The mix designs shall include the anticipated loss of slump per 100-foot length of specified hose size.

9. Strength test data of the proposed mix design as specified herein.

Distribute reviewed mix design to the testing laboratory, batch plant, and job site.

- C. Submit concrete batch tickets for each truck delivered to the site. Each ticket shall note at least the following data: design mix strength; batch proportions including actual water and aggregate moisture contents; date and batch time; arrival time at site; discharge time; concrete volume; and any change to concrete made at the site.
- D. Construction Joints: Submit proposed construction and control joint details and locations for Engineer's review.
- E. Curing and protection procedures: including product data on materials proposed for use.
- F. Certifications regarding all iron or steel products.

1.4 QUALITY ASSURANCE

- A. General
 - 1. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for the proper performance of the work of this Section.
 - 2. The Owner, through the Engineer, reserves the right of approval of any Subcontractor pre-qualified and selected for this portion of the Work by the Contractor. Approval will be based, in part, on a documented successful experience in performing work of a similar nature.
 - 3. Cast-In-Place Concrete work shall conform to all requirements of ACI 301, "Specifications for Structural Concrete for Buildings."
 - 4. Detailing, fabrication, and erection of reinforcing steel shall conform to ACI 318, "Building Code Requirements for Structural Concrete and Commentary" and ACI 315, "Details and Detailing of Concrete Reinforcement."
 - 5. Ready mix plant equipment and facilities shall conform to the "Check List for Certification of Ready Mixed Concrete Production Facilities" of the NRMCA.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Concrete
 - 1. Portland cement: Type II - low alkali conforming to ASTM C150, "Standard Specification for Portland Cement."

2. Aggregate, general
 - a. Shall be normal weight and uniformly graded and clean conforming to ASTM C33, “Standard Specification for Concrete Aggregates.”
 - b. Do not use aggregate known to cause excessive shrinkage.
3. Aggregate, coarse
 - a. Crushed rock or washed gravel with a maximum size of 3/4 inch.
4. Aggregate, fine
 - a. Natural washed sand of hard and durable particles varying from fine to particles passing a 3/8 inch screen, of which at least 12% shall pass a 50-mesh screen.
5. Water
 - a. Clean and potable, and free from oils, acids, alkali, organic matter and other deleterious material.
6. Air entraining admixture shall conform to ASTM C260, “Standard Specification for Air Entraining Admixture for Concrete.” The air-entraining agent shall be a nontoxic concentrated solution of neutralized Vinsol resin, such as "Daravair 1000" as manufactured by GCP Applied Technologies Inc. or equivalent accepted by the Engineer.
7. Water reducing admixture shall conform to ASTM C494 “Standard Specification for Chemical Admixtures for Concrete.” Water reducing agent shall be of Type A, B, C, D, E, F, or G (as noted in concrete mix design) such as “Daracem-100” as manufactured by GCP Applied Technologies Inc. or equivalent accepted by the Engineer.

B. Reinforcing Steel

1. All reinforcing steel shall conform to ASTM 615 Grade 60, “Specification for Deformed and Plain Billet Steel Bars for Concrete Reinforcement” and shall be fusion bond epoxy coated as per ASTM A775.
2. Fabricate reinforcement to the required shapes and dimensions, within fabrication tolerances stated in the CRSI "Manual of Standard Practices.”
3. Do not use reinforcement having any of the following defects:
 - a. Bar lengths, depths, or bends exceeding the specified fabricating tolerances.
 - b. Bends or kinks not indicated on the Drawings or required for this Work.
 - c. Bars with cross section reduced due to excessive rust or other causes.

C. Moisture Protection

Curing materials for concrete cast above the tidal zone shall conform to ASTM C309, “Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete”, wet burlap, or plastic membrane.

D. Accessories

All spacers, chairs, bolsters, and other devices necessary for proper reinforcing steel placement shall be epoxy coated with nylon tipped legs. All reinforcing steel shall be adequately tied with nylon, epoxy, or plastic-coated tie wire and supported with

epoxy-coated chairs that hold the bars to the specified clearance. One chair sample shall be submitted to the Engineer for review. No clay or concrete bricks or any other material other than reviewed chairs shall be permitted to support reinforcing steel.

E. Bonding Agent and Fusion Bonded Epoxy Coating Touch-Up

Bonding agent shall be Sika Armatec 110 Epocem, as manufactured by Sika Corporation or an equivalent accepted by the Engineer.

F. Product Delivery, Storage, and Handling

Conform to the recommendations of ACI 304, “Guide for Measuring, Mixing, Transporting, and Placing Concrete.”

PART 3 - EXECUTION

3.1 INSTALLATION

A. Concrete Mix Proportioning

1. Concrete shall be proportioned by the Contractor in accordance with ACI 301. The proposed design mix, together with all the Test Records, or Trial Mix Data, as required by ACI 301, shall be submitted to the Engineer for review at least two weeks prior to the first intended placement. Submit a separate pump mix if different from concrete mix placed by conventional methods.
2. Concrete shall be normal weight with a minimum compressive strength of 5000 psi at 28 days unless otherwise noted on Contract Documents.
3. Concrete shall have a maximum water to cement ratio of 0.40 unless otherwise noted on Contract Documents.
4. Concrete shall be proportioned to have a slump of 4 inches, ± 1 inch, at the discharge end of the pump hose. Use a water reducing agent as required to achieve the desired slump range. Addition of water at site will not be permitted.
5. Concrete shall contain 4% to 6% entrained air.

B. Form Construction

1. Design, erect, support, brace, and maintain formwork so it will safely support vertical and lateral loads which might be applied until such loads can be supported safely by the concrete structure in accordance with ACI 347.
2. Construct forms to the exact sizes, shapes, lines, and dimensions shown, and as required to obtain accurate alignment, location, grades, and level and plumb work in the finished structure.
3. Form coating or water shall be applied to all forms. If coating is used, it shall be applied prior to placement of reinforcing steel.
4. Form ties and spreaders shall be of such type as to leave no metal closer than 3 inches from any exposed concrete surface.

C. Reinforcement Placement

1. All epoxy coated reinforcing steel shall be protected from damage to the epoxy during handling and placement. Any epoxy coated reinforcing steel, where the epoxy has been damaged shall be either removed from the site or re-coated, at the Engineer's discretion with strict conformance to the manufacturer's instructions at the Contractors expense.
2. Place reinforcement to obtain the required coverage for concrete protection. Minimum concrete cover for all reinforcing shall be 3 inches except where specifically noted otherwise.
3. Clean reinforcement and remove loose dust, earth, and other materials which reduce bond or destroy bond with concrete other than epoxy coating.
4. Position, support, and secure reinforcement against displacement by forms, construction, and the concrete placement operations.
5. All reinforcing steel shall be continuous unless specifically detailed otherwise on the Contract Drawings. Provide dowels or lap splices of the appropriate class to maintain continuity. Unless otherwise shown on the Contract Drawings lap bars in compliance with ACI 318. Dowels or splices shall be shown on the shop drawings and shall be subject to the field review of the Engineer. No more than 60% of the total number of bars shall be spliced at one location.

D. Embedded Items

1. Install embedded items furnished under this Section and other Sections. All sleeves, inserts, anchors, and embedded items required for adjoining work or for its support shall be placed prior to casting concrete. All embedded items shall be positioned accurately and supported against displacement.
2. Where existing timber pile tops are to be embedded in the concrete, thoroughly clean the embedded portion of the piles of all debris and foreign matter prior to concrete placement. Do not damage the existing piles by cleaning.

E. Concrete Mixing

1. Transit-mix the concrete in accordance with provisions of ASTM C94.
2. Do not use concrete after 90 minutes from time of introduction of water to the mix.

F. Concrete Placement

1. All concrete work shall conform to the requirements of ACI 318, "Building Code Requirements for Structural Concrete."
2. Preparation
 - a. Remove foreign matter accumulated in the forms.
 - b. Rigidly close openings left in the formwork.

- c. Wet wood forms immediately prior to concrete placement. Wet wood forms sufficiently to tighten up cracks. Wet other material sufficiently to maintain the workability of the concrete.
 - d. Use only clean tools.
- 3. Conveying
 - a. Perform concrete placing at such a rate that concrete which is being integrated with fresh concrete is still plastic.
 - b. Deposit concrete as nearly as practicable in its final location to avoid separation due to re-handling and flowing.
 - c. Do not use concrete which becomes non-plastic and unworkable, or does not meet required quality control limits, or has been contaminated by foreign materials.
 - d. Remove rejected and excess concrete from the job site.
- 4. Placing concrete in forms
 - a. Concrete shall be cast to full dimensions in one operation.
 - b. Free-fall of concrete during placement greater than 8 feet is prohibited. The Contractor shall place concrete with a tremie tube for drops greater than 8 feet.
 - c. Deposit concrete in horizontal layers not deeper than 24 inches and avoid inclined construction joints.
 - d. Remove temporary spreaders in forms when concrete has reached the elevation of the spreaders.
- 5. Consolidation
 - a. Consolidate each layer of concrete immediately after placing, by use of internal concrete vibrators supplemented by hand spading, rodding, or tamping.
 - b. Do not use vibrators to transport concrete inside the forms.
- 6. Construction Joints
 - a. Do not use horizontal construction joints.
 - b. Secure the Engineer's review of joint design and location prior to the start of concrete placement.

G. Curing and Protection

- 1. Beginning immediately after placement, concrete shall be protected from premature drying, excessively hot or cold temperatures, and mechanical damage and shall be maintained with minimal moisture loss at a relative constant temperature for the period necessary for hydration of the cement and hardening of the concrete.
- 2. Concrete surfaces not covered by forms or within the inter-tidal elevations shall be protected from loss of surface moisture for not less than 7 days using moisture protection as specified herein.
- 3. If cold-weather concreting is anticipated, a preconstruction meeting should be held to define how cold weather concreting methods will be used. When the mean daily ambient temperature is at or below 40 degrees F or 45 degrees F and falling the Contractor shall follow the requirements of ACI 306R-16, "Guide to Cold Weather Concreting":

- a. Set up proper enclosure and heat to 50 degrees F for at least 2 hours before starting any pour. Set up individual thermometers within enclosure to monitor ambient temperatures near the face of fresh concrete. Thermometers shall be placed at a maximum of 50-foot centers, at major corners or returns, and at ends of concrete sections. Monitor and record temperatures in a log at early morning, noon, and early evening.
- b. Use a water-reducing admixture with an accelerated set, but do not use or rely upon any material as an anti-freeze. Use of calcium chloride is forbidden.
- c. Use vented heaters with blowers so placed that they do not produce localized hot spots which may dry out the concrete. Exposure to exhaust gases from combustion heaters is prohibited for the first 24 hours of the curing period.
- d. Maintain the temperature of the formwork at not less than 50 degrees F but not greater than 70 degrees F for 48 hours after completion of pour; formwork may be stripped after 72 hours after completion of pour. After 48 hours of maintaining at least 50 degrees F, the temperature may be allowed to drop gradually and shall be kept above 32 degrees F for a period of 7 days after completion of pour. Protection during this period may be provided by existing enclosure or by means indicated in note e below.
- e. Protection may be provided by use of insulation methods. Adequate insulation shall consist of at least one of the following:
 - ♦ 12" of dry earth; provide moisture cover if over slab concrete.
 - ♦ 4" of hay under adequate moisture cover.
 - ♦ 1" of insulation blankets with vapor barrier seal.
 - ♦ Other insulating material acceptable to the Engineer.

NOTE: Extreme conditions of temperature or wind may require more protection.

- f. Concrete may not be placed on frozen ground.
 - g. All frozen concrete shall be removed from the job and replaced at a cost to the Contractor.
4. When the mean daily ambient and substrate temperature is above 80 degrees F, the Contractor shall follow the requirements of ACI 305R-20, "Guide to Hot Weather Concreting." Concrete shall be protected from thermal damage. Provisions for windbreaks, shading, fog spraying, sprinkling, ponding, or wet covering with a light-colored material shall be made in advance of placement and such protective measures shall be taken as quickly as concrete hardening and finishing operations will allow.
- a. No concrete shall be placed when the air temperature is above 90 degrees F unless the air is still, and relative humidity is above 80%.
 - b. Set up proper windbreakers for concrete surfaces whenever the relative humidity is less than 70% for slight air motion or 80% for light breezes.
 - c. Provide shade for pours otherwise exposed to the sun.
 - d. Concrete is to be at a temperature of 80 degrees F or less when placed. If necessary, the batching plant shall cool aggregates by spraying or by using

chilled water or ice. All such water shall be accounted for as part of the mixing water.

- e. Use an admixture with a retarded set.
- f. All forms shall be thoroughly wetted at least daily and more often when the relative humidity is low.
- g. For slabs, maintain the required materials for curing on hand, so they may be placed immediately upon finishing. All concrete placed in ambient temperatures over 80 degrees F shall be kept wet for a minimum of 24 hours. Intermittent spraying will not be permitted. No water shall be applied before concrete has acquired its initial set. When the concrete temperature of any slab goes above 100 degrees F, place a layer of sand on it and keep it continuously wet until the temperature is below 80 degrees F.

H. Finishing

- 1. Remove all fins, blemishes, and defective concrete areas and patch where required with reworked cement mortar of the same proportions as that used in the concrete.
- 2. Form tie holes shall be plugged solid with reworked cement mortar of the same proportions as that used in the concrete.
- 3. Exposed surfaces of concrete shall receive a wood float finish.

3.2 CONCRETE TESTING

Concrete testing shall comply with ACI-318. Test reports shall be submitted to the Engineer for review.

END OF SECTION

SECTION 06 13 00

HEAVY TIMBER CONSTRUCTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Special Conditions and Specification sections, apply to work of this section.

1.2 SUMMARY

- A. The Work covered by this Section of these Specifications consists of furnishing all plant, labor, supervision, equipment, appliances and materials, and in performing all operations in connection with the timber construction, all in strict accordance with this Section of the Specifications and the applicable drawings and subject to the terms and conditions of the Contract.

1.3 Quality Assurance

- A. Use adequate number of workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work in this Section.
- B. The Owner reserves the right of approval of any Subcontractor pre-qualified and selected for this portion of the Work by the Contractor. Approval will be based, in part, on:
 - 1. Documented successful experience in performing work of a similar nature.
 - 2. Acceptable schedule of unit prices for measurement and payment in event of changes in the Work of this Section.
- C. Comply with the requirements of the "Wood Engineering Handbook" by US Forest Products Laboratory, except as may be modified herein.
- D. All visually graded structural lumber and wood construction shall conform to the "National Design Specification for Wood Construction", and its Supplement, "Design Values for Wood Construction" by the National Forest Products Association.

1.4 SUBMITTALS

- A. No later than the time of delivery of materials to the site, submit certificates as to conformance with the specified species, grade, and treatment prior to installation of any timber or hardware.

1.5 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. All timber shall be stored in stacks such that there is an air space beneath the material and situated to prevent the timber from being exposed to standing water.
- B. The Contractor shall notify the Owner twenty-four hours in advance of delivery of timber materials. The Contractor guarantees timber shall be stored in a safe manner within Owner designated area provided on the site.
- C. Timber shall be stored off the ground in a manner to prevent damage and to permit easy access for inspection.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Timber shall meet the requirements of the Southern Pine Inspection Bureau Inspection Rule, for Southern Yellow Pine No. 1, Paragraph 508 Marine Grade minimum.
- B. Clean-peel and preservative pressure treat timber in accordance with AWWA Standard P5 for Alkaline Copper Quat (ACQ) to the following retentions:
 - 1. All timber components except as noted below that will be subject to marine use, brackish or saltwater immersion, shall be Greenheart timber.
 - 2. Any miscellaneous timber 2 inch thick and smaller, subjected to marine use, out of water splash, above ground, and ground contact shall have a minimum retention of 0.6 pound per cubic foot.
- C. All material used shall be sound, well-seasoned, and straight grained, free from shakes and large or loose knots, and shall have no decayed wood, worm holes, or any defects which the Owner determines will impair its strength or durability.
- D. Pieces of exceptionally lightweight will not be accepted.
- E. Lumber shall be surfaced four sides unless otherwise noted.

2.2 HARDWARE

- A. All steel hardware used to connect Greenheart timbers, including all bolts, nuts and washers shall be galvanized steel conforming to ASTM A307, Grade A. Galvanizing shall conform to the requirements of ASTM A153.
- B. Finish of all hardware and metal fittings shall be hot dipped galvanized after fabrication.
- C. Furnish Certificates of Compliance with ASTM Specifications and Standards specified herein. Each certificate to be signed by Contractor and Galvanizer certifying that steel

materials, bolts, nuts, washers and items of iron and steel hardware in conformance to specified requirements, and that the galvanizing is in full conformance with these Specifications.

- D. Galvanized materials are to be given passivating treatment to prevent wet storage stain. Treatment shall consist of quenching newly galvanized material in a water quench containing not more than 0.2% sodium dichromate.
- E. All steel hardware used to connect ACQ treated timbers, including all bolts, nuts and washers shall be stainless steel 316.

PART 3 - EXECUTION

3.1 HANDLING, CUTTING, AND FRAMING

- A. Handle lumber and timber carefully, without sudden dropping, breaking of outer fibers, bruising, or penetrating the surface with tools.
- B. Accurately cut and frame lumber to a close fit in such a manner that the joints shall have an even bearing over the entire contact surface.
- C. All drilled holes and field cuts shall be treated with a preservative (product to be submitted for review by the Contractor and approved by the Owner) in accordance with AWP A M4 - "Standard for the Care of Preservative Treated Wood Products" prior to erection of timber member or installation of bolt.

3.2 HARDWARE

- A. A washer of the size and type specified shall be used under all bolt heads and nuts which would otherwise come in contact with timber. The nuts of all bolts shall be effectively locked after they have been finally tightened.
- B. Field touch-up of hot-dipped galvanizing shall be 90-97 Tnemec-Zinc zinc-rich coating as manufactured by Tnemec Company, Inc. of Kansas City, MO, or equivalent accepted by the Owner. Material shall be applied in strict accordance with manufacturers written instructions

END OF SECTION

SECTION 31 62 19

TIMBER PILES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Special Conditions and Specification sections, apply to work of this section.

1.2 SUMMARY

- A. The work covered by this section of these Specifications consists of furnishing all plant, labor, supervision, equipment, appliances, materials, and in performing all operations in connection with the installation of the timber piles, all in strict accordance with this Section of the Specifications.

1.3 SUBMITTALS

- A. The Contractor shall submit sufficient technical data on the equipment necessary to accurately measure and record pile penetration and capacity during the entire driving of each pile.
- B. No later than the time of delivery of materials to the site, submit certificates as to conformance with the specified species and grade prior to installation of any timber pile.
- C. Hardware Certifications, including material specifications, grade, and finish.

1.4 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. All timber shall be stored in stacks such that there is an air space beneath the material and situated to prevent the timber from being exposed to standing water.
- B. The material shall be stored on site in an area which will be designated by the Owner.
- C. Timber shall be handled in an approved manner such that the material will not be damaged.

PART 2 - PRODUCTS

2.1 CERTIFICATION

Greenheart timber piles shall be certified by lumber company stating specification (Guyana Grading Rule No. GR03) and compliance with ASTM D25.

2.2 MATERIALS

- A. All piles shall be Greenheart timber.
- B. Pile dimensions shall conform to ASTM D25.

2.3 INSPECTION

The Contractor shall notify the Project Engineer within 24 hours of delivery of all piles to be driven on the project site. At the Project Engineer's discretion, these piles are to be available for inspection. The Contractor shall assist the Engineer in maintaining records of the behavior of each pile during driving, the total penetration, and the significant blow counts before acceptance of final penetration. No piles shall be driven except in the presence of the Engineer, who shall be given notice at least 24 hours in advance of all pile driving. The Contractor shall mark the depth intervals on all piles.

PART 3 - EXECUTION

3.1 SITE CONDITIONS

Withdraw piles that encounter underground obstructions sufficient to impede pile driving. Redrive as close as possible to original position, subject to review of Owner. Remove piles that split, broom, break, or drive out of line. Drive another pile in its place. Provide and maintain necessary lighting and barriers to adequately assure public safety. Provide adequate safeguards to protect from damage improvements on the work site and on adjacent properties.

3.2 EQUIPMENT

- A. Drive piles with an impact hammer with sufficient energy and energy transfer characteristics to drive the piles to the required capacity and toe elevation without damaging the head. Use care not to injure piles by overdriving as would be indicated by rebound of hammer or staggering of pile. Cut off heads of piles accurately in accordance with the Contract Documents after completion of driving.
- B. Rig the pile driver with hanging or fixed leads to guide hammer from highest to lowest points of travel in a manner permitting free vertical movement of the hammer and with the leads laterally braced or cabled to assure firm support of the piles during driving.

3.3 INSTALLATION

- A. Drive the piles straight and true at indicated locations with deviation from the longitudinal axis of not more than 1/4 inch per foot.
- B. Locate piles within 3 inches of the position indicated on the Drawings.
- C. Continuously drive each pile to reach the capacity and/or full embedded length called for on the Drawings.
- D. Use suitable cushions or driving heads to avoid damage to the piles, developing proper total driving energy and directing the energy along the longitudinal center of gravity of the pile.
- E. Jetting to assist penetration will not be permitted.
- F. Pre-drilling will not be permitted unless accepted by the Owner, whereby approved pre-drilling to assist penetration may be used where extreme driving resistance is encountered or where vibrations from driving may be detrimental to adjacent structures.
- G. The Contractor shall provide the Owner with a complete driving record with the date of final installation and tip elevations. This record shall be submitted weekly and signed by a representative of the Contractor. The Contractor shall keep an accurate set of pile driving records indicating the pile number, pile type installed, type of hammer and rated energy, date of installation, final tip elevation, blow count, and Contractor's representative name and signature.
- H. Install three 1-inch stainless steel banding at top of Greenheart Piles spaced 6 inches.

3.4 HANDLING, CUTTING, AND FRAMING

- A. Handle timber piles carefully, without sudden dropping, breaking or outer fibers, bruising, or penetrating the surface with tools.
- B. After driving, the heads of piles shall be cut-off at the correct elevation as shown on the Drawings.

END OF SECTION

Attachment 1
Prevailing Wage



**THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT
DEPARTMENT OF LABOR STANDARDS
Prevailing Wage Rates**

MAURA HEALY
Governor

KIM DRISCOLL
Lt. Governor

As determined by the Director under the provisions of the
Massachusetts General Laws, Chapter 149, Sections 26 to 27H

LAUREN JONES
Secretary
MICHAEL FLANAGAN
Director

Awarding Authority:	Chatham - Department of Public Works	City/Town: CHATHAM
Contract Number:		
Description of Work:	Project adds a 79' pile-supported concrete walkway, replaces platform, reinstalls gangway, extends foundation wall, repairs pavement, and installs guardrail and crane pile.	
Job Location:	50 Barcliff Ave, Chatham, MA 02633	

Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

- The wage rates will remain in effect for the duration of the project, except in the case of multi-year public construction projects. For construction projects lasting longer than one year, awarding authorities must request an updated wage schedule no later than two weeks before the anniversary of the date the contract was executed by the awarding authority and the general contractor. For multi-year CM AT RISK projects, the awarding authority must request an annual update no later than two weeks before the anniversary date, determined as the earlier of: (a) the execution date of the GMP Amendment, or (b) the execution date of the first amendment to permit procurement of construction services. The updated wage schedule must be provided to all contractors, including general and sub-contractors, working on the construction project.
- This annual update requirement is generally not applicable to 27F "rental of equipment" contracts. For such contracts, the prevailing wage rates issued by DLS shall remain in effect for the duration of the contract term. However, if the prevailing wage rate sheet issued does not contain wage rates for each year covered by the contract term, the Awarding Authority must request updated rate sheets from DLS and provide them to the contractor to ensure the correct rates are being paid throughout the duration of the contract. Additionally, if an Awarding Authority exercises an option to renew or extend the contract term, they must request updated rate sheets from DLS and provide them to the contractor.
- This wage schedule applies only to the specific project referenced at the top of this page and uniquely identified by the "Wage Request Number" on all pages of this schedule.
- An Awarding Authority must request an updated wage schedule if it has not opened bids or selected a contractor within 90 days of the date of issuance of the wage schedule. For CM AT RISK projects (bid pursuant to G.L. c.149A), the earlier of: (a) the execution date of the GMP Amendment, or (b) the bid for the first construction scope of work must be within 90-days of the wage schedule issuance date.
- The wage schedule shall be incorporated in any advertisement or call for bids for the project as required by M.G.L. c. 149, § 27. The wage schedule shall be made a part of the contract awarded for the project. The wage schedule must be posted in a conspicuous place at the work site for the life of the project in accordance with M.G.L. c. 149 § 27. The wages listed on the wage schedule must be paid to employees performing construction work on the project whether they are employed by the prime contractor, a filed sub-bidder, or a sub-contractor.
- Apprentices working on the project are required to be registered with the Massachusetts Division of Apprentice Standards (DAS). Apprentices must keep their apprentice identification card on their persons during all work hours on the project. An apprentice registered with DAS may be paid the lower apprentice wage rate at the applicable step as provided on the prevailing wage schedule. **Any apprentice not registered with DAS regardless of whether they are registered with another federal, state, local, or private agency must be paid the journeyworker's rate.**
- Every contractor or subcontractor working on the construction project must submit weekly payroll reports and a Statement of Compliance directly to the awarding authority by mail or email and keep them on file for three years. Each weekly payroll report must contain: the employee's name, address, occupational classification, hours worked, and wages paid. Do not submit weekly payroll reports to DLS. For a sample payroll reporting form go to <http://www.mass.gov/dols/pw>.
- Contractors with questions about the wage rates or classifications included on the wage schedule have an affirmative obligation to inquire with DLS at (617) 626-6953.
- Contractors must obtain the wage schedules from awarding authorities. Failure of a contractor or subcontractor to pay the prevailing wage rates listed on the wage schedule to all employees who perform construction work on the project is a violation of the law and subjects the contractor or subcontractor to civil and criminal penalties.
- Employees not receiving the prevailing wage rate set forth on the wage schedule may file a complaint with the Fair Labor Division of the office of the Attorney General at (617) 727-3465.

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
(2 AXLE) DRIVER - EQUIPMENT	12/1/2025	\$40.95	\$15.57	\$21.78	\$0.00	\$0.00	\$78.30
TEAMSTERS JOINT COUNCIL NO. 10	1/1/2026	\$40.95	\$16.17	\$21.78	\$0.00	\$0.00	\$78.90
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	6/1/2026	\$41.95	\$16.17	\$21.78	\$0.00	\$0.00	\$79.90
	12/1/2026	\$41.95	\$16.17	\$23.52	\$0.00	\$0.00	\$81.64
	1/1/2027	\$41.95	\$16.77	\$23.52	\$0.00	\$0.00	\$82.24
(3 AXLE) DRIVER - EQUIPMENT	12/1/2025	\$41.02	\$15.57	\$21.78	\$0.00	\$0.00	\$78.37
TEAMSTERS JOINT COUNCIL NO. 10	1/1/2026	\$41.02	\$16.17	\$21.78	\$0.00	\$0.00	\$78.97
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	6/1/2026	\$42.02	\$16.17	\$21.78	\$0.00	\$0.00	\$79.97
	12/1/2026	\$42.02	\$16.17	\$23.52	\$0.00	\$0.00	\$81.71
	1/1/2027	\$42.02	\$16.77	\$23.52	\$0.00	\$0.00	\$82.31
(4 & 5 AXLE) DRIVER - EQUIPMENT	12/1/2025	\$41.14	\$15.57	\$21.78	\$0.00	\$0.00	\$78.49
TEAMSTERS JOINT COUNCIL NO. 10	1/1/2026	\$41.14	\$16.17	\$21.78	\$0.00	\$0.00	\$79.09
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	6/1/2026	\$42.14	\$16.17	\$21.78	\$0.00	\$0.00	\$80.09
	12/1/2026	\$42.14	\$16.17	\$23.52	\$0.00	\$0.00	\$81.83
	1/1/2027	\$42.14	\$16.77	\$23.52	\$0.00	\$0.00	\$82.43
ADS/SUBMERSIBLE PILOT	8/1/2024	\$117.16	\$10.08	\$11.62	\$12.67	\$0.00	\$151.53
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 2)							
For apprentice rates see "Apprentice- PILE DRIVER"							
AIR TRACK OPERATOR	12/1/2025	\$41.97	\$10.15	\$9.50	\$9.11	\$0.00	\$70.73
LABORERS	6/1/2026	\$43.41	\$10.15	\$9.50	\$9.11	\$0.00	\$72.17
LABORERS - ZONE 2	12/1/2026	\$44.85	\$10.15	\$9.50	\$9.11	\$0.00	\$73.61
	6/1/2027	\$46.30	\$10.15	\$9.50	\$9.11	\$0.00	\$75.06
	12/1/2027	\$47.75	\$10.15	\$9.50	\$9.11	\$0.00	\$76.51
	6/1/2028	\$49.25	\$10.15	\$9.50	\$9.11	\$0.00	\$78.01
	12/1/2028	\$50.75	\$10.15	\$9.50	\$9.11	\$0.00	\$79.51
For apprentice rates see "Apprentice- LABORER"							
AIR TRACK OPERATOR (HEAVY & HIGHWAY)	12/1/2025	\$41.97	\$10.15	\$9.50	\$9.21	\$0.00	\$70.83
LABORERS	6/1/2026	\$43.41	\$10.15	\$9.50	\$9.21	\$0.00	\$72.27
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$44.85	\$10.15	\$9.50	\$9.21	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
ASBESTOS REMOVER - PIPE / MECH. EQUIPT.	12/1/2025	\$44.80	\$14.50	\$4.30	\$6.75	\$0.00	\$70.35
HEAT & FROST INSULATORS LOCAL 6							
HEAT & FROST INSULATORS LOCAL 6 (BOSTON)							
ASPHALT RAKER	12/1/2025	\$41.47	\$10.15	\$9.50	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.91	\$10.15	\$9.50	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$44.35	\$10.15	\$9.50	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.80	\$10.15	\$9.50	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.25	\$10.15	\$9.50	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.75	\$10.15	\$9.50	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.25	\$10.15	\$9.50	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
ASPHALT RAKER (HEAVY & HIGHWAY)	12/1/2025	\$41.47	\$10.15	\$9.50	\$9.21	\$0.00	\$70.33
LABORERS	6/1/2026	\$42.91	\$10.15	\$9.50	\$9.21	\$0.00	\$71.77
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$44.35	\$10.15	\$9.50	\$9.21	\$0.00	\$73.21

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE	12/1/2025	\$59.28	\$16.05	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.58	\$16.05	\$13.25	\$3.25	\$0.00	\$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$62.03	\$16.05	\$13.25	\$3.25	\$0.00	\$94.58

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

BACKHOE/FRONT-END LOADER	12/1/2025	\$59.28	\$16.05	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.58	\$16.05	\$13.25	\$3.25	\$0.00	\$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$62.03	\$16.05	\$13.25	\$3.25	\$0.00	\$94.58

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

BARCO-TYPE JUMPING TAMPER	12/1/2025	\$41.47	\$10.15	\$9.50	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.91	\$10.15	\$9.50	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$44.35	\$10.15	\$9.50	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.80	\$10.15	\$9.50	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.25	\$10.15	\$9.50	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.75	\$10.15	\$9.50	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.25	\$10.15	\$9.50	\$9.11	\$0.00	\$79.01

For apprentice rates see "Apprentice- LABORER"

BLOCK PAVER, RAMMER / CURB SETTER	12/1/2025	\$41.97	\$10.15	\$9.50	\$9.11	\$0.00	\$70.73
LABORERS	6/1/2026	\$43.41	\$10.15	\$9.50	\$9.11	\$0.00	\$72.17
LABORERS - ZONE 2	12/1/2026	\$44.85	\$10.15	\$9.50	\$9.11	\$0.00	\$73.61
	6/1/2027	\$46.30	\$10.15	\$9.50	\$9.11	\$0.00	\$75.06
	12/1/2027	\$47.75	\$10.15	\$9.50	\$9.11	\$0.00	\$76.51
	6/1/2028	\$49.25	\$10.15	\$9.50	\$9.11	\$0.00	\$78.01
	12/1/2028	\$50.75	\$10.15	\$9.50	\$9.11	\$0.00	\$79.51

For apprentice rates see "Apprentice- LABORER"

BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY)	12/1/2025	\$41.97	\$10.15	\$9.50	\$9.21	\$0.00	\$70.83
LABORERS	6/1/2026	\$43.41	\$10.15	\$9.50	\$9.21	\$0.00	\$72.27
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$44.85	\$10.15	\$9.50	\$9.21	\$0.00	\$73.71

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

BOILER MAKER	1/1/2024	\$48.12	\$7.07	\$14.60	\$6.00	\$0.00	\$75.79
BOILERMAKERS LOCAL 29							
BOILERMAKERS LOCAL 29							

Apprentice: BOILER MAKER**Effective Date: 1/1/2024**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	65.00	\$31.28	\$7.07	\$9.32	\$3.90	\$0.00	\$51.57
2	65.00	\$31.28	\$7.07	\$9.32	\$3.90	\$0.00	\$51.57
3	70.00	\$33.68	\$7.07	\$10.03	\$4.20	\$0.00	\$54.98

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: BOILER MAKER							
Effective Date: 1/1/2024							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
4	75.00	\$36.09	\$7.07	\$10.74	\$4.50	\$0.00	\$58.40
5	80.00	\$38.50	\$7.07	\$11.45	\$4.80	\$0.00	\$61.82
6	85.00	\$40.90	\$7.07	\$12.18	\$5.10	\$0.00	\$65.25
7	90.00	\$43.31	\$7.07	\$12.88	\$5.40	\$0.00	\$68.66
8	95.00	\$45.71	\$7.07	\$13.62	\$5.70	\$0.00	\$72.10
Apprentice to Journeyworker Ratio: 1:4							
BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)	8/1/2025	\$67.95	\$11.49	\$15.57	\$8.02	\$0.00	\$103.03
BRICKLAYERS LOCAL 3	2/1/2026	\$69.30	\$11.49	\$15.57	\$8.02	\$0.00	\$104.38
BRICKLAYERS LOCAL 3 (NEW BEDFORD)	8/1/2026	\$71.50	\$11.49	\$15.57	\$8.02	\$0.00	\$106.58
	2/1/2027	\$72.90	\$11.49	\$15.57	\$8.02	\$0.00	\$107.98
Apprentice: BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)							
Effective Date: 8/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$33.98	\$11.49	\$15.57	\$8.02	\$0.00	\$69.06
2	60.00	\$40.77	\$11.49	\$15.57	\$8.02	\$0.00	\$75.85
3	70.00	\$47.57	\$11.49	\$15.57	\$8.02	\$0.00	\$82.65
4	80.00	\$54.36	\$11.49	\$15.57	\$8.02	\$0.00	\$89.44
5	90.00	\$61.16	\$11.49	\$15.57	\$8.02	\$0.00	\$96.24
Apprentice: BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)							
Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$34.65	\$11.49	\$15.57	\$8.02	\$0.00	\$69.73
2	60.00	\$41.58	\$11.49	\$15.57	\$8.02	\$0.00	\$76.66
3	70.00	\$48.51	\$11.49	\$15.57	\$8.02	\$0.00	\$83.59
4	80.00	\$55.44	\$11.49	\$15.57	\$8.02	\$0.00	\$90.52
5	90.00	\$62.37	\$11.49	\$15.57	\$8.02	\$0.00	\$97.45
Apprentice to Journeyworker Ratio: 1:5							
BULLDOZER/GRADER/SCRAPER	12/1/2025	\$58.62	\$16.05	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.90	\$16.05	\$13.25	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$61.34	\$16.05	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
CAISSON & UNDERPINNING BOTTOM MAN	12/1/2025	\$49.85	\$10.15	\$9.50	\$9.80	\$0.00	\$79.30
LABORERS	6/1/2026	\$51.40	\$10.15	\$9.50	\$9.80	\$0.00	\$80.85
LABORERS - FOUNDATION AND MARINE	12/1/2026	\$52.90	\$10.15	\$9.50	\$9.80	\$0.00	\$82.35

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING LABORER	12/1/2025	\$48.70	\$10.15	\$9.50	\$9.80	\$0.00	\$78.15
LABORERS	6/1/2026	\$50.25	\$10.15	\$9.50	\$9.80	\$0.00	\$79.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	\$51.75	\$10.15	\$9.50	\$9.80	\$0.00	\$81.20
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING TOP MAN	12/1/2025	\$49.03	\$10.15	\$9.50	\$9.80	\$0.00	\$78.48
LABORERS	6/1/2026	\$50.58	\$10.15	\$9.50	\$9.80	\$0.00	\$80.03
LABORERS - FOUNDATION AND MARINE	12/1/2026	\$52.08	\$10.15	\$9.50	\$9.80	\$0.00	\$81.53
For apprentice rates see "Apprentice- LABORER"							
CARBIDE CORE DRILL OPERATOR	12/1/2025	\$41.47	\$10.15	\$9.50	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.91	\$10.15	\$9.50	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$44.35	\$10.15	\$9.50	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.80	\$10.15	\$9.50	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.25	\$10.15	\$9.50	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.75	\$10.15	\$9.50	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.25	\$10.15	\$9.50	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
CARPENTER	9/1/2025	\$50.35	\$10.33	\$11.47	\$8.50	\$0.00	\$80.65
CARPENTERS	3/1/2026	\$51.60	\$10.33	\$11.47	\$8.50	\$0.00	\$81.90
CARPENTERS -ZONE 2 (Eastern Massachusetts)	9/1/2026	\$52.85	\$10.33	\$11.47	\$8.50	\$0.00	\$83.15
	3/1/2027	\$54.10	\$10.33	\$11.47	\$8.50	\$0.00	\$84.40

Apprentice: CARPENTER**Effective Date: 9/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$22.66	\$10.33	\$0.00	\$1.73	\$0.00	\$34.72
2	45.00	\$22.66	\$10.33	\$0.00	\$1.73	\$0.00	\$34.72
3	55.00	\$27.69	\$10.33	\$0.00	\$3.40	\$0.00	\$41.42
4	55.00	\$27.69	\$10.33	\$0.00	\$3.40	\$0.00	\$41.42
5	70.00	\$35.25	\$10.33	\$11.41	\$5.10	\$0.00	\$62.09
6	70.00	\$35.25	\$10.33	\$11.41	\$5.10	\$0.00	\$62.09
7	80.00	\$40.28	\$10.33	\$11.44	\$6.80	\$0.00	\$68.85
8	80.00	\$40.28	\$10.33	\$11.44	\$6.80	\$0.00	\$68.85

Apprentice: CARPENTER**Effective Date: 3/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$23.22	\$10.33	\$0.00	\$1.73	\$0.00	\$35.28
2	45.00	\$23.22	\$10.33	\$0.00	\$1.73	\$0.00	\$35.28
3	55.00	\$28.38	\$10.33	\$0.00	\$3.40	\$0.00	\$42.11
4	55.00	\$28.38	\$10.33	\$0.00	\$3.40	\$0.00	\$42.11

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: CARPENTER							
Effective Date: 3/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
5	70.00	\$36.12	\$10.33	\$11.41	\$5.10	\$0.00	\$62.96
6	70.00	\$36.12	\$10.33	\$11.41	\$5.10	\$0.00	\$62.96
7	80.00	\$41.28	\$10.33	\$11.44	\$6.80	\$0.00	\$69.85
8	80.00	\$41.28	\$10.33	\$11.44	\$6.80	\$0.00	\$69.85
Apprentice to Journeyworker Ratio: 1:5							
CARPENTER WOOD FRAME	10/1/2025	\$27.75	\$7.02	\$3.80	\$1.00	\$0.00	\$39.57
CARPENTERS	10/1/2026	\$28.85	\$7.02	\$3.80	\$1.00	\$0.00	\$40.67
CARPENTERS-ZONE 3 (Wood Frame)							
All Aspects of New Wood Frame Work							

Apprentice: CARPENTER WOOD FRAME							
Effective Date: 10/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$16.65	\$7.02	\$0.00	\$0.00	\$0.00	\$23.67
2	60.00	\$16.65	\$7.02	\$0.00	\$0.00	\$0.00	\$23.67
3	65.00	\$18.04	\$7.02	\$0.00	\$1.00	\$0.00	\$26.06
4	70.00	\$19.43	\$7.02	\$0.00	\$1.00	\$0.00	\$27.45
5	75.00	\$20.81	\$7.02	\$3.80	\$1.00	\$0.00	\$32.63
6	80.00	\$22.20	\$7.02	\$3.80	\$1.00	\$0.00	\$34.02
7	85.00	\$23.59	\$7.02	\$3.80	\$1.00	\$0.00	\$35.41
8	90.00	\$24.98	\$7.02	\$3.80	\$1.00	\$0.00	\$36.80

Apprentice: CARPENTER WOOD FRAME							
Effective Date: 10/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$17.31	\$7.02	\$0.00	\$0.00	\$0.00	\$24.33
2	60.00	\$17.31	\$7.02	\$0.00	\$0.00	\$0.00	\$24.33
3	65.00	\$18.75	\$7.02	\$0.00	\$1.00	\$0.00	\$26.77
4	70.00	\$20.20	\$7.02	\$0.00	\$1.00	\$0.00	\$28.22
5	75.00	\$21.64	\$7.02	\$3.80	\$1.00	\$0.00	\$33.46
6	80.00	\$23.08	\$7.02	\$3.80	\$1.00	\$0.00	\$34.90
7	85.00	\$24.52	\$7.02	\$3.80	\$1.00	\$0.00	\$36.34
8	90.00	\$25.97	\$7.02	\$3.80	\$1.00	\$0.00	\$37.79

Apprentice to Journeyworker Ratio: 1:5

CEMENT MASONRY/PLASTERING	7/1/2024	\$49.19	\$13.35	\$16.43	\$7.78	\$1.80	\$88.55
BRICKLAYERS LOCAL 3							
BRICKLAYERS LOCAL 3 (NEW BEDFORD)							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: CEMENT MASONRY/PLASTERING Effective Date: 7/1/2024							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.60	\$13.35	\$16.43	\$0.00	\$0.00	\$54.38
2	60.00	\$29.51	\$13.35	\$16.43	\$2.78	\$1.80	\$63.87
3	65.00	\$31.97	\$13.35	\$16.43	\$3.78	\$1.80	\$67.33
4	70.00	\$34.43	\$13.35	\$16.43	\$4.78	\$1.80	\$70.79
5	75.00	\$36.89	\$13.35	\$16.43	\$5.78	\$1.80	\$74.25
6	80.00	\$39.35	\$13.35	\$16.43	\$6.78	\$1.80	\$77.71
7	90.00	\$44.27	\$13.35	\$16.43	\$7.78	\$1.80	\$83.63
Apprentice to Journeyworker Ratio: 1:3							
CHAIN SAW OPERATOR	12/1/2025	\$41.47	\$10.15	\$9.50	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.91	\$10.15	\$9.50	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$44.35	\$10.15	\$9.50	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.80	\$10.15	\$9.50	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.25	\$10.15	\$9.50	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.75	\$10.15	\$9.50	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.25	\$10.15	\$9.50	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES	12/1/2025	\$60.48	\$16.05	\$13.25	\$3.25	\$0.00	\$93.03
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$61.81	\$16.05	\$13.25	\$3.25	\$0.00	\$94.36
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$63.29	\$16.05	\$13.25	\$3.25	\$0.00	\$95.84
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
COMPRESSOR OPERATOR	12/1/2025	\$37.97	\$16.05	\$13.25	\$3.25	\$0.00	\$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$38.83	\$16.05	\$13.25	\$3.25	\$0.00	\$71.38
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$39.78	\$16.05	\$13.25	\$3.25	\$0.00	\$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
DELEADER (BRIDGE)	7/1/2025	\$58.51	\$10.30	\$11.95	\$12.50	\$0.00	\$93.26
PAINTERS LOCAL 35	1/1/2026	\$59.56	\$10.35	\$12.00	\$12.60	\$0.00	\$94.51
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: DELEADER (BRIDGE) Effective Date: 7/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$29.26	\$10.30	\$0.00	\$0.00	\$0.00	\$39.56
2	55.00	\$32.18	\$10.30	\$0.00	\$6.88	\$0.00	\$49.36
3	60.00	\$35.11	\$10.30	\$0.00	\$7.50	\$0.00	\$52.91
4	65.00	\$38.03	\$10.30	\$0.00	\$8.13	\$0.00	\$56.46
5	70.00	\$40.96	\$10.30	\$11.95	\$8.75	\$0.00	\$71.96
6	75.00	\$43.88	\$10.30	\$11.95	\$9.38	\$0.00	\$75.51

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: DELEADER (BRIDGE)							
Effective Date: 7/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
7	80.00	\$46.81	\$10.30	\$11.95	\$10.00	\$0.00	\$79.06
8	90.00	\$52.66	\$10.30	\$11.95	\$11.25	\$0.00	\$86.16
Apprentice: DELEADER (BRIDGE)							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$29.78	\$10.35	\$0.00	\$0.00	\$0.00	\$40.13
2	55.00	\$32.76	\$10.35	\$0.00	\$6.93	\$0.00	\$50.04
3	60.00	\$35.74	\$10.35	\$0.00	\$7.56	\$0.00	\$53.65
4	65.00	\$38.71	\$10.35	\$0.00	\$8.19	\$0.00	\$57.25
5	70.00	\$41.69	\$10.35	\$12.00	\$8.82	\$0.00	\$72.86
6	75.00	\$44.67	\$10.35	\$12.00	\$9.45	\$0.00	\$76.47
7	80.00	\$47.65	\$10.35	\$12.00	\$10.08	\$0.00	\$80.08
8	90.00	\$53.60	\$10.35	\$12.00	\$11.34	\$0.00	\$87.29
Apprentice to Journeyworker Ratio: 1:1							
DEMO: ADZEMAN	12/1/2025	\$48.75	\$10.15	\$9.50	\$9.65	\$0.00	\$78.05
LABORERS	6/1/2026	\$50.30	\$10.15	\$9.50	\$9.65	\$0.00	\$79.60
LABORERS - ZONE 2	12/7/2026	\$51.80	\$10.15	\$9.50	\$9.65	\$0.00	\$81.10
	6/7/2027	\$53.40	\$10.15	\$9.50	\$9.65	\$0.00	\$82.70
	12/6/2027	\$55.00	\$10.15	\$9.50	\$9.65	\$0.00	\$84.30
	6/5/2028	\$56.68	\$10.15	\$9.50	\$9.65	\$0.00	\$85.98
	12/4/2028	\$58.35	\$10.15	\$9.50	\$9.65	\$0.00	\$87.65
For apprentice rates see "Apprentice- LABORER"							
DEMO: BACKHOE/LOADER/HAMMER OPERATOR	12/1/2025	\$49.75	\$10.15	\$9.50	\$9.65	\$0.00	\$79.05
LABORERS	6/1/2026	\$51.30	\$10.15	\$9.50	\$9.65	\$0.00	\$80.60
LABORERS - ZONE 2	12/7/2026	\$52.80	\$10.15	\$9.50	\$9.65	\$0.00	\$82.10
	6/7/2027	\$54.40	\$10.15	\$9.50	\$9.65	\$0.00	\$83.70
	12/6/2027	\$56.00	\$10.15	\$9.50	\$9.65	\$0.00	\$85.30
	6/5/2028	\$57.68	\$10.15	\$9.50	\$9.65	\$0.00	\$86.98
	12/4/2028	\$59.35	\$10.15	\$9.50	\$9.65	\$0.00	\$88.65
For apprentice rates see "Apprentice- LABORER"							
DEMO: BURNERS	12/1/2025	\$49.50	\$10.15	\$9.50	\$9.65	\$0.00	\$78.80
LABORERS	6/1/2026	\$51.05	\$10.15	\$9.50	\$9.65	\$0.00	\$80.35
LABORERS - ZONE 2	12/7/2026	\$52.55	\$10.15	\$9.50	\$9.65	\$0.00	\$81.85
	6/7/2027	\$54.15	\$10.15	\$9.50	\$9.65	\$0.00	\$83.45
	12/6/2027	\$55.75	\$10.15	\$9.50	\$9.65	\$0.00	\$85.05
	6/5/2028	\$57.43	\$10.15	\$9.50	\$9.65	\$0.00	\$86.73
	12/4/2028	\$59.10	\$10.15	\$9.50	\$9.65	\$0.00	\$88.40
For apprentice rates see "Apprentice- LABORER"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
DEMO: CONCRETE CUTTER/SAWYER LABORERS	12/1/2025	\$49.75	\$10.15	\$9.50	\$9.65	\$0.00	\$79.05
LABORERS - ZONE 2	6/1/2026	\$51.30	\$10.15	\$9.50	\$9.65	\$0.00	\$80.60
	12/7/2026	\$52.80	\$10.15	\$9.50	\$9.65	\$0.00	\$82.10
	6/7/2027	\$54.40	\$10.15	\$9.50	\$9.65	\$0.00	\$83.70
	12/6/2027	\$56.00	\$10.15	\$9.50	\$9.65	\$0.00	\$85.30
	6/5/2028	\$57.68	\$10.15	\$9.50	\$9.65	\$0.00	\$86.98
	12/4/2028	\$59.35	\$10.15	\$9.50	\$9.65	\$0.00	\$88.65
For apprentice rates see "Apprentice- LABORER"							
DEMO: JACKHAMMER OPERATOR LABORERS	12/1/2025	\$49.50	\$10.15	\$9.50	\$9.65	\$0.00	\$78.80
LABORERS - ZONE 2	6/1/2026	\$51.05	\$10.15	\$9.50	\$9.65	\$0.00	\$80.35
	12/7/2026	\$52.55	\$10.15	\$9.50	\$9.65	\$0.00	\$81.85
	6/7/2027	\$54.15	\$10.15	\$9.50	\$9.65	\$0.00	\$83.45
	12/6/2027	\$55.75	\$10.15	\$9.50	\$9.65	\$0.00	\$85.05
	6/5/2028	\$57.43	\$10.15	\$9.50	\$9.65	\$0.00	\$86.73
	12/4/2028	\$59.10	\$10.15	\$9.50	\$9.65	\$0.00	\$88.40
For apprentice rates see "Apprentice- LABORER"							
DEMO: WRECKING LABORER LABORERS	12/1/2025	\$48.75	\$10.15	\$9.50	\$9.65	\$0.00	\$78.05
LABORERS - ZONE 2	6/1/2026	\$50.30	\$10.15	\$9.50	\$9.65	\$0.00	\$79.60
	12/7/2026	\$51.80	\$10.15	\$9.50	\$9.65	\$0.00	\$81.10
	6/7/2027	\$53.40	\$10.15	\$9.50	\$9.65	\$0.00	\$82.70
	12/6/2027	\$55.00	\$10.15	\$9.50	\$9.65	\$0.00	\$84.30
	6/5/2028	\$56.68	\$10.15	\$9.50	\$9.65	\$0.00	\$85.98
	12/4/2028	\$58.35	\$10.15	\$9.50	\$9.65	\$0.00	\$87.65
For apprentice rates see "Apprentice- LABORER"							
DIRECTIONAL DRILL MACHINE OPERATOR OPERATING ENGINEERS LOCAL 4	12/1/2025	\$58.62	\$16.05	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.90	\$16.05	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.34	\$16.05	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
DIVER PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 2)	8/1/2024	\$78.11	\$10.08	\$11.62	\$12.67	\$0.00	\$112.48
as of 8-1-24, Apprentices with diving licenses begin at second year. % of Diver wage 70/80/90 2A \$69.83, 3A \$91.79,4A \$102.14 Total Rate							
DIVER TENDER PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 2)	8/1/2024	\$51.97	\$10.08	\$11.62	\$12.67	\$0.00	\$86.34
as of 8-1-24, Apprentices with diving licenses begin at second year. % of Piledriver wage 70/80/90 2A \$54.20, 3A \$73.93,4A \$82.05 Total Rate							
DIVER TENDER (EFFLUENT) PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 2)	8/1/2024	\$83.69	\$10.08	\$11.62	\$12.67	\$0.00	\$118.06
For apprentice rates see "Apprentice- PILE DRIVER"							
DIVER/SLURRY (EFFLUENT) PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 2)	8/1/2024	\$117.16	\$10.08	\$11.62	\$12.67	\$0.00	\$151.53
For apprentice rates see "Apprentice- PILE DRIVER"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
DRAWBRIDGE OPERATOR (Construction)	7/1/2020	\$26.77	\$6.67	\$3.93	\$0.00	\$0.16	\$37.53
DRAWBRIDGE - SEIU LOCAL 888							
DRAWBRIDGE - SEIU LOCAL 888							
ELECTRICIAN	9/1/2025	\$52.25	\$12.25	\$14.86	\$3.75	\$0.00	\$83.11
ELECTRICIANS LOCAL 223	9/1/2026	\$54.72	\$12.50	\$15.56	\$4.00	\$0.00	\$86.78
ELECTRICIANS LOCAL 223							

Apprentice: ELECTRICIAN							
Effective Date: 9/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$20.90	\$12.25	\$0.63	\$0.00	\$0.00	\$33.78
2	45.00	\$23.51	\$12.25	\$0.71	\$0.00	\$0.00	\$36.47
3	50.00	\$26.13	\$12.25	\$0.78	\$0.00	\$0.00	\$39.16
4	55.00	\$28.74	\$12.25	\$6.61	\$2.50	\$0.00	\$50.10
5	60.00	\$31.35	\$12.25	\$7.21	\$2.50	\$0.00	\$53.31
6	65.00	\$33.96	\$12.25	\$7.82	\$2.50	\$0.00	\$56.53
7	70.00	\$36.58	\$12.25	\$8.41	\$2.50	\$0.00	\$59.74
8	75.00	\$39.19	\$12.25	\$9.02	\$2.50	\$0.00	\$62.96

Apprentice: ELECTRICIAN							
Effective Date: 9/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$21.89	\$12.50	\$0.66	\$0.00	\$0.00	\$35.05
2	45.00	\$24.62	\$12.50	\$0.74	\$0.00	\$0.00	\$37.86
3	50.00	\$27.36	\$12.50	\$0.82	\$0.00	\$0.00	\$40.68
4	55.00	\$30.10	\$12.50	\$6.92	\$2.75	\$0.00	\$52.27
5	60.00	\$32.83	\$12.50	\$7.54	\$2.75	\$0.00	\$55.62
6	65.00	\$35.57	\$12.50	\$8.18	\$2.75	\$0.00	\$59.00
7	70.00	\$38.30	\$12.50	\$8.81	\$2.75	\$0.00	\$62.36
8	75.00	\$41.04	\$12.50	\$9.43	\$2.75	\$0.00	\$65.72

Apprentice to Journeyworker Ratio: 2:3

ELEVATOR CONSTRUCTOR	1/1/2025	\$74.17	\$16.28	\$10.96	\$10.40	\$0.00	\$111.81
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2026	\$77.26	\$16.38	\$11.06	\$10.70	\$0.00	\$115.40
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2027	\$80.55	\$16.48	\$11.16	\$11.00	\$0.00	\$119.19

Apprentice: ELEVATOR CONSTRUCTOR							
Effective Date: 1/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$37.09	\$0.00	\$0.00	\$0.00	\$0.00	\$37.09
2	55.00	\$40.79	\$16.28	\$10.96	\$10.40	\$0.00	\$78.43
3	65.00	\$48.21	\$16.28	\$10.96	\$10.40	\$0.00	\$85.85

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: ELEVATOR CONSTRUCTOR Effective Date: 1/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
4	70.00	\$51.92	\$16.28	\$10.96	\$10.40	\$0.00	\$89.56
5	80.00	\$59.34	\$16.28	\$10.96	\$10.40	\$0.00	\$96.98
Apprentice: ELEVATOR CONSTRUCTOR Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$38.63	\$0.00	\$0.00	\$0.00	\$0.00	\$38.63
2	55.00	\$42.49	\$16.38	\$11.06	\$10.70	\$0.00	\$80.63
3	65.00	\$50.22	\$16.38	\$11.06	\$10.70	\$0.00	\$88.36
4	70.00	\$54.08	\$16.38	\$11.06	\$10.70	\$0.00	\$92.22
5	80.00	\$61.81	\$16.38	\$11.06	\$10.70	\$0.00	\$99.95
Apprentice to Journeyworker Ratio: 1:1							
ELEVATOR CONSTRUCTOR HELPER	1/1/2025	\$51.92	\$16.28	\$10.96	\$10.40	\$0.00	\$89.56
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2026	\$54.08	\$16.38	\$11.06	\$10.07	\$0.00	\$91.59
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2027	\$56.39	\$16.48	\$11.16	\$11.00	\$0.00	\$95.03
For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"							
FENCE & GUARD RAIL ERECTOR (HEAVY & HIGHWAY)	12/1/2025	\$41.47	\$10.15	\$9.50	\$9.21	\$0.00	\$70.33
LABORERS	6/1/2026	\$42.91	\$10.15	\$9.50	\$9.21	\$0.00	\$71.77
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$44.35	\$10.15	\$9.50	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY	11/1/2025	\$53.56	\$16.05	\$13.25	\$3.25	\$0.00	\$86.11
OPERATING ENGINEERS LOCAL 4	5/1/2026	\$55.00	\$16.05	\$13.25	\$3.25	\$0.00	\$87.55
OPERATING ENGINEERS LOCAL 4	11/1/2026	\$56.29	\$16.05	\$13.25	\$3.25	\$0.00	\$88.84
	5/1/2027	\$57.72	\$16.05	\$13.25	\$3.25	\$0.00	\$90.27
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY	11/1/2025	\$55.17	\$16.05	\$13.25	\$3.25	\$0.00	\$87.72
OPERATING ENGINEERS LOCAL 4	5/1/2026	\$56.62	\$16.05	\$13.25	\$3.25	\$0.00	\$89.17
OPERATING ENGINEERS LOCAL 4	11/1/2026	\$57.92	\$16.05	\$13.25	\$3.25	\$0.00	\$90.47
	5/1/2027	\$59.37	\$16.05	\$13.25	\$3.25	\$0.00	\$91.92
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY	11/1/2025	\$26.03	\$16.05	\$13.25	\$3.25	\$0.00	\$58.58
OPERATING ENGINEERS LOCAL 4	5/1/2026	\$26.88	\$16.05	\$13.25	\$3.25	\$0.00	\$59.43
OPERATING ENGINEERS LOCAL 4	11/1/2026	\$27.64	\$16.05	\$13.25	\$3.25	\$0.00	\$60.19
	5/1/2027	\$28.49	\$16.05	\$13.25	\$3.25	\$0.00	\$61.04
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIRE ALARM INSTALLER	9/1/2025	\$52.25	\$12.25	\$14.86	\$3.75	\$0.00	\$83.11

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
ELECTRICIANS LOCAL 223	9/1/2026	\$54.72	\$12.50	\$15.56	\$4.00	\$0.00	\$86.78
ELECTRICIANS LOCAL 223							
For apprentice rates see "Apprentice- ELECTRICIAN"							
FIRE ALARM REPAIR / MAINTENANCE	9/1/2025	\$52.25	\$12.25	\$14.86	\$3.75	\$0.00	\$83.11
/ COMMISSIONING	9/1/2026	\$54.72	\$12.50	\$15.56	\$4.00	\$0.00	\$86.78
ELECTRICIANS LOCAL 223							
ELECTRICIANS LOCAL 223							
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"							
FIREMAN (ASST. ENGINEER)	12/1/2025	\$47.69	\$16.05	\$13.25	\$3.25	\$0.00	\$80.24
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$48.75	\$16.05	\$13.25	\$3.25	\$0.00	\$81.30
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$49.93	\$16.05	\$13.25	\$3.25	\$0.00	\$82.48
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FLAGGER & SIGNALER (HEAVY & HIGHWAY)	12/1/2025	\$28.09	\$10.15	\$9.50	\$9.21	\$0.00	\$56.95
LABORERS	6/1/2026	\$29.21	\$10.15	\$9.50	\$9.21	\$0.00	\$58.07
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$29.21	\$10.15	\$9.50	\$9.21	\$0.00	\$58.07
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
FLOORCOVERER	3/1/2024	\$48.93	\$10.33	\$11.47	\$8.80	\$0.00	\$79.53
FLOORCOVERERS LOCAL 2168							
FLOORCOVERERS LOCAL 2168 ZONE II							

Apprentice: FLOORCOVERER**Effective Date: 3/1/2024**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.47	\$10.33	\$0.00	\$1.76	\$0.00	\$36.56
2	55.00	\$26.91	\$10.33	\$0.00	\$1.76	\$0.00	\$39.00
3	60.00	\$29.36	\$10.33	\$0.00	\$3.52	\$0.00	\$43.21
4	65.00	\$31.80	\$10.33	\$0.00	\$3.52	\$0.00	\$45.65
5	70.00	\$34.25	\$10.33	\$11.47	\$5.28	\$0.00	\$61.33
6	75.00	\$36.70	\$10.33	\$11.47	\$5.28	\$0.00	\$63.78
7	80.00	\$39.14	\$10.33	\$11.47	\$7.04	\$0.00	\$67.98
8	85.00	\$41.59	\$10.33	\$11.47	\$7.04	\$0.00	\$70.43

Apprentice Notes

Steps are 750 hrs.

Apprentice to Journeyworker Ratio: 1:1

FORK LIFT/CHERRY PICKER	12/1/2025	\$59.28	\$16.05	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.58	\$16.05	\$13.25	\$3.25	\$0.00	\$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$62.03	\$16.05	\$13.25	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
GENERATOR/LIGHTING PLANT/HEATERS	12/1/2025	\$37.97	\$16.05	\$13.25	\$3.25	\$0.00	\$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$38.83	\$16.05	\$13.25	\$3.25	\$0.00	\$71.38
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$39.78	\$16.05	\$13.25	\$3.25	\$0.00	\$72.33

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)	6/1/2025	\$43.13	\$10.80	\$8.25	\$5.50	\$0.00	\$67.68
GLAZIERS LOCAL 1333	6/1/2026	\$44.73	\$11.20	\$8.40	\$6.05	\$0.00	\$70.38
GLAZIERS LOCAL 1333	6/1/2027	\$46.73	\$11.60	\$8.55	\$6.60	\$0.00	\$73.48
	6/1/2028	\$48.73	\$12.00	\$8.70	\$7.20	\$0.00	\$76.63

Apprentice: GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)

Effective Date: 6/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$21.57	\$10.80	\$8.25	\$5.50	\$0.00	\$46.12
2	56.25	\$24.26	\$10.80	\$8.25	\$5.50	\$0.00	\$48.81
3	62.50	\$26.96	\$10.80	\$8.25	\$5.50	\$0.00	\$51.51
4	68.75	\$29.65	\$10.80	\$8.25	\$5.50	\$0.00	\$54.20
5	75.00	\$32.35	\$10.80	\$8.25	\$5.50	\$0.00	\$56.90
6	81.25	\$35.04	\$10.80	\$8.25	\$5.50	\$0.00	\$59.59
7	87.50	\$37.74	\$10.80	\$8.25	\$5.50	\$0.00	\$62.29
8	93.75	\$40.43	\$10.80	\$8.25	\$5.50	\$0.00	\$64.98

Apprentice: GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$22.37	\$11.20	\$8.40	\$6.05	\$0.00	\$48.02
2	56.25	\$25.16	\$11.20	\$8.40	\$6.05	\$0.00	\$50.81
3	62.50	\$27.96	\$11.20	\$8.40	\$6.05	\$0.00	\$53.61
4	68.75	\$30.75	\$11.20	\$8.40	\$6.05	\$0.00	\$56.40
5	75.00	\$33.55	\$11.20	\$8.40	\$6.05	\$0.00	\$59.20
6	81.25	\$36.34	\$11.20	\$8.40	\$6.05	\$0.00	\$61.99
7	87.50	\$39.14	\$11.20	\$8.40	\$6.05	\$0.00	\$64.79
8	93.75	\$41.93	\$11.20	\$8.40	\$6.05	\$0.00	\$67.58

Apprentice to Journeyworker Ratio: 3:1

HOISTING ENGINEER/CRANES/GRADALLS	12/1/2025	\$59.28	\$16.05	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.58	\$16.05	\$13.25	\$3.25	\$0.00	\$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$62.03	\$16.05	\$13.25	\$3.25	\$0.00	\$94.58

Apprentice: HOISTING ENGINEER/CRANES/GRADALLS

Effective Date: 12/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	\$32.88	\$0.00	\$0.00	\$0.00	\$0.00	\$32.88
2	60.00	\$35.87	\$16.05	\$13.25	\$3.25	\$0.00	\$68.42
3	65.00	\$38.86	\$16.05	\$13.25	\$3.25	\$0.00	\$71.41
4	70.00	\$41.85	\$16.05	\$13.25	\$3.25	\$0.00	\$74.40

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: HOISTING ENGINEER/CRANES/GRADALLS Effective Date: 12/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
5	75.00	\$44.84	\$16.05	\$13.25	\$3.25	\$0.00	\$77.39
6	80.00	\$47.82	\$16.05	\$13.25	\$3.25	\$0.00	\$80.37
7	85.00	\$50.81	\$16.05	\$13.25	\$3.25	\$0.00	\$83.36
8	90.00	\$53.80	\$16.05	\$13.25	\$3.25	\$0.00	\$86.35
Apprentice: HOISTING ENGINEER/CRANES/GRADALLS Effective Date: 6/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	\$33.32	\$0.00	\$0.00	\$0.00	\$0.00	\$33.32
2	60.00	\$36.35	\$16.05	\$13.25	\$3.25	\$0.00	\$68.90
3	65.00	\$39.38	\$16.05	\$13.25	\$3.25	\$0.00	\$71.93
4	70.00	\$42.41	\$16.50	\$13.25	\$3.25	\$0.00	\$75.41
5	75.00	\$45.44	\$16.50	\$13.25	\$3.25	\$0.00	\$78.44
6	80.00	\$48.46	\$16.50	\$13.25	\$3.25	\$0.00	\$81.46
7	85.00	\$51.49	\$16.50	\$13.25	\$3.25	\$0.00	\$84.49
8	90.00	\$54.52	\$16.50	\$13.25	\$3.25	\$0.00	\$87.52
Apprentice to Journeyworker Ratio: 1:6							
HVAC (DUCTWORK)	10/1/2025	\$44.05	\$14.91	\$13.35	\$6.15	\$2.24	\$80.70
SHEETMETAL WORKERS LOCAL 17	4/1/2026	\$45.55	\$14.91	\$13.35	\$6.15	\$2.24	\$82.20
SHEETMETAL WORKERS LOCAL 17 - B							
For apprentice rates see "Apprentice- SHEET METAL WORKER"							
HVAC (ELECTRICAL CONTROLS)	9/1/2025	\$52.25	\$12.25	\$14.86	\$3.75	\$0.00	\$83.11
ELECTRICIANS LOCAL 223	9/1/2026	\$54.72	\$12.50	\$15.56	\$4.00	\$0.00	\$86.78
ELECTRICIANS LOCAL 223							
For apprentice rates see "Apprentice- ELECTRICIAN"							
HVAC (TESTING AND BALANCING - AIR)	10/1/2025	\$44.05	\$14.91	\$13.35	\$6.15	\$2.24	\$80.70
SHEETMETAL WORKERS LOCAL 17	4/1/2026	\$45.55	\$14.91	\$13.35	\$6.15	\$2.24	\$82.20
SHEETMETAL WORKERS LOCAL 17 - B							
For apprentice rates see "Apprentice- SHEET METAL WORKER"							
HVAC (TESTING AND BALANCING -WATER)	8/25/2025	\$55.24	\$10.80	\$16.80	\$4.60	\$0.00	\$87.44
PLUMBERS & PIPEFITTERS LOCAL 51							
PLUMBERS & PIPEFITTERS LOCAL 51							
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
HVAC MECHANIC	8/25/2025	\$55.24	\$10.80	\$16.80	\$4.60	\$0.00	\$87.44
PLUMBERS & PIPEFITTERS LOCAL 51							
PLUMBERS & PIPEFITTERS LOCAL 51							
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
HYDRAULIC DRILLS	12/1/2025	\$41.97	\$10.15	\$9.50	\$9.11	\$0.00	\$70.73

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS	6/1/2026	\$43.41	\$10.15	\$9.50	\$9.11	\$0.00	\$72.17
LABORERS - ZONE 2	12/1/2026	\$44.85	\$10.15	\$9.50	\$9.11	\$0.00	\$73.61
	6/1/2027	\$46.30	\$10.15	\$9.50	\$9.11	\$0.00	\$75.06
	12/1/2027	\$47.75	\$10.15	\$9.50	\$9.11	\$0.00	\$76.51
	6/1/2028	\$49.25	\$10.15	\$9.50	\$9.11	\$0.00	\$78.01
	12/1/2028	\$50.75	\$10.15	\$9.50	\$9.11	\$0.00	\$79.51

For apprentice rates see "Apprentice- LABORER"

HYDRAULIC DRILLS (HEAVY & HIGHWAY)	12/1/2025	\$41.97	\$10.15	\$9.50	\$9.21	\$0.00	\$70.83
LABORERS	6/1/2026	\$43.41	\$10.15	\$9.50	\$9.21	\$0.00	\$72.27
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$44.85	\$10.15	\$9.50	\$9.21	\$0.00	\$73.71

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

INSULATOR (PIPES & TANKS)	9/1/2025	\$60.34	\$14.75	\$9.52	\$10.09	\$0.00	\$94.70
HEAT & FROST INSULATORS LOCAL 6	9/1/2026	\$63.76	\$14.75	\$9.52	\$10.09	\$0.00	\$98.12
HEAT & FROST INSULATORS LOCAL 6 (BOSTON)							

Apprentice: INSULATOR (PIPES & TANKS)**Effective Date: 9/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$30.17	\$14.75	\$9.27	\$5.05	\$0.00	\$59.24
2	60.00	\$36.20	\$14.75	\$9.32	\$6.05	\$0.00	\$66.32
3	70.00	\$42.24	\$14.75	\$9.37	\$7.06	\$0.00	\$73.42
4	80.00	\$48.27	\$14.75	\$9.42	\$8.07	\$0.00	\$80.51

Apprentice: INSULATOR (PIPES & TANKS)**Effective Date: 9/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$31.88	\$14.75	\$9.27	\$5.05	\$0.00	\$60.95
2	60.00	\$38.26	\$14.75	\$9.32	\$6.05	\$0.00	\$68.38
3	70.00	\$44.63	\$14.75	\$9.37	\$7.06	\$0.00	\$75.81
4	80.00	\$51.01	\$14.75	\$9.42	\$8.07	\$0.00	\$83.25

Apprentice to Journeyworker Ratio: 1:4

IRONWORKER/WELDER	3/16/2021	\$42.46	\$7.70	\$12.10	\$5.00	\$0.00	\$67.26
IRONWORKERS LOCAL 37							
IRONWORKERS LOCAL 37							

Apprentice: IRONWORKER/WELDER**Effective Date: 3/16/2021**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	70.00	\$29.72	\$7.70	\$12.10	\$5.00	\$0.00	\$54.52
2	75.00	\$31.85	\$7.70	\$12.10	\$5.00	\$0.00	\$56.65

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: IRONWORKER/WELDER Effective Date: 3/16/2021							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
3	80.00	\$33.97	\$7.70	\$12.10	\$5.00	\$0.00	\$58.77
4	85.00	\$36.09	\$7.70	\$12.10	\$5.00	\$0.00	\$60.89
5	90.00	\$38.21	\$7.70	\$12.10	\$5.00	\$0.00	\$63.01
6	95.00	\$40.34	\$7.70	\$12.10	\$5.00	\$0.00	\$65.14
Apprentice to Journeyworker Ratio: 1:4							
JACKHAMMER & PAVING BREAKER OPERATOR	12/1/2025	\$41.47	\$10.15	\$9.50	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.91	\$10.15	\$9.50	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$44.35	\$10.15	\$9.50	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.80	\$10.15	\$9.50	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.25	\$10.15	\$9.50	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.75	\$10.15	\$9.50	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.25	\$10.15	\$9.50	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
LABORER	12/1/2025	\$41.22	\$10.15	\$9.50	\$9.11	\$0.00	\$69.98
LABORERS	6/1/2026	\$42.66	\$10.15	\$9.50	\$9.11	\$0.00	\$71.42
LABORERS - ZONE 2	12/1/2026	\$44.10	\$10.15	\$9.50	\$9.11	\$0.00	\$72.86
	6/1/2027	\$45.55	\$10.15	\$9.50	\$9.11	\$0.00	\$74.31
	12/1/2027	\$47.00	\$10.15	\$9.50	\$9.11	\$0.00	\$75.76
	6/1/2028	\$48.50	\$10.15	\$9.50	\$9.11	\$0.00	\$77.26
	12/1/2028	\$50.00	\$10.15	\$9.50	\$9.11	\$0.00	\$78.76
Apprentice: LABORER Effective Date: 12/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$25.03	\$10.15	\$9.50	\$9.11	\$0.00	\$53.79
2	70.00	\$29.20	\$10.15	\$9.50	\$9.11	\$0.00	\$57.96
3	80.00	\$33.38	\$10.15	\$9.50	\$9.11	\$0.00	\$62.14
4	90.00	\$37.55	\$10.15	\$9.50	\$9.11	\$0.00	\$66.31
Apprentice: LABORER Effective Date: 6/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$25.60	\$10.15	\$9.50	\$9.11	\$0.00	\$54.36
2	70.00	\$29.86	\$10.15	\$9.50	\$9.11	\$0.00	\$58.62
3	80.00	\$34.13	\$10.15	\$9.50	\$9.11	\$0.00	\$62.89
4	90.00	\$38.39	\$10.15	\$9.50	\$9.11	\$0.00	\$67.15
Apprentice to Journeyworker Ratio: 1:5							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORER (HEAVY & HIGHWAY)	12/1/2025	\$41.22	\$10.15	\$9.50	\$9.21	\$0.00	\$70.08
LABORERS	6/1/2026	\$42.66	\$10.15	\$9.50	\$9.21	\$0.00	\$71.52
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$44.10	\$10.15	\$9.50	\$9.21	\$0.00	\$72.96

Apprentice: LABORER (HEAVY & HIGHWAY)

Effective Date: 12/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$25.03	\$9.90	\$9.25	\$9.21	\$0.00	\$53.39
2	70.00	\$29.20	\$9.90	\$9.25	\$9.21	\$0.00	\$57.56
3	80.00	\$33.38	\$9.90	\$9.25	\$9.21	\$0.00	\$61.74
4	90.00	\$37.55	\$9.90	\$9.25	\$9.21	\$0.00	\$65.91

Apprentice: LABORER (HEAVY & HIGHWAY)

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$25.60	\$10.15	\$9.50	\$9.21	\$0.00	\$54.46
2	70.00	\$29.86	\$10.15	\$9.50	\$9.21	\$0.00	\$58.72
3	80.00	\$34.13	\$10.15	\$9.50	\$9.21	\$0.00	\$62.99
4	90.00	\$38.39	\$10.15	\$9.50	\$9.10	\$0.00	\$67.14

Apprentice to Journeyworker Ratio: 1:5

LABORER: CARPENTER TENDER	12/1/2025	\$41.22	\$10.15	\$9.50	\$9.11	\$0.00	\$69.98
LABORERS	6/1/2026	\$42.66	\$10.15	\$9.50	\$9.11	\$0.00	\$71.42
LABORERS - ZONE 2	12/1/2026	\$44.10	\$10.15	\$9.50	\$9.11	\$0.00	\$72.86
	6/1/2027	\$45.55	\$10.15	\$9.50	\$9.11	\$0.00	\$74.31
	12/1/2027	\$47.00	\$10.15	\$9.50	\$9.11	\$0.00	\$75.76
	6/1/2028	\$48.50	\$10.15	\$9.50	\$9.11	\$0.00	\$77.26
	12/1/2028	\$50.00	\$10.15	\$9.50	\$9.11	\$0.00	\$78.76

For apprentice rates see "Apprentice- LABORER"

LABORER: CEMENT FINISHER TENDER	12/1/2025	\$41.22	\$10.15	\$9.50	\$9.11	\$0.00	\$69.98
LABORERS	6/1/2026	\$42.66	\$10.15	\$9.50	\$9.11	\$0.00	\$71.42
LABORERS - ZONE 2	12/1/2026	\$44.10	\$10.15	\$9.50	\$9.11	\$0.00	\$72.86
	6/1/2027	\$45.55	\$10.15	\$9.50	\$9.11	\$0.00	\$74.31
	12/1/2027	\$47.00	\$10.15	\$9.50	\$9.11	\$0.00	\$75.76
	6/1/2028	\$48.50	\$10.15	\$9.50	\$9.11	\$0.00	\$77.26
	12/1/2028	\$50.00	\$10.15	\$9.50	\$9.11	\$0.00	\$78.76

For apprentice rates see "Apprentice- LABORER"

LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER	12/1/2025	\$41.31	\$10.15	\$9.50	\$9.65	\$0.00	\$70.61
LABORERS	6/1/2026	\$42.75	\$10.15	\$9.50	\$9.65	\$0.00	\$72.05
LABORERS - ZONE 2	12/7/2026	\$44.19	\$10.15	\$9.50	\$9.65	\$0.00	\$73.49
	6/7/2027	\$45.64	\$10.15	\$9.50	\$9.65	\$0.00	\$74.94
	12/6/2027	\$47.09	\$10.15	\$9.50	\$9.65	\$0.00	\$76.39
	6/5/2028	\$48.59	\$10.15	\$9.50	\$9.65	\$0.00	\$77.89

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/4/2028	\$50.09	\$10.15	\$9.50	\$9.65	\$0.00	\$79.39
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER	12/1/2025	\$41.47	\$10.15	\$9.50	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.91	\$10.15	\$9.50	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$44.35	\$10.15	\$9.50	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.80	\$10.15	\$9.50	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.25	\$10.15	\$9.50	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.75	\$10.15	\$9.50	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.25	\$10.15	\$9.50	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER (HEAVY & HIGHWAY)	12/1/2025	\$41.47	\$10.15	\$9.50	\$9.21	\$0.00	\$70.33
LABORERS	6/1/2026	\$42.91	\$10.15	\$9.50	\$9.21	\$0.00	\$71.77
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$44.35	\$10.15	\$9.50	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
LABORER: MULTI-TRADE TENDER	12/1/2025	\$41.22	\$10.15	\$9.50	\$9.11	\$0.00	\$69.98
LABORERS	6/1/2026	\$42.66	\$10.15	\$9.50	\$9.11	\$0.00	\$71.42
LABORERS - ZONE 2	12/1/2026	\$44.10	\$10.15	\$9.50	\$9.11	\$0.00	\$72.86
	6/1/2027	\$45.55	\$10.15	\$9.50	\$9.11	\$0.00	\$74.31
	12/1/2027	\$47.00	\$10.15	\$9.50	\$9.11	\$0.00	\$75.76
	6/1/2028	\$48.50	\$10.15	\$9.50	\$9.11	\$0.00	\$77.26
	12/1/2028	\$50.00	\$10.15	\$9.50	\$9.11	\$0.00	\$78.76
For apprentice rates see "Apprentice- LABORER"							
LABORER: TREE REMOVER	12/1/2025	\$41.22	\$10.15	\$9.50	\$9.11	\$0.00	\$69.98
LABORERS	6/1/2026	\$42.66	\$10.15	\$9.50	\$9.11	\$0.00	\$71.42
LABORERS - ZONE 2	12/1/2026	\$44.10	\$10.15	\$9.50	\$9.11	\$0.00	\$72.86
	6/1/2027	\$45.55	\$10.15	\$9.50	\$9.11	\$0.00	\$74.31
	12/1/2027	\$47.00	\$10.15	\$9.50	\$9.11	\$0.00	\$75.76
	6/1/2028	\$48.50	\$10.15	\$9.50	\$9.11	\$0.00	\$77.26
	12/1/2028	\$50.00	\$10.15	\$9.50	\$9.11	\$0.00	\$78.76
This classification applies to the removal of standing trees, and the trimming and removal of branches and limbs when related to public works construction or site clearance incidental to construction . For apprentice rates see "Apprentice- LABORER"							
LASER BEAM OPERATOR	12/1/2025	\$41.47	\$10.15	\$9.50	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.91	\$10.15	\$9.50	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$44.35	\$10.15	\$9.50	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.80	\$10.15	\$9.50	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.25	\$10.15	\$9.50	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.75	\$10.15	\$9.50	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.25	\$10.15	\$9.50	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
LASER BEAM OPERATOR (HEAVY & HIGHWAY)	12/1/2025	\$41.47	\$10.15	\$9.50	\$9.21	\$0.00	\$70.33
LABORERS	6/1/2026	\$42.91	\$10.15	\$9.50	\$9.21	\$0.00	\$71.77
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$44.35	\$10.15	\$9.50	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
MARBLE & TILE FINISHERS	8/1/2025	\$52.08	\$11.49	\$15.57	\$6.05	\$0.00	\$85.19

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
BRICKLAYERS LOCAL 3	2/1/2026	\$53.16	\$11.49	\$15.57	\$6.05	\$0.00	\$86.27
BRICKLAYERS LOCAL 3 - MARBLE & TILE	8/1/2026	\$54.92	\$11.49	\$15.57	\$6.05	\$0.00	\$88.03
	2/1/2027	\$56.04	\$11.49	\$15.57	\$6.05	\$0.00	\$89.15

Apprentice: MARBLE & TILE FINISHERS							
Effective Date: 8/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.04	\$11.49	\$15.57	\$6.05	\$0.00	\$59.15
2	60.00	\$31.25	\$11.49	\$15.57	\$6.05	\$0.00	\$64.36
3	70.00	\$36.46	\$11.49	\$15.57	\$6.05	\$0.00	\$69.57
4	80.00	\$41.66	\$11.49	\$15.57	\$6.05	\$0.00	\$74.77
5	90.00	\$46.87	\$11.49	\$15.57	\$6.05	\$0.00	\$79.98

Apprentice: MARBLE & TILE FINISHERS							
Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.58	\$11.49	\$15.57	\$6.05	\$0.00	\$59.69
2	60.00	\$31.90	\$11.49	\$15.57	\$6.05	\$0.00	\$65.01
3	70.00	\$37.21	\$11.49	\$15.57	\$6.05	\$0.00	\$70.32
4	80.00	\$42.53	\$11.49	\$15.57	\$6.05	\$0.00	\$75.64
5	90.00	\$47.84	\$11.49	\$15.57	\$6.05	\$0.00	\$80.95

Apprentice to Journeyworker Ratio: 1:5

MARBLE MASONS,TILELAYERS & TERRAZZO MECH	8/1/2025	\$67.97	\$11.49	\$15.57	\$7.99	\$0.00	\$103.02
BRICKLAYERS LOCAL 3	2/1/2026	\$69.32	\$11.49	\$15.57	\$7.99	\$0.00	\$104.37
BRICKLAYERS LOCAL 3 - MARBLE & TILE	8/1/2026	\$71.52	\$11.49	\$15.57	\$7.99	\$0.00	\$106.57
	2/1/2027	\$72.92	\$11.49	\$15.57	\$7.99	\$0.00	\$107.97

Apprentice: MARBLE MASONS,TILELAYERS & TERRAZZO MECH							
Effective Date: 8/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$33.99	\$11.49	\$15.57	\$7.99	\$0.00	\$69.04
2	60.00	\$40.78	\$11.49	\$15.57	\$7.99	\$0.00	\$75.83
3	70.00	\$47.58	\$11.49	\$15.57	\$7.99	\$0.00	\$82.63
4	80.00	\$54.38	\$11.49	\$15.57	\$7.99	\$0.00	\$89.43
5	90.00	\$61.17	\$11.49	\$15.57	\$7.99	\$0.00	\$96.22

Apprentice: MARBLE MASONS,TILELAYERS & TERRAZZO MECH							
Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: MARBLE MASONS, TILELAYERS & TERRAZZO MECH Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$34.66	\$11.49	\$15.57	\$7.99	\$0.00	\$69.71
2	60.00	\$41.59	\$11.49	\$15.57	\$7.99	\$0.00	\$76.64
3	70.00	\$48.52	\$11.49	\$15.57	\$7.99	\$0.00	\$83.57
4	80.00	\$55.46	\$11.49	\$15.57	\$7.99	\$0.00	\$90.51
5	90.00	\$62.39	\$11.49	\$15.57	\$7.99	\$0.00	\$97.44
Apprentice to Journeyworker Ratio: 1:5							
MECH. SWEEPER OPERATOR (ON CONST. SITES)	12/1/2025	\$58.62	\$16.05	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.90	\$16.05	\$13.25	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$61.34	\$16.05	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
MECHANICS MAINTENANCE	12/1/2025	\$58.62	\$16.05	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.90	\$16.05	\$13.25	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$61.34	\$16.05	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
MILLWRIGHT (Zone 2)	1/6/2025	\$45.03	\$10.08	\$11.47	\$10.00	\$0.00	\$76.58
MILLWRIGHTS LOCAL 1121	1/5/2026	\$47.36	\$10.08	\$11.47	\$10.00	\$0.00	\$78.91
MILLWRIGHTS LOCAL 1121 - Zone 2							

Apprentice: MILLWRIGHT (Zone 2)							
Effective Date: 1/6/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	\$24.77	\$10.08	\$0.00	\$5.50	\$0.00	\$40.35
2	65.00	\$29.27	\$10.08	\$0.00	\$6.50	\$0.00	\$45.85
3	75.00	\$33.77	\$10.08	\$11.47	\$7.50	\$0.00	\$62.82
4	85.00	\$38.28	\$10.08	\$11.47	\$8.50	\$0.00	\$68.33

Apprentice: MILLWRIGHT (Zone 2)							
Effective Date: 1/5/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	\$26.05	\$10.08	\$0.00	\$5.50	\$0.00	\$41.63
2	65.00	\$30.78	\$10.08	\$0.00	\$6.50	\$0.00	\$47.36
3	75.00	\$35.52	\$10.08	\$11.47	\$7.50	\$0.00	\$64.57
4	85.00	\$40.26	\$10.08	\$11.47	\$8.50	\$0.00	\$70.31

Apprentice Notes

Step 1&2 Appr. indentured after 1/6/2020 receive no pension,

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice to Journeyworker Ratio: 1:4							
MORTAR MIXER	12/1/2025	\$41.47	\$10.15	\$9.50	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.91	\$10.15	\$9.50	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$44.35	\$10.15	\$9.50	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.80	\$10.15	\$9.50	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.25	\$10.15	\$9.50	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.75	\$10.15	\$9.50	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.25	\$10.15	\$9.50	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
OILER (OTHER THAN TRUCK CRANES,GRADALLS)	12/1/2025	\$25.68	\$16.05	\$13.25	\$3.25	\$0.00	\$58.23
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$26.27	\$16.05	\$13.25	\$3.25	\$0.00	\$58.82
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$26.94	\$16.05	\$13.25	\$3.25	\$0.00	\$59.49
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
OILER (TRUCK CRANES, GRADALLS)	12/1/2025	\$31.65	\$16.05	\$13.25	\$3.25	\$0.00	\$64.20
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$32.37	\$16.05	\$13.25	\$3.25	\$0.00	\$64.92
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$33.17	\$16.05	\$13.25	\$3.25	\$0.00	\$65.72
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
OTHER POWER DRIVEN EQUIPMENT - CLASS II	12/1/2025	\$58.62	\$16.05	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.90	\$16.05	\$13.25	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$61.34	\$16.05	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PAINTER (BRIDGES/TANKS)	7/1/2025	\$58.51	\$10.30	\$11.95	\$12.50	\$0.00	\$93.26
PAINTERS LOCAL 35	1/1/2026	\$59.56	\$10.35	\$12.00	\$12.50	\$0.00	\$94.41
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER (BRIDGES/TANKS)							
Effective Date: 7/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$29.26	\$10.30	\$0.00	\$0.00	\$0.00	\$39.56
2	55.00	\$32.18	\$10.30	\$0.00	\$6.88	\$0.00	\$49.36
3	60.00	\$35.11	\$10.30	\$0.00	\$7.50	\$0.00	\$52.91
4	65.00	\$38.03	\$10.30	\$0.00	\$8.13	\$0.00	\$56.46
5	70.00	\$40.96	\$10.30	\$11.95	\$8.75	\$0.00	\$71.96
6	75.00	\$43.88	\$10.30	\$11.95	\$9.38	\$0.00	\$75.51
7	80.00	\$46.81	\$10.30	\$11.95	\$10.00	\$0.00	\$79.06
8	90.00	\$52.66	\$10.30	\$11.95	\$11.25	\$0.00	\$86.16

Apprentice: PAINTER (BRIDGES/TANKS)							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: PAINTER (BRIDGES/TANKS)							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$29.78	\$10.35	\$0.00	\$0.00	\$0.00	\$40.13
2	55.00	\$32.76	\$10.35	\$0.00	\$6.93	\$0.00	\$50.04
3	60.00	\$35.74	\$10.35	\$0.00	\$7.56	\$0.00	\$53.65
4	65.00	\$38.71	\$10.35	\$0.00	\$8.19	\$0.00	\$57.25
5	70.00	\$41.69	\$10.35	\$12.00	\$8.82	\$0.00	\$72.86
6	75.00	\$44.67	\$10.35	\$12.00	\$9.45	\$0.00	\$76.47
7	80.00	\$47.65	\$10.35	\$12.00	\$10.08	\$0.00	\$80.08
8	90.00	\$53.60	\$10.35	\$12.00	\$11.34	\$0.00	\$87.29

Apprentice to Journeyworker Ratio: 1:1

PAINTER (SPRAY OR SANDBLAST, NEW) *	7/1/2025	\$49.41	\$10.30	\$11.95	\$12.50	\$0.00	\$84.16
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used.	1/1/2026	\$50.46	\$10.35	\$12.00	\$12.60	\$0.00	\$85.41
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER (SPRAY OR SANDBLAST, NEW) *							
Effective Date: 7/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.71	\$10.30	\$0.00	\$0.00	\$0.00	\$35.01
2	55.00	\$27.18	\$10.30	\$0.00	\$6.88	\$0.00	\$44.36
3	60.00	\$29.65	\$10.30	\$0.00	\$7.50	\$0.00	\$47.45
4	65.00	\$32.12	\$10.30	\$0.00	\$8.13	\$0.00	\$50.55
5	70.00	\$34.59	\$10.30	\$11.95	\$8.75	\$0.00	\$65.59
6	75.00	\$37.06	\$10.30	\$11.95	\$9.38	\$0.00	\$68.69
7	80.00	\$39.53	\$10.30	\$11.95	\$10.00	\$0.00	\$71.78
8	90.00	\$44.47	\$10.30	\$11.95	\$11.25	\$0.00	\$77.97

Apprentice: PAINTER (SPRAY OR SANDBLAST, NEW) *							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$25.23	\$10.35	\$0.00	\$0.00	\$0.00	\$35.58
2	55.00	\$27.75	\$10.35	\$0.00	\$6.93	\$0.00	\$45.03
3	60.00	\$30.28	\$10.35	\$0.00	\$7.56	\$0.00	\$48.19
4	65.00	\$32.80	\$10.35	\$0.00	\$8.19	\$0.00	\$51.34
5	70.00	\$35.32	\$10.35	\$12.00	\$8.82	\$0.00	\$66.49
6	75.00	\$37.85	\$10.35	\$12.00	\$9.45	\$0.00	\$69.65
7	80.00	\$40.37	\$10.35	\$12.00	\$10.08	\$0.00	\$72.80
8	90.00	\$45.41	\$10.35	\$12.00	\$11.34	\$0.00	\$79.10

Apprentice to Journeyworker Ratio: 1:1

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
PAINTER (SPRAY OR SANDBLAST, REPAINT)	7/1/2025	\$47.47	\$10.30	\$11.95	\$12.50	\$0.00	\$82.22
PAINTERS LOCAL 35	1/1/2026	\$48.52	\$10.35	\$12.00	\$12.60	\$0.00	\$83.47
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER (SPRAY OR SANDBLAST, REPAINT)							
Effective Date: 7/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$23.74	\$10.30	\$0.00	\$0.00	\$0.00	\$34.04
2	55.00	\$26.11	\$10.30	\$0.00	\$6.88	\$0.00	\$43.29
3	60.00	\$28.48	\$10.30	\$0.00	\$7.50	\$0.00	\$46.28
4	65.00	\$30.86	\$10.30	\$0.00	\$8.13	\$0.00	\$49.29
5	70.00	\$33.23	\$10.30	\$11.95	\$8.75	\$0.00	\$64.23
6	75.00	\$35.60	\$10.30	\$11.95	\$9.38	\$0.00	\$67.23
7	80.00	\$37.98	\$10.30	\$11.95	\$10.00	\$0.00	\$70.23
8	90.00	\$42.72	\$10.30	\$11.95	\$11.25	\$0.00	\$76.22

Apprentice: PAINTER (SPRAY OR SANDBLAST, REPAINT)							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.26	\$10.35	\$0.00	\$0.00	\$0.00	\$34.61
2	55.00	\$26.69	\$10.35	\$0.00	\$6.93	\$0.00	\$43.97
3	60.00	\$29.11	\$10.35	\$0.00	\$7.56	\$0.00	\$47.02
4	65.00	\$31.54	\$10.35	\$0.00	\$8.19	\$0.00	\$50.08
5	70.00	\$33.96	\$10.35	\$12.00	\$8.82	\$0.00	\$65.13
6	75.00	\$36.39	\$10.35	\$12.00	\$9.45	\$0.00	\$68.19
7	80.00	\$38.82	\$10.35	\$12.00	\$10.08	\$0.00	\$71.25
8	90.00	\$43.67	\$10.35	\$12.00	\$11.34	\$0.00	\$77.36

Apprentice to Journeyworker Ratio: 1:1

PAINTER / TAPER (BRUSH, NEW) *	7/1/2025	\$48.01	\$10.30	\$11.95	\$12.50	\$0.00	\$82.76
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used.	1/1/2026	\$49.06	\$10.35	\$12.00	\$12.60	\$0.00	\$84.01
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER / TAPER (BRUSH, NEW) *							
Effective Date: 7/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.01	\$10.30	\$0.00	\$0.00	\$0.00	\$34.31
2	55.00	\$26.41	\$10.30	\$0.00	\$6.88	\$0.00	\$43.59
3	60.00	\$28.81	\$10.30	\$0.00	\$7.50	\$0.00	\$46.61
4	65.00	\$31.21	\$10.30	\$0.00	\$8.13	\$0.00	\$49.64
5	70.00	\$33.61	\$10.30	\$11.95	\$8.75	\$0.00	\$64.61
6	75.00	\$36.01	\$10.30	\$11.95	\$9.38	\$0.00	\$67.64

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: PAINTER / TAPER (BRUSH, NEW) *							
Effective Date: 7/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
7	80.00	\$38.41	\$10.30	\$11.95	\$10.00	\$0.00	\$70.66
8	90.00	\$43.21	\$10.30	\$11.95	\$11.25	\$0.00	\$76.71
Apprentice: PAINTER / TAPER (BRUSH, NEW) *							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.53	\$10.35	\$0.00	\$0.00	\$0.00	\$34.88
2	55.00	\$26.98	\$10.35	\$0.00	\$6.93	\$0.00	\$44.26
3	60.00	\$29.44	\$10.35	\$0.00	\$7.56	\$0.00	\$47.35
4	65.00	\$31.89	\$10.35	\$0.00	\$8.19	\$0.00	\$50.43
5	70.00	\$34.34	\$10.35	\$12.00	\$8.82	\$0.00	\$65.51
6	75.00	\$36.80	\$10.35	\$12.00	\$9.45	\$0.00	\$68.60
7	80.00	\$39.25	\$10.35	\$12.00	\$10.08	\$0.00	\$71.68
8	90.00	\$44.15	\$10.35	\$12.00	\$11.34	\$0.00	\$77.84
Apprentice to Journeyworker Ratio: 1:1							
PAINTER / TAPER (BRUSH, REPAINT)	7/1/2025	\$46.07	\$10.30	\$11.95	\$12.50	\$0.00	\$80.82
PAINTERS LOCAL 35	1/1/2026	\$47.12	\$10.35	\$12.00	\$12.60	\$0.00	\$82.07
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER / TAPER (BRUSH, REPAINT)							
Effective Date: 7/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$23.04	\$10.30	\$0.00	\$0.00	\$0.00	\$33.34
2	55.00	\$25.34	\$10.30	\$0.00	\$6.88	\$0.00	\$42.52
3	60.00	\$27.64	\$10.30	\$0.00	\$7.50	\$0.00	\$45.44
4	65.00	\$29.95	\$10.30	\$0.00	\$8.13	\$0.00	\$48.38
5	70.00	\$32.25	\$10.30	\$11.95	\$8.75	\$0.00	\$63.25
6	75.00	\$34.55	\$10.30	\$11.95	\$9.38	\$0.00	\$66.18
7	80.00	\$36.86	\$10.30	\$11.95	\$10.00	\$0.00	\$69.11
8	90.00	\$41.46	\$10.30	\$11.95	\$11.25	\$0.00	\$74.96

Apprentice: PAINTER / TAPER (BRUSH, REPAINT)							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$23.56	\$10.35	\$0.00	\$0.00	\$0.00	\$33.91
2	55.00	\$25.92	\$10.35	\$0.00	\$6.93	\$0.00	\$43.20

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: PAINTER / TAPER (BRUSH, REPAINT)							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
3	60.00	\$28.27	\$10.35	\$0.00	\$7.56	\$0.00	\$46.18
4	65.00	\$30.63	\$10.35	\$0.00	\$8.19	\$0.00	\$49.17
5	70.00	\$32.98	\$10.35	\$12.00	\$8.82	\$0.00	\$64.15
6	75.00	\$35.34	\$10.35	\$12.00	\$9.45	\$0.00	\$67.14
7	80.00	\$37.70	\$10.35	\$12.00	\$10.08	\$0.00	\$70.13
8	90.00	\$42.41	\$10.35	\$12.00	\$11.34	\$0.00	\$76.10

Apprentice to Journeyworker Ratio: 1:1

PAINTER TRAFFIC MARKINGS (HEAVY/HIGHWAY)	12/1/2025	\$41.22	\$10.15	\$9.50	\$9.21	\$0.00	\$70.08
LABORERS	6/1/2026	\$42.66	\$10.15	\$9.50	\$9.21	\$0.00	\$71.52
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$44.10	\$10.15	\$9.50	\$9.21	\$0.00	\$72.96

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

PANEL & PICKUP TRUCKS DRIVER	12/1/2025	\$40.78	\$15.57	\$21.78	\$0.00	\$0.00	\$78.13
TEAMSTERS JOINT COUNCIL NO. 10	1/1/2026	\$40.78	\$16.17	\$21.78	\$0.00	\$0.00	\$78.73
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	6/1/2026	\$41.78	\$16.17	\$21.78	\$0.00	\$0.00	\$79.73
	12/1/2026	\$41.78	\$16.17	\$23.52	\$0.00	\$0.00	\$81.47
	1/1/2027	\$41.78	\$16.77	\$23.52	\$0.00	\$0.00	\$82.07

PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK)	8/1/2024	\$51.97	\$10.08	\$11.62	\$12.67	\$0.00	\$86.34
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 2)							

For apprentice rates see "Apprentice- PILE DRIVER"

PILE DRIVER	8/1/2024	\$51.97	\$10.08	\$11.62	\$12.67	\$0.00	\$86.34
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 2)							

Apprentice: PILE DRIVER							
Effective Date: 8/1/2024							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$23.39	\$10.08	\$0.00	\$2.53	\$0.00	\$36.00
2	55.00	\$28.58	\$10.08	\$0.00	\$5.07	\$0.00	\$43.73
3	70.00	\$36.38	\$10.08	\$11.62	\$7.60	\$0.00	\$65.68
4	80.00	\$41.58	\$10.08	\$11.62	\$10.14	\$0.00	\$73.42

Apprentice to Journeyworker Ratio: 1:5

PIPELAYER	12/1/2025	\$41.47	\$10.15	\$9.50	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.91	\$10.15	\$9.50	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$44.35	\$10.15	\$9.50	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.80	\$10.15	\$9.50	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.25	\$10.15	\$9.50	\$9.11	\$0.00	\$76.01

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	6/1/2028	\$48.75	\$10.15	\$9.50	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.25	\$10.15	\$9.50	\$9.11	\$0.00	\$79.01

For apprentice rates see "Apprentice- LABORER"

PIPELAYER (HEAVY & HIGHWAY)	12/1/2025	\$41.47	\$10.15	\$9.50	\$9.21	\$0.00	\$70.33
LABORERS	6/1/2026	\$42.91	\$10.15	\$9.50	\$9.21	\$0.00	\$71.77
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$44.35	\$10.15	\$9.50	\$9.21	\$0.00	\$73.21

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

PLUMBER & PIPEFITTER	8/25/2025	\$55.24	\$10.80	\$16.80	\$4.60	\$0.00	\$87.44
PLUMBERS & PIPEFITTERS LOCAL 51							
PLUMBERS & PIPEFITTERS LOCAL 51							

Apprentice: PLUMBER & PIPEFITTER**Effective Date: 8/25/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$22.10	\$10.15	\$2.50	\$0.00	\$0.00	\$34.75
2	50.00	\$27.62	\$10.15	\$2.50	\$0.00	\$0.00	\$40.27
3	60.00	\$33.14	\$10.15	\$8.40	\$0.50	\$0.00	\$52.19
4	70.00	\$38.67	\$10.15	\$13.44	\$0.80	\$0.00	\$63.06
5	80.00	\$44.19	\$10.15	\$16.80	\$1.00	\$0.00	\$72.14

Apprentice to Journeyworker Ratio: 1:3

PNEUMATIC CONTROLS (TEMP.)	8/25/2025	\$55.24	\$10.80	\$16.80	\$4.60	\$0.00	\$87.44
PLUMBERS & PIPEFITTERS LOCAL 51							
PLUMBERS & PIPEFITTERS LOCAL 51							

For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"

PNEUMATIC DRILL/TOOL OPERATOR	12/1/2025	\$41.47	\$10.15	\$9.50	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.91	\$10.15	\$9.50	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$44.35	\$10.15	\$9.50	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.80	\$10.15	\$9.50	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.25	\$10.15	\$9.50	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.75	\$10.15	\$9.50	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.25	\$10.15	\$9.50	\$9.11	\$0.00	\$79.01

For apprentice rates see "Apprentice- LABORER"

PNEUMATIC DRILL/TOOL OPERATOR (HEAVY & HIGHWAY)	12/1/2025	\$41.47	\$10.15	\$9.50	\$9.21	\$0.00	\$70.33
LABORERS	6/1/2026	\$42.91	\$10.15	\$9.50	\$9.21	\$0.00	\$71.77
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$44.35	\$10.15	\$9.50	\$9.21	\$0.00	\$73.21

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

POWDERMAN & BLASTER	12/1/2025	\$42.22	\$10.15	\$9.50	\$9.11	\$0.00	\$70.98
LABORERS	6/1/2026	\$43.66	\$10.15	\$9.50	\$9.11	\$0.00	\$72.42
LABORERS - ZONE 2	12/1/2026	\$45.10	\$10.15	\$9.50	\$9.11	\$0.00	\$73.86
	6/1/2027	\$46.55	\$10.15	\$9.50	\$9.11	\$0.00	\$75.31
	12/1/2027	\$48.00	\$10.15	\$9.50	\$9.11	\$0.00	\$76.76
	6/1/2028	\$49.50	\$10.15	\$9.50	\$9.11	\$0.00	\$78.26

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2028	\$51.00	\$10.15	\$9.50	\$9.11	\$0.00	\$79.76
For apprentice rates see "Apprentice- LABORER"							
POWDERMAN & BLASTER (HEAVY & HIGHWAY)	12/1/2025	\$42.22	\$9.90	\$9.50	\$9.21	\$0.00	\$70.83
LABORERS	6/1/2026	\$43.66	\$9.90	\$9.50	\$9.21	\$0.00	\$72.27
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$45.10	\$9.90	\$9.50	\$9.21	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
POWER SHOVEL/DERRICK/TRENCHING MACHINE	12/1/2025	\$59.28	\$16.05	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.58	\$16.05	\$13.25	\$3.25	\$0.00	\$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$62.03	\$16.05	\$13.25	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (CONCRETE)	12/1/2025	\$58.62	\$16.05	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.90	\$16.05	\$13.25	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$61.34	\$16.05	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (DEWATERING, OTHER)	12/1/2025	\$37.97	\$16.05	\$13.25	\$3.25	\$0.00	\$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$38.83	\$16.05	\$13.25	\$3.25	\$0.00	\$71.38
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$39.78	\$16.05	\$13.25	\$3.25	\$0.00	\$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
READY-MIX CONCRETE DRIVER	8/1/2023	\$25.00	\$13.91	\$6.90	\$0.00	\$0.00	\$45.81
TEAMSTERS 653							
TEAMSTERS 653 - Southeastern Concrete (Weymouth)							
RECLAIMERS	12/1/2025	\$58.62	\$16.05	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.90	\$16.05	\$13.25	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$61.34	\$16.05	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
RIDE-ON MOTORIZED BUGGY OPERATOR	12/1/2025	\$41.47	\$10.15	\$9.50	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.91	\$10.15	\$9.50	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$44.35	\$10.15	\$9.50	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.80	\$10.15	\$9.50	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.25	\$10.15	\$9.50	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.75	\$10.15	\$9.50	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.25	\$10.15	\$9.50	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
ROLLER/SPREADER/MULCHING MACHINE	12/1/2025	\$58.62	\$16.05	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.90	\$16.05	\$13.25	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$61.34	\$16.05	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
ROOFER (Inc.Roofers Waterproofing &Roofers Damproofg)	8/1/2025	\$53.53	\$13.28	\$12.67	\$9.03	\$0.00	\$88.51
ROOFERS LOCAL 33	2/1/2026	\$54.78	\$13.28	\$12.67	\$9.03	\$0.00	\$89.76
ROOFERS LOCAL 33							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: ROOFER (Inc.Roofing Waterproofing &Roofing Damproofing)							
Effective Date: 8/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.77	\$13.28	\$6.52	\$9.03	\$0.00	\$55.60
2	60.00	\$32.12	\$13.28	\$12.67	\$9.03	\$0.00	\$67.10
3	65.00	\$34.79	\$13.28	\$12.67	\$9.03	\$0.00	\$69.77
4	75.00	\$40.15	\$13.28	\$12.67	\$9.03	\$0.00	\$75.13
5	85.00	\$45.50	\$13.28	\$12.67	\$9.03	\$0.00	\$80.48
Apprentice: ROOFER (Inc.Roofing Waterproofing &Roofing Damproofing)							
Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$27.39	\$13.28	\$6.52	\$9.03	\$0.00	\$56.22
2	60.00	\$32.87	\$13.28	\$12.67	\$9.03	\$0.00	\$67.85
3	65.00	\$35.61	\$13.28	\$12.67	\$9.03	\$0.00	\$70.59
4	75.00	\$41.09	\$13.28	\$12.67	\$9.03	\$0.00	\$76.07
5	85.00	\$46.56	\$13.28	\$12.67	\$9.03	\$0.00	\$81.54
Apprentice Notes							
** 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1							
Apprentice to Journeyworker Ratio: 1:5							
ROOFER SLATE / TILE / PRECAST CONCRETE	8/1/2025	\$53.78	\$13.28	\$12.67	\$9.03	\$0.00	\$88.76
ROOFERS LOCAL 33	2/1/2026	\$55.03	\$13.28	\$12.67	\$9.03	\$0.00	\$90.01
For apprentice rates see "Apprentice- ROOFER"							
SHEETMETAL WORKER	10/1/2025	\$44.05	\$14.91	\$13.35	\$6.15	\$2.24	\$80.70
SHEETMETAL WORKERS LOCAL 17	4/1/2026	\$45.55	\$14.91	\$13.35	\$6.15	\$2.24	\$82.20
SHEETMETAL WORKERS LOCAL 17 - B							

Apprentice: SHEETMETAL WORKER							
Effective Date: 10/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$17.62	\$14.91	\$4.27	\$0.00	\$1.09	\$37.89
2	45.00	\$19.82	\$14.91	\$4.80	\$0.00	\$1.17	\$40.70
3	50.00	\$22.03	\$14.91	\$12.28	\$0.00	\$1.45	\$50.67
4	55.00	\$24.23	\$14.91	\$12.28	\$0.00	\$1.52	\$52.94
5	60.00	\$26.43	\$14.91	\$12.28	\$3.69	\$1.64	\$58.95
6	65.00	\$28.63	\$14.91	\$12.28	\$4.00	\$1.71	\$61.53
7	70.00	\$30.84	\$14.91	\$12.28	\$4.31	\$1.78	\$64.12
8	75.00	\$33.04	\$14.91	\$12.28	\$4.61	\$1.86	\$66.70

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: SHEETMETAL WORKER							
Effective Date: 10/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
9	80.00	\$35.24	\$14.91	\$12.28	\$4.92	\$1.93	\$69.28
10	85.00	\$37.44	\$14.91	\$12.28	\$5.23	\$2.00	\$71.86
Apprentice: SHEETMETAL WORKER							
Effective Date: 4/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$18.22	\$14.91	\$4.27	\$0.00	\$1.09	\$38.49
2	45.00	\$20.50	\$14.91	\$4.80	\$0.00	\$1.17	\$41.38
3	50.00	\$22.78	\$14.91	\$12.28	\$0.00	\$1.45	\$51.42
4	55.00	\$25.05	\$14.91	\$12.28	\$0.00	\$1.52	\$53.76
5	60.00	\$27.33	\$14.91	\$12.28	\$3.69	\$1.64	\$59.85
6	65.00	\$29.61	\$14.91	\$12.28	\$4.00	\$1.71	\$62.51
7	70.00	\$31.89	\$14.91	\$12.28	\$4.31	\$1.78	\$65.17
8	75.00	\$34.16	\$14.91	\$12.28	\$4.61	\$1.86	\$67.82
9	80.00	\$36.44	\$14.91	\$12.28	\$4.92	\$1.93	\$70.48
10	85.00	\$38.72	\$14.91	\$12.28	\$5.23	\$2.00	\$73.14
Apprentice to Journeyworker Ratio: 1:4							
SPECIALIZED EARTH MOVING EQUIP < 35 TONS	12/1/2025	\$41.24	\$15.57	\$21.78	\$0.00	\$0.00	\$78.59
TEAMSTERS JOINT COUNCIL NO. 10	1/1/2026	\$41.24	\$16.17	\$21.78	\$0.00	\$0.00	\$79.19
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	6/1/2026	\$42.24	\$16.17	\$21.78	\$0.00	\$0.00	\$80.19
	12/1/2026	\$42.24	\$16.17	\$23.52	\$0.00	\$0.00	\$81.93
	1/1/2027	\$42.24	\$16.77	\$23.52	\$0.00	\$0.00	\$82.53
SPECIALIZED EARTH MOVING EQUIP > 35 TONS	12/1/2025	\$41.53	\$15.57	\$21.78	\$0.00	\$0.00	\$78.88
TEAMSTERS JOINT COUNCIL NO. 10	1/1/2026	\$41.53	\$16.17	\$21.78	\$0.00	\$0.00	\$79.48
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	6/1/2026	\$42.53	\$16.17	\$21.78	\$0.00	\$0.00	\$80.48
	12/1/2026	\$42.53	\$16.17	\$23.52	\$0.00	\$0.00	\$82.22
	1/1/2027	\$42.53	\$16.77	\$23.52	\$0.00	\$0.00	\$82.82
SPRINKLER FITTER	10/1/2025	\$64.85	\$12.25	\$7.40	\$19.50	\$0.00	\$104.00
SPRINKLER FITTERS LOCAL 550	1/1/2026	\$64.85	\$13.45	\$7.45	\$18.25	\$0.00	\$104.00
SPRINKLER FITTERS LOCAL 550 - (Section B) Zone 2							
Apprentice: SPRINKLER FITTER							
Effective Date: 10/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	\$22.70	\$12.25	\$14.22	\$0.00	\$0.00	\$49.17
2	0.00	\$25.94	\$12.25	\$15.20	\$0.00	\$0.00	\$53.39
3	0.00	\$29.18	\$12.25	\$16.18	\$0.00	\$0.00	\$57.61

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: SPRINKLER FITTER							
Effective Date: 10/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
4	0.00	\$32.43	\$12.25	\$17.15	\$0.00	\$0.00	\$61.83
5	0.00	\$35.67	\$12.25	\$18.12	\$0.00	\$0.00	\$66.04
6	0.00	\$38.91	\$12.25	\$19.10	\$0.00	\$0.00	\$70.26
7	65.00	\$42.15	\$12.25	\$20.08	\$0.00	\$0.00	\$74.48
8	0.00	\$45.40	\$12.25	\$21.05	\$0.00	\$0.00	\$78.70
9	0.00	\$48.64	\$12.25	\$22.02	\$0.00	\$0.00	\$82.91
10	0.00	\$51.88	\$12.25	\$23.00	\$0.00	\$0.00	\$87.13
Apprentice: SPRINKLER FITTER							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	0.00	\$22.70	\$13.45	\$13.84	\$0.00	\$0.00	\$49.99
2	0.00	\$25.94	\$13.45	\$14.75	\$0.00	\$0.00	\$54.14
3	0.00	\$29.18	\$13.45	\$15.67	\$0.00	\$0.00	\$58.30
4	0.00	\$32.43	\$13.45	\$16.57	\$0.00	\$0.00	\$62.45
5	0.00	\$35.67	\$13.45	\$17.49	\$0.00	\$0.00	\$66.61
6	0.00	\$38.91	\$13.45	\$18.40	\$0.00	\$0.00	\$70.76
7	0.00	\$42.15	\$13.45	\$19.32	\$0.00	\$0.00	\$74.92
8	0.00	\$45.40	\$13.45	\$20.22	\$0.00	\$0.00	\$79.07
9	0.00	\$48.64	\$13.45	\$21.15	\$0.00	\$0.00	\$83.24
10	0.00	\$51.88	\$13.45	\$22.05	\$0.00	\$0.00	\$87.38
Apprentice Notes							
Apprentice entered prior 9/30/10:							
Apprentice to Journeyworker Ratio: 1:3							
STEAM BOILER OPERATOR	12/1/2025	\$58.62	\$16.05	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.90	\$16.05	\$13.25	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$61.34	\$16.05	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN	12/1/2025	\$58.62	\$16.05	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.90	\$16.05	\$13.25	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$61.34	\$16.05	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TELECOMMUNICATION TECHNICIAN	9/1/2025	\$42.52	\$12.00	\$12.05	\$3.25	\$0.00	\$69.82
TELECOMMUNICATION TECHNICIAN	9/1/2026	\$44.41	\$12.25	\$12.59	\$3.50	\$0.00	\$72.75
ELECTRICIANS LOCAL 223	9/1/2027	\$46.51	\$12.50	\$13.18	\$3.75	\$0.00	\$75.94
ELECTRICIANS LOCAL 223							
For apprentice rates and ratios see "Apprentice- ELECTRICIAN"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
TERRAZZO FINISHERS	8/1/2025	\$66.89	\$11.49	\$15.57	\$8.02	\$0.00	\$101.97
BRICKLAYERS LOCAL 3	2/1/2026	\$68.24	\$11.49	\$15.57	\$8.02	\$0.00	\$103.32
BRICKLAYERS LOCAL 3 - MARBLE & TILE	8/1/2026	\$70.44	\$11.49	\$15.57	\$8.02	\$0.00	\$105.52
	2/1/2027	\$71.84	\$11.49	\$15.57	\$8.02	\$0.00	\$106.92

Apprentice: TERRAZZO FINISHERS							
Effective Date: 8/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$33.45	\$11.49	\$15.57	\$8.02	\$0.00	\$68.53
2	60.00	\$40.13	\$11.49	\$15.57	\$8.02	\$0.00	\$75.21
3	70.00	\$46.82	\$11.49	\$15.57	\$8.02	\$0.00	\$81.90
4	80.00	\$53.51	\$11.49	\$15.57	\$8.02	\$0.00	\$88.59
5	90.00	\$60.20	\$11.49	\$15.57	\$8.02	\$0.00	\$95.28

Apprentice: TERRAZZO FINISHERS							
Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$34.12	\$11.49	\$15.57	\$8.02	\$0.00	\$69.20
2	60.00	\$40.94	\$11.49	\$15.57	\$8.02	\$0.00	\$76.02
3	70.00	\$47.77	\$11.49	\$15.57	\$8.02	\$0.00	\$82.85
4	80.00	\$54.59	\$11.49	\$15.57	\$8.02	\$0.00	\$89.67
5	90.00	\$61.42	\$11.49	\$15.57	\$8.02	\$0.00	\$96.50

Apprentice to Journeyworker Ratio: 1:5

TEST BORING DRILLER	12/1/2025	\$52.70	\$10.15	\$9.50	\$9.80	\$0.00	\$82.15
LABORERS	6/1/2026	\$54.25	\$10.15	\$9.50	\$9.80	\$0.00	\$83.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	\$55.75	\$10.15	\$9.50	\$9.80	\$0.00	\$85.20

For apprentice rates see "Apprentice- LABORER"

TEST BORING DRILLER HELPER	12/1/2025	\$48.82	\$10.15	\$9.50	\$9.80	\$0.00	\$78.27
LABORERS	6/1/2026	\$50.37	\$10.15	\$9.50	\$9.80	\$0.00	\$79.82
LABORERS - FOUNDATION AND MARINE	12/1/2026	\$51.87	\$10.15	\$9.50	\$9.80	\$0.00	\$81.32

For apprentice rates see "Apprentice- LABORER"

TEST BORING LABORER	12/1/2025	\$48.70	\$10.15	\$9.50	\$9.80	\$0.00	\$78.15
LABORERS	6/1/2026	\$50.25	\$10.15	\$9.50	\$9.80	\$0.00	\$79.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	\$51.75	\$10.15	\$9.50	\$9.80	\$0.00	\$81.20

For apprentice rates see "Apprentice- LABORER"

TRACTORS/PORTABLE STEAM GENERATORS	12/1/2025	\$58.62	\$16.05	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.90	\$16.05	\$13.25	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$61.34	\$16.05	\$13.25	\$3.25	\$0.00	\$93.89

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

TRAILERS FOR EARTH MOVING EQUIPMENT	12/1/2025	\$41.82	\$15.57	\$21.78	\$0.00	\$0.00	\$79.17
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Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
TEAMSTERS JOINT COUNCIL NO. 10	1/1/2026	\$41.82	\$16.17	\$21.78	\$0.00	\$0.00	\$79.77
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	6/1/2026	\$42.82	\$16.17	\$21.78	\$0.00	\$0.00	\$80.77
	12/1/2026	\$42.82	\$16.17	\$23.52	\$0.00	\$0.00	\$82.51
	1/1/2027	\$42.82	\$16.77	\$23.52	\$0.00	\$0.00	\$83.11
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TUNNEL WORK - COMPRESSED AIR LABORERS	12/1/2025	\$60.93	\$10.15	\$9.50	\$10.25	\$0.00	\$90.83
LABORERS (COMPRESSED AIR)	6/1/2026	\$62.48	\$10.15	\$9.50	\$10.25	\$0.00	\$92.38
	12/1/2026	\$63.98	\$10.15	\$9.50	\$10.25	\$0.00	\$93.88
For apprentice rates see "Apprentice- LABORER"							
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TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE) LABORERS	12/1/2025	\$62.93	\$10.15	\$9.50	\$10.25	\$0.00	\$92.83
LABORERS (COMPRESSED AIR)	6/1/2026	\$64.48	\$10.15	\$9.50	\$10.25	\$0.00	\$94.38
	12/1/2026	\$65.98	\$10.15	\$9.50	\$10.25	\$0.00	\$95.88
For apprentice rates see "Apprentice- LABORER"							
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TUNNEL WORK - FREE AIR LABORERS	12/1/2025	\$53.00	\$10.15	\$9.50	\$10.25	\$0.00	\$82.90
LABORERS (FREE AIR TUNNEL)	6/1/2026	\$54.55	\$10.15	\$9.50	\$10.25	\$0.00	\$84.45
	12/1/2026	\$56.05	\$10.15	\$9.50	\$10.25	\$0.00	\$85.95
For apprentice rates see "Apprentice- LABORER"							
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TUNNEL WORK - FREE AIR (HAZ. WASTE) LABORERS	12/1/2025	\$55.00	\$10.15	\$9.50	\$10.25	\$0.00	\$84.90
LABORERS (FREE AIR TUNNEL)	6/1/2026	\$56.55	\$10.15	\$9.50	\$10.25	\$0.00	\$86.45
	12/1/2026	\$58.05	\$10.15	\$9.50	\$10.25	\$0.00	\$87.95
For apprentice rates see "Apprentice- LABORER"							
<hr/>							
VAC-HAUL	12/1/2025	\$41.24	\$15.57	\$21.78	\$0.00	\$0.00	\$78.59
TEAMSTERS JOINT COUNCIL NO. 10	1/1/2026	\$41.24	\$16.17	\$21.78	\$0.00	\$0.00	\$79.19
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	6/1/2026	\$42.24	\$16.17	\$21.78	\$0.00	\$0.00	\$80.19
	12/1/2026	\$42.24	\$16.17	\$23.52	\$0.00	\$0.00	\$81.93
	1/1/2027	\$42.24	\$16.77	\$23.52	\$0.00	\$0.00	\$82.53
<hr/>							
WAGON DRILL OPERATOR LABORERS	12/1/2025	\$41.47	\$10.15	\$9.50	\$9.11	\$0.00	\$70.23
LABORERS - ZONE 2	6/1/2026	\$42.91	\$10.15	\$9.50	\$9.11	\$0.00	\$71.67
	12/1/2026	\$44.35	\$10.15	\$9.50	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.80	\$10.15	\$9.50	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.25	\$10.15	\$9.50	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.75	\$10.15	\$9.50	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.25	\$10.15	\$9.50	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
<hr/>							
WAGON DRILL OPERATOR (HEAVY & HIGHWAY) LABORERS	12/1/2025	\$41.47	\$10.15	\$9.50	\$9.21	\$0.00	\$70.33
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$42.91	\$10.15	\$9.50	\$9.21	\$0.00	\$71.77
	12/1/2026	\$44.35	\$10.15	\$9.50	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
<hr/>							
WASTE WATER PUMP OPERATOR	12/1/2025	\$59.28	\$16.05	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.58	\$16.05	\$13.25	\$3.25	\$0.00	\$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$62.03	\$16.05	\$13.25	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
<hr/>							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
WATER METER INSTALLER	8/25/2025	\$55.24	\$10.80	\$16.80	\$4.60	\$0.00	\$87.44
PLUMBERS & PIPEFITTERS LOCAL 51							
PLUMBERS & PIPEFITTERS LOCAL 51							

For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"

Additional Apprentice Information

All apprentices must be registered with the Division of Apprenticeship Training(DAS) in accordance with M.G.L.c. 23, §§ 11E-11L. Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the hourly prevailing wage rate established by the Commissioner under the provisions of M.G.L.c. 149, §§ 26-27D.

Apprentice ratios are established by DAS pursuant to M.G.L.c. 23, §§ 11E-11L. Ratios are expressed as the allowable number of apprentices to journeymen or fraction thereof, unless otherwise specified. The ratios listed herein have been taken from relevant private collective bargaining agreements(CBAs) and are provided for illustrative purposes only. They have not been independently verified as being accurate or continuing to be accurate.

Parties having questions regarding what ratio to use should contact DAS.

Attachment 2

Applicable Conditions and Permits

- ♦ **Order of Conditions-recorded, #SE 10-3555 (Massachusetts Department of Environmental Protection, July 7, 2022)**
- ♦ **Order of Conditions-extension via Massachusetts LEADS Act (Massachusetts Department of Environmental Protection, March 6, 2025)**
- ♦ **Permit Verification, NAE-2024-02657 (U.S. Army Corps of Engineers, February 12, 2025)**
- ♦ **Chapter 91 Special Conditions, License No. WW01-0000608 (Massachusetts Department of Environmental Protection, May 28, 2025)**

**Order of Conditions-recorded, #SE 10-3555 (Massachusetts
Department of Environmental Protection, July 7, 2022)**



Provided by MassDEP:
SE 10-3555
MassDEP File #

eDEP Transaction #
Chatham
City/Town

A. General Information

Please note:
this form has
been modified
with added
space to
accommodate
the Registry
of Deeds
Requirements

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. From: Chatham
Conservation Commission
2. This issuance is for (check one): a. ☒ Order of Conditions b. ☐ Amended Order of Conditions

3. To: Applicant:

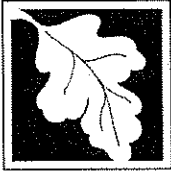
Robert	Duncanson, Ph.D.	
a. First Name	b. Last Name	
Town of Chatham		
c. Organization		
549 Main Street		
d. Mailing Address		
Chatham	MA	02633
e. City/Town	f. State	g. Zip Code

4. Property Owner (if different from applicant):

a. First Name	b. Last Name	
c. Organization		
d. Mailing Address		
e. City/Town	f. State	g. Zip Code

5. Project Location:

54 & 0 Barcliff Avenue Extension		Chatham
a. Street Address		b. City/Town
16F		PIER- 5 & 7
c. Assessors Map/Plat Number		d. Parcel/Lot Number
Latitude and Longitude, if known:	41d41m17s	69d57m04s
	d. Latitude	e. Longitude



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

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A. General Information (cont.)

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):

Barnstable

a. County

673

c. Book

b. Certificate Number (if registered land)

164

d. Page

7. Dates: 6/7/2022 7/6/2022 7/7/2022
 a. Date Notice of Intent Filed b. Date Public Hearing Closed c. Date of Issuance

8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):

South Jog Pier & Site Improvements Permit Drawings G-001 to G-003, C-101, S-101 to S-108, ES.01, EDS1.1, ES1.1, E4.1, P001, PD100, P100 & P001

Foth Infrastructure & Environment, LLC

John T. Contillo, Jr

b. Prepared By

c. Signed and Stamped by

Various- See Plans

Various- See Plans

d. Final Revision Date

e. Scale

f. Additional Plan or Document Title

g. Date

B. Findings

1. Findings pursuant to the Massachusetts Wetlands Protection Act:

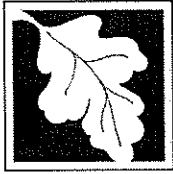
Following the review of the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act (the Act). Check all that apply:

- a. ☐ Public Water Supply b. ☒ Land Containing Shellfish c. ☒ Prevention of Pollution
 d. ☐ Private Water Supply e. ☐ Fisheries f. ☒ Protection of Wildlife Habitat
 g. ☐ Groundwater Supply h. ☒ Storm Damage Prevention i. ☒ Flood Control

2. This Commission hereby finds the project, as proposed, is: (check one of the following boxes)

Approved subject to:

- a. ☒ the following conditions which are necessary in accordance with the performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

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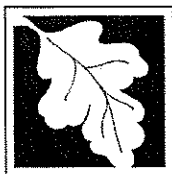
B. Findings (cont.)

Denied because:

- b. ☐ the proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect the interests of the Act, and a final Order of Conditions is issued. **A description of the performance standards which the proposed work cannot meet is attached to this Order.**
- c. ☐ the information submitted by the applicant is not sufficient to describe the site, the work, or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the Act's interests, and a final Order of Conditions is issued. **A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).**
3. ☐ Buffer Zone Impacts: Shortest distance between limit of project disturbance and the wetland resource area specified in 310 CMR 10.02(1)(a) a. linear feet

Inland Resource Area Impacts: Check all that apply below. (For Approvals Only)

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4. <input type="checkbox"/> Bank	<u> </u> a. linear feet	<u> </u> b. linear feet	<u> </u> c. linear feet	<u> </u> d. linear feet
5. <input type="checkbox"/> Bordering Vegetated Wetland	<u> </u> a. square feet	<u> </u> b. square feet	<u> </u> c. square feet	<u> </u> d. square feet
6. <input type="checkbox"/> Land Under Waterbodies and Waterways	<u> </u> a. square feet	<u> </u> b. square feet	<u> </u> c. square feet	<u> </u> d. square feet
	<u> </u> e. c/y dredged	<u> </u> f. c/y dredged		
7. <input type="checkbox"/> Bordering Land Subject to Flooding	<u> </u> a. square feet	<u> </u> b. square feet	<u> </u> c. square feet	<u> </u> d. square feet
Cubic Feet Flood Storage	<u> </u> e. cubic feet	<u> </u> f. cubic feet	<u> </u> g. cubic feet	<u> </u> h. cubic feet
8. <input type="checkbox"/> Isolated Land Subject to Flooding	<u> </u> a. square feet	<u> </u> b. square feet		
Cubic Feet Flood Storage	<u> </u> c. cubic feet	<u> </u> d. cubic feet	<u> </u> e. cubic feet	<u> </u> f. cubic feet
9. <input type="checkbox"/> Riverfront Area	<u> </u> a. total sq. feet	<u> </u> b. total sq. feet		
Sq ft within 100 ft	<u> </u> c. square feet	<u> </u> d. square feet	<u> </u> e. square feet	<u> </u> f. square feet
Sq ft between 100-200 ft	<u> </u> g. square feet	<u> </u> h. square feet	<u> </u> i. square feet	<u> </u> j. square feet



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

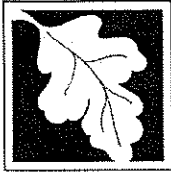
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B. Findings (cont.)

Coastal Resource Area Impacts: Check all that apply below. (For Approvals Only)

	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
10. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below			
11. <input checked="" type="checkbox"/> Land Under the Ocean	453 a. square feet	453 b. square feet		
	c. c/y dredged	d. c/y dredged		
12. <input type="checkbox"/> Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes below			
13. <input checked="" type="checkbox"/> Coastal Beaches	129 a. square feet	129 b. square feet	cu yd c. nourishment	cu yd d. nourishment
14. <input type="checkbox"/> Coastal Dunes	a. square feet	b. square feet	cu yd c. nourishment	cu yd d. nourishment
15. <input type="checkbox"/> Coastal Banks	a. linear feet	b. linear feet		
16. <input type="checkbox"/> Rocky Intertidal Shores	a. square feet	b. square feet		
17. <input type="checkbox"/> Salt Marshes	a. square feet	b. square feet	c. square feet	d. square feet
18. <input type="checkbox"/> Land Under Salt Ponds	a. square feet	b. square feet		
	c. c/y dredged	d. c/y dredged		
19. <input checked="" type="checkbox"/> Land Containing Shellfish	66 a. square feet	66 b. square feet	c. square feet	d. square feet
20. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, Inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above			
	a. c/y dredged	b. c/y dredged		
21. <input checked="" type="checkbox"/> Land Subject to Coastal Storm Flowage	4,400 a. square feet	4,400 b. square feet		
22. <input type="checkbox"/> Riverfront Area	a. total sq. feet	b. total sq. feet		
Sq ft within 100 ft	c. square feet	d. square feet	e. square feet	f. square feet
Sq ft between 100-200 ft	g. square feet	h. square feet	i. square feet	j. square feet



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B. Findings (cont.)

* #23. If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.5.c (BVW) or B.17.c (Salt Marsh) above, please enter the additional amount here.

23. ☐ Restoration/Enhancement *:

a. square feet of BVW

b. square feet of salt marsh

24. ☐ Stream Crossing(s):

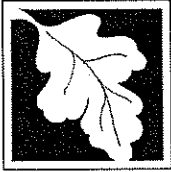
a. number of new stream crossings

b. number of replacement stream crossings

C. General Conditions Under Massachusetts Wetlands Protection Act

The following conditions are only applicable to Approved projects.

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
 - a. The work is a maintenance dredging project as provided for in the Act; or
 - b. The time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.
 - c. If the work is for a Test Project, this Order of Conditions shall be valid for no more than one year.
5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order. An Order of Conditions for a Test Project may be extended for one additional year only upon written application by the applicant, subject to the provisions of 310 CMR 10.05(11)(f).
6. If this Order constitutes an Amended Order of Conditions, this Amended Order of Conditions does not extend the issuance date of the original Final Order of Conditions and the Order will expire on 7/7/2025 unless extended in writing by the Department.
7. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.



Massachusetts Department of Environmental Protection
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WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

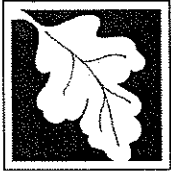
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C. General Conditions Under Massachusetts Wetlands Protection Act

8. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.
9. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.
10. A sign shall be displayed at the site not less than two square feet or more than three square feet in size bearing the words,

"Massachusetts Department of Environmental Protection" [or, "MassDEP"]
 "File Number SE 10-3555 "
11. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before MassDEP.
12. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.
13. The work shall conform to the plans and special conditions referenced in this order.
14. Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.
15. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.
16. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.



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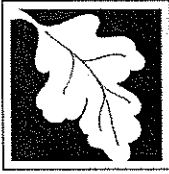
City/Town

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

17. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.
18. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.
19. The work associated with this Order (the "Project")
 - (1) ☒ is subject to the Massachusetts Stormwater Standards
 - (2) ☐ is NOT subject to the Massachusetts Stormwater Standards

If the work is subject to the Stormwater Standards, then the project is subject to the following conditions:

- a) All work, including site preparation, land disturbance, construction and redevelopment, shall be implemented in accordance with the construction period pollution prevention and erosion and sedimentation control plan and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Construction General Permit as required by Stormwater Condition 8. Construction period erosion, sedimentation and pollution control measures and best management practices (BMPs) shall remain in place until the site is fully stabilized.
- b) No stormwater runoff may be discharged to the post-construction stormwater BMPs unless and until a Registered Professional Engineer provides a Certification that:
 - i. all construction period BMPs have been removed or will be removed by a date certain specified in the Certification. For any construction period BMPs intended to be converted to post construction operation for stormwater attenuation, recharge, and/or treatment, the conversion is allowed by the MassDEP Stormwater Handbook BMP specifications and that the BMP has been properly cleaned or prepared for post construction operation, including removal of all construction period sediment trapped in inlet and outlet control structures;
 - ii. as-built final construction BMP plans are included, signed and stamped by a Registered Professional Engineer, certifying the site is fully stabilized;
 - iii. any illicit discharges to the stormwater management system have been removed, as per the requirements of Stormwater Standard 10;



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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

iv. all post-construction stormwater BMPs are installed in accordance with the plans (including all planting plans) approved by the issuing authority, and have been inspected to ensure that they are not damaged and that they are in proper working condition;

v. any vegetation associated with post-construction BMPs is suitably established to withstand erosion.

c) The landowner is responsible for BMP maintenance until the issuing authority is notified that another party has legally assumed responsibility for BMP maintenance. Prior to requesting a Certificate of Compliance, or Partial Certificate of Compliance, the responsible party (defined in General Condition 18(e)) shall execute and submit to the issuing authority an Operation and Maintenance Compliance Statement ("O&M Statement") for the Stormwater BMPs identifying the party responsible for implementing the stormwater BMP Operation and Maintenance Plan ("O&M Plan") and certifying the following:

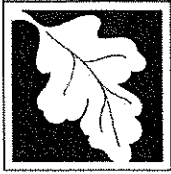
i.) the O&M Plan is complete and will be implemented upon receipt of the Certificate of Compliance, and

ii.) the future responsible parties shall be notified in writing of their ongoing legal responsibility to operate and maintain the stormwater management BMPs and implement the Stormwater Pollution Prevention Plan.

d) Post-construction pollution prevention and source control shall be implemented in accordance with the long-term pollution prevention plan section of the approved Stormwater Report and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Multi-Sector General Permit.

e) Unless and until another party accepts responsibility, the landowner, or owner of any drainage easement, assumes responsibility for maintaining each BMP. To overcome this presumption, the landowner of the property must submit to the issuing authority a legally binding agreement of record, acceptable to the issuing authority, evidencing that another entity has accepted responsibility for maintaining the BMP, and that the proposed responsible party shall be treated as a permittee for purposes of implementing the requirements of Conditions 18(f) through 18(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 18(f) through 18(k) with respect to that BMP shall be a violation of the Order of Conditions or Certificate of Compliance. In the case of stormwater BMPs that are serving more than one lot, the legally binding agreement shall also identify the lots that will be serviced by the stormwater BMPs. A plan and easement deed that grants the responsible party access to perform the required operation and maintenance must be submitted along with the legally binding agreement.

f) The responsible party shall operate and maintain all stormwater BMPs in accordance with the design plans, the O&M Plan, and the requirements of the Massachusetts Stormwater Handbook.



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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

g) The responsible party shall:

1. Maintain an operation and maintenance log for the last three (3) consecutive calendar years of inspections, repairs, maintenance and/or replacement of the stormwater management system or any part thereof, and disposal (for disposal the log shall indicate the type of material and the disposal location);
2. Make the maintenance log available to MassDEP and the Conservation Commission ("Commission") upon request; and
3. Allow members and agents of the MassDEP and the Commission to enter and inspect the site to evaluate and ensure that the responsible party is in compliance with the requirements for each BMP established in the O&M Plan approved by the issuing authority.

h) All sediment or other contaminants removed from stormwater BMPs shall be disposed of in accordance with all applicable federal, state, and local laws and regulations.

i) Illicit discharges to the stormwater management system as defined in 310 CMR 10.04 are prohibited.

j) The stormwater management system approved in the Order of Conditions shall not be changed without the prior written approval of the issuing authority.

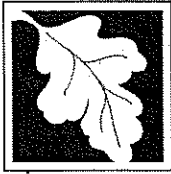
k) Areas designated as qualifying pervious areas for the purpose of the Low Impact Site Design Credit (as defined in the MassDEP Stormwater Handbook, Volume 3, Chapter 1, Low Impact Development Site Design Credits) shall not be altered without the prior written approval of the issuing authority.

l) Access for maintenance, repair, and/or replacement of BMPs shall not be withheld. Any fencing constructed around stormwater BMPs shall include access gates and shall be at least six inches above grade to allow for wildlife passage.

Special Conditions (if you need more space for additional conditions, please attach a text document):

see attached

20. For Test Projects subject to 310 CMR 10.05(11), the applicant shall also implement the monitoring plan and the restoration plan submitted with the Notice of Intent. If the conservation commission or Department determines that the Test Project threatens the public health, safety or the environment, the applicant shall implement the removal plan submitted with the Notice of Intent or modify the project as directed by the conservation commission or the Department.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

SE 10-3555

MassDEP File #

eDEP Transaction #

Chatham

City/Town

D. Findings Under Municipal Wetlands Bylaw or Ordinance

1. Is a municipal wetlands bylaw or ordinance applicable? ☒ Yes ☐ No
2. The Chatham hereby finds (check one that applies):
Conservation Commission

- a. ☐ that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw, specifically:

1. Municipal Ordinance or Bylaw

2. Citation

Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order of Conditions is issued.

- b. ☒ that the following additional conditions are necessary to comply with a municipal ordinance or bylaw:

Chatham Wetlands Bylaw and Regulations

1. Municipal Ordinance or Bylaw

2. Citation

3. The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.

The special conditions relating to municipal ordinance or bylaw are as follows (if you need more space for additional conditions, attach a text document):

see attached



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

SE 10- 3555

MassDEP File #

eDEP Transaction #

Chatham

City/Town

E. Signatures

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.

Please indicate the number of members who will sign this form.

This Order must be signed by a majority of the Conservation Commission.

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

7/7/22
 1. Date of Issuance

5
 2. Number of Signers

54 90 Bardcliff Avenue Extension

Robert Raus
 Signature

ROBERT RAUS
 Printed Name

[Signature]
 Signature

[Signature]
 Printed Name

[Signature]
 Signature

[Signature]
 Printed Name

[Signature]
 Signature

KAREN LATTIN
 Printed Name

[Signature]
 Signature

Euse L Gordon
 Printed Name

[Signature]
 Signature

[Signature]
 Printed Name

[Signature]
 Signature

[Signature]
 Printed Name

[Signature]
 Signature

[Signature]
 Printed Name

[Signature]
 Signature

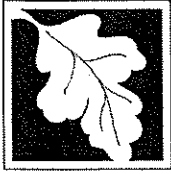
[Signature]
 Printed Name

☐ by hand delivery on

☒ by certified mail, return receipt requested, on

Date

Date



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

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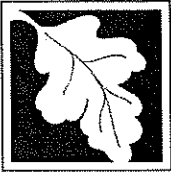
City/Town

F. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate MassDEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request for Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order, or providing written information to the Department prior to issuance of a Superseding Order.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40), and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

DEP File Number: _____

**Request for Departmental Action Fee
Transmittal Form**

Provided by DEP _____

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. Request Information

1. Location of Project

a. Street Address _____

b. City/Town, Zip _____

c. Check number _____

d. Fee amount _____

2. Person or party making request (if appropriate, name the citizen group's representative):

Name _____

Mailing Address _____

City/Town _____

State _____

Zip Code _____

Phone Number _____

Fax Number (if applicable) _____

3. Applicant (as shown on Determination of Applicability (Form 2), Order of Resource Area Delineation (Form 4B), Order of Conditions (Form 5), Restoration Order of Conditions (Form 5A), or Notice of Non-Significance (Form 6)):

Name _____

Mailing Address _____

City/Town _____

State _____

Zip Code _____

Phone Number _____

Fax Number (if applicable) _____

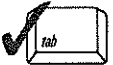
4. DEP File Number: _____

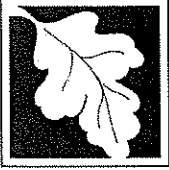
B. Instructions

1. When the Departmental action request is for (check one):

- ☐ Superseding Order of Conditions – Fee: \$120.00 (single family house projects) or \$245 (all other projects)
- ☐ Superseding Determination of Applicability – Fee: \$120
- ☐ Superseding Order of Resource Area Delineation – Fee: \$120

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.





Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

DEP File Number:

**Request for Departmental Action Fee
Transmittal Form**

Provided by DEP

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Instructions (cont.)

Send this form and check or money order, payable to the *Commonwealth of Massachusetts*, to:

Department of Environmental Protection
Box 4062
Boston, MA 02211

2. On a separate sheet attached to this form, state clearly and concisely the objections to the Determination or Order which is being appealed. To the extent that the Determination or Order is based on a municipal bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.
3. Send a **copy** of this form and a **copy** of the check or money order with the Request for a Superseding Determination or Order by certified mail or hand delivery to the appropriate DEP Regional Office (see <https://www.mass.gov/service-details/massdep-regional-offices-by-community>).
4. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.



SE 10- 3555
CWP N-22-27

File Number

TOWN OF CHATHAM CONSERVATION COMMISSION

Findings on Application filed under the
Chatham Wetlands Protection Bylaw, Chapter 272

Issuance Date

APPLICANT: Town of Chatham
549 Main Street
OWNER: Chatham, MA 02633

7/7/22

Location of Work: 5490 Bardiff Ave Extension Assessors' Map: 16F Parcel ID: PIER-527
Property recorded at the Registry of Deeds or Land Court in Barnstable County:

Certificate:

Book: 673

Page: 164

After public hearing in accordance with the Open Meeting Law (MGL Ch 39, s23B) closed on 7/6/22
the Chatham Conservation Commission, in accordance with the Town of Chatham Wetlands Protection Bylaw
(Ch 272) finds:

☒ **Permit is granted;** work may proceed subject to the attached Special Conditions.

☐ **Permit is denied;** see attached explanation.

Chatham Conservation Commission:

Robert Ball
Kim S. Silver
James
Karen Lathin

David Smith

signed by 5 of 7 Commissioners

Town of Chatham – Order of Conditions
Massachusetts Wetlands Protection Act, M.G.L. c. 131, § 40
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54 & 0 Barcliff Avenue Extension, Map [16F] Parcel [PIER-5 & 7]
SE 10- 3555, CWP N-22-27

Owner/Applicant: Robert Duncanson, Ph.D. for The Town of Chatham

Owner's Representative: Foth Infrastructure & Environment, LLC

Project Type: Install sheet bulkhead seaward of existing bulkhead, reconstruct existing timber stairs and landing, and add a walkway from upper parking lot.

SUPPORTING DOCUMENTS

Through the Public Hearing process, plans, work protocols, and expert testimony were submitted. The following list of documents reflects the project as reviewed by the Commission and represents the project that seeks an Order of Conditions under the Massachusetts Wetlands Protection (310 CMR 10.00) and Town of Chatham Wetlands Protection Regulations. The following materials are hereby made a part of this Order:

- Wetlands Protection Act Form 3 – Notice of Intent and Wetland Fee Transmittal Form
- NOI Checklist
- Check for State and Local Filing Fees
- Site Access Authorization Form
- Certified Abutters List and Map from the Chatham Assessor's Office
- Abutter Notification Letter and Mail Receipts
- Property description
- Wetland Delineation Information
- Project description
- Performance standards
- Construction Protocol
- Variance Request and Alternatives Analysis
- Staking Protocol
- Maps: Locus Map, FEMA Flood Insurance Rate Map (FIRM)
- Site Plan Titled: South Jog Pier & Site Improvements- Permit Drawings for property located at 54 & 0 Barcliff Avenue Extension, Chatham, MA, prepared for Town of Chatham , prepared by Foth Infrastructure & Environment, LLC, dated Various- see plans, scale 1" =Various- see plans, stamped by Various- see plans

HEARING INFORMATION:

The Applicant submitted a Notice of Intent received by the Conservation Division on 6/7/2022. The Conservation Commission held a public hearing on 6/22/2022 to review the proposed Notice of Intent. An Order of Conditions was reviewed at the Work Session on 7/6/2022.

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RESOURCE AREAS:

The following Resource Areas are associated with the project site:

Resource Areas: Areas subject to protection under M.G.L. c. 131, § 40	310 CMR 10.00: DEP's Wetland Protection Regulations	Chatham Wetlands Protection Regulations
Land Under the Ocean	310 CMR 10.25 (2)	CWPR 2.01 (2)
Coastal Beaches	310 CMR 10.27 (2)	CWPR 2.02 (2)
Coastal Banks	310 CMR 10.30 (2)	CWPR 2.05 (2)
Land Containing Shellfish/Shellfish and Shellfish Habitat	310 CMR 10.34 (2)	CWPR 2.08 (2)
Land Subject to Coastal Storm Flowage (LSCSF)	310 CMR 10.04	CWPR 2.10 (2)(a)
Adjacent Upland Resource Area (AURA)		CWPR 4.01 (2)
Estimated Habitats of Rare Wildlife	310 CMR 10.37	

PROPERTY AND PROJECT DESCRIPTION:

Property Description:

The subject property is 2.08 acres of waterfront utilized as an offloading facility for commercial fisherman, fishing charters, and Coast Guard & Harbormaster rescue vessels. The site includes a fish packaging building, and a wharfinger/harbormaster building with public restrooms and a staff office for facility oversight, timber decks and stairs, parking, and a public viewing deck overlooking the fish off-loading area. The subject property is identified by the Chatham Board of Assessors as Parcel 16F-PIER 5 and classified as a Municipal Property by the Chatham Zoning Map. The site is located along Chatham Harbor and Aunt Lydia's Cove in FEMA flood zone VE (EL. 15) with a zone AE (EL. 13) upland.

The Project is within Land Under the Ocean, Coastal Bank, Coastal Beach and Land Subject to Coastal Storm Flowage coastal resource areas. Other regulated areas within the Project area include Natural Heritage and Endangered Species Program (NHESP) priority habitat of rare species and estimated habitat of rare wildlife. The area seaward of the existing bulkhead is depicted as an Approved Shellfish Growing Area on MassGIS based on the Division of Marine Fisheries. The area seaward of the east face of the South Jog is designated as a shellfish suitability area (Blue Mussel).

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The subject property includes a paved parking lot with a curb along the top of the existing bulkhead. The existing finger piers, floating dock, and sheet pile bulkhead are licensed under multiple state licenses and Orders of Conditions listed in Table 1 and in Attachment G.

Project and Mitigation Description:

The project will stabilize the shoreline and protect the subject property and bank by replacing the bulkhead which has reached the end of its service life and is deteriorating. The replacement bulkhead will be installed just seaward of the existing bulkhead, The existing fendering system will be replaced with a timber pile system. A cathodic protection system comprised of aluminum anodes is proposed throughout the facility to reduce corrosion of the steel. The riprap south of the existing South Jog Pier will be removed prior to construction to drive the sheet pile. The existing fendering system that is located around the building will be replaced from the southside of the building around the bulkhead and to the north property line.

The existing timber stairs and landings alongside the Wharfinger building are in poor condition, not compliant with current building codes, and will be reconstructed. A new curbed sidewalk will be added from the north end of the Upper parking lot along Barcliff Avenue Extension intersection the path alongside the Wharfinger building, then an at-grade walkway along the perimeter of the Lower parking lot to the South Jog Pier. The walkway is designed to separate pedestrian access from vehicular traffic and commercial activities at the facility.

FINDINGS:

Following review of the Application and Supporting Documents referenced above that describe the proposed Project and the information provided at the public hearings held on the application, the Conservation Commission finds that:

1. The proposed project will result in an overall coverage increase of 1500 sf for the creation of the walkway.
2. 650 sf of rip rap will be removed.
3. The pedestrian walkway was deemed necessary for safety and will have a guardrail to try to maintain pedestrian flow to the walkway and to keep vehicles at bay.
4. Bulkhead installation will be a land-based or water-based crane via barge.
5. A grass swale will be established next to the walkway to mitigate for stormwater runoff (depicted on plan S.106). New drainage (outside of Conservation jurisdiction) will also occur in the upper parking lot.

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6. Preservation of the Fish Pier is beneficial to the fishing industry, economy and public benefits.
7. The proposed project includes activities in the NDZ, therefore a variance is required and/or requested. Given that the lot is constrained in size, the lot is extensively disturbed, the project serves public interest and a bulkhead already exists, the Commission finds that the increase in the NDZ is offset by an overall benefit or no change to the resource area. Therefore, the Commission finds that the proposed Project qualifies for a variance from the Chatham bylaw pursuant to the Chatham Wetlands Protection Regulations, Part IV, Section 4.03, because the applicant has (a) demonstrated that there are no reasonable alternatives to the project within the proposed, site and (b) demonstrated, and the Commission finds, that, as conditioned herein, there will be no adverse impact from the project. Accordingly, the Commission grants the variance.

DECISION: The Commission **APPROVES** the Project and finds the project as described in the Supporting Documents can be permitted subject to the following Special and General Conditions which protect the interests identified in the Chatham Wetland Bylaw c. 272 and Regulations and Massachusetts Wetland Protection Act M.G.L. c. 131 § 40 and the Regulations 310 CMR 10.00 (inclusive).

DISCLAIMER: By issuing this permit, the Conservation Commission makes no determination of property rights or the legal ability of the applicant to undertake this project. In all cases, the applicant proceeds with the project at his/her own peril in this regard.

CONDITIONS

The Project approval is based on compliance with the following Special and Standard Conditions. Except as otherwise specifically notes on the approved Plans, these Conditions apply as and to the extent they are applicable to the specific Project. The Standard Conditions supplement the Special Conditions and relate generally to steps necessary for the protection of wetland Resource Areas before, during, and after project completion, and to provide documentation necessary to confirm that the project has been completed as permitted. If there is any conflict or inconsistency between the Standard Conditions and the Special Conditions, the Special Conditions shall control.

SPECIAL CONDITIONS:

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1. The approved Site Plans, all Notes on the Approved Plans and Work Protocols contained in the Applicant's Narrative are hereby incorporated by reference and made a part of this Order of Conditions.
2. Applicant shall take special care to ensure that no unpermitted alteration, including temporary alteration, of the No Disturb Zone (NDZ) occurs during the project. Steps to be taken to protect the NDZ shall include, as examples and without limitation, avoiding any excavation within the NDZ, installation of Limit of Work (hay bales, silt fence or similar protective barrier) along the boundaries of the NDZ to prevent any unnecessary incursion. Any disturbance of NDZ that cannot be avoided shall be minimized as much as possible and the NDZ shall be restored to its pre-construction condition immediately after the project is completed.
3. Prior to start the contractor shall submit a site management plan that details procedures for material storage, cleaning of site, containment of debris and silt curtain installation/maintenance.
4. No pesticides, fertilizers or new permanent irrigation is permitted within any Resource Areas in Conservation jurisdiction. **This condition shall be recorded as an on-going condition on the Certificate of Compliance.**

STANDARD CONDITIONS:

A. Pre-construction Conditions

1. All pre-construction activities shall be conducted in a manner that avoids alteration to any wetland Resource Area as defined in 310 CMR 10.00 and the Town of Chatham Wetlands Protection Regulations.
2. Project installation and maintenance shall be implemented, supervised, and monitored by a qualified consultant/contractor approved by the Conservation Commission. If, following Commission review, approval of the plans, and issuance of an Order of Conditions, there is no consultant/contractor selected or there is a change in consultant/contractor, the Applicant shall appear before the Conservation Commission at a regularly scheduled meeting to request approval of a consultant/contractor appropriately qualified to undertake the Project prior to undertaking or continuing any work.
3. Prior to any site disturbance and to the pre-construction meeting, all sedimentation controls shall be in place and ready for inspection by the Agent during the pre-construction meeting. The Agent may instruct the contractors to modify the

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sedimentation controls to protect wetland Resource Areas and for compliance with the Order of Conditions. Note: Hay is not acceptable for erosion controls.

4. Prior to any work commencing and the pre-construction meeting with the Agent, a sign shall be visibly displayed on the site showing the DEP and/or the Chatham Conservation Division file number and shall remain posted until the issuance of a Certificate of Compliance. A copy of this Order of Conditions and site plan shall be retained on the site at all times and visibly displayed in a weatherproof container.
5. Prior to any site disturbance, a pre-construction meeting will be held with the responsible contractors, engineer, and Commission/Agent to review the Order of Conditions, the work protocol and other required materials identified in this Order of Conditions. Multiple contractors may be required to attend the pre-construction meeting, at the discretion of the Conservation Agent or Conservation Commission. Notice of work start and completion shall be given to the Agent in writing before or during the Pre-Construction meeting. The notice of start of work shall also include the name(s) and telephone number(s) of the person(s) responsible on site for compliance with this Order. Work shall not begin until a pre-construction meeting is held, and the Agent determines the work can proceed.
6. The applicant shall identify a professional land surveyor, engineer, landscape designer and/or ecological restoration professional (as appropriate to the project), or other professional approved by the Commission) to act as a project site manager or “clerk of the works”. The “clerk of the works” shall be approved by the Conservation Agent at the pre-construction meeting. The clerk of the works shall supervise the contractor(s) and inspect the site regularly whenever work takes place in or within 100 feet of a wetland Resource Area. The clerk of the works will be onsite regularly and shall take responsibility for the proper functioning of drainage and erosion control systems for the project. The phone number for the “Clerk of the Works” shall be given to the Agent at the Pre-Construction meeting. Prior to any work commencing, the named “Clerk of the Works” shall sign and submit a form acknowledging their understanding of this Order of Conditions and asserting that they will provide all subcontractors with a copy of these Conditions as they apply to each subcontractor. Multiple clerks of the works may be required where projects involve multiple components which each need specialized oversight capability.

B. Conditions for Demolition, Construction, Site Disturbance and Drainage

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1. All material and debris generated during demolition of existing structures shall be loaded onto waiting trucks and removed from the site daily. Stockpiling of debris shall not occur within any Resource Areas.
2. All construction materials, earth stockpiles, landscaping materials, slurry pits, waste products, refuse, debris, stumps, slash or excavate shall be stockpiled or collected in outside all Resource Areas and associated buffer zones under cover and surrounded by a double staked row of straw bales to prevent contact with rain water. Port-o-potties shall be sited at least 100 feet from wetland Resource Areas or on existing pavement. Washing of equipment and tools shall be done off site or handled in a manner approved by the Conservation Agent and in no case, shall concrete or masonry debris be left on site and uncovered.
3. No material of any kind shall be buried, placed or dispersed in areas within jurisdiction of the Conservation Commission, except as expressly permitted by the Order of Conditions or the plan(s) approved herein.
4. Disturbed areas where the grade is steep (>10%) shall not be exposed for longer than two months. If exposed for longer than 2 weeks, erosion control matting shall be installed and firmly anchored in place to prevent soil from washing out during rain or flooding events. In addition, the exposed area(s) shall be seeded with perennial rye or other native grasses for stability. All sedimentation controls shall be approved by the Agent prior to installation. All disturbed areas shall be stabilized and seeded prior to November 1st of each year and no disturbed areas shall be left unprotected or without erosion controls during the winter months (December – April).
5. Machinery and vehicle access shall be from the existing parking areas and across upland areas, unless otherwise specified in the Approved Work Protocol or approved Site Plan(s). The granting of this permit does not obviate the Applicant's need to gain proper permission from any abutter whose property is to be used for access.
6. Machinery and vehicles, when not in use, shall be parked on existing pavement, unless otherwise specified in the Order of Conditions or on the approved site plan(s).
7. There shall be no discharge or spillage of fuel, oil or other pollutants to any wetland Resource Area(s) or associated buffer zones. The Applicant shall take all reasonable precautions to prevent the release of pollutants through negligence, ignorance, accident or vandalism.
8. Runoff from hardscaped areas or roof runoff shall be allowed to percolate down through the soils from the surface using best management practices for handling stormwater, and as approved by the Commission/Agent. At no time may runoff be

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directed to any Resource Area. All stormwater runoff from hardscaped areas on the applicant's property, including runoff from rooves, patios, terrace, swimming pools and other hardscape features, must be captured on the applicant's property and not allowed to flow onto neighboring properties or into Resource Areas. This project shall not increase runoff, nor cause flood or storm damage to abutters, other property owners or the Resource Area.

9. Failure to follow approved and required maintenance practices for the Project, or any part of this Project is shown to cause negative impact to the Resource Areas shall be cause for the Commission to require that remedial measures must be undertaken. The Commission reserves the right to require that a hearing be held, at the applicant's expense, in order to discuss the necessary remedial measures and determine if more information from the Applicant or a Third Party Consultant is required. The Commission may determine that the approved project is to be modified as necessary to protect the interests of the Act.

PROJECT SPECIFIC CONDITIONS:

C. Installation of Sheet Pile Bulkhead

1. The approved Site Plan and Planting Plans, the notes on the approved plans and any Construction Protocols and/or notes are hereby incorporated by reference and made a part of this Order of Conditions.
2. Any equipment to be used in any Resource Area shall be inspected for leaks prior to entering in the Resource Areas and only biodegradable hydraulic fluid shall be used.
3. There shall be no adverse impact to the shellfish habitat or intertidal area during the construction of the bulkhead or after the bulkhead is installed. This condition shall be recorded as an ongoing condition on the Certificate of Compliance.
4. All equipment used during construction shall be removed from tidal and sandy access routes prior to any astronomic tidal or storm event.
5. Beach nourishment, when required by this Order of Conditions, shall be performed in accordance with the Massachusetts DEP's *Beach Nourishment: Guide to Best management Practices for Projects in Massachusetts*. Beach nourishment material shall be clean and of compatible grain size with existing material. Prior to any nourishment activities, the Applicant's Engineer shall submit written documentation detailing that the sand is clean and compatible. The maximum amount of nourishment required in any given year shall not exceed the volume specified in the Site Plan, Planting Plan, Land Management Plan and/or Construction Protocols. If no such volume is shown on

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documents listed above, then the nourishment volume shall be approved by the Commission prior to any nourishment activity. This condition is an ongoing condition and shall be recorded as such on the Certificate of Compliance.

6. If, after consulting with qualified coastal engineers or coastal geologists at the Applicant's expense, the Commission finds that the bulkhead has caused or accelerated erosion on the site or on nearby properties, it may order the Applicant to nourish the beaches using clean sand of a similar grain size, with an amount of material equal to an engineer's/geologists calculation of the loss caused by the structure. The Commission may order re-nourishment as necessary. This condition shall be recorded as an ongoing condition on the Certificate of Compliance.
7. In the event the Project is not performing as anticipated or has suffered a catastrophic failure and that, as a consequence, the Applicant and/or the Commission determines some part or all of it should be removed, the Applicant shall seek approval for a protocol to remove project components or the entire Project from the Resources Area(s). This condition shall be recorded as an ongoing condition on the Certificate of Compliance.
8. The approved shorefront protection system may not be appropriate *infinitum* due to changes in site conditions, the Commission reserves the right in the future to require that a hearing be held, at the applicant's expense. This would be done for the purpose of determining whether conditions on the site have changed substantially, particularly in relation to the change in mean high water elevation or other. The Commission may determine that approved shorefront protection system the is to be modified as necessary to protect the interests of the Act. This condition shall be recorded as an ongoing condition on the Certificate of Compliance.
9. Failure to follow maintenance of the Project or if the any part of this Project shall be shown to cause negative impact to the resource areas shall be cause for the Commission to require that remedial measures must be undertaken, including, if appropriate, the removal of the bulkhead. This condition shall be recorded as an ongoing condition on the Certificate of Compliance.

A. General Conditions

1. The "applicant" as used in this Order of Conditions shall refer to the owner, any successor in interest or successor in control of the property referenced in the Notice of Intent, supporting documents and this Order of Conditions. The Commission shall be notified in writing within 30 days of all transfers of title of any portion of property that take place prior to issuance of a Certificate of Compliance.

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SE 10- 3555, CWP N-22-27

2. This Order of Conditions shall be recorded at the registry of deeds/land court and proof of the recording shall be submitted to the Conservation Commission prior to the Pre-Construction meeting with the Conservation Agent.
3. The Applicant shall provide a copy of this Order of Conditions to the person or persons supervising the activities that are the subject of this Order and will be responsible for ensuring that all persons performing the permitted activities are fully aware of the terms and conditions of this Order of Conditions.
4. Any person performing work on the activities permitted with this Order of Conditions is individually responsible for understanding and complying with the requirements of this Order, the Wetlands Protection Act (310 CMR 10.00) and the Town of Chatham Wetland Protection Regulations.
5. This Order of Conditions authorizes only the activities described on the approved plan(s) and approved documents referenced in this Order of Conditions. Any other or additional activities in areas within jurisdiction of the Conservation Commission shall require a separate review and approval by the Conservation Commission.
6. If any change is made to the approved plan(s) which may or will alter an area subject to protection under the Wetlands Protection Act (310 CMR 10.00) and the Town of Chatham Wetlands Protection Regulations, the Applicant shall inquire from the Conservation Commission and/or the Conservation Agent, prior to implementing the change in the field, whether the change is significant enough to require an additional filing (i.e. Field Change Request, Amendment to the Order of Conditions or new Notice of Intent). Any errors in plans or information submitted by the Applicant or their Representative shall be considered changes and the above process shall be followed. This Order of Conditions is subject to the applicant obtaining all applicable local and state permits.
7. The Commission, its employees and agents shall have the right of entry to inspect for compliance with the terms of this Order until a Certificate of Compliance has been obtained and recorded at the Barnstable Registry of Deeds. Commission members or their agent may acquire any information, measurements, photographs, observations and/or materials or may require the submittal of any data or information deemed necessary by this Commission for that evaluation.
8. This Order of Conditions is valid for three years under the local Wetlands Protection By-Law and three years under MGL Ch. 131, s 40. Application for an extension shall be submitted in writing to the Conservation Commission at least thirty days prior to the expiration date.

Town of Chatham – Order of Conditions
Massachusetts Wetlands Protection Act, M.G.L. c. 131, § 40
Town of Chatham Wetlands Bylaw C. 272 and Regulations
54 & 0 Barcliff Avenue Extension, Map [16F] Parcel [PIER-5 & 7]
SE 10- 3555, CWP N-22-27

9. The Commission reserves the right to amend this Order of Conditions prior to completion of construction, after a legally advertised public hearing, if plans or circumstances are changed or if new conditions or information so warrant.
10. The Commission reserves the right to require additional information from the Applicant or his/her Representative prior to completion of construction, after a legally advertised public hearing, if plans or circumstances are changed or if new conditions or information so warrant. If the Applicant will not provide such information, the Commission reserves the right to hire a third party applicant at the applicant's expense to obtain the information needed.
11. The Approved Plan for this Order of Conditions does not constitute specific acceptance of the boundaries of resource areas for work. The Commission may require new plans and/or delineation of resource areas, as it deems appropriate.
12. Upon completion of the project the applicant shall submit a written request for a Certificate of Compliance to the Commission and shall include:
 - a. A written statement from a Massachusetts registered professional engineer certifying that the work has been conducted as shown on the plan and documents referenced above, as conditioned by the Commission.
 - b. An "as-built" plan, including final contours and planted areas, prepared and signed and stamped by a Massachusetts registered professional engineer or land surveyor for the file.
13. This Order of Conditions shall be deemed not to have been complied with until the applicant has obtained a Certificate of Compliance and it has been recorded in the Barnstable County Registry of Deeds.
14. Failure to comply with the above conditions shall constitute cause to revoke this permit and/or issue fines.

**Order of Conditions-extension via Massachusetts LEADS Act
(Massachusetts Department of Environmental Protection,
March 6, 2025)**

Fw: [External] Re: MA LEADS Act - Chatham Fish Pier Order of Conditions Extension (DEP #

From Vardy, Fiona C <Fiona.Vardy@foth.com>

Date Fri 3/7/2025 5:13 PM

To Jarden, Judd R <Judd.Jarden@foth.com>

From: Catherine Ricks <cricks@chatham-ma.gov>

Sent: Thursday, March 6, 2025 2:46 PM

To: Vardy, Fiona C <Fiona.Vardy@foth.com>

Cc: Theodore Keon <tkeon@chatham-ma.gov>; Crystal Keon <ckeon@chatham-ma.gov>; Paul Wightman <PWightman@chatham-ma.gov>

Subject: [External] Re: MA LEADS Act - Chatham Fish Pier Order of Conditions Extension (DEP #

Fiona,

I apologize for not responding sooner, yes the LEADS Act extends the local permit an additional 2 years. The new expiration date is 7/7/27.

Sincerely,
Catherine

From: Vardy, Fiona C <Fiona.Vardy@foth.com>

Sent: Thursday, March 6, 2025 12:16 PM

To: Catherine Ricks <cricks@chatham-ma.gov>

Subject: MA LEADS Act - Chatham Fish Pier Order of Conditions Extension (DEP #

CAUTION: This email originated from outside of the organization. Please take care when clicking links or opening attachments. When in doubt, contact IT.

Hi Catherine,

Thanks so much for your time yesterday discussing the OOC extension! It's new to me so just wanted to follow up to confirm that the Chatham Fish Pier OOC (attached) is now extended to 7/7/2027. Please let me know if any additional information would be helpful!

Thank you!
Fiona

Fiona Vardy
Lead Environmental Regulatory Specialist



Permit Verification, NAE-2024-02657
(U.S. Army Corps of Engineers, February 12, 2025)



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751

February 12, 2025

Regulatory Division
File Number: NAE-2024-02657

Greg Berman
Town of Chatham
261 George Ryder Road
Chatham, Massachusetts 02633
(Via Email): gberman@chatham-ma.gov

Dear Greg Berman:

This regards your application submitted to the U.S. Army Corps of Engineers to permanently impact 420 square feet of area below the Mean High Water (MHW) line for the purposes of installing a walkway. The walkway will be a 70 feet X 6 feet concrete deck (420 square feet) supported by 10 12-inch timber piles. All concrete formwork will be done out of the water. No concrete will be placed below the MHW. The piles will be installed via vibratory hammer. Turbidity curtains will be installed and will remain on site for the duration of all in-water work in working condition. Time of the Year (TOY) restrictions will apply from January 15th to June 30th of any year unless turbidity curtains are deployed a week prior to the start of the TOY period. TOY restrictions will apply to all in-water work and immediate adjacent upland areas from May 1 to July 31 of any year to protect sensitive life stages of horseshoe crabs. This project is located in the Chatham Harbor, 54 Barcliff Avenue Extension, Chatham, Massachusetts 02633 at approximate site coordinates 41.687685, -69.950808. The work is shown on the enclosed plans titled "PROJECT: CHATHAM FISH PIER SOUTH JOG PEDESTRIAN WALKWAY ADDRESS: 54 BARCLIFF AVE. CHATHAM, MASSACHUSETTS, 02633 APPLICANT: TOWN OF CHATHAM" on 6 sheets and dated "SEPTEMBER 9, 2024".

Based on the information that you have provided, we verify that the activity is authorized under General Permit # 4 of the June 2, 2023, federal permit known as the Massachusetts General Permits (GPs). The GPs are available at <https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Massachusetts-General-Permit>.

Please review the enclosed GPs carefully, in particular the general conditions beginning on page 35, and ensure that you and all personnel performing work authorized by the GPs are fully aware of and comply with its terms and conditions. A copy of the GPs and this verification letter shall be available at the work site as required by General Condition 17. You must perform this work in compliance with the following special condition(s):

- 1) All construction shall be completed in accordance with the limits of construction and construction sequences detailed on the enclosed plan drawings, titled "PROJECT: CHATHAM FISH PIER SOUTH JOG PEDESTRIAN WALKWAY ADDRESS: 54 BARCLIFF AVE. CHATHAM, MASSACHUSETTS, 02633 APPLICANT: TOWN OF CHATHAM", on a total of 6 sheets, and dated "SEPTEMBER 9, 2024". If you change the plans or construction methods for work within or adjacent to the Chatham Harbor, please contact us immediately to discuss modification of this authorization. The Corps of Engineers must approve any changes before you undertake them.
- 2) You must complete and return the enclosed Work Start Notification Form to this office at least two weeks before the anticipated start date. The form shall be emailed to Maninder Singh at Maninder.Singh@usace.army.mil and cenae-r@usace.army.mil; or mailed to Maninder Singh, Regulatory Division, U.S. Army Corps of Engineers, New England District, 696 Virginia Road, Concord, Massachusetts 01742-2751.
- 3) You must complete and return the enclosed Compliance Certification Form to this office within one month of the completion of work. The form shall be emailed to Maninder Singh at Maninder.Singh@usace.army.mil and cenae-r@usace.army.mil; or mailed to Maninder Singh, Regulatory Division, U.S. Army Corps of Engineers, New England District, 696 Virginia Road, Concord, Massachusetts 01742-2751.
- 4) Vibratory pile driving shall be initiated for 15 seconds at reduced energy followed by a one-minute waiting period. This sequence of 15 seconds of reduced energy driving, one-minute waiting period shall be repeated two more times, followed immediately by pile-driving at full rate and energy. In addition to using a soft start at the beginning of the workday for pile driving, a soft start must also be used at any time following a cessation of pile driving for a period of 30 minutes or longer.
- 5) Turbidity curtains shall be installed for the duration of all in-water work and shall be maintained in working condition.
- 6) Time of the Year (TOY) restriction will be applied from January 15th to June 30th of any year to all in-water work. No in-water work shall take place within the TOY period. This TOY restriction will be waived if the turbidity curtains are installed at least one week prior to the beginning of the TOY period.
- 7) Time of the Year (TOY) restriction will be applied from May 1st to July 31st of any year to all in-water work and to any work on immediate adjacent upland areas. No work shall take place in-water and/or at immediate adjacent upland areas

during this TOY period.

- 8) Concrete delivery vehicles should be prohibited from washing down equipment on site. This activity could potentially wash excess concrete and hydrocarbons into marine resource areas.
- 9) Fuel spills from refueling of construction equipment will adversely impact sensitive resource areas. Impacts to resource areas can be avoided by prohibiting all land-based equipment from being refueled on-site. If equipment is refueled on-site, adequate containment and cleanup of material should be required to minimize impacts.
- 10) Maintain project vessels operating within the action area to speed limits below 10 knots.
- 11) Maintain a 1,500-foot buffer between project vessels and ESA-listed whales and a 150-foot buffer between project vessels and sea turtles unless the vessel is navigating to an in-water disposal site/activity.
- 12) The number of project vessels must be limited to the greatest extent possible, as appropriate to size and scale of project.
- 13) The permanent net increase in vessels resulting from a project (e.g., dock/float/pier/boating facility) must not exceed two non-commercial vessels. A project must not result in the permanent net increase of any commercial vessels.

This authorization expires on June 1, 2028. You must commence or have under contract to commence the work authorized herein by June 1, 2028, and complete the work by June 1, 2029. If not, you must contact this office to determine the need for further authorization and we recommend you contact us *before* the work authorized herein expires. Please contact us immediately if you change the plans or construction methods for work within our jurisdiction as we must approve any changes before you undertake them. Performing work within our jurisdiction that is not specifically authorized by this determination or failing to comply with the special condition(s) provided above or all the terms and conditions of the GPs may subject you to the enforcement provisions of our regulations.

This authorization does not obviate the need to obtain other federal, state, or local authorizations required by law. Applicants are responsible for applying for and obtaining any other approvals.

Your project is located within, or may affect resources within, the coastal zone. The

Massachusetts Office of Coastal Zone Management (CZM) has already determined that no further Federal Consistency Review is required.

We continually strive to improve our customer service. To better serve you, we would appreciate your completing our Customer Service Survey located at <https://regulatory.ops.usace.army.mil/customer-service-survey>.

Please contact Maninder Singh of my staff at (978) 318-8967 or (978)-257-6884 or Maninder.Singh@usace.army.mil if you have any questions.

Sincerely,

Paul Maniccia

Paul Maniccia
Chief, Massachusetts Section
Regulatory Division

Enclosures

Cc:

Fiona Vardy, FOTH, Fiona.Vardy@foth.com
Ed Reiner, U.S. EPA, Region 1, Boston, MA, reiner.ed@epa.gov
Sabrina Pereira, NMFS, Gloucester, MA; sabrina.pereira@noaa.gov
Alexa Cacacie, NMFS, Gloucester, MA; alexa.cacacie@noaa.gov
Sean Duffey, Coastal Zone Management, Boston, MA, sean.duffey@mass.gov
Patrice Bordonaro, Coastal Zone Management, Boston, MA,
patrice.bordonaro@mass.gov
Maissoun Reda, Chief, DEP SERO, Wetlands and Waterways, Lakeville, MA;
maissoun.reda@mass.gov
David Robinson, MA Board of Underwater Archaeological Resources (BUAR);
david.s.robinson@mass.gov
Chatham Conservation Commission, Medson@chatham-ma.gov

	I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.
	NAME

DRAWING INDEX

SHEET	TITLE
1	PROJECT NOTES
2	PROPERTY ABUTTER MAP
3	EXISTING SITE PLAN
4	PROPOSED SITE PLAN
5	SECTIONS

LEGEND

—————	ANNUAL HIGH TIDE LINE (AHTL EL. +3.56 NAVD88)
—————	MEAN HIGH WATER (MHW EL. +4.11 NAVD88)
· · · · ·	MEAN LOW WATER (MLW EL. -4.81 NAVD88)
—————	FEMA FLOODPLAIN ZONE BOUNDARY
—————	PROPERTY LINE
—————	PROJECT SITE

PRIOR USACE PERMITS AND MA DEP LICENSES AUTHORIZATIONS

AUTHORIZATION	ISSUING AGENCY	DATE
LICENSE NO. 7281	MA DEP	APRIL 2, 1998
CENAE-CO-R-199701460	USACE	NOVEMBER 25, 1997
LICENSE NO. 2078	DPW	OCTOBER 26, 1989
LICENSE NO. 7281	MA DEP	APRIL 2, 1989
LICENSE NO. 560	DPW	APRIL 15, 1979
PERMIT NO. 560-1979	USACE	1979
LICENSE NO. 5330	DPW	JANUARY 3, 1968
LICENSE NO. 3886	DPW	OCTOBER 1, 1956
LICENSE NO. 3171	DPW	SEPTEMBER 20, 1949

DATUM OFFSETS

MLLW	NAVD88	
+6.05	+3.56	AHTL
+4.80	+2.31	MHW
+2.49	0.00	NAVD88
+0.16	-2.33	MLW
0.00	-2.49	MLLW
OFFSETS TAKEN FROM NOAA TIDAL STATION CHATHAM #8447435 EPOCH 1983-2001		

- NOTES:
1. CONTOUR ELEVATION DATA SHOWN ON THIS PLAN WAS GATHERED ON FOTH ON MARCH 10, 2021, MARCH 17, 2021, AND JANUARY 19, 2022.
 2. ELEVATIONS ARE IN FEET AND TENTHS AND REFER TO ELEVATIONS ABOVE THE VERTICAL REFERENCE PLANE.
 3. THE VERTICAL REFERENCE PLANE FOR THIS PROJECT IS NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88). THE HORIZONTAL REFERENCE PLANE FOR THIS PROJECT IS NAD83 MASSACHUSETTS STATE PLANE, MAINLAND ZONE, US FOOT.
 4. TIDAL ELEVATIONS TAKEN FROM NOAA TIDAL GUAGE STATION - CHATHAM #8447435, EPOCH 1983-2001, ON 8/22/2022.
 5. PROPERTY INFORMATION SHOWN ON THE PLANS WAS COLLECTED FROM THE CHATHAM ASSESSORS OFFICE ON JULY 18, 2024.
 6. AUNT LYDIA'S COVE FEDERAL CHANNEL LIMITS REFER TO THE USACE AUNT LYDIAS COVE MASSACHUSETTS MAP DATED MARCH 21, 2006.
 7. CHAPTER 91 JURISDICTIONAL LIMITS SHOWN ON THE PLANS REFERENCE MA CZM COAST SURVEYS MAPS T1085A..
 8. SHORELINE, BRIDGES, PIERS, ETC. ARE SCALED FROM ORTHOIMAGERY. ORTHOIMAGERY AND SCALED DATA IS APPROXIMATE UNLESS OTHERWISE NOTED AND SHOULD BE USED AS A GENERAL REFERENCE ONLY.
 9. LIMITS OF SALT MARSH, AS SHOWN, ARE BASED ON AVAILABLE INFORMATION PROVIDED BY THE MASSGIS DATABASE. LIMITS OF MARSH POOL AND PHRAGMITES, AS SHOWN, ARE BASED ON FIELD SURVEY DATA COLLECTED ON JULY 26, 2024.
 10. FEMA FLOOD LINES AS SHOW DELINEATED ON FIRM PANEL 25009C0436G DATED 7/16/2014, FIS COMMUNITY 25009CV001C REVISED 7/19/2018. ENTIRE PROJECT SITE IS LOCATED WITHIN THE FEMA FLOOD ZONE VE EL. 15' NAVD88.

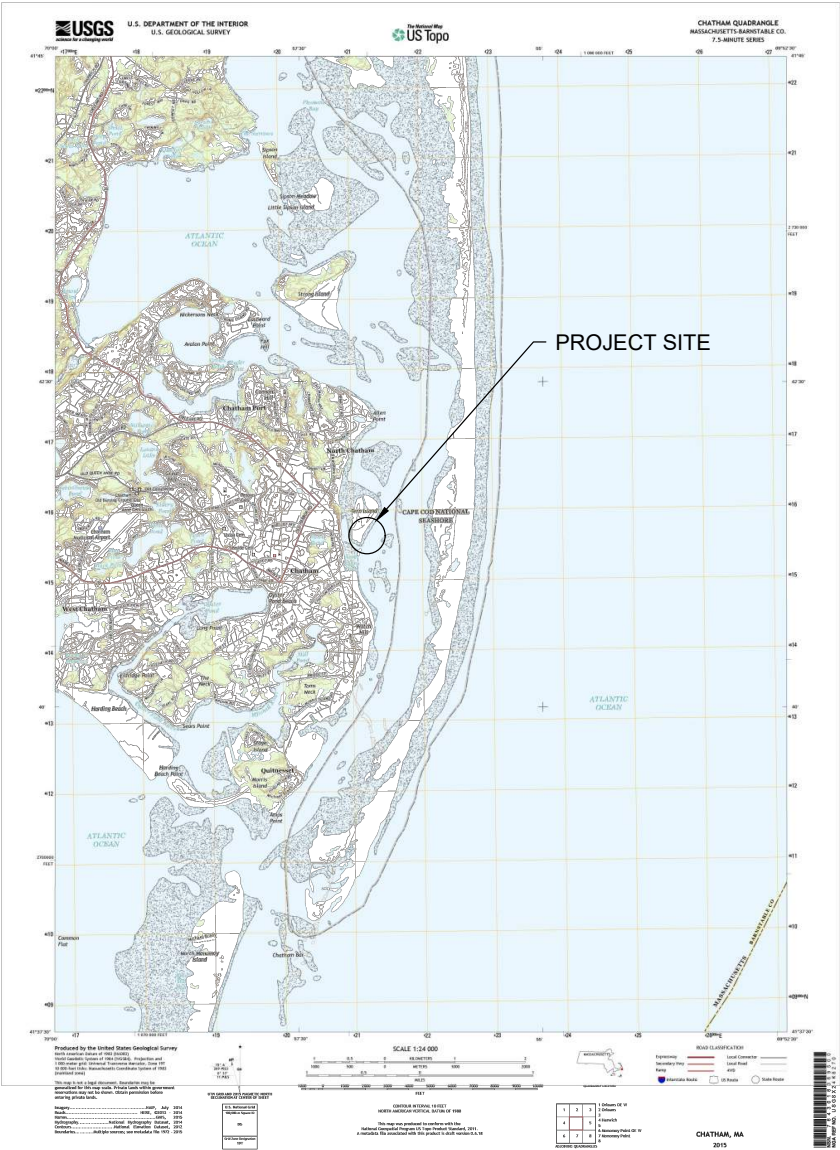
PROJECT: CHATHAM FISH PIER
SOUTH JOG PEDESTRIAN WALKWAY
ADDRESS: 54 BARCLIFF AVE.
CHATHAM, MASSACHUSETTS, 02633
APPLICANT: TOWN OF CHATHAM

PROJECT NOTES
SHEET 1 OF 6
SEPTEMBER 9, 2024



I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

NAME

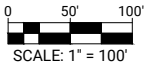
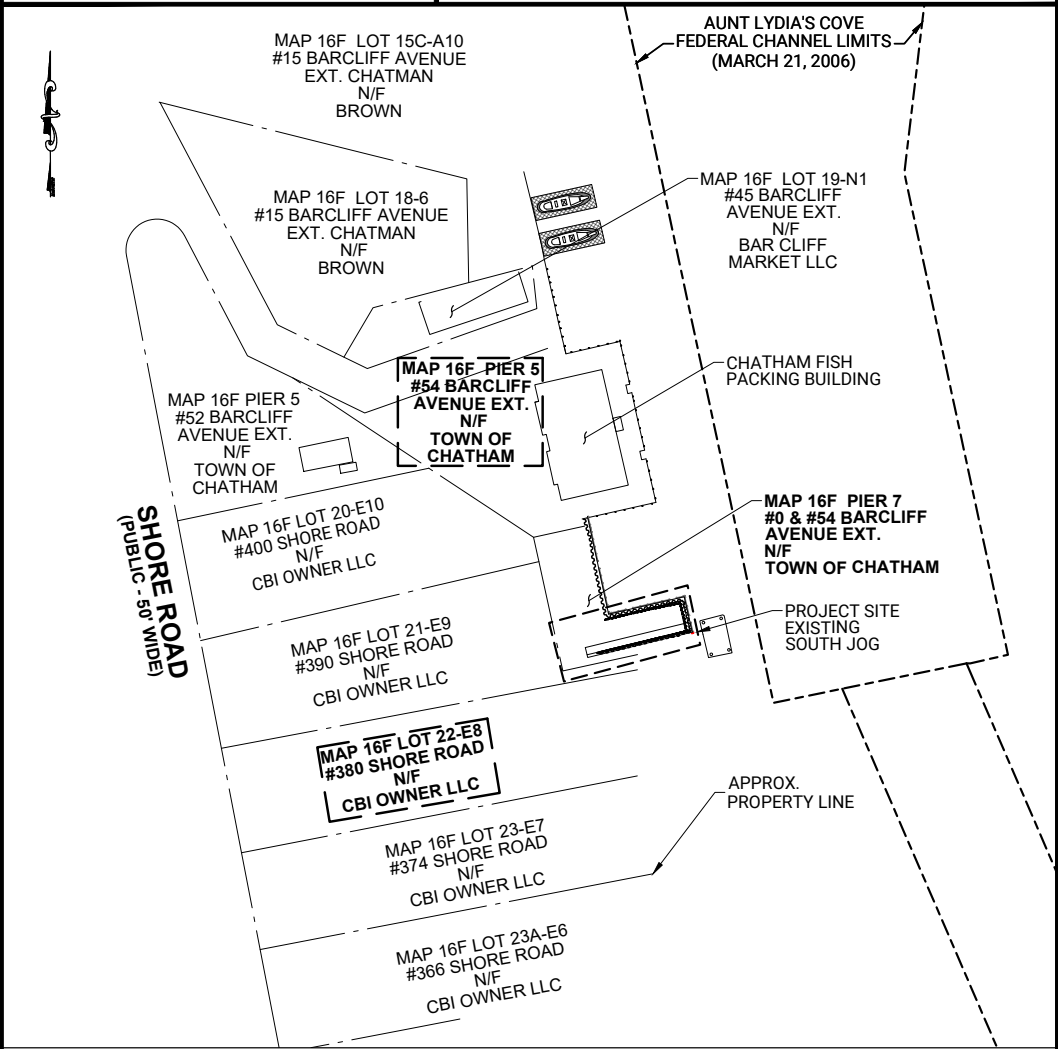


PROJECT: CHATHAM FISH PIER
SOUTH JOG PEDESTRIAN WALKWAY
ADDRESS: 54 BARCLIFF AVE.
CHATHAM, MASSACHUSETTS, 02633
APPLICANT: TOWN OF CHATHAM

USGS QUAD MAP
SHEET 2 OF 6
SEPTEMBER 9, 2024

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

NAME _____



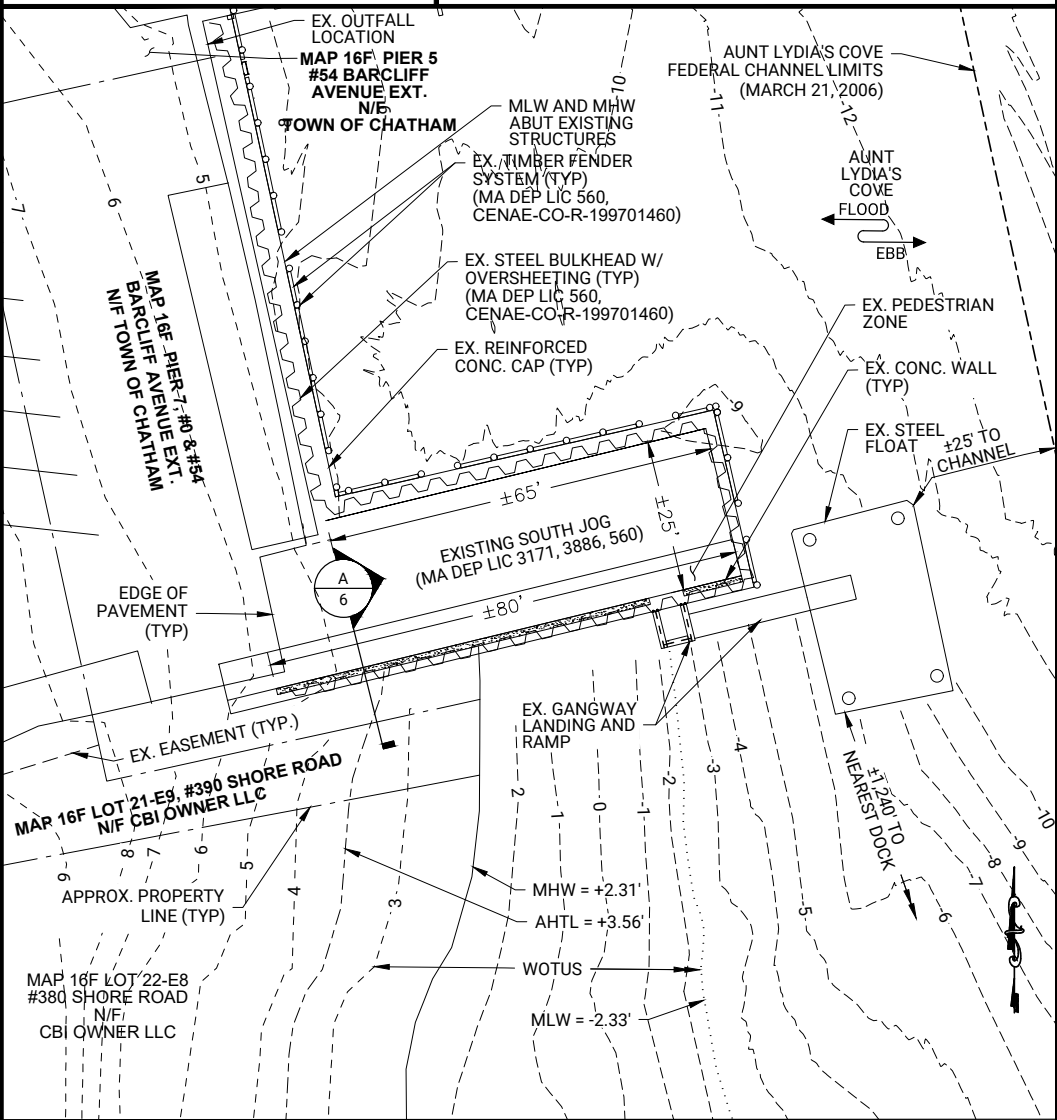
- NOTES**
1. ENTIRE PROJECT SITE LOCATED IN FEMA FLOOD VE ZONE EL 15' NAVD88

PROJECT: CHATHAM FISH PIER
SOUTH JOG PEDESTRIAN WALKWAY
ADDRESS: 54 BARCLIFF AVE.
CHATHAM, MASSACHUSETTS, 02633
APPLICANT: TOWN OF CHATHAM

PROPERTY ABUTTER
MAP
SHEET 3 OF 6
SEPTEMBER 9, 2024

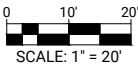
I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

NAME _____



NOTES

1. ENTIRE PROJECT SITE LOCATED SEAWARD OF HISTORIC HIGH TIDE LINE
2. ENTIRE PROJECT SITE LOCATED IN FEMA FLOOD VE ZONE EL 15' NAVD88

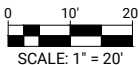
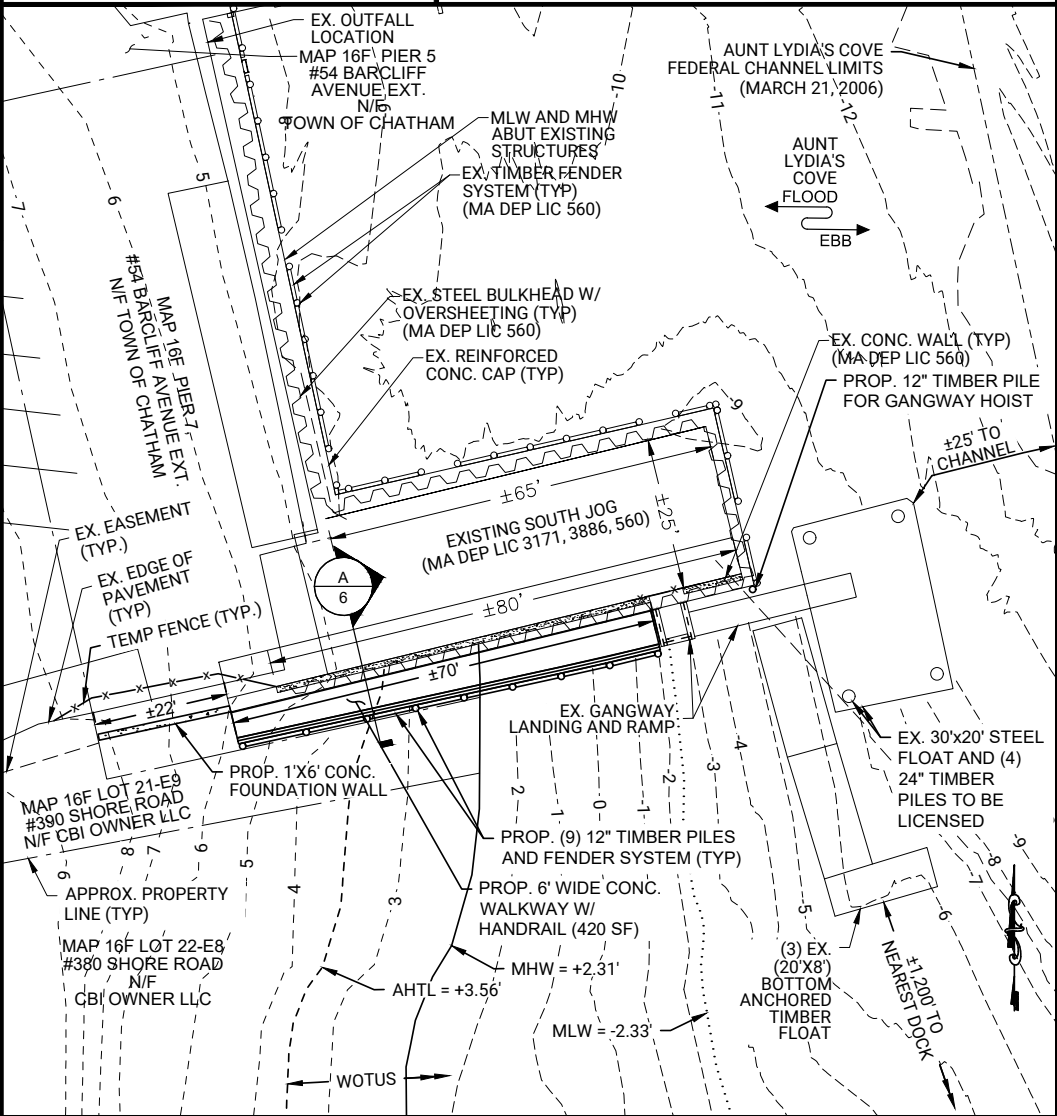


PROJECT: CHATHAM FISH PIER
SOUTH JOG PEDESTRIAN WALKWAY
ADDRESS: 54 BARCLIFF AVE.
CHATHAM, MASSACHUSETTS, 02633
APPLICANT: TOWN OF CHATHAM

EXISTING SITE PLAN
SHEET 4 OF 6
SEPTEMBER 9, 2024

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

NAME _____



NOTES

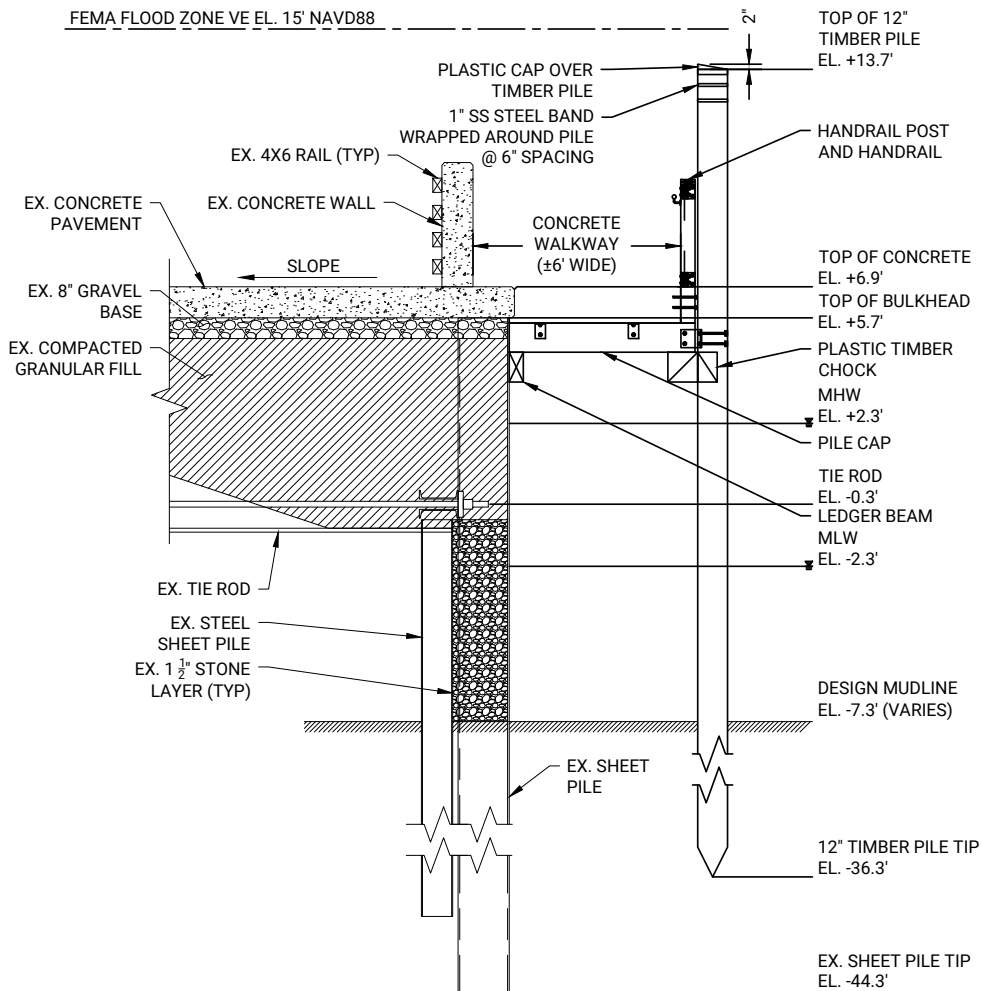
1. ENTIRE PROJECT SITE LOCATED SEAWARD OF HISTORIC HIGH TIDE LINE
2. ENTIRE PROJECT SITE LOCATED IN FEMA FLOOD VE ZONE EL 15' NAVD88

PROJECT: CHATHAM FISH PIER
SOUTH JOG PEDESTRIAN WALKWAY
ADDRESS: 54 BARCLIFF AVE.
CHATHAM, MASSACHUSETTS, 02633
APPLICANT: TOWN OF CHATHAM

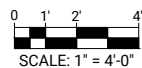
PROPOSED SITE PLAN
SHEET 5 OF 6
SEPTEMBER 9, 2024

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

NAME



A PEDESTRIAN WALKWAY SECTION
5 SCALE: 1" = 4'-0"



PROJECT: CHATHAM FISH PIER
SOUTH JOG PEDESTRIAN WALKWAY
ADDRESS: 54 BARCLIFF AVE.
CHATHAM, MASSACHUSETTS, 02633
APPLICANT: TOWN OF CHATHAM

PROPOSED SECTION
SHEET 6 OF 6
SEPTEMBER 9, 2024



**US Army Corps
of Engineers®**
New England District

WORK-START NOTIFICATION FORM
(Minimum Notice: Two weeks before work begins)

EMAIL TO: Maninder.Singh@usace.army.mil and cenae-r@usace.army.mil; or

MAIL TO: Maninder Singh
Regulatory Division
U.S. Army Corps of Engineers, New England District
696 Virginia Road
Concord, Massachusetts 01742-2751

Also, if the work is in the Massachusetts Coastal Zone (<https://www.mass.gov/service-details/czm-regions-coastal-communities-and-coastal-zone-boundary>), email this form to Sean.Duffey@mass.gov and patrice.bordonaro@mass.gov or mail it to: The Massachusetts Office of Coastal Zone Management, Project Review Coordinator, Suite 800, 251 Causeway Street, Boston, MA 02114.

Corps of Engineers Permit No. **NAE-2024-02657** was issued to **Greg Berman**. This work is located in Chatham Harbor, 54 Barcliff Avenue Extension, Chatham, Massachusetts 02633 at approximate site coordinates 41.687685, -69.950808 and authorized to permanently impact 420 square feet of area below the Mean High Water (MHW) line for the purposes of installing a walkway. The walkway will be 70 feet X 6 feet (420 square feet) supported by 10 12-inch timber piles. The piles will be installed via vibratory hammer. Turbidity curtains will be installed and will remain on site for the duration of all in-water work in working condition. Time of the Year (TOY) restrictions will apply from January 15th to June 30th of any year unless turbidity curtains are deployed a week prior to the start of the TOY period. TOY restrictions will apply to all in-water work and immediate adjacent upland areas that will be used for construction staging and site access from May 1 to July 31 to protect sensitive life stages of horseshoe crabs.

The people (e.g., contractor) listed below will do the work, and they understand the permit's conditions and limitations.

PLEASE PRINT OR TYPE

Name of Person/Firm: _____

Business Address: _____

Phone & email: () () _____

Proposed Work Dates: Start: _____ Finish: _____

Permittee/Agent Signature: _____ Date: _____

Printed Name: _____ Title: _____

Date Permit Issued: _____ Date Permit Expires: _____

FOR USE BY THE CORPS OF ENGINEERS

PM: _____ **Submittals Required:** _____

Inspection Recommendation: _____



**US Army Corps
of Engineers®**
New England District

COMPLIANCE CERTIFICATION FORM
(Minimum Notice: Permittee must sign and return notification
within one month of the completion of work.)

Permit Number: NAE-2024-02657
Project Manager: Maninder Singh
Name of Permittee: Greg Berman
Permit Issuance Date: February 12, 2025

Please sign this certification and return it to our office upon completion of the activity.

* E-MAIL TO: cenae-r-ma@usace.army.mil; & Maninder.singh@usace.army.mil *
* *
* MAIL TO: Massachusetts Section *
* Regulatory Division *
* U.S. Army Corps of Engineers, New England District *
* 696 Virginia Road *
* Concord, MA 01742-2751 *

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit was completed in accordance with the terms and conditions of the above referenced permit, and any required mitigation was completed in accordance with the permit conditions.

_____ Signature of Permittee	_____ Date
_____ Printed Name	_____ Date of Work Completion
() _____ Telephone Number	() _____ Telephone Number

Chapter 91 Special Conditions, License No. WW01-0000608
(Massachusetts Department of Environmental Protection,
May 28, 2025)



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

Maura T. Healey
Governor

Kimberley Driscoll
Lieutenant Governor

Rebecca L. Tepper
Secretary

Bonnie Heiple
Commissioner

May 28, 2025

Town of Chatham
c/o Foth Infrastructure & Environment, LLC.
Attn: Fiona Vardy
114 Touro Street
Newport, RI 02840

RE: ISSUANCE OF CHAPTER 91 WATERWAYS LICENSE
Waterways License Application No. 24-WW01-0174-APP, License No. WW01-0000608
Town of Chatham, Aunt Lydias Cove (Chatham Harbor)
0 Barcliff Avenue Extension, Chatham

Dear Sir or Madam,

The Department of Environmental Protection hereby issues the above-referenced Waterways License, enclosed, authorizing you to perform certain activities pursuant to M.G.L. c. 91, the Public Waterfront Act and its regulations 310 CMR 9.00. Any change in use or alteration of any structure or fill not authorized by this license may render this license void.

This License is not final until all administrative appeal periods from this License have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed. The appeal period is for twenty-one (21) days. No work shall be undertaken until the License has become final and has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property

RECORDING OF THE LICENSE

This License must be recorded at the Registry of Deeds or, if registered land, with the Land Registration Office within sixty (60) days from the date of license issuance. In the case of recorded land, the License shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the project is located. In the case of the registered land, the License shall be noted on the Land Court Certificate of Title of the owner of the land upon which the project is located. **Failure to record this license within sixty (60) days of the date of issuance will render this license void pursuant to 310 CMR 9.18.**

Upon recording the License and Plan, you must notify the Department by accessing your Authorization record at <https://eplace.eea.mass.gov/citizenaccess> and entering the recording information. Instructions for entering recording information may be found at: <https://www.mass.gov/doc/eplace-waterways-recording-information-amendment/download>. Failure to notify the Department of the recording of this License is a violation of 310 CMR 9.00.

REQUEST CERTIFICATE OF COMPLIANCE

Pursuant to 310 CMR 9.19, once the proposed project is completed you must file a Request for a Certificate of Compliance form, BRP WW05, within sixty (60) days of completion but in no event later than five (5) years from the License's issuance date. The license for any project for which such a request is not filed and certificate issued may be revoked pursuant to 310 CMR 9.26.

NOTICE OF APPEAL RIGHTS**Who has the right to appeal?**

The following persons shall have the right to an adjudicatory hearing concerning this decision by the Department to grant or deny a license or permit, in accordance with 310 CMR 9.17(1): (a) an applicant who has demonstrated property rights in the lands in question, or which is a public agency; (b) any person aggrieved by the decision of the Department to grant a license or permit who has submitted written comments within the public comment period; (c) ten (10) residents of the Commonwealth who, pursuant to M.G.L. c. 30A, § 10A, have submitted comments within the public comment period with at least 5 of the 10 residents residing in the municipality(s) in which the license or permitted activity is located. The appeal shall clearly and specifically state the facts and grounds for the appeal and the relief sought, and each appealing resident shall file an affidavit stating the intent to be part of the group and to be represented by its authorized representative; (d) the municipal official in the affected municipality who has submitted written comments within the public comment period; and (e) CZM, for any project identified in 310 CMR 9.13(2) (a) for CZM participation or, in an Ocean Sanctuary, if it has filed a notice of participation within the public comment period.

How can I request an adjudicatory hearing?

A person requesting an adjudicatory hearing must submit a "Notice of Claim" to the Department, with a copy of the MassDEP Transmittal Form and including the detail specified below, within twenty-one (21) days of the date of issuance of this decision. The MassDEP Fee Transmittal Form is available at the following website: <https://www.mass.gov/doc/adjudicatory-hearing-fee-transmittal-form/download>. The Notice of Claim must be made in writing and sent by certified mail or hand delivery to:

MassDEP Office of Appeals and Dispute Resolution
Case Administrator
100 Cambridge Street, Suite 900
Boston, MA 02114

A copy of the complete Notice of Claim must be sent at the same time by certified mail or hand delivery to: (1) the applicant, (2) the municipal official of the city or town where the project is located, and (3) the issuing office of the MassDEP, which in this case is located at:

MassDEP Waterways Regulation Program
20 Riverside Drive
Lakeville, MA 02347

The MassDEP Fee Transmittal Form and a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100) must be mailed to:

ISSUANCE OF CHAPTER 91 WATERWAYS LICENSE

Page 3

Waterways License Application No. 24-WW01-0174-APP, License No. WW01-0000608

Town of Chatham, Aunt Lydias Cove (Chatham Harbor)

0 Barcliff Avenue Extension, Chatham

Mass. Department of Environmental Protection
Commonwealth Master Lockbox
P.O. Box 4062
Boston, Massachusetts 02211

What information must be included in the hearing request?

Pursuant to 310 CMR 9.17(3), any Notice of Claim requesting an adjudicatory hearing must include the following information:

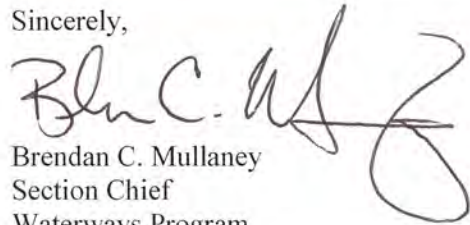
- (a) the MassDEP Waterways Application File Number;
- (b) the complete name, address, fax number and telephone number of the applicant;
- (c) the address of the project;
- (d) the complete name, address, fax number, and telephone number of the party filing the request and, if represented by counsel, the name, address, fax number, and phone number of the attorney;
- (e) if claiming to be a person aggrieved, the specific facts that demonstrate that the party satisfies the definition of "aggrieved person" found in 310 CMR 9.02;
- (f) a clear statement that a formal adjudicatory hearing is being requested;
- (g) a clear statement of the facts which are the grounds for the proceedings, the specific objections to the MassDEP's written decision, and the relief sought through the adjudicatory hearing, including specifically the changes desired in the final written decision; and
- (h) a statement that a copy of the request has been sent to: the applicant and the municipal official of the city or town where the project is located.

Dismissal of request

The request for appeal will be dismissed if the filing fee is not paid, unless the appellant is exempt or is granted a waiver. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority. The Department may waive the adjudicatory hearing filing fee pursuant to 310 CMR 4.06(2) for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file an affidavit setting forth the facts believed to support the claim of undue financial hardship together with the hearing request as provided above.

Please feel free to contact Cally Harper of the Waterways Program, (617) 549-3598 or cally.harper@mass.gov, if you have any questions pertaining to the Chapter 91 License.

Sincerely,



Brendan C. Mullaney
Section Chief
Waterways Program

cc: w/enc. Daniel J. Padien, Waterways Program Chief, DEP Boston
Office of Coastal Zone Management
Chatham Harbormaster
Chatham Conservation Commission
Greg Berman, Town of Chatham

The Commonwealth of Massachusetts



No. WW01-0000608

Whereas, Town of Chatham

of -- Chatham -- in the County of -- Barnstable -- and Commonwealth aforesaid, has applied to the Department of Environmental Protection for license to -- construct and maintain a concrete foundation wall, concrete walkway, and timber pile and fender system --

and has submitted plans of the same; and whereas due notice of said application, ~~and of the time and place fixed for a hearing thereon~~, has been given, as required by law, to the -- Select Board -- of the -- Town of Chatham. --

NOW, said Department, having heard all parties desiring to be heard, and having fully considered said application, hereby, subject to the approval of the Governor, authorizes and licenses the said

-- Town of Chatham --, subject to the provisions of the ninety-first chapter of the General Laws, and of all laws which are or may be in force applicable thereto, to -- construct and maintain a concrete foundation wall, concrete walkway, and timber pile and fender system --

in and over the waters and filled tidelands of -- Aunt Lydia's Cove (Chatham Harbor) -- at -- 0 Barcliff Avenue, Extension -- in the -- Town of Chatham -- and in accordance with the locations shown and details indicated on the accompanying DEP License Plan No. WW01-0000608 (5 sheets).

The structures hereby authorized shall be limited to the following use(s): to provide public and commercial docking and boating access to navigable waters.

This license is issued for an unlimited term in accordance with 310 CMR 9.15(l)(c).

Existing structures previously authorized under the Department of Environmental Protection License No.s 11586, 2078, 7281; the Department of Environmental Quality Engineering License No. 560 and Department of Public Works License No.s 5330, 3886 and 3171 shall be maintained in accordance with the terms and conditions of said licenses and plans.

Special Waterways Conditions:

1. In accordance with any license condition, easement, or other public right of lateral passage that exists in the area of the subject property lying between the high and low water marks, the Licensee shall allow the public in the exercise of such rights to pass freely over and around all structures within such intertidal area. Nothing in this condition shall be construed as preventing the Licensee from excluding the public from portions of said structure(s) or property not intended for lateral passage.
2. In partial compensation for use of structures on tidelands of the Commonwealth, which interferes with the rights of the public to use such lands, the Licensee shall allow the public to pass on foot, for any purpose and from dawn to dusk, within the area of the subject property lying seaward of the high water mark. This condition shall not be construed to prevent the Licensee from taking reasonable measures to discourage unlawful activities by users of the area(s) intended for public passage, including but not limited to trespassing on the adjacent private areas and deposit of refuse of any kind or nature in the water or on the shore. Further, the exercise by the public of free on-foot passage in accordance with this condition shall be considered a permitted use to which the limited liability provisions of M.G.L. c.21, s.17c apply.
3. No dredging (including, but not limited to the effects of prop wash) is permitted herein.
4. To protect the sensitive life stages of winter flounder, in-water, silt-producing activities shall not take place from January 15th to June 30th of any year. However, work may occur within this TOY-restricted period if a silt curtain is installed around the work area prior to January 15th. To protect the sensitive life stages of horseshoe crabs, construction activities on the beach bordering the pier shall not take place from May 1st to July 31st of any year.
5. All work authorized herein shall be completed within five (5) years of the date of license issuance. Said construction period may be extended by the Department for one or more one year periods without public notice, provided that the Applicant submits to the Department, thirty (30) days prior to the expiration of said construction period, a written request to extend the period and provides an adequate justification for said extension.
6. Within sixty (60) days of completion of the licensed project, the Licensee shall request, in writing, that the Department issue a Certificate of Compliance in accordance with 310 CMR 9.19. The request shall be accompanied by a certification by a registered professional engineer licensed in the Commonwealth that the project was completed in accordance with the License.

Duplicate of said plan, number WW01-0000608 is on file in the office of said Department, and original of said plan accompanies this License, and is to be referred to as a part hereof.

STANDARD WATERWAYS LICENSE CONDITIONS

1. Acceptance of this Waterways License shall constitute an agreement by the Licensee to conform with all terms and conditions stated herein.
 2. This License is granted upon the express condition that any and all other applicable authorizations necessitated due to the provisions hereof shall be secured by the Licensee prior to the commencement of any activity or use authorized pursuant to this License.
 3. Any change in use or any substantial structural alteration of any structure or fill authorized herein shall require the issuance by the Department of a new Waterways License in accordance with the provisions and procedures established in Chapter 91 of the Massachusetts General Laws. Any unauthorized substantial change in use or unauthorized substantial structural alteration of any structure or fill authorized herein shall render this Waterways License void.
 4. This Waterways License shall be revocable by the Department for noncompliance with the terms and conditions set forth herein. This license may be revoked after the Department has given written notice of the alleged noncompliance to the Licensee and those persons who have filed a written request for such notice with the Department and afforded them a reasonable opportunity to correct said noncompliance. Failure to correct said noncompliance after the issuance of a written notice by the Department shall render this Waterways License void and the Commonwealth may proceed to remove or cause removal of any structure or fill authorized herein at the expense of the Licensee, its successors and assigns as an unauthorized and unlawful structure and/or fill.
 5. The structures and/or fill authorized herein shall be maintained in good repair and in accordance with the terms and conditions stated herein and the details indicated on the accompanying license plans.
 6. Nothing in this Waterways License shall be construed as authorizing encroachment in, on or over property not owned or controlled by the Licensee, except with the written consent of the owner or owners thereof.
 7. This Waterways License is granted subject to all applicable Federal, State, County, and Municipal laws, ordinances and regulations including but not limited to a valid final Order of Conditions issued pursuant to the Wetlands Protection Act, G.L. Chapter 131, s.40.
 8. This Waterways License is granted upon the express condition that the use of the structures and/or fill authorized hereby shall be in strict conformance with all applicable requirements and authorizations of the MassDEP.
 9. This License authorizes structure(s) and/or fill on:

X Private Tidelands. In accordance with the public easement that exists by law on private tidelands, the licensee shall allow the public to use and to pass freely upon the area of the subject property lying between the high and low water marks, for the purposes of fishing, fowling, navigation, and the natural derivatives thereof.

X Commonwealth Tidelands. The Licensee shall not restrict the public's right to use and to pass freely, for any lawful purpose, upon lands lying seaward of the low water mark. Said lands are held in trust by the Commonwealth for the benefit of the public.

 a Great Pond of the Commonwealth. The Licensee shall not restrict the public's right to use and to pass freely upon lands lying seaward of the high water mark for any lawful purpose.

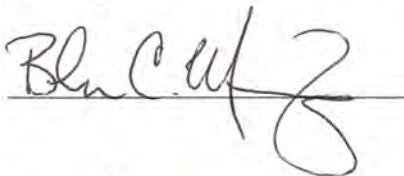
 Navigable River and Streams. The Licensee shall not restrict the public's right to use and to pass freely, for any lawful purpose, in the waterway.
- No restriction on the exercise of these public rights shall be imposed unless otherwise expressly provided in this license.
10. Unless otherwise expressly provided by this license, the licensee shall not limit the hours of availability of any areas of the subject property designated for public passage, nor place any gates, fences, or other structures on such areas in a manner that would impede or discourage the free flow of pedestrian movement thereon.

The amount of tide-water displaced by the work hereby authorized has been ascertained by said Department, and compensation thereof has been made by the said -- Town of Chatham -- by paying into the Treasury of the Commonwealth -- zero dollars and zero cents (\$ 0.00) -- for each cubic yard so displaced, being the amount hereby assessed by said Department. (0 cy = \$ 0.00)

Nothing in this License shall be so construed as to impair the legal rights of any person.

This License shall be void unless the same and the accompanying plan are recorded within 60 days from the date hereof, in the Registry of Deeds for the County of Barnstable.

IN WITNESS WHEREAS, said Department of Environmental Protection have hereunto set their hands this 28th day of May in the year two thousand twenty-five.

for Program Chief 

Department of Environmental Protection

Commissioner 

THE COMMONWEALTH OF MASSACHUSETTS

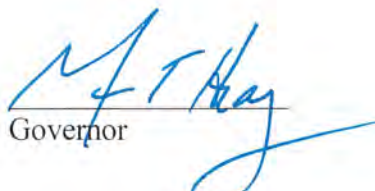
This license is approved in consideration of the payment into the treasury of the Commonwealth by the said -- Town of Chatham --

of the further sum of -- zero dollars and zero cents (\$0.00) --

the amount determined by the Governor as a just and equitable charge for rights and privileges hereby granted in the land of the Commonwealth.

BOSTON,

Approved by the Governor.


Governor

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

NAME

DRAWING INDEX

SHEET	TITLE
1	PROJECT NOTES
2	PROPERTY ABUTTER MAP
3	EXISTING SITE PLAN
4	PROPOSED SITE PLAN
5	SECTIONS

PRIOR CHAPTER 91 AUTHORIZATIONS

AUTHORIZATION	ISSUING AGENCY	DATE
LICENSE NO. 11586	MA DEP	DECEMBER 29, 2006
LICENSE NO. 2078	MA DEP	OCTOBER 26, 1989
LICENSE NO. 7281	MA DEP	APRIL 2, 1989
LICENSE NO. 560	MA DEQE	APRIL 15, 1979
LICENSE NO. 5330	DPW	JANUARY 3, 1968
LICENSE NO. 3886	DPW	OCTOBER 1, 1956
LICENSE NO. 3171	DPW	SEPTEMBER 20, 1949

LEGEND

— — — — —	HISTORIC HIGH WATER
=====	MEAN HIGH WATER (MHW EL. +4.11 NAVD88)
.....	MEAN LOW WATER (MLW EL. -4.81 NAVD88)
- - - - -	FEMA FLOODPLAIN ZONE BOUNDARY
=====	PROPERTY LINE
=====	PROJECT SITE

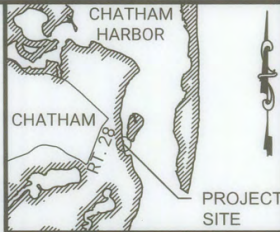
NOTES:

1. CONTOUR ELEVATION DATA SHOWN ON THIS PLAN WAS GATHERED ON FOTH ON MARCH 10, 2021, MARCH 17, 2021, AND JANUARY 19, 2022.
2. ELEVATIONS ARE IN FEET AND TENTHS AND REFER TO ELEVATIONS ABOVE THE VERTICAL REFERENCE PLANE.
3. THE VERTICAL REFERENCE PLANE FOR THIS PROJECT IS NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88). THE HORIZONTAL REFERENCE PLANE FOR THIS PROJECT IS NAD83 MASSACHUSETTS STATE PLANE, MAINLAND ZONE, US FOOT.
4. TIDAL ELEVATIONS TAKEN FROM NOAA TIDAL GUAGE STATION - CHATHAM #8447435, EPOCH 1983-2001, ON 8/22/2022.
5. PROPERTY INFORMATION SHOWN ON THE PLANS WAS COLLECTED FROM THE CHATHAM ASSESSORS OFFICE ON JULY 18, 2024.
6. AUNT LYDIA'S COVE FEDERAL CHANNEL LIMITS REFER TO THE USACE AUNT LYDIAS COVE MASSACHUSETTS MAP DATED MARCH 21, 2006.
7. CHAPTER 91 JURISDICTIONAL LIMITS SHOWN ON THE PLANS REFERENCE MA CZM COAST SURVEYS MAPS T1085A..
8. SHORELINE, BRIDGES, PIERS, ETC. ARE SCALED FROM ORTHOIMAGERY. ORTHOIMAGERY AND SCALED DATA IS APPROXIMATE UNLESS OTHERWISE NOTED AND SHOULD BE USED AS A GENERAL REFERENCE ONLY.
9. LIMITS OF SALT MARSH, AS SHOWN, ARE BASED ON AVAILABLE INFORMATION PROVIDED BY THE MASSGIS DATABASE. LIMITS OF MARSH POOL AND PHRAGMITES, AS SHOWN, ARE BASED ON FIELD SURVEY DATA COLLECTED ON JULY 26, 2024.
10. FEMA FLOOD LINES AS SHOW DELINEATED ON FIRM PANEL 25009C0436G DATED 7/16/2014, FIS COMMUNITY 25009CV001C REVISED 7/19/2018. ENTIRE PROJECT SITE IS LOCATED WITHIN THE FEMA FLOOD ZONE VE EL. 15' NAVD88.

PROJECT NOTES

SHEET 1 OF 5
SEPTEMBER 9, 2024

PLAN ACCOMPANYING PETITION OF THE TOWN OF CHATHAM TO CONSTRUCT AND MAINTAIN A CANTILEVER DECK EXTENSION WITHIN FILLED AND/OR FLOWED TIDELANDS OR WATERS OF AUNT LYDIAS COVE (CHATHAM HARBOR) AT 0 BARCLIFF AVE. EXT., CHATHAM, MASSACHUSETTS, BARNSTABLE COUNTY



SITE LOCUS
1"=10,000'

DATUM OFFSETS

MLLW	NAVD88	
+6.05	+3.56	AHTL
+4.80	+2.31	MHW
+2.49	0.00	NAVD88
+0.16	-2.33	MLW
0.00	-2.49	MLLW

OFFSETS TAKEN FROM
NOAA TIDAL STATION
CHATHAM #8447435
EPOCH 1983-2001

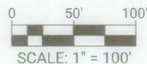
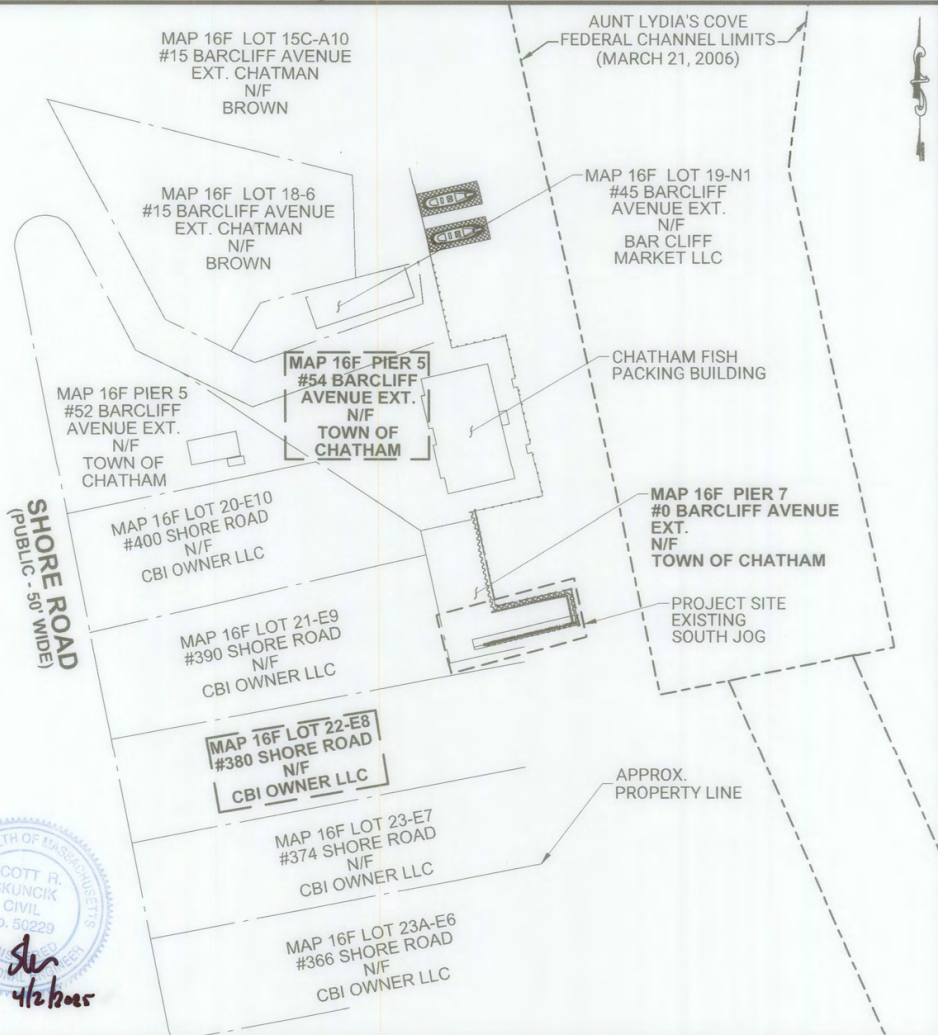
LICENSE PLAN NO. www1-0000608

Approved by Department of Environmental Protection of
Massachusetts

Ben C. M. 3
Ben C. M. 3
May 28, 2025

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

Scott R. Skuncik
NAME



NOTES

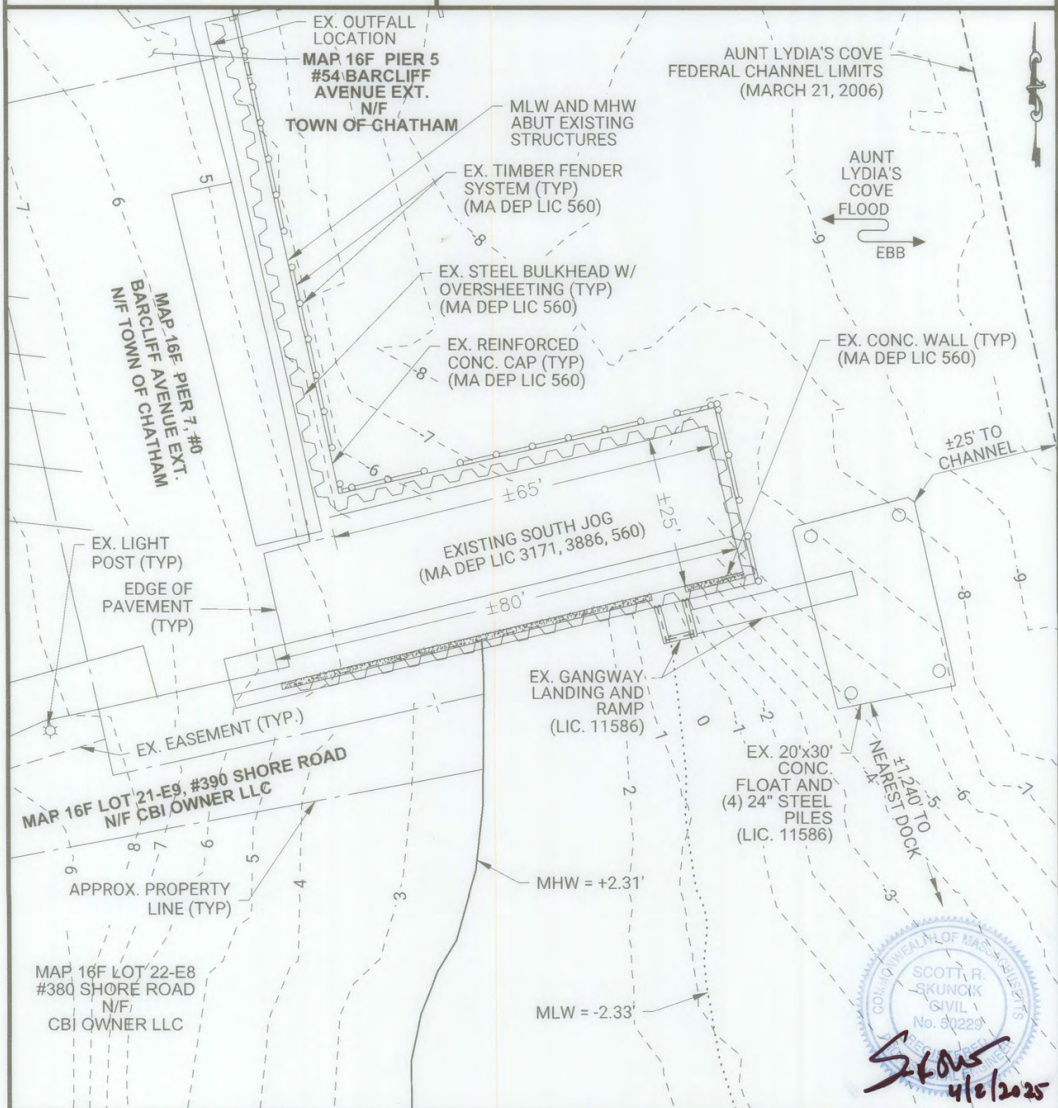
1. ENTIRE PROJECT SITE LOCATED SEAWARD OF HISTORIC HIGH TIDE LINE
2. ENTIRE PROJECT SITE LOCATED IN FEMA FLOOD VE ZONE EL 15' NAVD88

PROPERTY ABUTTER MAP
SHEET 2 OF 5
SEPTEMBER 9, 2024

LICENSE PLAN NO. W101-0000608
Approved by Department of Environmental Protection
Date: May 28, 2025

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

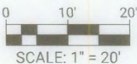
Sam R Shaw
NAME



SCOTT R. SKUNCIK
CIVIL
No. 80229
4/8/2025

NOTES

1. ENTIRE PROJECT SITE LOCATED SEAWARD OF HISTORIC HIGH TIDE LINE
2. ENTIRE PROJECT SITE LOCATED IN FEMA FLOOD VE ZONE EL 15' NAVD88

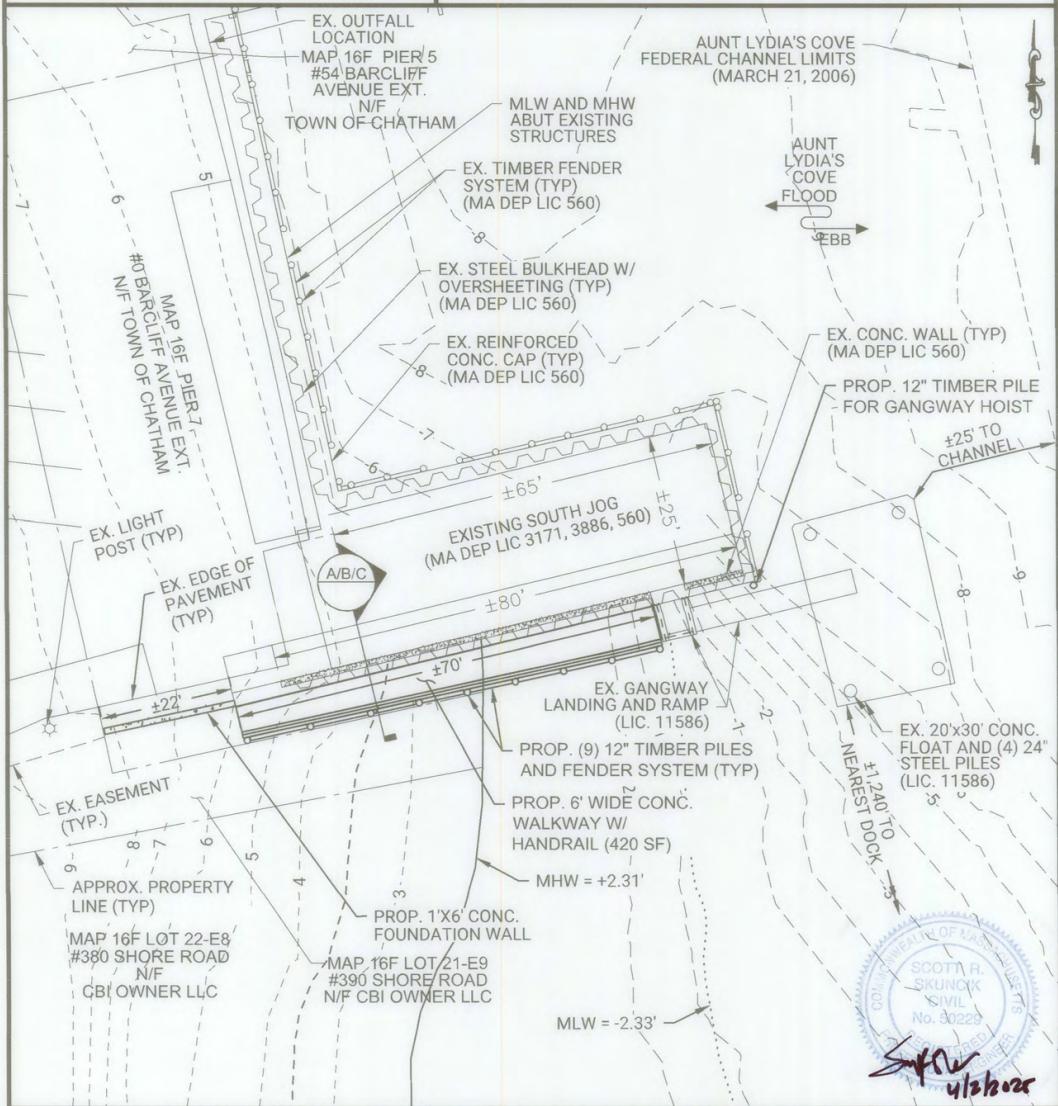


EXISTING SITE PLAN
SHEET 3 OF 5
SEPTEMBER 9, 2024

LICENSE PLAN NO. *WW01-0000608*
Approved by Department of Environmental Protection
Date: *May 20, 2025*

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

Signature
NAME



0 10' 20'
SCALE: 1" = 20'

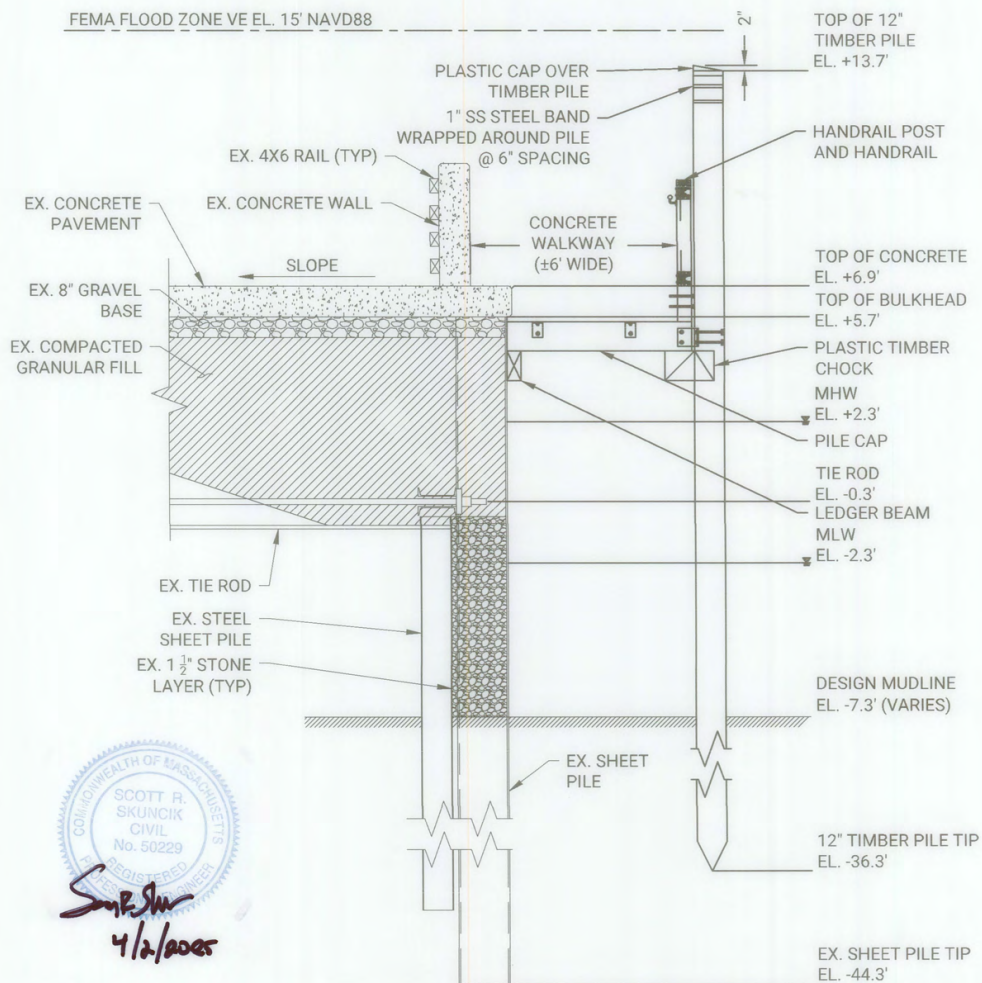
PROPOSED SITE PLAN
SHEET 4 OF 5
SEPTEMBER 9, 2024

LICENSE PLAN NO. WW01-0000608
Approved by Department of Environmental Protection
Date: May 28, 2025

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

Sam R. Skuncik

NAME



A
5

SECTION OF CONCRETE WALKWAY
SCALE: 1" = 4'-0"

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

SECTIONS
SHEET 5 OF 5
SEPTEMBER 9, 2024

LICENSE PLAN NO. **WW01-0000608**
Approved by Department of Environmental Protection
Date: **May 28, 2025**

Drawings

CHATHAM FISH PIER SOUTH JOG PEDESTRIAN WALKWAY

TOWN OF CHATHAM, MASSACHUSETTS
DECEMBER 2025

Prepared for:
Town of Chatham, Massachusetts



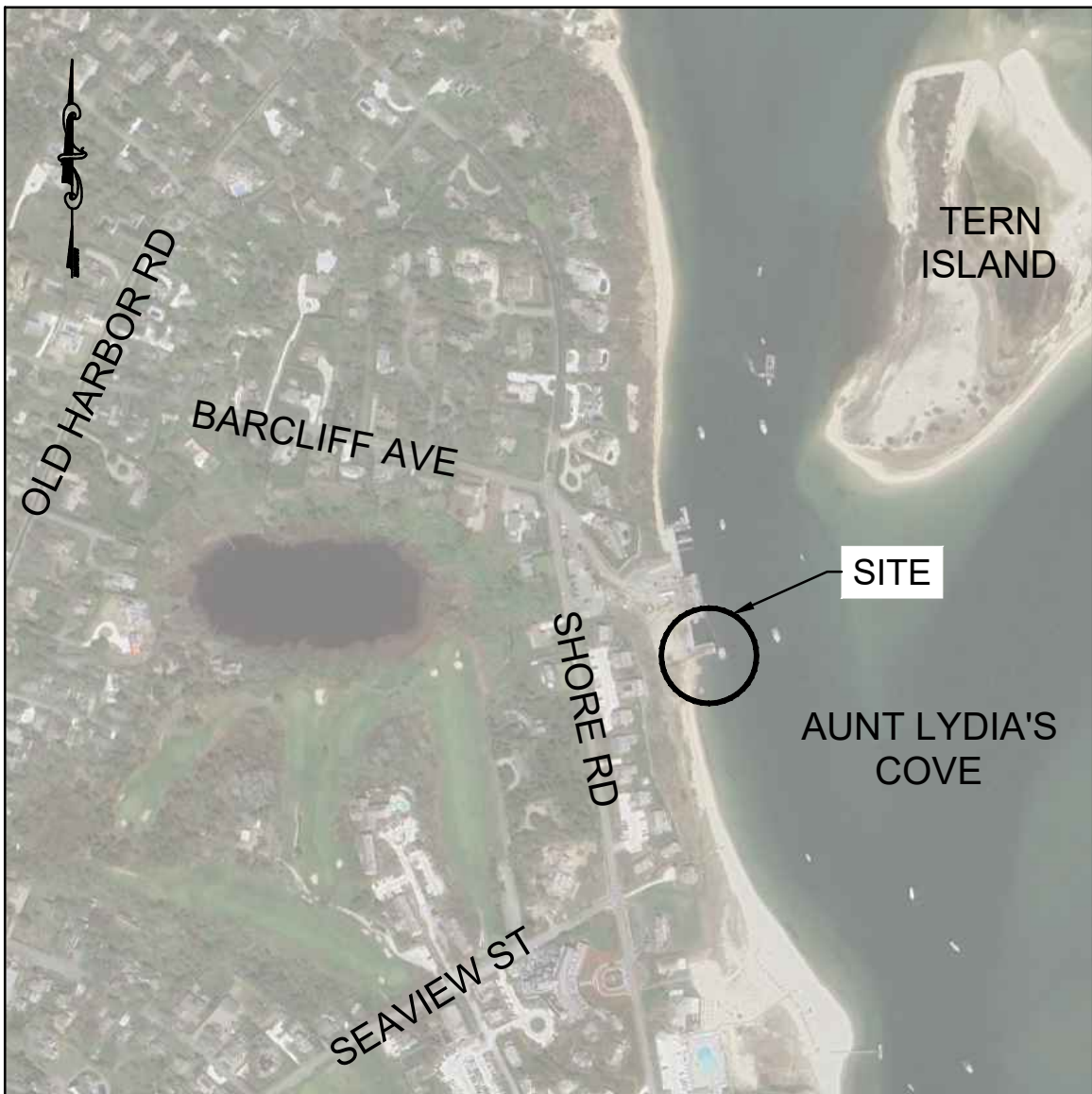
Prepared by:
Foth Infrastructure & Environment, LLC



DRAWING INDEX	
SHEET NUMBER	TITLE
G-001	COVER SHEET
G-002	PROJECT NOTES
C-101	EXISTING CONDITIONS AND DEMOLITION PLAN
S-101	GENERAL SITE PLAN
S-102	CONCRETE WALKWAY PARTIAL PLAN
S-301	SECTIONS
S-501	DETAILS



VICINITY MAP



LOCATION MAP

PE STAMP

SHEET TITLE:

COVER SHEET

ISSUANCE:

ISSUED FOR BID

PROJECT NO: 0021C036.01

SHEET NUMBER

G-001

REVISIONS			
NO.	BY	DATE	DESCRIPTION
△			
△			
△			
△			
△			

DATE OF PREPARATION		
	BY	DATE
SURVEYED	FOTH	7/16/2025
DRAWN	CJG	11/25/2025
DESIGNED	AIM	11/25/2025
CHECKED	AIM	12/10/2025



SHEET TITLE:

PROJECT NOTES

ISSUANCE:

ISSUED FOR BID

PROJECT NO: 0021C036.01

SHEET NUMBER

G-002

3. THE CONTRACTOR SHALL SAFEGUARD AND PROTECT EXCAVATIONS

1. BITUMINOUS CONCRETE PAVING SHALL CONFORM TO THE REQUIREMENTS OF THE STATE OF MASSACHUSETTS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR HIGHWAYS AND BRIDGES, LATEST EDITION.

5. HANDLE TIMBER PILES CAREFULLY, WITHOUT SUDDEN DROPPING, BREAKING OF OUTER FIBERS, BRUISING OR PENETRATING THE SURFACE WITH TOOLS.

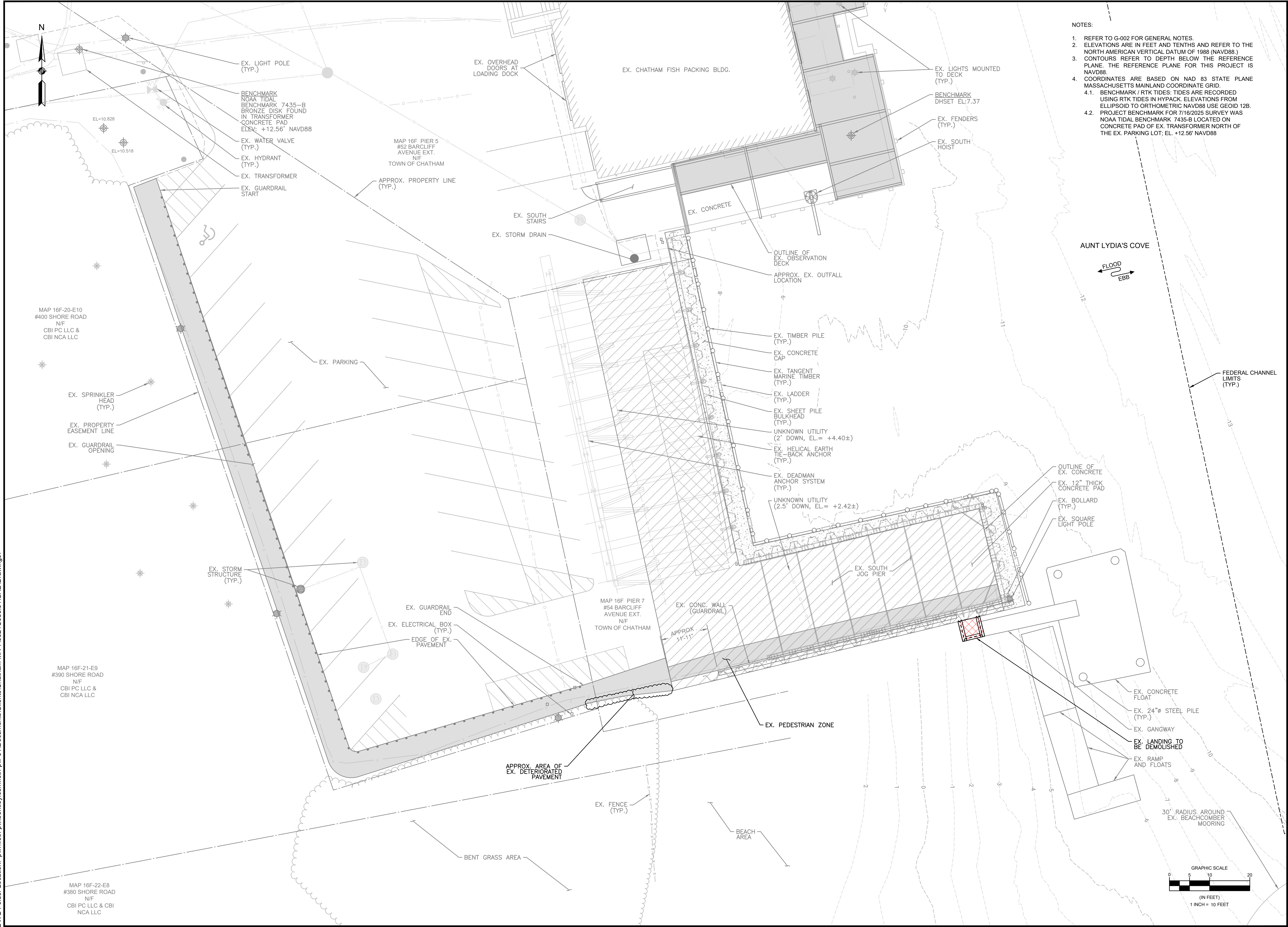
1. GLASS FIBER REINFORCED POLYMER (GFRP) SHALL BE KODIAK HIGH PERFORMANCE COMPOSITES, MANUFACTURED BY FIBERGLASS REBAR. US, KATY, TX OR EQUIVALENT ACCEPTED BY THE ENGINEER.

1. PULTEX SUPERSTRUCTURAL PROFILES, WIDE FLANGE SECTIONS, SHALL BE PART #IW 982 AS MANUFACTURED BY CREATIVE COMPOSITES GROUP, ALUM BANK, PA OR EQUIVALENT ACCEPTED BY ENGINEER.


NOAA TIDE STATION
CHATHAM, MA 8447435

$x^{9.71}$	EXISTING SPOT ELEVATION
— 10 —	EXISTING CONTOUR
— 10 —	EXISTING CONTROL POINT LOCATION
	EXISTING BENCH MARK LOCATION
	EXISTING SPRINKLER HEAD LOCATION
	EXISTING CATCH BASIN LOCATION
	EXISTING LIGHTPOLE LOCATION
	PROPOSED LIGHTPOLE LOCATION
	EXISTING SANITARY MANHOLE LOCATION
	EXISTING DRAINAGE MANHOLE LOCATION
	EXISTING SANITARY MANHOLE LOCATION
	EXISTING WATER SOURCE LOCATION
	EXISTING GAS METER LOCATION
	EXISTING GAS VALVE LOCATION
	EXISTING WATER VALVE LOCATION
	NO PARKING AREA
	CONCRETE AREA - PAD & DECK
	DEMOLITION AREA
	HANDICAP PARKING SPOT
	EXISTING ELECTRIC LINE
	EXISTING COMMUNICATIONS LINE
	EXISTING WATER LINE
	EXISTING STORM SEWER
	EXISTING SANITARY SEWER
	EXISTING GAS LINE
	UNKNOWN UTILITY LINE
	APPROXIMATE PROPERTY LINE
	PROPERTY EASEMENT
	BENT GRASS BOUNDARY
	EXISTING OR PROPOSED SHEET PILING
	SHELLFISH SUITABILITY AREA (MASSGIS)
	HISTORIC HIGH TIDE LINE (MASSGIS)
	FEMA FLOOD ZONE (MASSGIS)
	WETLAND RESOURCE AREAS (MA GIS)
	MEAN LOW WATER (MLW) = -2.33' NAVD88
	MEAN HIGH WATER (MHW) = -2.31' NAVD88

Tuesday, December 9, 2025 8:53:40 AM
DWG Filename: 21c036.01 chatham south jog_ex cond.dwg Layout: c-101
DWG Folder Location: pw:\foth-pw.bentley.com:foth-pw-01\Documents\Clients\Chatham MA T10021C036.01\CAD\Drawings\



- NOTES:
1. REFER TO G-002 FOR GENERAL NOTES.
 2. ELEVATIONS ARE IN FEET AND TENTHS AND REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88.)
 3. CONTOURS REFER TO DEPTH BELOW THE REFERENCE PLANE. THE REFERENCE PLANE FOR THIS PROJECT IS NAVD88.
 4. COORDINATES ARE BASED ON NAD 83 STATE PLANE MASSACHUSETTS MAINLAND COORDINATE GRID.
 - 4.1. BENCHMARK / RTK TIDES: TIDES ARE RECORDED USING RTK TIDES IN HYPACK. ELEVATIONS FROM ELLIPSOID TO ORTHOMETRIC NAVD88 USE GEOID 12B.
 - 4.2. PROJECT BENCHMARK FOR 7/16/2025 SURVEY WAS NOAA TIDAL BENCHMARK 7435-B LOCATED ON CONCRETE PAD OF EX. TRANSFORMER NORTH OF THE EX. PARKING LOT; EL. +12.56' NAVD88




CHATHAM FISH PIER
SOUTH JOG PEDESTRIAN WALKWAY
TOWN OF CHATHAM
54 BARCLIFF AVE. CHATHAM, MA 02633

REVISIONS	
NO.	DESCRIPTION

DATE OF PREPARATION		
SURVEYED	BY	DATE

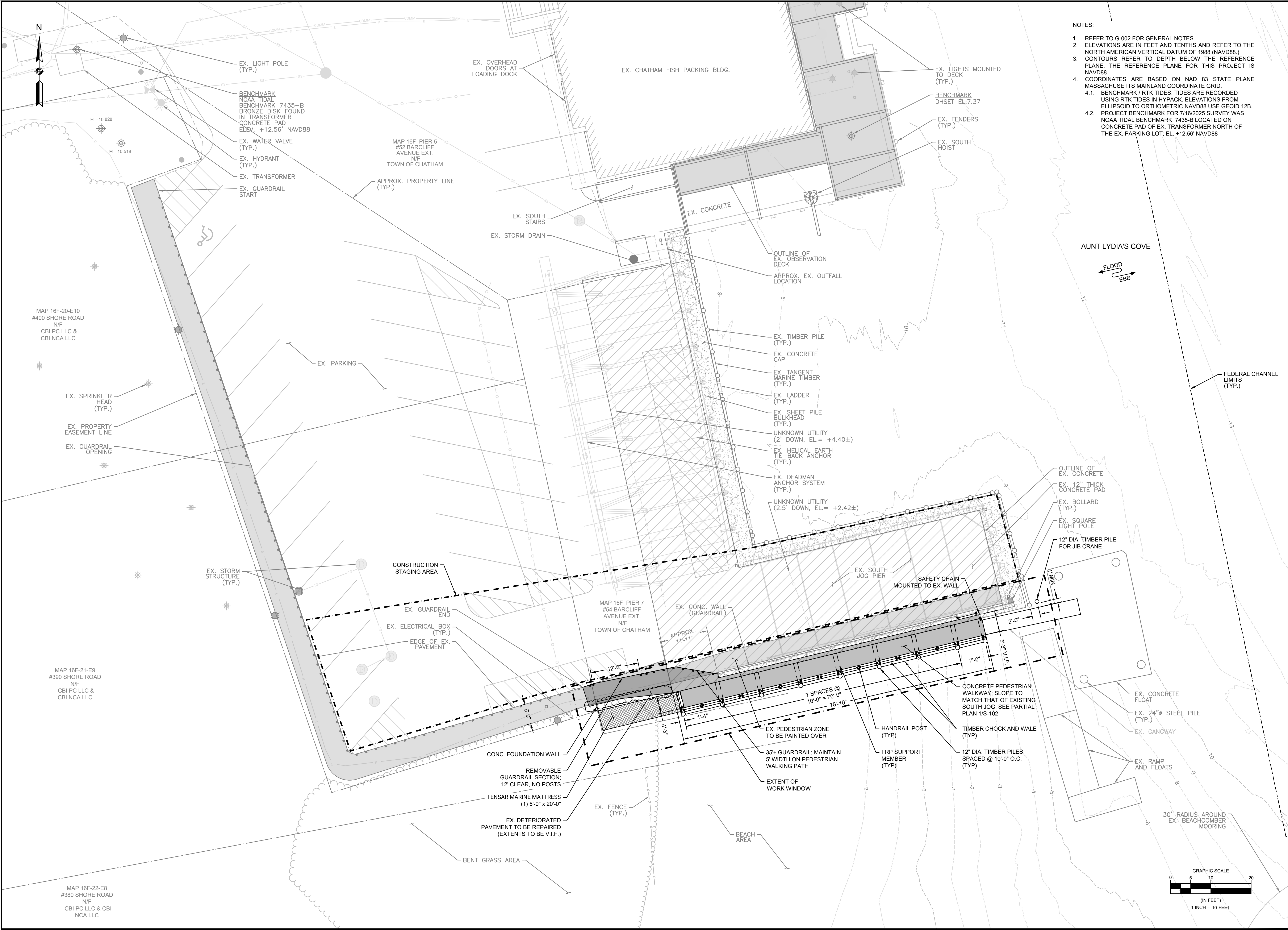
PE STAMP



SHEET TITLE:
EXISTING CONDITIONS AND DEMOLITION PLAN

ISSUANCE:
ISSUED FOR BID

PROJECT NO: 0021C036.01
SHEET NUMBER
C-101



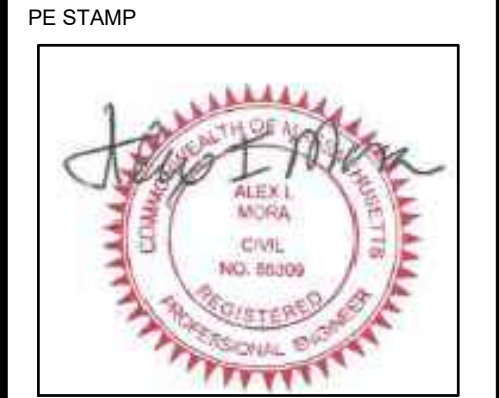
- NOTES:
1. REFER TO G-002 FOR GENERAL NOTES.
 2. ELEVATIONS ARE IN FEET AND TENTHS OF 1988 (NAVD88.)
 3. CONTOURS REFER TO DEPTH BELOW THE REFERENCE PLANE. THE REFERENCE PLANE FOR THIS PROJECT IS NAVD88.
 4. COORDINATES ARE BASED ON NAD 83 STATE PLANE MASSACHUSETTS MAINLAND COORDINATE GRID.
 - 4.1. BENCHMARK / RTK TIDES: TIDES ARE RECORDED USING RTK TIDES IN HYPACK. ELEVATIONS FROM ELLIPSOID TO ORTHOMETRIC NAVD88 USE GEOID 12B.
 - 4.2. PROJECT BENCHMARK FOR 7/16/2025 SURVEY WAS NOAA TIDAL BENCHMARK 7435-B LOCATED ON CONCRETE PAD OF EX. TRANSFORMER NORTH OF THE EX. PARKING LOT; EL. +12.56' NAVD88



CHATHAM FISH PIER
SOUTH JOG PEDESTRIAN WALKWAY
TOWN OF CHATHAM
54 BARCLIFF AVE. CHATHAM, MA 02633

REVISIONS		DESCRIPTION	
NO.	DATE	BY	DESCRIPTION
1			
2			
3			
4			
5			

DATE OF PREPARATION		
SURVEYED	BY	DATE
DRAWN	CJG	11/25/2025
DESIGNED	AIM	11/25/2025
CHECKED	AIM	12/10/2025



SHEET TITLE:

GENERAL
SITE PLAN

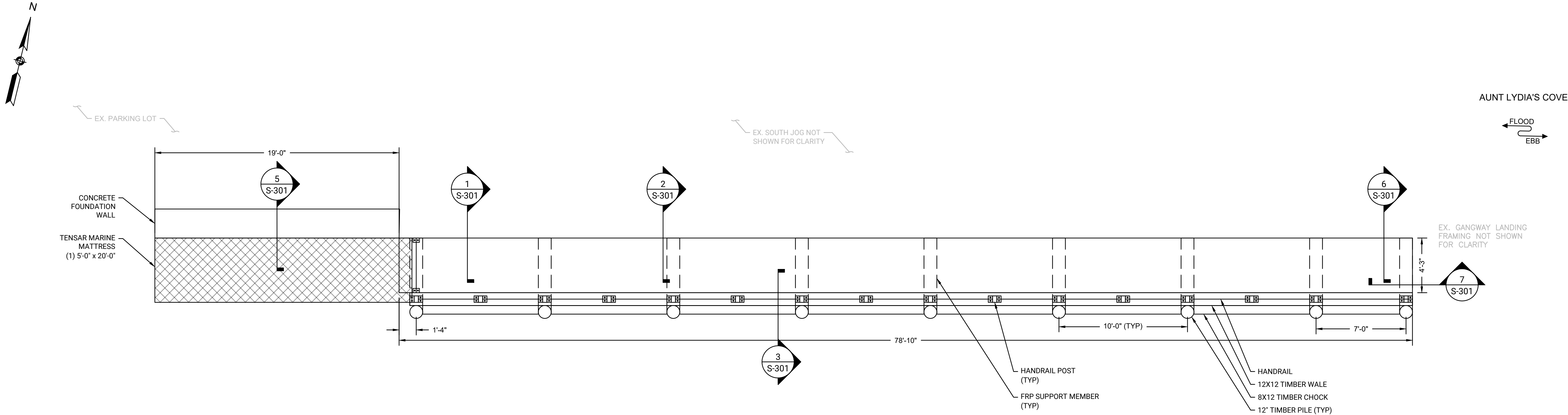
ISSUANCE:

ISSUED FOR BID

PROJECT NO: 0021C036.01

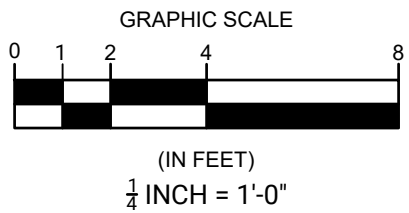
SHEET NUMBER

S-101



1 PARTIAL PLAN OF CONCRETE WALKWAY
S-102 SCALE: 1/4" = 1'-0"

- NOTE:
1. SOUTH JOG - NOT SHOWN FOR CLARITY
 2. WALKWAY SLOPE SHALL MATCH EXISTING SOUTH JOG.



CHATHAM FISH PIER
SOUTH JOG PEDESTRIAN WALKWAY
TOWN OF CHATHAM
54 BARCLIFF AVE. CHATHAM, MA 02633

REVISIONS						
DESCRIPTION						
NO.	BY	DATE				
1						
2						
3						
4						
5						

DATE OF PREPARATION		
SURVEYED	BY	DATE
DRAWN	FOTH	7/16/2025
DESIGNED	CJG	11/25/2025
CHECKED	AIM	11/25/2025
	AIM	12/10/2025



SHEET TITLE:

CONCRETE
WALKWAY
PARTIAL PLAN

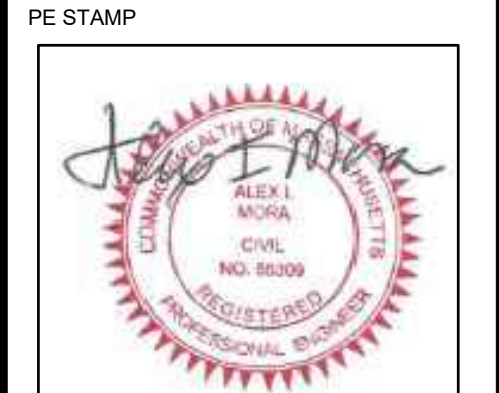
ISSUANCE:

ISSUED FOR BID

PROJECT NO: 0021C036.01
SHEET NUMBER
S-102

NO.	DATE	REVISIONS	
		DESCRIPTION	

DATE OF PREPARATION		
	BY	DATE



SHEET TITLE:

SECTIONS

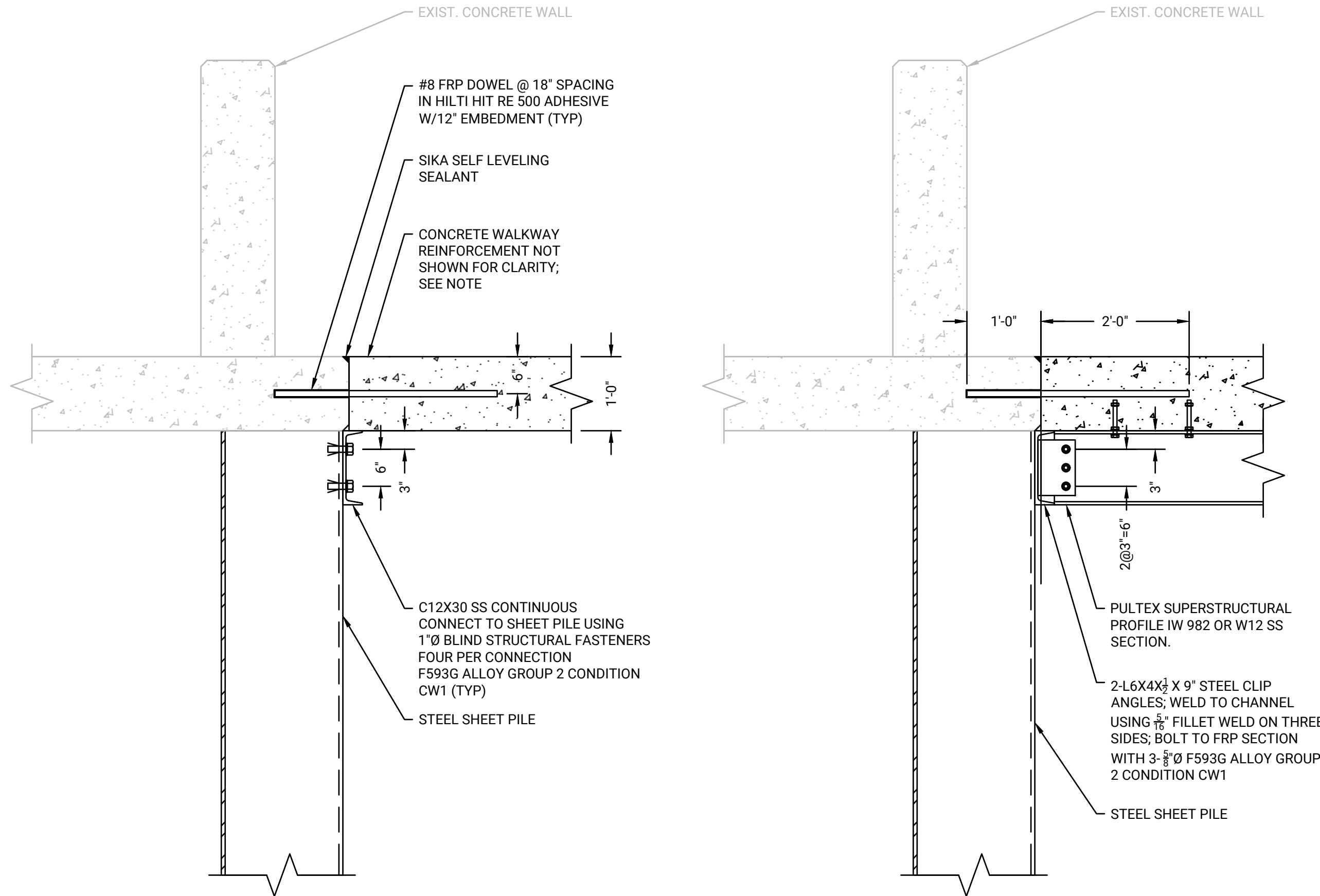
ISSUANCE:

ISSUED FOR BID

PROJECT NO: 0021C036.01

SHEET NUMBER

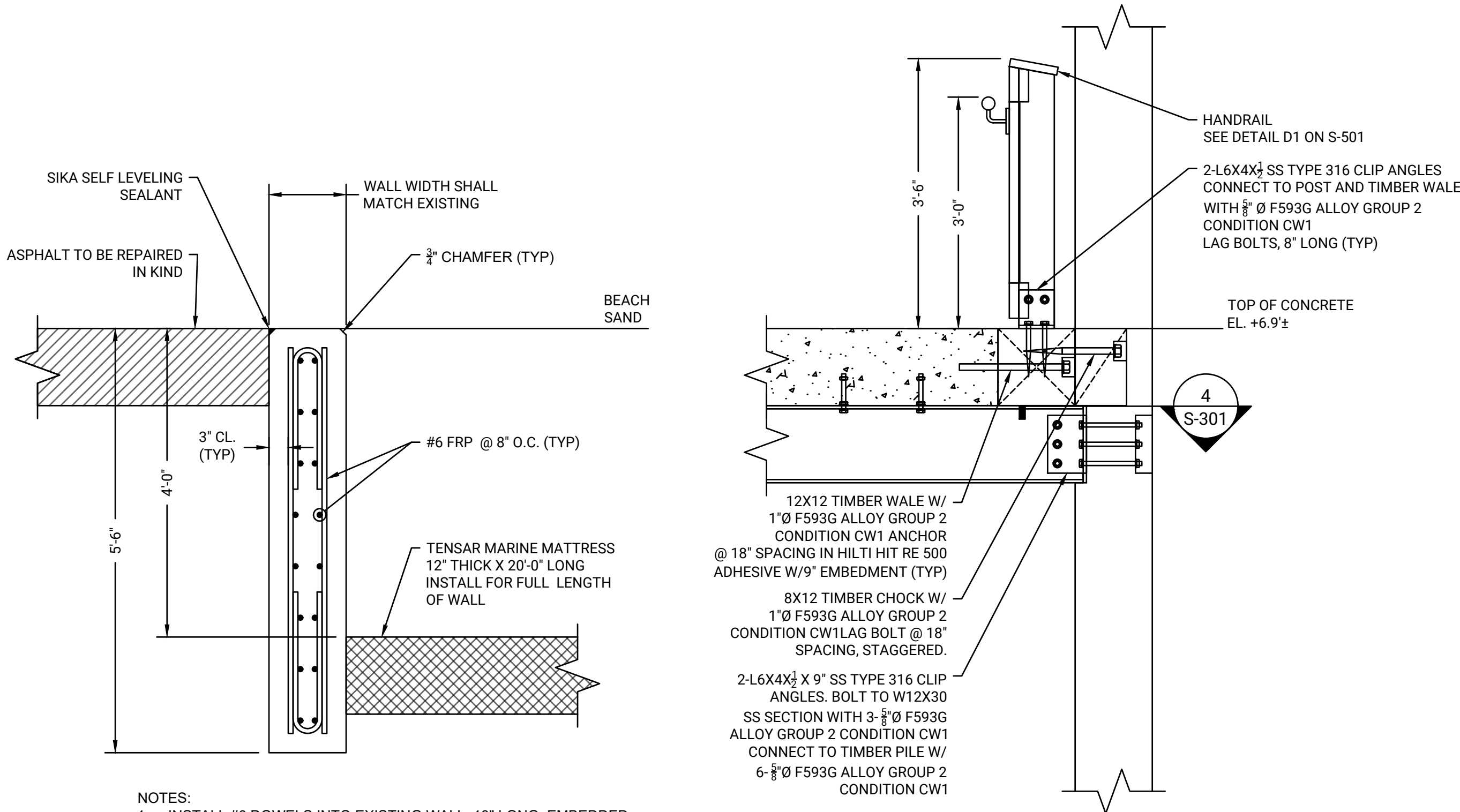
S-301



NOTE:
1. WALKWAY SLOPE SHALL MATCH
EXISTING SLOPE OF SOUTH JOG.

1 CONCRETE DOWELING SECTION
S-102 SCALE: 3/4" = 1'-0"

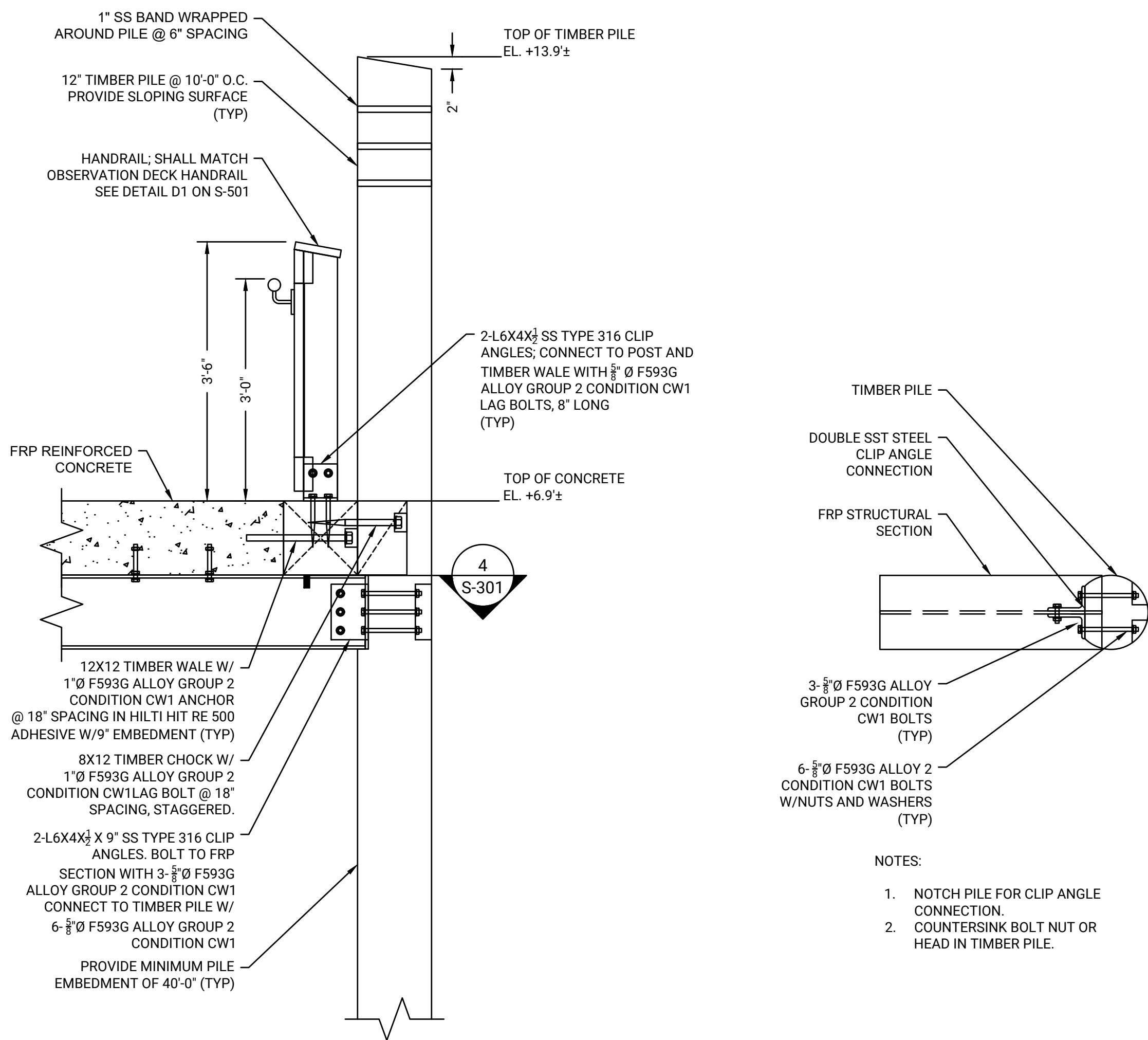
2 CONCRETE SSP SUPPORT SECTION
S-102 SCALE: 3/4" = 1'-0"



NOTES:
1. INSTALL #6 DOWELS INTO EXISTING WALL, 18" LONG, EMBEDDED INTO CONCRETE 9 INCHES WITH HILTI HIT RE 500 EPOXY ADHESIVE.
2. MATCH LAYOUT AND SPACING OF HORIZONTAL REINFORCEMENT IN NEW WALL.
3. CONTRACTOR SHALL BE CAREFUL NOT TO UNDERMINE EXISTING WALL.

5 FOUNDATION WALL
S-102 SCALE: 3/4" = 1'-0"

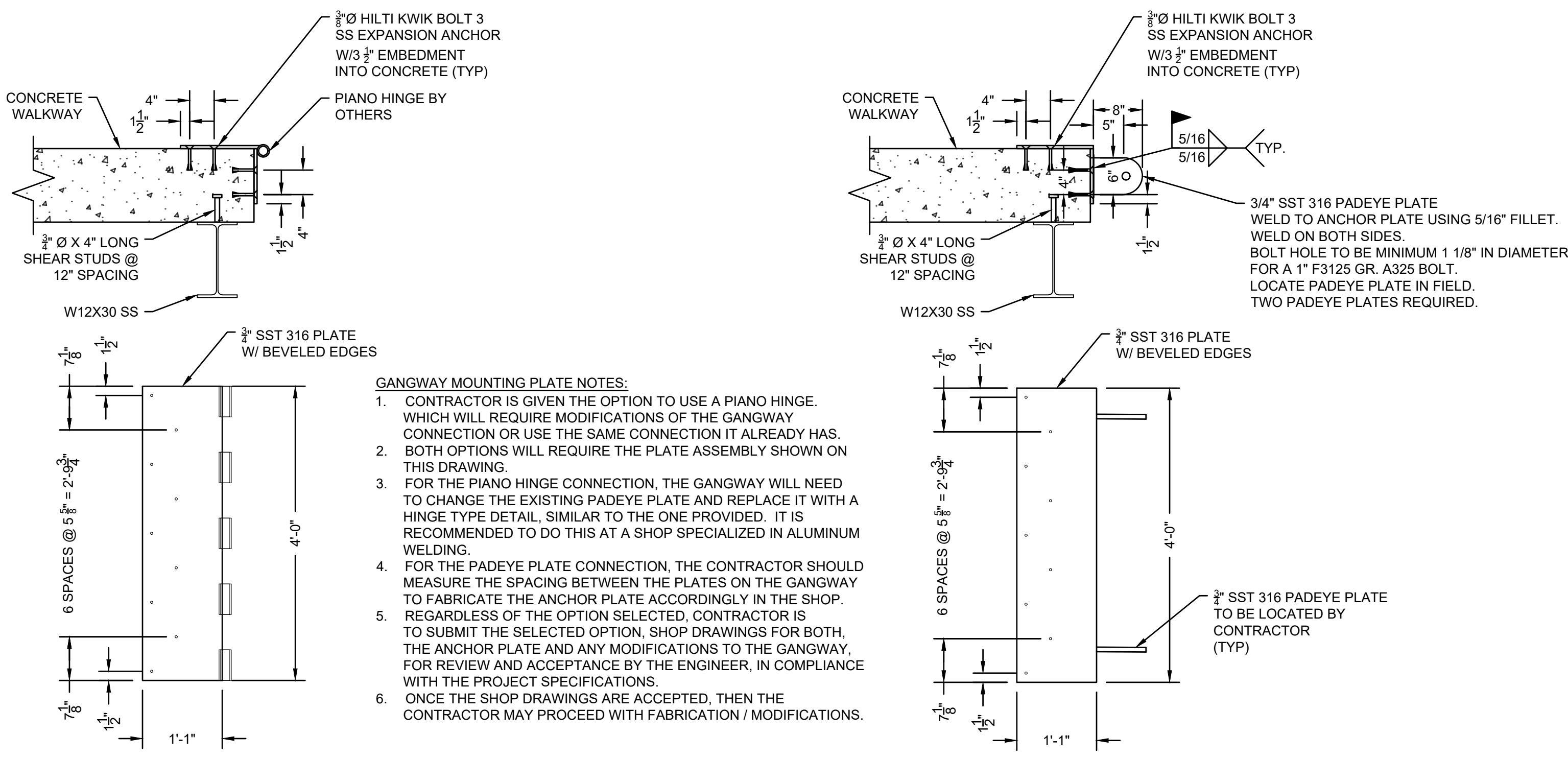
6 CONCRETE TIMBER SUPPORT SECTION
S-102 SCALE: 3/4" = 1'-0"



NOTES:
1. NOTCH PILE FOR CLIP ANGLE CONNECTION.
2. COUNTERSINK BOLT NUT OR HEAD IN TIMBER PILE.

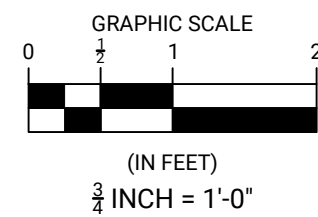
4 TOP VIEW SECTION OF PILE CONNECTION
S-301 SCALE: 3/4" = 1'-0"

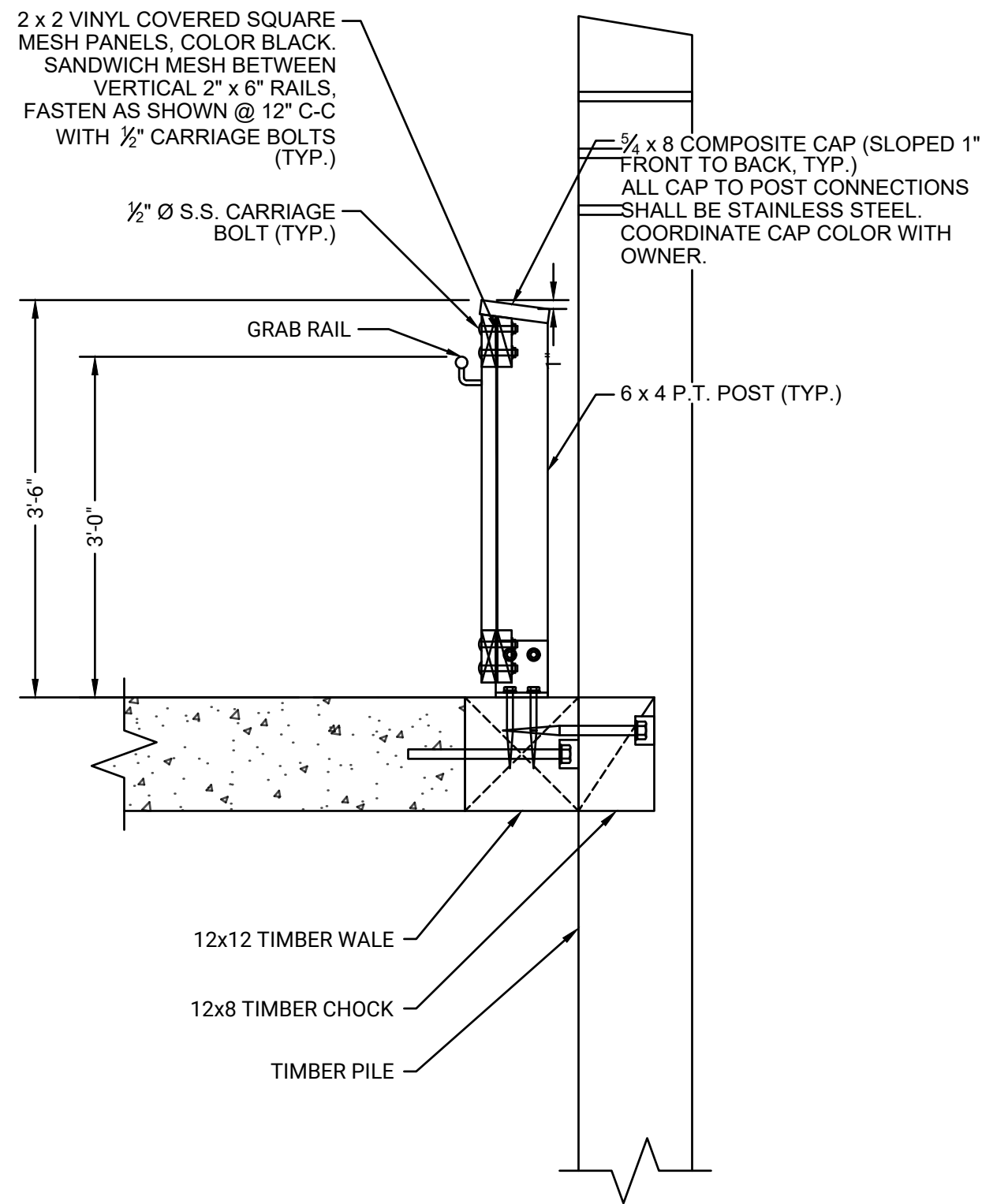
3 CONCRETE TIMBER SUPPORT SECTION
S-102 SCALE: 3/4" = 1'-0"



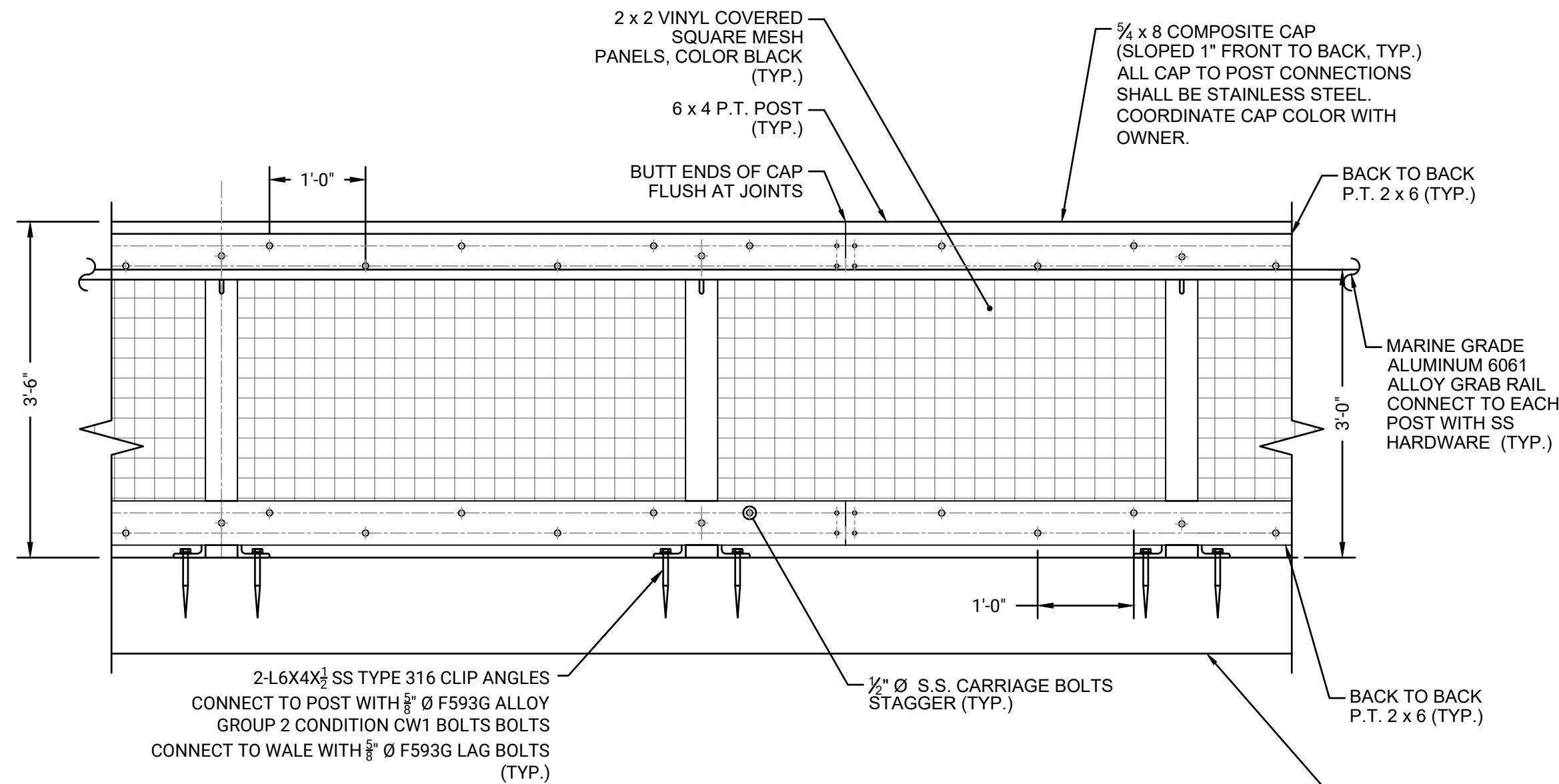
GANGWAY MOUNTING PLATE NOTES:
1. CONTRACTOR IS GIVEN THE OPTION TO USE A PIANO HINGE, WHICH WILL REQUIRE MODIFICATIONS OF THE GANGWAY CONNECTION OR USE THE SAME CONNECTION IT ALREADY HAS.
2. BOTH OPTIONS WILL REQUIRE THE PLATE ASSEMBLY SHOWN ON THIS DRAWING.
3. FOR THE PIANO HINGE CONNECTION, THE GANGWAY WILL NEED TO CHANGE THE EXISTING PADEYE PLATE AND REPLACE IT WITH A HINGE TYPE DETAIL. SIMILAR TO THE ONE PROVIDED. IT IS RECOMMENDED TO DO THIS AT A SHOP SPECIALIZED IN ALUMINUM WELDING.
4. FOR THE PADEYE PLATE CONNECTION, THE CONTRACTOR SHOULD MEASURE THE SPACING BETWEEN THE PLATES ON THE GANGWAY TO FABRICATE THE ANCHOR PLATE ACCORDINGLY IN THE SHOP.
5. REGARDLESS OF THE OPTION SELECTED, CONTRACTOR IS TO SUBMIT THE SELECTED OPTION, SHOP DRAWINGS FOR BOTH, THE ANCHOR PLATE AND ANY MODIFICATIONS TO THE GANGWAY, FOR REVIEW AND ACCEPTANCE BY THE ENGINEER, IN COMPLIANCE WITH THE PROJECT SPECIFICATIONS.
6. ONCE THE SHOP DRAWINGS ARE ACCEPTED, THEN THE CONTRACTOR MAY PROCEED WITH FABRICATION / MODIFICATIONS.

ALTERNATE



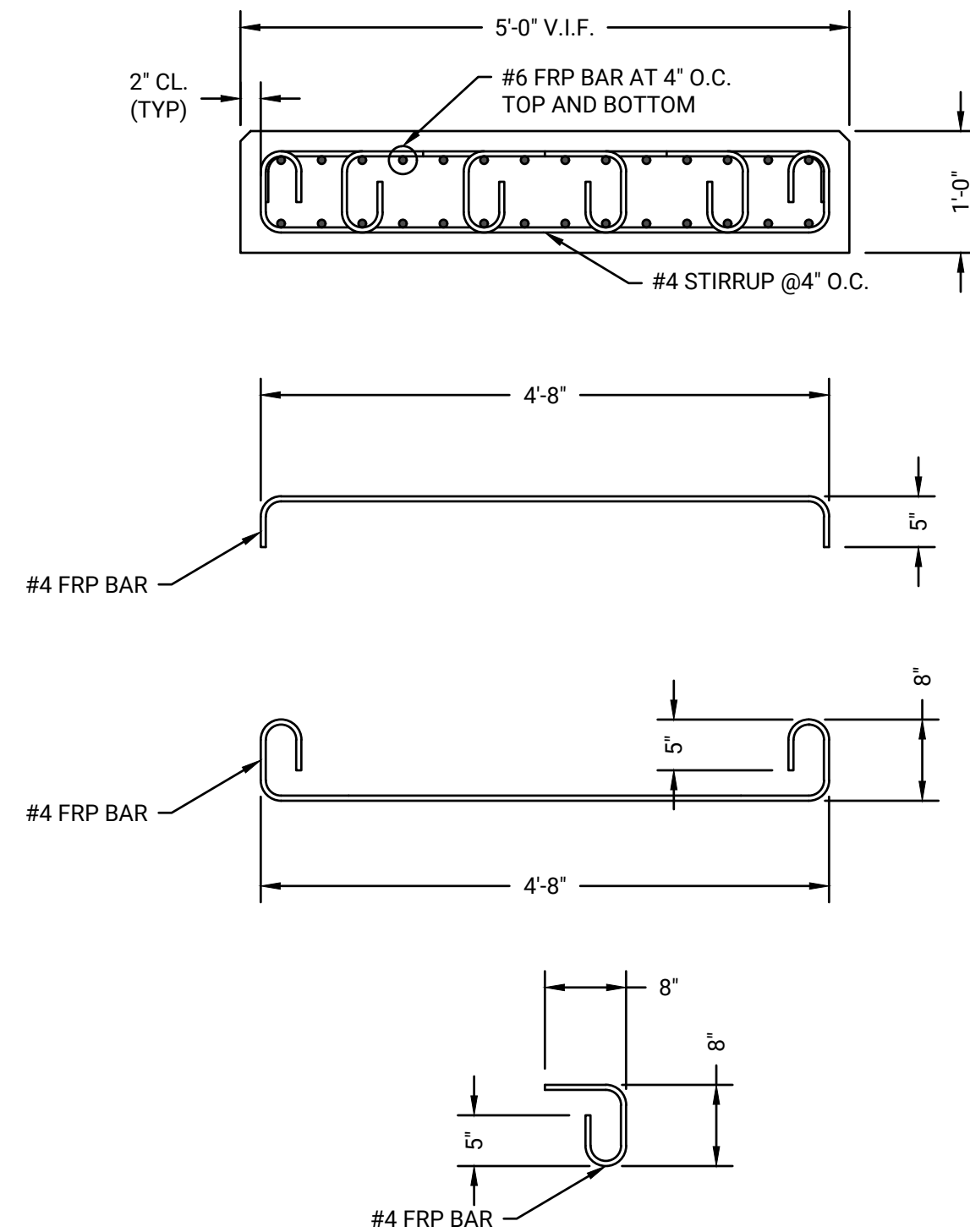


D1 TIMBER HANDRAIL DETAIL
S-501 SCALE: 3/4" = 1'-0"

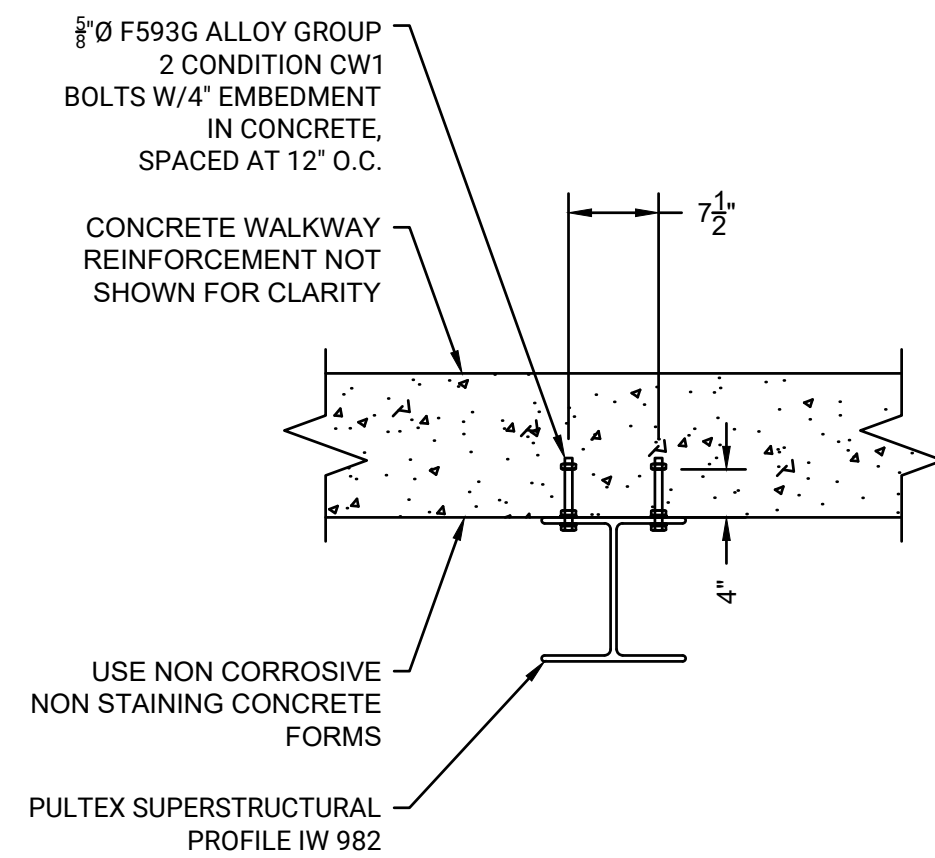


NOTE:
GRAB RAIL SHALL EXTEND PAST END OF HANDRAIL 12 INCHES TO MEET ADA REQUIREMENTS.

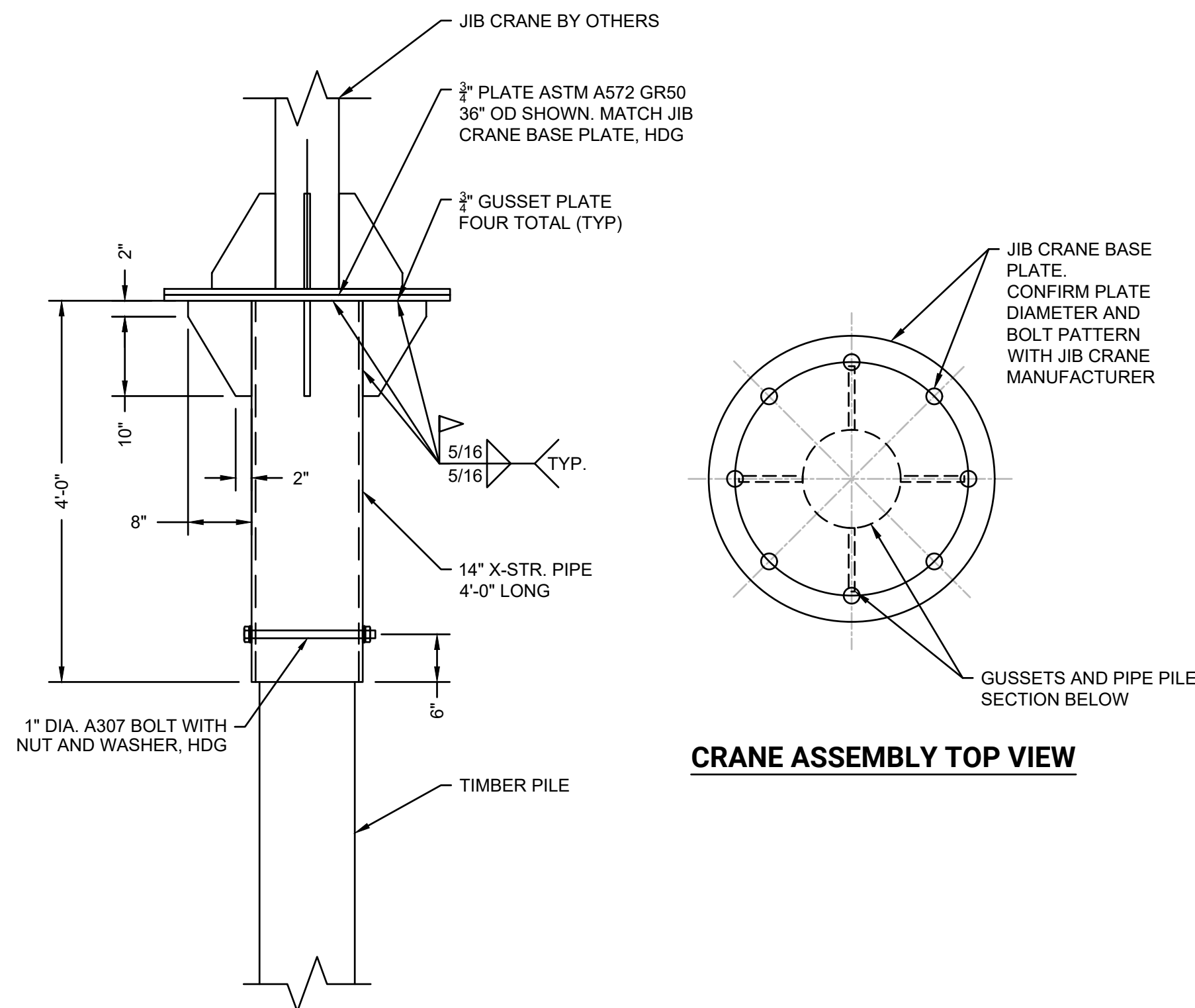
D2 HANDRAIL ELEVATION DETAIL
S-501 SCALE: 3/4" = 1'-0"



D3 TYPICAL FRP REINFORCED CONCRETE SECTION
S-501 SCALE: 3/4" = 1'-0"

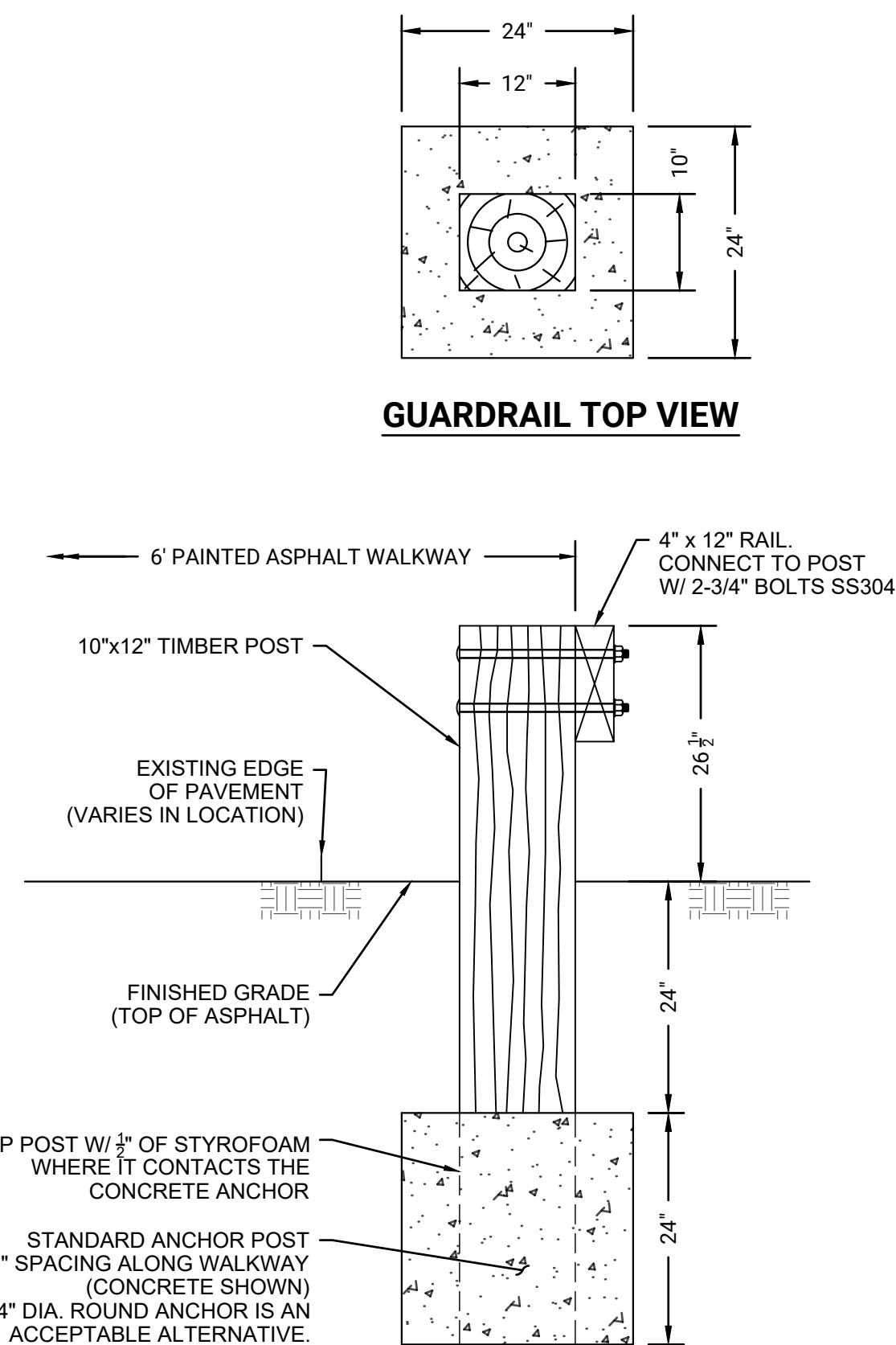


D4 FRP STRUCTURAL SECTION
S-501 SCALE: 3/4" = 1'-0"

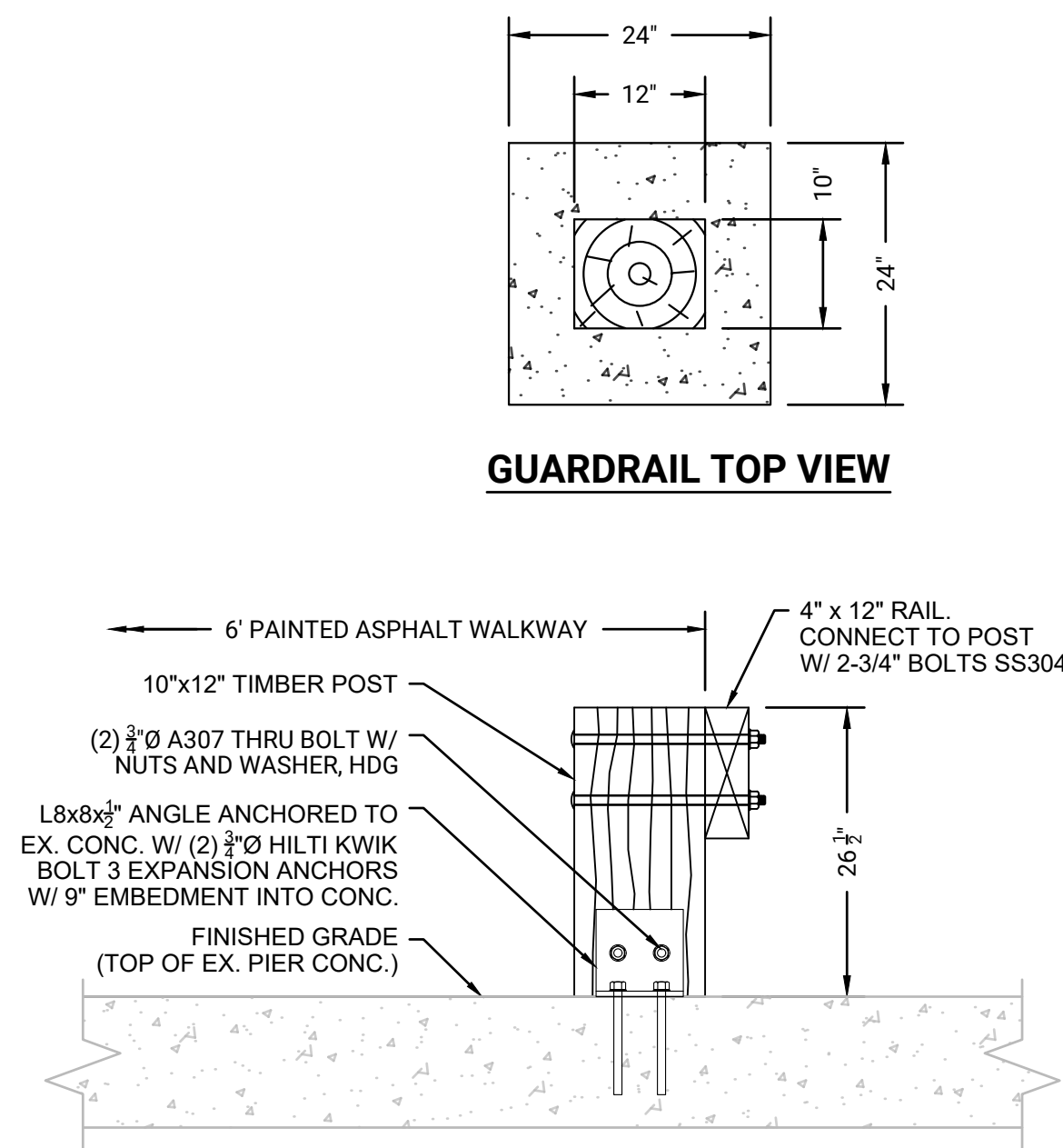


- NOTES:
- COORDINATE TOP ELEVATION OF PILE SLEEVE WITH CLIENT.
 - COORDINATE LOCATION OF JIB CRANE WITH CLIENT.
 - PILE SLEEVE STEEL ASSEMBLY SHALL BE HDG.
 - COORDINATE CONNECTION OF JIB CRANE TO PILE SLEEVE WITH JIB CRANE MANUFACTURER.

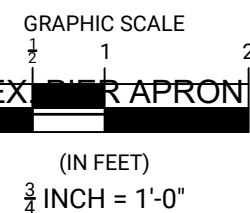
D5 JIB CRANE ASSEMBLY DETAIL
S-501 SCALE: 3/4" = 1'-0"



D6 GUARDRAIL SECTION AT EX. PARKING LOT
S-501 SCALE: 3/4" = 1'-0"



D7 GUARDRAIL SECTION AT EX. APRON
S-501 SCALE: 3/4" = 1'-0"



REVISIONS				
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DATE OF PREPARATION		
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DRAWN	FOTH	7/16/2025
DESIGNED	CJG	11/25/2025
CHECKED	AIM	11/25/2025
	AIM	12/10/2025



SHEET TITLE:

DETAILS

ISSUANCE:

ISSUED FOR BID

PROJECT NO: 0021C036.01

SHEET NUMBER

S-501