

CITY OF WILMINGTON, NC

BID INVITATION

BIDS ARE DUE: OCTOBER 27, 2026, at 3:00 PM

PRE-BID MEETING: SEPTEMBER 29, 2026, at 3:00 PM

PROJECT NAME: DOCK STREET SHORELINE
STABILIZATION

PROJECT NUMBER: 2TRST20151

CONTRACT NUMBER: DSSS-AD-1026

PROJECT DIRECTOR: JUSTIN CARTER– 910-765-7461

PROJECT ENGINEER: JEFFREY TROUTMAN – 910-762-4200
(ARDURRA)

PROJECT MANAGER LESLIE BOWLES-EARLY – 910-765-7469

SUBMIT BIDS TO: PURCHASING MANAGER
P. O. BOX 1810
929 N. FRONT ST. 10th FLOOR
WILMINGTON, N. C. 28401-1810
(910) 341-7830

BIDDERS NAME: _____

ADDRESS: _____

TELEPHONE: _____

EMAIL: _____

**DOCK STREET SHORELINE STABILIZATION
DSSS-AD-1026**

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ADVERTISEMENT FOR BID
CITY OF WILMINGTON, NC
DOCK STREET SHORELINE STABILIZATION
CONTRACT NUMBER: DSSS-AD-1026

Pursuant to North Carolina General Statute 143-129, sealed proposals addressed to the Purchasing Manager, P. O. Box 1810, 929 N. Front Street 10th Floor, Wilmington, NC 28401, and marked "DOCK STREET SHORELINE STABILIZATION" will be received until 3:00 p.m., Tuesday, October 27, 2026, at which time they will be publicly opened and read at 929 N. Front Street 10th Floor, Room 1069 Wilmington, NC. The City will receive SINGLE PRIME BIDS ONLY for this project.

Project Description : This project is to enhance, improve and stabilize the existing shore protection retaining wall along Water Street, located just north of the intersection with Dock Street, with a gravity retaining wall composed of stacked concrete-filled, high-strength, synthetic fabric form tubes that are horizontally stepped back with an approximate 1 on 2 vertical wall slope.

All firms submitting bids for the proposed work must be properly licensed under Chapter 87, N. C. General Statutes. The bidder's license number must appear on the outside of the envelope.

A Pre-Bid Conference will be held at 3:00 p.m., Tuesday, September 29, 2026, at 929 N. Front Street, 10th Floor Room 1069, Wilmington, NC. All parties interested in the project are invited to attend.

Plans, Specifications and Bid Documents can be obtained by clicking the Link. For assistance, please contact Kathy Bryant at kathy.bryant@wilmingtonnc.gov.

Potential subcontractors may secure a list of potential prime contractors from the City's website, www.wilmingtonnc.gov.

The City of Wilmington does not discriminate on the basis of race, sex, color, age, national origin, religion or disability in its employment opportunities, programs, services, or activities.

Bids for this project shall be guaranteed by all bidders for a period of 90 calendar days following the bid opening. **The City of Wilmington Reserves the Right to Reject any and all Bids.**

Daryle L. Parker
Purchasing Manager
September 15, 2026

BIDDER'S CHECKLIST

1. READ AND UNDERSTAND ALL SPECIAL NOTICES.
2. SIGN AFFIDAVIT OF NON-COLLUSION A-1 AND A-2.
HAVE THIRD PARTY NOTARIZE PAGE A-3
3. SIGN AFFIDAVIT OF COMPLIANCE WITH NC E-VERIFY STATUTES
4. COMPLETE THE PROPOSAL SECTION AND SIGN.
5. ALL ADDENDA ISSUED FOR THIS PROJECT HAVE BEEN SIGNED OR ACKNOWLEDGED ON THE PROPOSAL PAGE.
6. THE BID SURETY IS ENCLOSED AND PROPERLY EXECUTED.
REFERENCE PARAGRAPH G-1.04.2, PAGE G-2.
7. BID ENVELOPE SEALED AND MARKED WITH THE BIDDERS NAME, LICENSE NUMBER, PROJECT NAME AND NUMBER. NOTE: MULTIPLRIME AND SINGLE PRIME BIDS FROM THE SAME BIDDER MUST BE IN SEPARATE CLEARLY MARKED ENVELOPES.
8. ENVELOPE ADDRESSED AND MARKED:
PURCHASING MANAGER
CITY OF WILMINGTON
PO BOX 1810
929 N. FRONT STREET 10th FLOOR
WILMINGTON, NC 28401
BID NAME: DOCK STREET SHORELINE STABILIZATION
9. THE BID MUST BE MAILED OR DELIVERED TO THE ABOVE ADDRESS SO THAT RECEIPT IS PRIOR TO THE TIME AND DATE OF THE BID OPENING. BIDS RECEIVED AFTER THE SPECIFIED TIME WILL NOT BE CONSIDERED. THE CITY OF WILMINGTON ASSUMES NO RESPONSIBILITY FOR MAIL DELIVERY.

SPECIAL NOTICE TO ALL BIDDERS

MARCH 23, 1990 REV: 3-2020

1. Bid Rigging Affidavit

In accordance with the City of Wilmington's Bid Rigging and Conflict of Interest Ordinances, an Affidavit and Certificate of Non-Collusion and Non-Suspension is enclosed, Pages A-1, A-2 and A-3. The affidavit must be properly filled out, sealed and attested in order for your bid to be considered.

2. Subletting

Paragraph G-1.15, SUBLETTING OR ASSIGNMENT OF CONTRACT, of the City's General Specifications. All bidders must submit with their bid a listing of subcontractors contacted to submit proposals for this project. The listing must indicate the subcontractors to be used, the dollar amount of the proposed subcontract work, and type of work to be performed. If no subcontractors are to be utilized, this must be specified. This must be submitted at the time of the bid opening in order for the bid to be considered.

If subcontract firms are contacted but their proposals rejected for any reason the bidder must complete the justification form included in the bid document.

3. The City reserves the right to waive any immaterial defects in the bid documents.

4. Federal Funding

This project may be funded in whole or in part with Federal funds and all bidders are advised to pay strict attention to the Federal requirements which may be attached. Bid packages which include Affirmative Action under Section 3 require that each bidder submit with his bid an Affirmative Action Plan. The City will not require bidders to submit their plan with the bid. However, it will be required and must be submitted by the lowest responsible bidder and approved by the City prior to beginning work.

Paragraph 4 applies only if Federal Regulations are included in the Bid Documents.

If you have any questions concerning these requirements, please contact my office.

Daryle L. Parker
Purchasing Manager

STATE OF NORTH CAROLINA

COUNTY OF NEW HANOVER

AFFIDAVIT AND CERTIFICATE OF
NON-COLLUSION, NON-SUSPENSION AND NON-CONVICTION

The undersigned, being first duly sworn, deposes and says:

1. I understand that for the purposes of this affidavit, the term "bidder" shall include the person(s), firm(s), or corporation(s) signing this affidavit, the undersigned's subcontractor(s), subsidiary(ies) and affiliate(s) and any officer, director, employee or agent of the bidder; and the term "conviction" shall include guilty pleas, pleadings of nolo contendere and similar pleas.

2. This Affidavit and Certificate is made in accordance with Article 3 of Chapter 133 of the North Carolina General Statutes; I certify that this proposal is made without prior understanding, agreement, or connection with any person(s), firm(s), or corporation(s) making bids or proposals; I further certify that the bidder has not entered into any agreement with any other bidder or prospective bidder or with any other person(s), firm(s) or corporation(s) relating to the price named in said proposal, nor any agreement or arrangement under which any person(s), firm(s) or corporation(s) is to refrain from bidding, nor any agreement or arrangement for any act or omission in restraint of free competition among bidders; I understand collusive bidding is a violation of state and federal law and can result in fines, prison sentences, and civil damage awards; and I further certify that the bidder will abide by all terms of this bid or proposal.

3. The bidder is not suspended or debarred from bidding by any federal or state governmental agency that is providing funds for this contract.

4. The bidder is not presently charged in an indictment or information with engaging in any conspiracy, combination, or other unlawful act in restraint of trade or any similar charges in any federal court or a court of this or any other state.

5. The bidder, within one year immediately preceding the date of this affidavit, has not been convicted of charges or engaging in any conspiracy, combination, or other unlawful act in restraint of trade or similar charges in any federal court or a court of this or any other state.

6. If, during the time of this proposal, from the date advertised to the date bids are opened, the bidder is indicted or convicted of bid-rigging, I understand this proposal shall be rejected and not considered for award.

7. I hereby affirm that all information contained in this affidavit is true, correct, accurate and complete, and any untrue, incorrect, inaccurate or incomplete statements will result in the disqualification and rejection of this proposal. I certify that I am authorized to sign this bid and to make the representations set forth herein on behalf of myself and the bidder.

This the _____ day of _____, 2026.

COMPANY NAME _____

BY: _____
(Owner, Partner, or Corporate President, Vice
President or Assistant Vice President only)

ATTEST:

(Secretary, Assistant Secretary,
Cashier or Assistant Cashier only)

(CORPORATE SEAL)

(TO BE EXECUTED ON BEHALF OF THE CONTRACTOR)

STATE OF _____

COUNTY OF _____

I, _____, a Notary Public, certify that
(Name)

_____ personally came
(Name of Secretary, Assist. Sec., Cashier, Assist. Cashier)

before me this day and acknowledged that he (she) is _____
(Secretary, Assist. Sec.,

_____ of _____, a
Cashier, Assist. Cashier) (Name of Corporation)

corporation, and that by authority duly given and as the act of the corporation, the foregoing Affidavit

was signed in its name by its _____,
(President, Vice President, Assist. Vice President)

sealed with its corporate seal, and attest by himself (or herself) as its

_____.
(Secretary, Assist. Sec., Cashier, Assist. Cashier)

WITNESS my hand and official seal, this the _____ day of _____, 2026.

Notary Public

My Commission Expires: _____

(NOTARY SEAL)

STATE OF NORTH CAROLINA

COUNTY OF NEW HANOVER

AFFIDAVIT of COMPLIANCE
with N.C. E-VERIFY STATUTES

I, _____ (hereinafter the "Affiant"), duly authorized by
and on behalf of _____ (hereinafter the "Employer") after
being first duly sworn deposes and says as follows:

1. I am the _____ (President, Manager, CEO, etc.) of the Employer
and possess the full authority to speak for and on behalf of the Employer identified above.
2. Employer understands that "E-Verify" means the federal E-Verify program operated by the
United States Dept. of Homeland Security and other federal agencies, or any successor or
equivalent program used to verify the work authorization of newly hired employees pursuant
to federal law.
3. _____ Employer employs 25 or more employees in the State of North Carolina, and is in
compliance with the provisions of N.C. Gen. Stat. §64-26. Employer has verified the
work authorization of its employees through E-Verify and shall retain the records of
verification for a period of at least one year.

_____ Employer employs fewer than 25 Employees and is therefore not subject to the
provisions of
N.C. Gen. Stat. §64-26.
4. All subcontractors engaged by or to be engaged by Employer have or will have likewise
complied with the provisions of N.C. Gen. Stat. §64-26.
5. Employer shall keep the City of Wilmington informed of any change in its status pursuant to
Article 2 of Chapter 64 of the North Carolina General Statutes.

Further this affiant sayeth not.

This the _____ day of _____, 20____.

Affiant

STATE OF NORTH CAROLINA

COUNTY OF _____

Sworn to and subscribed before me, this the _____ day of _____, 20____.

Notary Public

[NOTARY SEAL]

My commission expires: _____

GENERAL PROVISIONS

Section G

INSTRUCTION TO BIDDERS

SPECIAL NOTICE

- G-1.01 The name of a certain brand, make, manufacturer, or definite specification is to denote the quality standard of the article desired, but does not restrict bidders to the specific brand, make, manufacturer, or specification named; it is to set forth and convey to the prospective bidders the general style, type, character, and quality of the article desired.
- G-1.02 The award of each contract will be made to the lowest responsible bidder as soon as practicable; provided, that in the selection of equipment or materials a contract may be awarded to a responsible bidder other than the lowest in the interest of standardization, or if ultimate economy is clearly evident.

If the project is being bid under the single and multiprime bidding methods, the CITY reserves the right to award the contract in whichever manner is in the best interest of the CITY taking into consideration the total cost of the project, including but not limited to contract administration and preparation costs.

The award of the contract represents a preliminary determination as to the qualifications of the bidder, the availability of funds for the project, and other matters precedent to the City's execution of the contract. No legally-binding acceptance of the offer set forth in the Contractor's bid occurs until the City executes the contract.

- G-1.03 If any person contemplating submitting a bid for the proposed contract is in doubt as to the true meaning of any part of the plans, specifications, or other proposed contract documents, he may submit to the Engineer a written request for an interpretation thereof. The person submitting the request will be responsible for its prompt delivery. An interpretation of the proposed documents will be made only by addendum duly issued, and a copy of such addendum will be mailed or delivered to each person receiving a set of such documents. The City of Wilmington will not be responsible for any other explanations or interpretations of the proposed documents.

GENERAL SPECIFICATIONS

- G-1.04 **SEALED PROPOSALS REQUIRED: INSTRUCTIONS:** In accordance with the attached copy of advertisement and the following specifications, proposals will be received by the City Council of the City of Wilmington, North Carolina, at 929 N Front Street 10th Floor, Purchasing Manager's Office, on the date and time designated in the Advertisement, when they will publicly open and read the proposals properly submitted for Municipal Improvements in the City of Wilmington, North Carolina. Firms submitting single and multiprime bids must enclose these in separate sealed, clearly marked envelopes.

If bids are requested for single and multiprime contracts, bids will be received, but not opened, for the separate prime contracts one (1) hours prior to the deadline for submission of single prime bids. All bids will be opened at the time for receipt of the single prime bids.

G-1.04.1 Proposals must be placed in a sealed envelope and addressed to The Purchasing Manager, City of Wilmington, North Carolina. The envelope shall show the name and address of the bidder and be plainly marked to show the project name and number and section (if applicable), as given in the Advertisement. The envelope must also be marked on the face to show the Contractor's North Carolina Contractor's License Number. Bid forms are contained in this bound copy of the Contract Documents, copies of the proposal pages may be submitted. All

information entered on proposal forms must be original and in ink. Submission of the entire document is not required. However, bidders are cautioned to submit all required forms, as referenced in the bound document, properly signed with the sealed bid. Bid forms will be filled in and completed in all respects as required herein.

Firms submitting bids for Single and Multi-Prime bids on the same project must submit each bid to the Purchasing Manager in a separate, properly identified sealed envelope.

Failure by the bidder to properly complete the Bid Proposal, Affidavit of Non-Collusion, or other documents will be cause for declaring the bid non-responsive and cause for rejection.

G-1.04.2 Each proposal shall be accompanied by a cash deposit or certified check, said check to be payable to the City of Wilmington, and to be drawn on some bank or trust company insured by the Federal Deposit Insurance Corporation, in an amount equal to not less than five percent (5%) of the proposal. In lieu of making a cash or certified check deposit, as above provided, a bidder may file a bid bond executed by a corporate surety, licensed under the laws of the State of North Carolina to execute such bonds, said bid bond to be in an amount equal to not less than five percent (5%) of the amount of the bid, and said bid bond to be conditioned so that the surety will, upon demand, forthwith make payment to the City of Wilmington upon said bond if the bidder fails to execute the contract as provided below, and upon failure to forthwith make payment, the surety shall pay to the City an amount equal to the amount of said bid bond. Said deposit of cash, certified check, or bid bond to be forfeited to the City of Wilmington in the event of the bidder's failure to execute the contract within ten (10) days after award, as required by Section 143-129 of the General Statutes of North Carolina, Volume 3, as amended.

Deposits will be retained by the City, as property of the several bidders until the award of the contract is made, or all bids are rejected, after which the deposits will be returned.

G-1.04.3 No bid may be withdrawn for a period of ninety (90) days after being filed.

G-1.04.4 The work contemplated in these specifications, and the prices named in the proposals will be considered to include all cost of supplying, delivering, and all labor necessary for the incorporation of all materials into the work, and the use of all tools, machinery and equipment of every name and description that is used in carrying out the plans and specifications under this contract.

G-1.04.5 Bidders are cautioned to carefully examine the proposed location of work, as well as the plans and specifications, and to go over the whole project thoroughly with the Engineer before submitting their bids. It is understood and agreed that the quantities in the specifications, or as shown on the plans are approximate only, and no claim will be made against the City Council for any excess or deficiency, and no allowance will be made for the failure of the bidder to estimate correctly the difficulties attending the execution of the work.

G-1.04.6 Bidders are cautioned to adhere strictly to the spirit of the specifications in submitting their tenders, and it will be considered bad form to submit a proposal, expecting concessions after being awarded the contract by proposing the use of inferior materials and methods of construction for cheapening the work. The Engineer, Owner, or City desires to aid the Contractor in every legitimate way to carry on the work economically and expeditiously as set out in these specifications, and no alternate bids will be allowed unless requested in the proposal.

G-1.04.7 Where bids are received on Unit Prices, the City Council reserves the right, to authorize an increase of fifty percent (50%) of the amount of work set out in the proposal, or to decrease it to an extent equal to fifty percent (50%) of actual cost of the original work predicted on the unit prices given in the proposal. Such increase or decrease shall not vitiate or annul the

contract agreement hereinafter entered into. In the event of a discrepancy in the unit prices and the extended prices the unit prices shall prevail.

G-1.04.8 The bidder shall be required to produce substantial evidence that he is properly qualified to carry on the work as set out in the specifications. The qualifications required of all bidders are as follows: Thorough knowledge and experience in work of this character; labor and equipment in such quantities and quality as to enable the Contractor to carry on the work economically and expeditiously; financial condition must be such as not to require aid from the City Council, other than the regular monthly estimates.

G-1.04.9 The City Council will not consider any bid or award of contract to any person, firm, or corporation, who has defaulted in any obligation to the City of Wilmington, or who, in the opinion of the Council, failed to perform his work satisfactorily as to character or time.

G-1.04.10 The City reserves the right to reject any and all bids, or to accept the bid, or bids on the entire project, or any section of the project, as given in the Proposal, which, in its opinion, is to the best interest of the City.

G-1.04.11 The Contractor's attention is especially called to the fact that he will be requested by the Council, and will be expected to push this work with all speed possible.

G-1.05 CONTRACT SURETY OF PERFORMANCE BOND: Contractor shall furnish and deliver to the City a Payment Bond and a Performance Bond covering the faithful performance and completion of the work included in this Agreement and payment for all materials and labor furnished or supplied in connection with the work included in this Agreement. Said bonds shall be issued and furnished to the City prior to, and as a condition precedent to, commencement of the work of this Agreement. Each of the Payment Bond and Performance Bond shall be furnished on behalf of the Contractor, shall name the City of Wilmington obligee, and shall be in the amount of one hundred percent (100%) of the contract price. Such bond(s) shall be solely for the protection of the City. The Payment Bond and the Performance Bond shall be issued by a surety of financial standing having a rating from A.M. Best Company equal to or better than A and must be included on the approved list of sureties issued by the United States Department of Treasury. The surety bond must be in the form set forth in NCGS 44A-33, without any variations there from. The Contractor shall provide surety bond wherein Surety waives notice of any and all modifications, omissions, additions, changes and advance payments or deferred payments in or about the Contract, and agrees that the obligations undertaken by the Bond shall not be impaired in any manner by reason of any such modifications, omissions, additions, changes, and advance payments or deferred payments. The surety bond must set forth no requirement that suit be initiated prior to the time stipulated in applicable North Carolina Statutes of Limitation.

G-1.06 INSURANCE REQUIREMENTS: Before commencing any work, the Contractor shall procure insurance in the contractor's name and maintain all insurance policies for the duration of the contract of the types and in the amounts listed in Section G-1.06. The insurance shall provide coverage against claims for injuries to persons or damages to property which may arise from operations or in connection with the performance of the work hereunder by the contractor, his agents, representatives, employees, or subcontractors, whether such operations by himself/herself or anyone directly or indirectly employed by him/her.

G-1.06.1 COMMERCIAL GENERAL LIABILITY: Contractor shall maintain Commercial General Liability (CGL) and if necessary, Commercial Umbrella Liability insurance with a total limit of not less than \$5,000,000 each occurrence for bodily injury and property damage. If such CGL insurance contains a general aggregate limit, it shall apply separately to this project/location or the general aggregate shall be twice the required limit. CGL insurance shall be written on Insurance Services Office (ISO) "occurrence" form CG 00 01 covering Commercial General Liability or its equivalent and shall cover the liability arising from premises, operations,

independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

The City of Wilmington, its officers, officials, agents, and employees are to be covered as additional insureds under the CGL by endorsement CG 20 10 or CG 20 33 **AND** CG 20 37 or an endorsement providing equivalent coverage as respects to liability arising out of activities performed by or on behalf of the contractor; products and completed operations of the contractor; premises owned, leased or used by the contractor; and under the commercial umbrella, if any. The coverage shall contain no special limitations on the scope of protection afforded to the City of Wilmington, its officers, officials, agents, and employees.

There shall be no endorsement or modification of the CGL or Umbrella Liability limiting the scope of coverage for liability arising from explosion, collapse, underground property damage, or damage to the named insured's work, when those exposures exist.

The insurer shall agree to waive all rights of subrogation against the City of Wilmington, its officers, officials, agents and employees for losses arising from work performed by the contractor for the City of Wilmington.

G-1.06.2 WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY: Contractor shall maintain Workers' Compensation as required by the general statutes of the State of North Carolina and Employer's Liability Insurance. The Employer's Liability, and if necessary, Commercial Umbrella Liability insurance shall not be less than \$5,000,000 each accident for bodily injury by accident, \$5,000,000 each employee for bodily injury by disease, and \$5,000,000 policy limit.

The insurer shall agree to waive all rights of subrogation against the City of Wilmington, its officers, officials, agents and employees for losses arising from work performed by the contractor for the City of Wilmington.

The U.S. Longshore and Harborworkers Compensation Act endorsement shall be attached to the policy when the services will be on or in close proximity to navigable waterways. The Maritime Coverage endorsement (WC 00 02 01) shall be attached to the policy when the contracted services involve the use of watercraft.

G-1.06.3 BUSINESS AUTO LIABILITY: Contractor shall maintain Business Auto Liability and, if necessary, Commercial Umbrella Liability insurance with a limit of not less than \$5,000,000 each accident. Such insurance shall cover liability arising out of any auto, including owned, hired, and non-owned autos. Business Auto coverage shall be written on ISO form CA 00 01, or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage equivalent to that provided in ISO form CA 00 01.

Pollution liability coverage equivalent to that provided under the ISO pollution liability-broadened coverage for covered autos endorsement (CA 99 48) shall be provided, and the Motor Carrier Act endorsement (MCS 90) shall be attached when those exposures exist.

Contractor waives all rights against the City of Wilmington, its officers, officials, agents and employees for recovery of damages to the extent these damages are covered by the business auto liability or commercial umbrella liability insurance obtained by Contractor pursuant to G-1.06.03 of this agreement.

The contractor's Business Auto Liability insurance shall be primary as respects the City of Wilmington, its officers, officials, agents, and employees. Any other insurance or self-insurance maintained by the City of Wilmington, its officers, officials, and employees shall be excess of and not contribute with the contractor's insurance.

G-1.06.4 OWNERS AND CONTRACTORS PROTECTIVE LIABILITY INSURANCE: Contractor shall maintain Owners and Contractors Protective Liability (OCP) insurance on behalf of the City of Wilmington, as named insured, with an each occurrence limit of \$5,000,000.

G-1.06.5 BUILDERS RISK INSURANCE: DELETED

G1-1.06.6 INSTALLATION FLOATER: DELETED

G1-1.06.7 PROFESSIONAL LIABILITY INSURANCE: DELETED

G1-1.06.8 ENVIRONMENTAL PROFESSIONAL LIABILITY INSURANCE: DELETED

G1-1.06.9 BAILEE COVERAGE (INCLUDING TRANSIT): DELETED

G1-1.06.10 CONTRACTORS POLLUTION LIABILITY INSURANCE: DELETED

G1-1.06.11 PROTECTION & INDEMNITY: DELETED

G1-1.06.12 ABUSE/MOLESTATION COVERAGE: DELETED

G1-1.06.13 ACCIDENT INSURANCE: DELETED

G1-1.06.14 ELECTRONIC DATA LIABILITY INSURANCE: DELETED

G1-1.06.15 FIDELITY COVERAGE: DELETED

G1-1.06.16 GARAGE LIABILITY AND/OR COMMERCIAL GENERAL LIABILITY: DELETED

G1-1.06.17 GARAGEKEEPER'S LEGAL LIABILITY: DELETED

G1-1.06.18 ON-HOOK CARGO: DELETED

G1-1.06.19 NETWORK SECURITY AND PRIVACY LIABILITY: DELETED

G1-1.06.20 TECHNOLOGY ERRORS & OMISSIONS: DELETED

G1-1.06.21 RAILROAD PROTECTIVE LIABILITY INSURANCE: DELETED

G1-1.06.6 DEDUCTIBLES AND SELF-INSURED RETENTIONS: The contractor shall be solely responsible for the payment of all deductibles to which such policies are subject, whether or not the City is an insured under the policy.

G1-1.06.7 MISCELLANEOUS INSURANCE PROVISIONS: The policies are to contain, or be endorsed to contain, the following provisions:

1. Each insurance policy required by this contract shall be endorsed to state that coverage shall not canceled by either party except after 30 days prior written notice has been given to the City of Wilmington, PO Box 1810, Wilmington, NC 28402-1810.
2. If Contractor's liability policies do not contain the standard ISO separation of insureds provision, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.

G1-1.06.8 ACCEPTABILITY OF INSURERS: Insurance is to be placed with insurers licensed to do business in the State of North Carolina with an A.M. Best's rating of no less than A VII unless specific approval has been granted by the City.

G1-1.06.9 EVIDENCE OF INSURANCE: The Contractor shall furnish the City with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements prior to commencing the work, and thereafter upon renewal or replacement of each certified coverage until all operations under this contract are deemed complete. Evidence of additional insured status shall be noted on the certificate of insurance as per requirements in Section G1-1.06. This Certificate shall be in six (6) counterparts and, when the contract is signed by the Contractor, a copy thereof shall be inserted in each copy of the contract documents and upon insertion shall become a part of such documents.

With respect to insurance maintained after final payment in compliance with requirements, an additional certificate(s) evidencing such coverage shall be provided to the City with final application for payment and thereafter upon renewal or replacement of such insurance until the expiration of the period for which such insurance must be maintained.

G1-1.06.10 SUBCONTRACTORS: Contractor shall include all subcontractors as insureds under its policies or shall furnish separate certificates for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated herein. Commercial General Liability coverage shall include independent contractors' coverage, and the contractor shall be responsible for assuring that all subcontractors are properly insured.

G1-1.06.11 CONDITIONS:

1. The insurance required for this contract must be on forms acceptable to the City.
2. The contractor shall provide that the insurance contributing to satisfaction of insurance requirements in G1-1.06 shall not be canceled, terminated or modified by the contractor without prior written approval of the City.
3. The contractor shall promptly notify the Safety & Risk Manager at (910) 341-5864 of any accidents arising in the course of operations under the contract causing bodily injury or property damage.
4. The City reserves the right to obtain complete, certified copies of all required insurance policies, at any time.
5. Failure of the City to demand a certificate of insurance or other evidence of full compliance with these insurance requirements or failure of the City to identify a deficiency from evidence that is provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
6. By requiring insurance herein, the City does not represent that coverage and limits will necessarily be adequate to protect the Contractor and such coverage and limits shall not be deemed as a limitation of Contractor's liability under the indemnities granted to the City of Wilmington in this contract.
7. The City shall have the right, but not the obligation of prohibiting Contractor or any subcontractor from entering the project site or withhold payment until such certificates or other evidence that insurance has been placed in complete compliance with these requirements is received and approved by the City.

G-1.07 DELETED

G-1.08 DELETED

G-1.09 DELETED

G-1.10 DELETED

G-1.11 PAYMENT OF EMPLOYEES: The Contractor, and each of his Sub-contractors, shall pay each of his employees, engaged in work on this project, in full (less deductions made mandatory by law) not less often than on the Contractor's regular pay days, which shall be normally each week.

G-1.12 PAYMENT: Payment by the City to the Contractor will be made under either one of the following procedures:

G1.12.1 Public Construction Contracts equal to or greater than one hundred thousand dollars (\$100,000)

A. The City shall retain five percent (5%) of any periodic payment due a Contractor.

B. When the project is fifty percent (50%) complete, the City, with written consent of the surety, shall not retain any further retainage from periodic payments due the Contractor if the Contractor continues to perform satisfactorily and any nonconforming work identified in writing prior to that time by the Architect, Engineer, or City has been corrected by the Contractor and accepted by the City Engineer, Architect, Engineer, or Project Manager. If the City determines the Contractor's performance is unsatisfactory, the City may reinstate retainage for each subsequent periodic payment application up to the maximum amount of five percent (5%). The project shall be deemed fifty percent (50%) complete when the Contractor's gross project invoices, excluding the value of materials stored off-site, equal or exceed fifty percent (50%) of the value of the contract, except the value of materials stored on-site shall not exceed twenty percent (20%) of the contractor's gross project invoices for the purpose of determining whether the project is fifty percent (50%) complete.

C. 50% complete means:

- Gross project invoices, excluding material stored off site, of the value of the contract
- The value of materials stored on-site shall not exceed 20% of the gross project invoices

G-1.12.2 PAYMENT ON UNIT PRICE CONTRACTS: Not later than 30 work days after receipt of a City approved invoice the City will make partial payment to the Contractor, on the basis of a duly certified approved estimate by the City Engineer, Project Architect or City Project Manager of the work performed during the preceding calendar month by the Contractor, in accordance with item 12.1.1 above.

G-1.12.3 PAYMENT ON LUMP SUM CONTRACTS, THIRTY DAYS OR MORE IN DURATION: Not later than 30 work days after receipt of a City approved invoice and acceptance of work performed during that period, the City will make partial payment to the Contractor on the basis of a duly certified approved estimate by the City Engineer, Architect, Designer or Project Manager of the work performed during the preceding calendar month by the Contractor, and the value of the materials on the job, but not installed. The City will retain five percent (5%) of the amount of each such estimates in accordance with item 12.1.1 above. For purposes of preparing these monthly estimates, after the execution of the Contract, the Contractor will be required to submit to the City Engineer, Architect, Designer or Project Manager a breakdown of his lump sum bid in sufficient detail to permit an accurate determination of the progress of the work.

G-1.12.4 UNSATISFACTORY PERFORMANCE AND RETAINAGE: Retainage of the maximum of 5% may be reinstated if performance of the Contractor is unsatisfactory as determined by the City.

G-12.5 Within 60 days after the submission of a pay request and one of the following occurs, as specified in the contract documents, the owner with written consent of the surety shall release to the contractor all retainage on payments held by the owner: (i) the City receives a certificate of substantial completion from the Project Manager, Architect, Engineer, or Designer in charge of the project; or (ii) the owner receives beneficial occupancy or use of the project. However, the City may retain sufficient funds to secure completion of the project or corrections on any work. If the City retains funds, the amount retained shall not exceed two and one-half (2 ½) times the estimated value of the work to be completed or corrected. Any reduction in the amount of the retainage on payments shall be with the consent of the contractor's surety.

G1.12.6 Release of Retainage shall be in accordance with G.S. 143-134.1.

G1.12.7 There will be no retainage on periodic or final payments made by the City or prime contractor on public construction contracts in which the total project costs are less than one hundred fifty thousand dollars (\$150,000).

G-1.12.8 PAYMENT ON LUMP SUM CONTRACTS, THIRTY DAYS OR LESS IN DURATION: Where the time for completion of work, as stated in the proposal, is thirty (30) calendar days, or less, the City will make one payment in full upon completion of work and acceptance by the City Council. No partial or interim payments will be made.

G-12.9 The Prime contractor and all Subcontractors working on the project shall comply with G.S. 143-134.1 in regards to payments to all subcontractors

G-12.9 Nothing in this section shall prevent the City from withholding payment to the contractor in addition to the amounts authorized under G.S. 143-134.1 for unsatisfactory job progress, defective construction not remedied, disputed work, or third-party claims filed against the owner or reasonable evidence that a third-party claim will be filed.

G1-12.10 Payment to Subcontractors by Prime Contractor or General Contractor

In accordance with N.C. Gen. Stat. § 22C, within seven days of receipt by the prime contractor of each periodic or final payment, the prime contractor shall pay the subcontractor based on work satisfactorily completed or service satisfactorily provided under the subcontract. Additionally, the Contractor shall pay the undisputed portions of subcontractors' invoices within one hundred five (105) calendar days of the date of subcontractor's invoice, independent of any payment by the City to the Contractor. If the Contractor withholds any retainage pending final completion of any subcontractor's Work, the Contractor is required to pay the retainage so withheld within seven (7) calendar days after such subcontractor completes his Work satisfactorily, regardless of any payment of retainage by the City to the Contractor. The Contractor's failure to pay subcontractors as provided herein shall be a material breach for which the City may cancel the Contract.

If any periodic or final payment to the subcontractor is delayed by more than seven days after receipt of periodic or final payment by the prime contractor, the prime contractor shall pay the subcontractor interest, beginning on the eighth day, at the rate of one percent (1%) per month or fraction thereof on unpaid balance as may be due.

A subcontract on a contract governed by this section may include a provision for the retainage on periodic payments made by the prime contractor to the subcontractor. However, the percentage of

the payment retained: (i) shall be paid to the subcontractor under the same terms and conditions as provided to the Prime Contractor and shall not exceed the percentage of retainage on payments made by the owner to the prime contractor. Subject to section G-1.12.4, any percentage of retainage on payments made by the prime contractor to the subcontractor that exceeds the percentage of retainage on payments made by the owner to the prime contractor shall be subject to interest to be paid by the prime contractor to the subcontractor at the rate of one percent (1%) per month or fraction thereof.

Nothing in this section shall prevent the prime contractor at the time of application and certification to the City from withholding application and certification to the City for payment to the subcontractor for unsatisfactory job progress; defective construction not remedied; disputed work; third party claims filed or reasonable evidence that claim will be filed; failure of subcontractor to make timely payments for labor, equipment, and materials; damage to prime contractor or another subcontractor; reasonable evidence that subcontract cannot be completed for the unpaid balance of the subcontract sum; or a reasonable amount for retainage not to exceed the initial percentage retained by the owner.

The Prime contractor shall comply in all respects with G.S. 143-134.1 in all manners in payments to any and all subcontractors.

Neither the City's nor contractor's release of retainage on payments as part of a payment in full on a line-item of work shall affect any applicable warranties on work done by the contractor or subcontractor, and the warranties shall not begin to run any earlier than either the owner's receipt of a certificate of substantial completion from the architect, engineer, or designer in charge of the project or the owner receives beneficial occupancy.

G-1.13 COMMENCEMENT AND COMPLETION OF WORK: The Contractor for the construction of improvements under this contract shall commence work under his contract within ten days after written notice by the City PURCHASING MANAGER and shall fully complete all work thereunder within the time stated in the proposal form.

G-1.14 EXISTING CONDITIONS: The Contractor, in signing this contract, acknowledges that he has read these Specifications and is familiar with their terms; that he has studied the plans and drawings, which are entirely clear to him; that he has been over the ground where the work is to be done, and has fully acquainted himself with the existing conditions; that he is fully prepared to sustain all losses or damages incurred by the action of the elements, or from any unforeseen obstructions, or encumbrances that may be encountered in the prosecution of the work; is prepared to provide the necessary tools, appliances and machinery, skilled and unskilled labor and materials of all kind as specified, and to guarantee that on completion, all work will be in strict compliance with the plans and specifications.

G-1.15 SUBLETTING OR ASSIGNMENT OF CONTRACT: The Contractor shall keep the work under his own control, and shall not assign, by power of attorney, or otherwise, nor sublet the work or any part thereof, without the written consent of the City. The Contractor shall perform on the site and with his own organization work equivalent to at least thirty percent (30%) of the work to be performed under this Contract. If, during the progress of the work hereunder, the Contractor requests a reduction of such percentage, and the City Manager determines that it would be to the City's advantage, the percentage of the work required to be performed by the Contractor's own organization may be reduced; provided prior written approval of such reduction is obtained by the Contractor from the City Manager. Also, with respect to each Sub-contractor, the Contractor shall either submit certification by his insurance carrier that such Sub-contractor is covered under the provisions of his policy, or submit a certificate from the Sub-contractor's insurer that the Sub-contractor is covered, in accordance with Paragraphs G-1.05 through G-1.10, inclusive.

The Contractor shall not, either legally or equitably, assign any of the monies payable under this Contract, or his claim thereto, except by consent of the City.

Written consent by the City to sublet or assign any portion of the contract shall not be construed to relieve the Contractor, or surety, of any responsibility for the fulfillment of the Contract.

INTENT OF SPECIFICATIONS

G-1.16 INTENT: The intent of these specifications is to provide for the work herein enumerated to be constructed of the best materials of their respective kinds, and perfectly suited to the work contemplated. The work to be fully completed in every detail for the purpose designed, and it is hereby understood that the Contractor, in accepting this contract, agrees to furnish skilled labor, and everything necessary to complete the work in a workmanlike and satisfactory manner.

G-1.17 CONTRACT: In order that the contractor may understand the scope of the work to be performed and the details of its construction, several documents have been prepared, and it is understood and agreed by and between the contracting parties that the following documents form, and are essential parts of the complete contract: Advertisement, Information for Bidders, General and Technical Specifications, Proposal, Specific Contract, Contractor's Bond, Drawings, Plans, Maps, MBE/WBE/HUB/DBE policy and Profiles, attached or herein described, and others that may be prepared from time to time governing and illustrating the work to be done under the terms of the contract, and all of which shall have the same weight as if embodied herein.

G-1.18 SPECIFICATIONS: The General Provisions of the Specifications give in detail the duties and obligations of the two parties to the contract, the procedure of the work, and manner in which payments are to be made under the contract. The Technical Specifications, following, give in more detail the characteristics and requirements of the several classes of materials and special instructions governing the methods of construction. Where there is conflict, the Technical Specifications shall always take precedence over the General Specifications.

DEFINITIONS

G-1.19 DEFINITIONS: Wherever in the Specifications, Proposal, Contract, or Bond the following terms, pronouns, or abbreviations used in their stead, occur, the intent and meaning shall be interpreted as follows:

A. N. S. I.

American National Standards Institute

A. S. T. M.

American Society for Testing and Materials

A. W. S.

American Welding Society

A. W. W. A.

American Water Works Association

A. A. S. H. T. O.

American Association of State Highway and Transportation Officials

Bid Bond

BID BOND: The security to be furnished by the bidder as guaranty of good faith to enter into a contract with the City for the proposed work, if such work is awarded to him.

Bidder

The person, or persons, partnership, firm or corporation submitting a proposal for the work contemplated.

Change Order

A written order from the Engineer signed by the Contractor and the City of Wilmington authorizing addition, deletion or revision in the work or an adjustment in the price or time for completion. All change orders must be approved by the City Manager and all change orders exceeding \$500,000.00 must be approved by Wilmington City Council.

City

The word City in these specifications refers to the City of Wilmington, North Carolina, the party of the second part to the contract, also referred to herein as the "Owner".

City Council or Council

The word Council, or City Council, refers to the City Council, the governing body of the City of Wilmington.

Contractor

The person, or persons, partnership, firm or corporation who enters into the contract awarded him by the City.

Drawings

All drawings, or reproductions thereof, pertaining to the construction of the work, which are approved by the Engineer for such purpose.

Engineer

The word Engineer, as used in these specifications, refers to the consulting engineer whose name appears on the drawings and/or to the City Engineer, and to his or their properly authorized assistants, limited to the duties entrusted to them.

Extra Work

A written order to the Contractor, signed by the Engineer, ordering a change in, or an addition to the work done, from that originally shown by the drawings and specifications. An authorized Change order shall be issued for this work.

F. S.

Federal Specifications

General Specifications

All requirements and provisions contained in this document.

Performance Bond

The approved form of security executed by the Contractor and his surety, guaranteeing complete execution of the contract.

Bond Proposal

Written offer submitted by the bidder in the required manner to perform the work contemplated.

N. C. S. H. C. or N. C. H. C. Specifications

North Carolina State Highway Commission, Raleigh, North Carolina, and to their "Standard Specifications of Roads and Structures," latest edition.

Request for Contract Payment

The form supplied by the City and completed by the Contractor to request periodic payments on the contract. This form also includes a MBE/WBE/HUB/DBE payment form.

Special Provisions

Statements modifying or changing the requirements or provisions of the General Specifications, or adding new requirements or provisions thereto.

Specifications

The General Specifications, Special Provisions, and all written or printed agreements and instructions pertaining to the performance of the work, and to the quantity and quality of the materials to be furnished under the contract.

Standard Details

The Standard Detail drawings, or reproductions thereof, which pertain to the standard method of construction of the work, and which are approved by the Engineer.

Surety

The corporate body which is bound with and for the contractor, that is primarily liable with the contractor, for the acceptable performance of the contract and for the completion of the work.

Phrases

Wherever, in the specifications, or upon the drawings, the words "As required", "As permitted", or words of like import are used, it shall be understood that the direction, requirements, or permission of the Engineer is intended; and similarly the words "approved", "acceptable" and "satisfactory", or words of like import shall mean approved, acceptable, or satisfactory to the Engineer.

THE DUTIES AND AUTHORITY OF THE ENGINEER DEFINED

G-1.20 INTERPRETATIONS AND CORRECTIONS: It is agreed by and between the contracting parties that the Engineer shall make all necessary explanations as to the meaning and intent of these specifications, and correct any errors, discrepancies or omissions that occur in the plans and specifications; it is further agreed that the Engineer shall, in all cases, determine the amount, quality, acceptability, and fitness of the several classes of work which are to be paid for under the contract; and it is also agreed that the Engineer shall act as referee upon all questions arising between the parties of this contract; and in all differences that occur between contractors working on adjoining sections concerning the work to be done under the terms of the contract, and the Engineer's decision shall be final and binding.

G-1.20.1 INTERPRETATIONS OF PLANS AND/OR SPECIFICATIONS PRIOR TO RECEIPT OF BIDS: If any prospective bidder feels that there are items within the plans or specifications, in the work proposed, or upon the site contemplated, which need clarification or interpretation, he shall, prior to the date and time for the receipt of bids, address a written statement to the Engineer, covering the points which he feels need clarification. It shall be the responsibility of the person addressing the inquiry to see that such a request is in the hands of the Engineer in sufficient time for proper consideration and answer. Upon receipt of such a written request, the Engineer will make a determination and if, in his opinion, interpretation, clarification and/or change should be made in the plans and/or specifications, he will inform each holder of the plans and specifications in writing of his decision or findings in the matter in question. No other procedure will be followed in interpretation or addendum to these specifications, and the City of Wilmington will not be responsible for any change unless made in accordance with this procedure.

Questions related to the proposed project, including questions concerning the plans and specifications will be addressed by the City or Engineer up to Seven (7) calendar days prior to the bid opening. No addenda will be issued after this time.

- G-1.21 **FIELD WORK:** The Engineer shall give all necessary base lines and bench marks and information of like character for the guidance of the contractor, and all the work shall accurately conform thereto. Any work done without established lines, grades, may be ordered removed and replaced, without additional expense to the City.
- G-1.22 **INSPECTION:** All materials and workmanship will be inspected by the Engineer, and the Contractor will be held to the spirit of the specifications at all times, the intent of such inspection being simply to obtain work of a high character, and one in which both parties to the contract can take pride.
- G-1.23 **ALTERATIONS:** It is agreed by the contracting parties that the Engineer may at all times, before or after the commencement of the work, make alterations, or changes in the location, alignment, grades, materials and methods of construction that is desired, regardless of whether the location of such work be as shown on the plans upon which bids have been invited, and such change shall not vitiate or annul this contract, but the Engineer will determine the value of said work, and should such change diminish the amount of work to be done, no claim shall be made by the Contractor for damages on the grounds of anticipated profits from the part disposed with, but should the plan of a particular piece of work be altered or changed after commencement of said work and result in extra cost to the Contractor, the Engineer shall determine and certify a fair equitable value therefor, and his decision shall be final and binding.
- G-1.24 **INSPECTORS:** Should it be found necessary, in the opinion of the Engineer, to appoint inspectors to pass upon the quality, amount, and general character of the work and the materials incorporated therein, such person, or persons, who, in the opinion of the Engineer, are deemed competent, may be appointed. The duties of this office are purely supervisory, and their decisions are subject to review by the Engineer.

EXTRA WORK

- G-1.25 **EXTRA WORK:** The Contractor shall do any work not otherwise herein provided for when, and as ordered by the Engineer in writing by himself or specially authorized assistants. In the event that a mutually agreed price is not arrived at prior to the accomplishment of this extra work, the Contractor shall keep a strict account of the labor, equipment, and material used on said extra work, and shall give the Engineer an itemized statement each day of the amount. He shall further furnish the Engineer with bills, accounts and vouchers relating to the cost and access to all accounts concerning this work.
- G-1.25.1 Request for reimbursement for Extra Work must be submitted by the Contractor within ten (10) days of the date upon which such extra work is accomplished, and subject request for reimbursement must bear on its face the authorizing number of the written order issued by the Engineer.
- G-1.25.2 No request for reimbursement on account of additional work will be honored by the Engineer unless previously authorized by him in the manner stated.
- G-1.26 **PROTECTION:** When such work is being carried on under the written instructions of the Engineer, and the work is damaged from whatever cause due to the carelessness or neglect of properly protecting it, or the use of improper materials, or inferior workmanship, such part thereof as the Engineer directs shall be removed and replaced by the Contractor at his own expense.

G-1.27 PAYMENT: For all such extra work, as authorized under the terms of Paragraph G-1.25, where it is possible for the Contractor and the Engineer to arrive at a mutually agreeable price (either lump sum or unit price) for this extra work in advance of the actual accomplishment of said work, this price may be used. In the event that this is not possible or practicable, the Contractor shall receive the reasonable cost of said work, plus ten percent (10%) of such cost. The decision of the Engineer shall be final upon all questions of the amount and value of extra work. The Engineer will include in such valuation the cost to the Contractor of all materials used, all labor, Social Security and insurance on labor only, common and skilled, labor foremen, and the fair rental of all machinery used for the period of such use. The Engineer will not include in this valuation any cost or rental of small tools, buildings, any portion of the time of the Contractor or superintendent, clerical help, overhead expenses or any allowance for the use of capital, these items being considered as covered by the ten percent (10%) added to the reasonable cost.

G-1.28 TIMEKEEPER: The Engineer shall have the right to appoint a timekeeper to represent the City on extra work, and the Contractor shall furnish him all necessary facilities for obtaining a correct record of the time and the materials incorporated in the work. The Engineer shall have the right to designate what force shall be employed, the compensation therefor and the foreman shall be approved by the Engineer.

GENERAL INSTRUCTIONS

G-1.29 OBSERVANCE OF THE LAW: In all operations connected with the work, the Contractor shall observe and obey all the precepts of the law, the ordinances and regulations of the Federal, City, County and State. The Contractor shall provide and maintain such barriers, signals, red lights, and watchmen to effectually prevent any accident in consequence of the work, and the Contractor shall be responsible and liable for all damage to life or property occasioned in any way by his acts or that of his agents.

G-1.30 DISPOSITION OF CLAIMS: In the event of injuries or damages to persons or property of any kind legally existing along, or adjacent to the work, the Contractor agrees to make repairs or payment for damages or injuries as may be necessary, and should the Contractor fail to promptly repair or satisfy any legal complication that arises, after being notified in writing by the Engineer, the right is conferred upon the CITY to deduct the cost thereof from any money due, or to become due, the Contractor under the terms of the contract. All claims arising under this contract shall be settled to the satisfaction of the Engineer within sixty (60) days after notification to the Contractor of such claims, unless proceedings are entered into in a court of law.

G-1.31 PATENTS: Should the Contractor use any patented invention, article or contrivance in the construction or maintenance of the work, or any part thereof embraced in these specifications, the fee or royalty for the use of such patented article as aforesaid shall be included in the Contractor's proposal; and the Contractor agrees to hold the City harmless against any and all demands for such fees or royalties; and before final payment to the Contractor he shall furnish satisfactory evidence that all such claims have been settled.

G-1.32 PRIVATE PROPERTY: The Contractor shall not enter, or occupy with men, tools, machinery and materials, any property except that under the control of the City without the consent of the Engineer, and then only with written consent of the property owner. A copy of this written consent shall be given, or mailed to the Engineer.

G-1.33 LAYING OUT THE WORK: The Engineer will provide a base line for alignment purposes and a benchmark for vertical control. All construction offset stakes, forms, and batterboards shall be set by the contractor and are subject to review and approval by the Engineer, however, such approval of these items shall not relieve the Contractor of his responsibility to construct the work to the line and grade shown on the plans.

- G-1.34 **UNAUTHORIZED WORK:** Any work done without lines, levels and instructions having been given by the Engineer, or without the supervision of an Inspector, will not be estimated or paid for, except when such work is authorized by the Engineer. Work so done, without the authority of the Engineer, may be ordered removed and replaced at the Contractor's cost.
- G-1.35 **RESPECT FOR FIELD RECORDS:** The Contractor shall carefully preserve and maintain the proper position of all lines, stakes and grade boards until authorized to remove them. Any work that shows lack of alignment or grade where the Engineer's control stakes are missing, or the position of the points, stakes, or grades indicate that they have been carelessly maintained, such work shall be removed and replaced at the Contractor's expense. If, in the opinion of the Engineer, the Contractor does not utilize reasonable care in preserving control stakes, he shall be required to pay for all expenses involved in the replacement of these stakes.
- G-1.36 **INSPECTION OF MATERIALS:** The Contractor shall furnish and deliver on the ground where it is to be used all materials suitable for the purpose intended. All materials and workmanship shall be subject to the Engineer's inspection, approval, or rejection at all times, and this inspection and approval during the progress of the work does not relieve the Contractor of repairs or renewal where the work has been damaged, proven defective, or overlooked, and on demand of the Engineer any work found not in conformity with the specifications shall be removed at once and replaced in accordance with the specifications.
- G-1.37 **WORKERS:** Only competent and skilled workers of each class shall be employed on the work, and if the Engineer notifies the Contractor that any common or skilled workers, including those superintending the work, are unfaithful, disobedient, disorderly, or unsatisfactory, such worker, or workers shall be taken off of this project not again employed upon the work without the consent of the Engineer.
- G-1.38 **PROSECUTION OF WORK:** The Contractor shall begin the work provided for under the terms of the contract within ten (10) days after written notice by the Purchasing Manager, and shall diligently prosecute and fully complete same within the time stated in his proposal. The Contractor shall prosecute the work in such manner, time and place as directed by the Engineer, and he shall carry out without delay all orders and instructions given by the Engineer. During the absence of the Contractor, a qualified representative shall have authority to direct the work and to receive orders and instructions from the Engineer; but this direction by the Engineer for prosecuting the work shall not relieve the Contractor of any of the obligations or liabilities assumed under the contract.
- G-1.39 **SANITATION:** Necessary sanitation conveniences for the use of workers employed upon the work shall be constructed and maintained by the Contractor, in strict accordance with the provisions of the City-County, and State Health Departments. The Contractor shall obey and enforce the aforesaid rules and regulations, including preventative measures where the workers have been exposed to infections and communicable diseases.
- G-1.40 **PUBLIC TRAFFIC:** The Contractor shall maintain, in a safe and practical way, the roadways that are now used by the public or individuals that neither may be unnecessarily delayed nor inconvenienced on account of the work being carried on by the Contractor. The Contractor will be responsible for all injuries, damages to persons or property incurred by such person, or persons, firm or corporation on account of the acts or claims of negligence by the Contractor to the aforesaid while passing over the public or private roadways. The Contractor will be required to repair, or make reparation for any damages that he may have caused to the roadways, public or private, immediately after discontinuing traffic along such route, or when authorized to do so by the Engineer.
- G-1.41 **BARRICADES AND LIGHTS:**

G-1.41.1 Travel upon streets or any intersecting alley, street, or private driveway shall not be inconvenienced needlessly, nor shall any street or alley be wholly obstructed for more than two blocks at any one time, except in special cases where a greater distance may be allowed by the Engineer.

G-1.41.2 Whenever a street is closed, the Contractor shall cause plainly worded signs, announcing such fact, to be placed with proper barricades at the nearest cross street upon each side of such obstruction, and upon intersecting streets.

G-1.41.3 The Contractor shall also maintain sufficient warning lights during the hours of darkness in and about the work which is under way, and it is his full responsibility to see that such lights are lit and kept lit from sunset to sunrise.

G-1.41.4 The Contractor shall also provide and maintain suitable detour signs so as to warn the public of work under way, and to guide them around the work in progress where it would be dangerous for them to proceed through the working area.

G-1.41.5 If required by the Engineer, the Contractor shall also provide watchmen, or signalmen for protection and guidance of the public.

G-1.41.6 All barricades, lights, signage, flagging, and signalmen shall be established and operate in accordance with City requirements and North Carolina Department of Transportation.

G-1.42 DRAINAGE: The Contractor shall maintain an unobstructed flow of the natural and artificial drains at all times, and in the event it is necessary during the prosecution of work to obstruct the free flow of either, the Contractor shall provide for flow of water in such manner that no damage shall result, or a nuisance be created.

G-1.43 CLEANING UP: On the completion of any part of the work, the Contractor shall remove all surplus earth, materials of construction, debris, and refuse from the work as directed by the Engineer. On the final completion of the work, all debris over the entire contract, which is a result of work by the Contractor, shall be moved or destroyed as directed by the Engineer.

G-1.44 INCIDENTAL WORK: The duties of the Contractor have been set out in these specifications in a broad manner, with the intent of bringing to the attention of the Contractor his responsibilities under the contract, and any details of the work not specifically mentioned, but obviously necessary for carrying on, and the completion of the work shall be considered incidental thereto, and as being a part of, and included with the work for which prices have been named in the proposal, and the Contractor will not be entitled to any additional compensation therefor.

G-1.45 CONTRACTOR'S CLAIM FOR DAMAGES: In the event the Contractor is of the opinion that he should be compensated for damages sustained by reason of some act of the City, its agents or employees, the amount of such claims shall be itemized and a detailed report shall be furnished the Engineer by the Contractor within ten (10) days after the date it is claimed such damages were sustained. If the Contractor fails to file his claim in the manner and within the time named but presents such claim at a later date when it would be impossible to make a thorough investigation, such claims will be forfeited and invalidated, and payment of the alleged damages will be disallowed.

G-1.46 EXTENSION OF TIME: No extension of time will be made the Contractor for completing the work on account of ordinary and usual delays, such as the condition of the weather, and lack of material, accidents, and the occurrence of such will not relieve the Contractor from the necessity of maintaining the rate of progress agreed upon. The City will have the right, upon the recommendation of the Engineer after investigation, to extend the time for completion when extraordinary delays or accidents of unusual nature are incurred over which the Contractor has no

possible control; but such action on the part of the City shall not operate or be construed to waive any of the rights of the City under this Contract and the Performance Bond. In the event the Contractor fails to complete the work in the specified time named in the proposal, and is permitted to continue and complete the work as if such time had not lapsed, such permission shall not be deemed a waiver in any respect by the City of any liability for extra expense thereby incurred arising from the noncompletion of said work, within the specified time, but such liability shall remain in full force against the Contractor.

G-1.47 TIME FOR COMPLETION AND LIQUIDATED DAMAGES: It is hereby understood and mutually agreed, by and between the Contractor and the City, that the date of beginning and the time for completion as specified in the contract of work to be done hereunder are ESSENTIAL CONDITIONS of this contract.

The beginning date of the construction period shall be ten (10) days following the date on the NOTICE TO PROCEED letter duly mailed by the Purchasing Manager to the contractors address indicated in the bid documents.

The Contractor agrees that said work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and the City, that the time for the completion of the work described herein is a reasonable time for the completion of the same, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.

If the said Contractor shall neglect, fail or refuse to complete the work within the time herein specified, or any proper extension thereof granted by the City, then the Contractor does hereby agree, as a part consideration for the awarding of this contract, to pay to the City the amount specified in the contract, not as a penalty but as liquidated damages for such breach of contract as hereinafter set forth, for each and every calendar day that the Contractor shall be in default after the time stipulated in the contract for completing the work.

The said amount is fixed and agreed upon by and between the Contractor and the City because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the City would in such event sustain, and said amount is agreed to be the amount of damages which the City would sustain and said amount shall be retained from time to time by the City from current periodical estimates.

It is further agreed that time is of the essence of each and every portion of this contract and of the specification wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the contract an additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be to the essence of this contract.

Provided, that the Contractor shall not be charged with liquidated damages or any excess cost when the City determines that the Contractor is without fault and the Contractor's reasons for the time extension are acceptable to the City; Provided further, that the Contractor shall not be charged with liquidated damages or any excess cost when the delay in completion of the work is due to any preference, priority or allocation order duly issued by the City.

G-1.48 SALVAGED MATERIALS: Any used materials removed from the site of the construction, such as granite curb, manhole and catch basin castings, pipe, fill materials, which materials will not be re-used under this contract, are the property of the City of Wilmington. Pipe, curb, castings, etc., shall be carefully removed by the Contractor and delivered to the City Lot at Tenth and Fanning Streets, where a receipt will be given. Excess fill material will be dumped on disposal areas indicated by the Engineer. The Contractor will be charged with any salvaged materials which he cannot account for as having delivered, as specified.

G-1.49 FINAL ESTIMATE: The Engineer shall certify to the City in writing when, in his opinion, the Contractor has performed all that is set out in the contract and the specifications relative to the construction, and the Engineer shall show in such certificate the amount of work done from actual measurement, and the value of such work under and according to the prices named in the proposal. The City, on acceptance of said certificate, shall pay unto the Contractor within thirty (30) days thereafter the amount remaining due, and that part of the estimate remaining unpaid and including all moneys retained in the monthly estimates and for other causes under the contract.

The acceptance by the Contractor of the final payment shall release the City of any and all claims, liabilities and obligations to the Contractor for any and all work done and materials furnished, or for any act of the City or its agents or employees affecting the same. Before final payment is made, the Contractor shall submit an affidavit to the Engineer, stating that he has fully paid all bills for equipment, materials, or labor used on this project.

G-1.50 INSPECTION AND TESTING MATERIALS: Whenever in these contract documents, inspection and testing of materials is called for, the selection of bureaus, laboratories and/or agencies for such inspection and testing is subject to the approval of the Engineer.

G-1.50.1 Documentary evidence satisfactory to the Engineer that the materials have passed the required inspection and testing must be furnished to the City by the Contractor prior to the incorporation of such materials in the work, when required by the Engineer, and rejected materials must be promptly removed from the premises.

G-1.50.2 Wherever an outside testing laboratory is employed for testing of materials to be incorporated in this contract, the City of Wilmington shall employ and pay said laboratory for services rendered.

G-1.51 CONTRACTOR'S USE OF PUBLIC WATER: The Contractor shall comply with all requirements of the Cape Fear Public Utility Authority for use of public water.

G-1.52 PRECAUTIONS PRIOR TO AND DURING EXCAVATION OF ANY STREETS: No excavation, tree removal or clearing shall be begun by the Contractor upon any street within the City, or any area upon which work is to be done under this contract until he has notified and arranged for an authorized representative of the utility companies and departments which maintain underground systems within the City of Wilmington (water, sewer, electric, telephone and gas) to go over all areas to be graded, excavated or cleared, and designate the location of all hidden or underground facilities, lines, cables, pipes, or other structures and adequately mark these for proper protection during the progress of the proposed construction. The City will use its best offices to require that the owners of utilities which are in physical interference with the work relocate their utilities with utmost speed when these obstructions are encountered. In case any obstruction so located or placed as to interfere with the work, is unexpectedly encountered, the Contractor shall at once notify the Engineer of the locality and circumstances, and the place shall be passed over until satisfactory arrangements can be made. The Contractor shall make no claim against the City for damages arising out of such a delay.

G-1.52.1 Any utility which requires relocation due to physical interference with the proposed construction will be required to be relocated by the owners by the City under its franchise agreement with the operators of said utility.

G-1.52.2 Any utility line which, in the opinion of the Engineer, does not require relocation due to physical interference with the proposed project shall be the responsibility of the Contractor to protect during the progress of the work. In the event of damage to any such line upon which a repair cost is claimed, this claim shall be paid by the Contractor. Where the utility owner has given incorrect or insufficient information to the Contractor as to the location of its underground

lines, then the Contractor shall be relieved of the costs of repair, which shall then be borne by the utility company or operating department.

G-1.52.3 Under no circumstances, however, shall machine excavation, grading or cut of any nature be made in a street, or areas where high voltage underground cable or gas distribution lines, services, or mains are situated without the continuous presence of an authorized representative of the owning utility who is capable of "shutting down", "cutting off", discontinuing, or taking such other action as may be necessary to prevent a dangerous condition or occurrence of said utility lines, cables or facilities are damaged during such operations.

G-1.52.4 Should the location or position of any underground or surface obstruction be such that in the opinion of the Engineer its removal, replacement, realignment, or change is required for the prosecution of the work, and it shall be deemed desirable or expedient by the Engineer, the Contractor shall perform such work as may be required as Extra Work under this Contract. (See G-1.25, G-1.26, G-1.27, and G1.28).

G-1.53 RIGHTS-OF-WAY: The City shall furnish all needed rights-of-way for the project, but in the event that any certain rights-of-way and grounds necessary for the purpose of this Contract be not acquired by the City until after the beginning of the work, the Contractor shall so arrange the procedure of work as to allow time for the acquisition of such rights-of-way, and the City will not reimburse, or be liable to the Contractor for any losses resulting from, or incident to, such delay. As soon as the rights-of-way in question have been acquired, the Contractor shall at once proceed with the work thereon with such forces as will insure its prompt completion, but if there is such delay in procuring the right-of-way in question that there will not remain a reasonable length of time before the date set for the completion of this particular work, this fact shall operate so as to extend the time for completion of the particular work affected and to compensate for the actual time lost.

G-1.54 USE OF A PORTION OF THE WORK: Whenever, in the opinion of the Engineer, any portion of the work is completed, or is in an acceptable condition for use, it shall be used for the purpose intended. Such use shall not be held in any way as an acceptance of that portion of the work used, or as a waiver of any of the provisions of these specifications. Necessary repairs or renewals in any section of the work due to defective materials, defective workmanship, or natural causes, under the instructions of the Engineer shall be performed by the Contractor at no additional cost to the City.

G-1.55 EXCISE TAX ON MATERIALS OR FEDERAL TRANSPORTATION TAX, EXEMPTION THEREON: Wherever existing Federal Laws concerning Federal Excise Taxes and Federal Transportation Tax provide that the City of Wilmington is exempt from payment of such tax on items purchased by it, and these laws and regulations permit the extension of this exemption to the Contractors performing work for the City, the City will supply affidavits as to the existence and nature of the Contract, as requested by the Contractor for his use in filing with his vendors and transportation agencies to make his purchases for work under this Contract exempt from such taxes; providing (1) that the Contractor shall have filed an affidavit with the City that his bid on this contract does not include any costs of said taxes, and (2) that the materials for which he will request exemption from tax will be only those materials, which upon completion of the Contract will have actually been incorporated into the work under this Contract, and upon receipt of final payment by the Contractor will become the property of the City of Wilmington.

G-1.56 REQUIRED RECORDS ON SALES AND USE TAX: In order that the City may substantiate a refund claim for sales and use taxes, the Contractor shall furnish the City certified statements in triplicate, setting forth the cost of building materials, supplies and fixtures, and equipment which become a part of, or are annexed to any building or structure being erected, altered, or repaired under contract with the City and the amount of sales and/or use taxes paid thereon.

In the event the Contractor makes several purchases from the same vendor, such certified statement must indicate the invoice numbers, the inclusive dates of the invoices, the total amount of the invoices and the sales and use taxes paid thereon. Such statement must also include the cost of any tangible personal property withdrawn from the Contractor's warehouse stock which is incorporated in the work, and the amount of sales and use tax paid thereon by the Contractor. The Contractor shall also obtain similar certified statements by his Sub-contractors and submit them to the City.

Bidders are reminded that an additional Two percent (2%) North Carolina Sales Tax is now collected on all sales made within certain counties. Purchases within these counties will require separate certified statements for this 2% tax. This statement shall give the vendors name, invoice number, total amount of invoice, date of invoice, the amount of the special 2% tax paid and the County in which the purchase was made. In the event that the Contractor wishes to file a combined certified statement showing the 4% tax and the 2% tax separately, this will be acceptable provided he gives the counties in which the 2% tax was paid.

This certified statement must be submitted to the City Engineer monthly, and all certified statements shall be submitted before final payment is made for work performed under this contract.

G-1.57 SURFACE AND SUB-SURFACE STRUCTURES: The Contractor shall be held responsible for the proper replacement of all bridges, crossings, or like structures.

In case any pipe or other obstruction, located or placed so as to interfere with the work is unexpectedly encountered, the Contractor shall at once notify the Engineer of the locality and circumstances, and the place shall be passed over until satisfactory arrangement can be made, without any claim for damages arising from such delay.

Should the location or position of any underground or surface obstruction be such that, in the opinion of the Engineer it must be relocated, and he deems it desirable or expedient that the Contractor undertake the necessary work, the Contractor will undertake to accomplish such work as directed by the Engineer, as provided under the sections of these Specifications dealing with Extra Work.

The Contractor is to take all risks and shall be responsible for all expenses and damage attending the presence or proximity of any gas or water pipe, or public or private sewers or drains, conduits, or other structures located in such a manner as shall not, in the opinion of the Engineer, require shifting, accommodating, or removing.

G-1.58 SETTLEMENT OVER EXCAVATION: The Contractor shall be entirely responsible for all settlement over any and all trenches and excavations which may have been cut along the line of his work at any time prior to the completion of his contract, and for a period of twelve (12) months after completion of his contract.

G-1.59 TEMPORARY SUSPENSION OF WORK: The Engineer shall have the authority to suspend the work, wholly or in part, for such period or periods as may be deemed necessary due to unsuitable weather, or other such conditions as are considered unfavorable for the suitable prosecution of the work, or for such time as is necessary due to the failure on the part of the Contractor to carry out orders given, or perform any or all provisions of the Contract. If it should be necessary to stop work for an indefinite period, the Contractor shall store all materials necessary in such a manner that they will not deteriorate or become damaged in any way, and he shall take every precaution necessary to prevent damage or deterioration of the work performed, provide suitable drainage by opening ditches, shoulder drains, etc., and erect structures where necessary. The Contractor shall not suspend the work without authority from the Engineer. Neither the failure of the Engineer to notify the Contractor to suspend the work on account of bad weather, nor permission from the

Engineer to continue work during bad weather shall be cause for the acceptance of any work which does not comply in every respect with the Contract and Specifications.

G-1.60 EQUAL OPPORTUNITY REQUIREMENTS: The Contractor agrees that it will in carrying out the terms of this agreement, comply with the provisions of Executive Order 11246 entitled "Equal Employment Opportunity".

In complying with the provisions of Executive Order 11246, the Contractor agrees as follows:

(a) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(b) The Contractor will in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.

(c) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or worker representatives of the Contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(d) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(e) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records and accounts by the Department of Housing and Urban Development and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.

(f) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 or September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(g) The Contractor will include the provisions of paragraphs (a) through (g) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor.

(h) EXEMPTIONS TO EQUAL OPPORTUNITY CLAUSE: (1) Contracts and sub-contracts not exceeding \$10,000.00 (other than Government bills of lading) are exempt. The amount of the contract, rather than the amount of the Federal Financial Assistance shall govern in determining the applicability of this exemption. (2) Except in the case of sub-contractors for the performance of construction work at the site of construction, the clause shall not be required to be inserted in sub-contracts below the second tier. (3) Contracts and sub-contracts not exceeding \$100,000.00 for standard commercial supplies or raw materials are exempt.

G-1.61 SAFETY: The contractor and each of his subcontractors shall comply at all times with all regulations of the Occupational Safety and Health Administration and all labor laws and regulations of the State of North Carolina applicable to safety. Such standards include 29 CFR Part 1926 and applicable standards from 29 CFR Part 1910 of the Code of Federal Regulations.

The contractor and each of his subcontractors shall maintain adequate protection against damage to life and property during the work and shall provide and maintain all necessary protective devices until completion and acceptance of the work by the City.

In any emergency threatening life or property not considered by the contractor as coming under the provisions provided in this Section G-1.61 the contractor may act at his own discretion to prevent or alleviate the threatening situation without authorization by the City.

G-1.62 Contractor shall obtain building, electrical, mechanical and plumbing permits for all work under the Contract. There will be no fee for obtaining these permits.

G-1.63 GENERAL CONTRACTOR: In the event the bid and subsequent contract require separate prime contractors for the various phases of the work, the Contractor receiving the GENERAL CONSTRUCTION contract shall act as the General Contractor for the project in regards to scheduling of the work and other duties generally carried out by the General Contractor.

G-1.64 PLANS AND SPECIFICATIONS: All firms receiving award on a section of the contract shall receive free of charge from the City of Wilmington two (2) complete sets of plans and specifications for the project. For Single prime contracts involving multiple subcontractors, the primary subcontractors (HVAC, Plumbing, and Electrical or specialty item specifically bid as a separate item) shall receive up to two (2) complete sets of plans and specifications. Any further sets required by the contractor shall be charged to the contractor at the cost of reproduction.

G-1.65 DISPUTES: Any disputes in excess of \$15,000 shall be processed in accordance with Section 13 of the contract.

Rev. 2/02

NEW HANOVER COUNTY

CONTRACT FOR CONSTRUCTION SERVICES

THIS CONTRACT, made this the ____ day of _____, 2026 by and between the CITY OF WILMINGTON, NORTH CAROLINA, a Municipal Corporation located in New Hanover County (hereinafter called "CITY"); and 1. a corporation organized under the laws of the State of _____; 2. a non-profit corporation organized under the laws of the State of _____; 3. an unincorporated association having its principal place of business in _____; 4. a resident of _____; or 5. owner of a partnership organized under the laws of the State of _____, with its principal offices in _____ (hereinafter called "CONTRACTOR").

W I T N E S S E T H:1. Purpose

The CITY hereby employs the CONTRACTOR to furnish all labor, materials and equipment to perform all work in manner and form as specified by the attached plans, specifications and documents consisting of, but not limited to: Advertisement, Instructions to Bidders, General Conditions, Technical Specifications, Proposal and Affidavit, Contract and Performance and Payment Bonds, which are incorporated as if fully set out, for the following:

DOCK STREET SHORELINE STABILIZATION as specified herein and, on the plans, specifications, contract documents, drawings, addenda and change orders (if any).

This project is to enhance, improve and stabilize the existing shore protection retaining wall along Water Street, located just north of the intersection with Dock Street, with a gravity retaining wall composted of stacked concrete-filled, high-strength, synthetic fabric form tubes that are horizontally stepped back with an approximate 1 on 2 vertical wall slope.

2. Term of Contract/Liquidated Damages

The CONTRACTOR shall commence the work to be performed under this contract within ten (10) days of receipt of a written order from the Purchasing Manager and shall complete all work hereunder within 180 calendar days of the date of beginning. The CONTRACTOR further agrees to pay, as liquidated damages, the sum of \$530.00 for each consecutive calendar day thereafter as hereinafter provided in Paragraph G-1.47 of the General Conditions.

3. Extra Work

In the event extra work is necessary, not set forth or contemplated in this contract, the CONTRACTOR agrees to faithfully perform all such work under a written change order from the CITY, setting forth and describing fully the work to be done. The CITY hereby agrees to pay to the CONTRACTOR, for any such extra work, upon presentation of properly prepared, itemized statements of cost computed as follows:

(a) The CONTRACTOR shall be allowed to charge for labor used at the actual payroll charges during the time actually spent on extra work, (b) He shall be allowed to add on labor charges the percentage shown in Paragraph 8 of the Proposal for Workmen's Compensation Insurance, Social Security and other payroll charges, (c) The rate for such equipment, this hourly rate to be for operating hours only, (d) The CONTRACTOR shall be allowed to charge for material purchased by him and used on extra work orders the amount charged to him by the vendor upon presentation of paid invoices, (e) The CONTRACTOR shall be allowed to add to the costs of said work arrived at enumerated above ten (10%) percent of materials, cost of equipment and actual payroll cost for overhead and profit.

4. Payment

4.1 The CITY agrees to pay to the CONTRACTOR for the faithful performance of this contract, subject to any additions or deductions as provided for in the Specifications or Proposal, and in accordance with the prices as set forth, subject to any additions which may be due under Paragraph 3 of this Agreement, Unit Prices and/or lump sum price, as set forth in the Proposal, the estimated total cost of _____
(\$ _____)

4.2 Not later than 30 work days after receipt of a City approved invoice the City will make partial payment to the Contractor on the basis of a duly certified approved estimate by the City Engineer of the work performed during the preceding calendar month by the Contractor, and the value of the materials on the job, but not installed, less ten (5%) percent of the amount of such estimate, which is to be retained by the CITY until all work has been performed strictly in accordance with this contract and until such work is accepted by the CITY.

4.3 Invoices, or estimates or the cost of work performed, through June 30th, must be received by the 10th calendar day of July.

4.4 Upon submission by the CONTRACTOR of evidence satisfactory to the CITY that all payrolls, materials, bills and any other liabilities or costs incurred by the CONTRACTOR in connection with the construction of this work has been paid in full, final payment on account of this contract shall be made within thirty (30) days after completion by the CONTRACTOR of all work covered by this agreement and the acceptance of such work by the CITY.

5. Performance Bond

It is agreed that if, at any time after the execution of this contract and the surety bond attached for its faithful performance, the CITY shall deem the surety or sureties upon such bond to

be unsatisfactory, or if for any reason such bond ceases to be adequate to cover the performance of the work, the CONTRACTOR shall, at his expense, within five days after receipt of notice from the CITY to do so, furnish an additional bond or bonds in such form and amount, and with such surety, or sureties, as shall be satisfactory to the CITY.

6. Insurance; Proof of Coverage

The CONTRACTOR shall take out and maintain, during the life of this contract, all insurance required under Paragraph G-1.06 of the General Provisions, and shall, at execution of this contract, attach to each of the counterparts thereof documentary proof of compliance in the form of a Certificate from his insurer, stating the amount, policy numbers, and kinds of insurance carried. This certificate shall also contain a statement by the insurer that he will notify the City of Wilmington by Registered Mail twenty (20) days prior to any cancellation or lapse of the insurance shown on this certificate. It is further agreed that the CONTRACTOR shall furnish the CITY with one memorandum copy of the policy, or policies, shown on this certificate at the time of the signing of this contract.

7. Guarantee

The CONTRACTOR hereby agrees to guarantee, for a period of one year after date of final payment, the work accomplished under this Contract. The CONTRACTOR agrees to repair at no cost to the CITY any defects due to faulty workmanship or materials which may appear in his work during this period.

8. Release and Indemnity

To the fullest extent permitted by law, the CONTRACTOR shall release, indemnify, keep and save harmless the CITY, its agents, officials and employees, from any and all responsibility or liability for any and all damage or injury of any kind or nature whatever (including death resulting therefrom) to all persons, whether agents, officials or employees of the CITY or third persons, and to all property proximately caused by, incident to, resulting from, arising out of, or occurring in connection with, directly or indirectly, the performance or nonperformance by CONTRACTOR (or by any person acting for the CONTRACTOR or for whom the CONTRACTOR is or is alleged to be in any way responsible), whether such claim may be based in whole or in part upon contract, tort (including alleged active or passive negligence or participation in the wrong), or upon any alleged breach of any duty or obligation on the part of the CONTRACTOR, its agents, officials and employees or otherwise. The provisions of this Section shall include any claims for equitable relief or for damages (compensatory or punitive) against the CITY, its agents, officials, and employees including alleged injury to the business of any claimant and shall include any and all losses, damages, injuries, settlements, judgments, decrees, awards, fines, penalties, claims, costs and expenses. Expenses as used herein shall include without limitation the costs incurred by the CITY, its agents, officials and employees, in connection with investigating any claim or defending any action, and shall also include reasonable attorneys' fees by reason of the assertion of any such claim against the CITY, its agents, officials or employees. The CONTRACTOR expressly understands and agrees that any performance bond or insurance protection required by this agreement, or otherwise provided by the CONTRACTOR, shall in no way limit the CONTRACTOR'S responsibility to release, indemnify, keep and save harmless and defend the CITY as herein provided. The intention of the parties is to apply and construe broadly in favor of the CITY the foregoing provisions subject to the limitations, if any, set forth in N.C.G.S. 22B-1.

9. Personnel

It is mutually agreed that CONTRACTOR is an independent contractor and not an agent of the CITY, and as such the CONTRACTOR shall not be entitled to any CITY employment benefits, such as, but not limited to, vacation, sick leave, insurance, workmen's compensation, or pension and retirement benefits.

10. Conflict of Interest

No paid employee of the CITY shall have a personal or financial interest, direct or indirect, as a contracting party or otherwise, in the performance of this agreement.

11. Non-Waiver of Rights

It is agreed that the CITY'S failure to insist upon the strict performance of any provision of this agreement, or to exercise any right based upon a breach thereof, or the acceptance of any performance during such breach, shall not constitute a waiver of any rights under this agreement.

12. Suspension or Termination of Agreement

12.1 In the event that review of Contractor's performance shows non-conformance to the attached scope of service or other terms or conditions contained herein as a result of the Contractor's errors, omissions or negligent acts, the contractor shall be in breach of this Agreement and the City may take corrective action as it deems necessary including, but not limited to, withholding or reduction of payment.

12.2 The City shall also have the right to suspend this Agreement upon written notice to the Contractor. Such suspension may be made for any of the following reasons: (a) violations or non-compliance with the contract terms, (b) violations of OSHA laws or regulations, (c) violations of Federal or State environmental and health laws or regulations, (d) operating City valves without permission, (e) moving City supplied water meters without permission, (f) failure to adequately plan for the protection of underground utilities during construction, (g) violation of any City ordinances or regulations or (h) verbal abuse of any City employees or others. In addition, any such violations may result in the Contractor being disqualified from bidding on future City projects. The written notice of suspension shall state the reasons for suspension and allow for a review period of ten (10) days during which the Contractor shall be provided with an opportunity to respond with an explanation or a justification, and/or shall undertake any reasonable remedial action required by the City. If, in the opinion of the City, the Contractor has not addressed the reasons for suspension at the completion of the ten (10) day suspension period, the City shall have a right to terminate this Agreement whereupon all obligations of the City to the Contractor shall cease.

12.3 The City may, at any time, terminate this contract for the City's convenience and without cause. Upon receipt of written notice from the City of such termination for the City's convenience, the Contractor shall (a) cease operations as directed by the City in the notice; (b) take actions necessary, or that the City may direct, for the protection and preservation of the work; and (c) except for work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing sub- contracts and purchase orders and enter into no further sub-contracts and purchase orders. In the event that this project is terminated for the convenience of the City, the Contractor shall be paid for services performed to the date of termination and costs incurred by reason of such termination, but such costs shall not include anticipated profit on unperformed work. (In no event will the amount due contractor in the event of termination for convenience exceed that amount set forth in Paragraph 4.1 of this Agreement. Contractor shall be paid for all reimbursables, as defined herein, which are due him.)

12.4 If after notice of termination of this contract under the provisions of Paragraph 12.2, it is determined for any reason that the Contractor was not in default under the provisions of such paragraph, or that the default was excusable under the provisions of this contract, the rights and obligations of the parties shall be the same as if the notice of termination had been issued by the City for convenience as set forth in Paragraph 12.3.

12.5 Nothing contained herein shall prevent the City from pursuing any other remedy which it may have against the Contractor including claims for damages.

13. Contract Disputes

In accordance with G.S. 143-128.1(8) the parties agree to mediate contract disputes in excess of \$15,000.00. Within ten (10) days of such contract disputes, the parties shall select a mediator that is certified pursuant to all of the parties involved in the dispute. If the parties cannot agree on a mediator or do not timely select a mediator, the City shall select the mediator. The parties and the mediator shall agree upon the mediator's rate of compensation. The parties to the dispute shall share in the payment of the mediator's compensation with the City paying a minimum of one-third of the compensation if the City is a party to the dispute.

14. Assignment of Agreement

It is mutually agreed by the parties hereto that this agreement is not transferable by either party to this agreement without the consent of the other party to this agreement.

15. Subcontracts

The CONTRACTOR shall utilize no subcontracts for carrying out the services to be performed under this agreement without the written approval of the CITY.

16. Entire Agreement

The agreement constitutes the entire understanding of the parties.

17. Binding Effect

The agreement shall be binding upon the heirs, successors, assigns, agents, officials, employees, independent contractors, and subcontractors of the parties.

18. Continuing Obligation

The parties will make and execute all further instruments and documents required to carry out the purposes and intent of the agreement.

19. Reference

Use of the masculine includes feminine and neuter, singular includes plural; and captions and headings are inserted for convenience of reference and do not define, describe, extend or limit the scope of intent of the agreement.

20. Interpretation

All of the terms and conditions contained herein shall be interpreted in accordance with the laws of the State of North Carolina. In the event of a conflict between the various terms and conditions contained herein or between these terms and other applicable provisions, then the more

particular shall prevail over the general and the more stringent or higher standard shall prevail over the less stringent or lower standard.

21. Saving Clause

If any section, subsection, paragraph, sentence, clause, phrase or portion of this contract is for any reason held invalid, unlawful, or unconstitutional by any court of competent jurisdiction, such portion shall be deemed severable and such holding shall not affect the validity of the remaining portions hereof.

22. Other Laws and Regulations

CONTRACTOR will comply with any and all applicable federal, state and local standards, regulations, laws, statutes and ordinances including those regarding toxic, hazardous and solid wastes and any pollutants; public and private nuisances; health or safety; and zoning, subdivision or other land use controls. CONTRACTOR will take all reasonably necessary, proper or required safety, preventative and remedial measures in accordance with any and all relations and directives from the North Carolina Department of Human Resources, the United States Environmental Protection Agency, the North Carolina Department of Environmental Quality, Health Departments, and any other federal, state or local agency having jurisdiction, to insure the prompt prevention or cessation (now or in the future) of violations of either the applicable provisions of such standards, regulations, laws, statutes, and ordinances or any permits or conditions issued thereunder. CONTRACTOR specifically acknowledges and agrees that CONTRACTOR, and any subcontractors it uses, has complied with and shall continue to comply with the provisions of the federal E-Verify program in compliance with Article 2 of Chapter 64 of the North Carolina General Statutes. CONTRACTOR shall maintain adequate safeguards with respect to sensitive customer information in conformance with and pursuant to 16 C.F.R. §681.1 and in accordance with N.C. Gen. Stat. §132-1.10 and §75-65.

23. Amendments

This agreement shall not be modified or otherwise amended except in writing signed by the parties.

24. Non-Discrimination

CONTRACTOR will take affirmative action not to discriminate against any employee or applicant for employment or otherwise illegally deny any person participation in or the benefits of the program which is the subject of this agreement because of race, creed, color, sex, age, disability or national origin. To the extent applicable, CONTRACTOR will comply with all provisions of Executive Order No. 11246, the Civil Rights Act of 1964, (P.L. 88-352) and 1968 (P.L. 90-284), and all applicable federal, state and local laws, ordinances, rules, regulations, orders, instructions, designations and other directives promulgated to prohibit discrimination. Violation of this provision, after notice, shall be a material breach of this agreement and may result, at CITY'S option, in a termination or suspension of this agreement in whole or in part.

25. Authority to Act

Each of the persons executing this Agreement on behalf of CONTRACTOR does hereby covenant, warrant and represent that the CONTRACTOR is a duly organized and validly existing legal entity authorized to transact business within the State of North Carolina, that the CONTRACTOR has full right and authority to enter into this Agreement, and that each and all persons signing on behalf of the CONTRACTOR were authorized to do so.

26. Counterparts.

This Agreement may be executed in several counterparts, including separate counterparts. Each shall be an original, but all of them together constitute the same instrument.

27. No Publicity.

No advertising, sales promotion or other materials of the CONTRACTOR or its agents or representations may identify or reference this Contract or the CITY in any manner absent the written consent of the CITY. Notwithstanding the forgoing, the parties agree that the CONTRACTOR may list the CITY as a reference in responses to requests for proposals, and may identify the CITY as a customer in presentations to potential customers.

28. Immunity Not Waived

This Agreement is governmental in nature, for the benefit of the public. CONTRACTOR acknowledges that City reserves all immunities, defenses, rights or actions arising out of City's sovereign status under applicable law. No waiver of any such immunities, defenses, rights or actions shall be implied or otherwise deemed to exist by reason of City's entry into this Agreement.

29. CITY Not Liable For Special or Consequential Damages.

The CITY shall not be liable to the CONTRACTOR, its agents or representatives or any subcontractor for or on account of any stoppages or delay in the performance of any obligations of the CITY, or any other consequential, indirect or special damages or lost profits related to this Contract.

30. Public Records.

CONTRACTOR acknowledges that the CITY is a public entity, subject to North Carolina's public records laws (N.C.G.S. § 132) and that any documents related to this Agreement may be subject to disclosure pursuant to state law in response to a public records request or to subpoena or other judicial process.

If CONTRACTOR believes documents related to the Agreement contain trade secrets or other proprietary data, CONTRACTOR must notify the CITY and include with the notification a statement that explains and supports CONTRACTOR'S claim. CONTRACTOR also must specifically identify the trade secrets or other proprietary data that CONTRACTOR believes should remain confidential.

In the event the CITY determines it is legally required to disclose pursuant to law any documents or information CONTRACTOR deems confidential trade secrets or proprietary data, the CITY, to the extent possible, will provide CONTRACTOR with prompt written notice by certified mail, fax, email, or other method that tracks delivery status of the requirement to disclose the information so CONTRACTOR may seek a protective order from a court having jurisdiction over the matter or obtain other appropriate remedies. The notice will include a time period for CONTRACTOR to seek court ordered protection or other legal remedies as deemed appropriate by CONTRACTOR. If CONTRACTOR does not obtain such court ordered protection by the expiration of said time period, the CITY may release the information without further notice to CONTRACTOR.

IN WITNESS WHEREOF, the CITY has caused this agreement to be duly executed in its name and behalf and the CONTRACTOR has caused this agreement to be duly executed in its name and behalf and its corporate seal to be hereunto affixed and attested to.

CITY OF WILMINGTON, NORTH CAROLINA

BY: _____
Becky Hawke, City Manager

Date: _____

WITNESS:

Daryle L. Parker, Purchasing Manager

APPROVED AS TO FORM:

Gina Essey, Assistant City Attorney

FINANCE OFFICER'S CERTIFICATION STATEMENT

This instrument has been preaudited in the manner required by the Local Government Budget and Fiscal Control Act this the _____ day of _____, 2026.

Martha Wayne, Chief Financial Officer

Project String: _____

Org./Obj. _____

Amount of Contract \$ _____

Req. # _____

Federal ID Number: 56-6000239

BY: _____

ATTEST:

Secretary, Assistant Secretary,
Trust Officer

(CORPORATE SEAL)

STATE OF _____

COUNTY OF _____

I, _____, a Notary Public, certify that
(Name)

_____ personally came before me this day and
(Name of Sec., Assist. Sec., Cashier, Assist. Cashier)

acknowledged that he (she) is _____ of
(Secretary, Assist. Sec., Cashier, Assist. Cashier)

_____, a corporation, and that by authority duly given and
(Name of Corporation)

as the act of the corporation, the foregoing Contract: Page C-10, Performance Bond: Page C-11, and
Payment Bond: Page C-12 were signed in its name by its

_____, sealed with
(President or Vice President)

its corporate seal, and attested by himself (or herself) as its

_____.
(Sec., Assist. Sec., Cashier, Assist. Cashier)

WITNESS my hand and official seal, this the _____ day of _____, 2026.

Notary Public

My Commission expires: _____

(NOTARY SEAL)

PERFORMANCE BOND

CITY OF WILMINGTON, NORTH CAROLINA

PRINCIPAL: _____

SURETY: _____

BOND AMOUNT: _____

_____ DOLLARS (\$ _____)

BOND DATE: _____

CONTRACT NUMBER: _____

"KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL AND SURETY above named, are held and firmly bound unto the CITY OF WILMINGTON, NORTH CAROLINA, hereinafter called the CITY, in the penal sum of the amount stated above 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 whereas the Principal entered into a certain contract with the CITY, numbered as shown above and hereto attached:

"NOW, THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the CITY, with or without notice to the Surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the Surety being hereby waived, then, this obligation to be void, otherwise to remain in full force and virtue.

"IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals on the date indicated above, 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."

(CORPORATE SEAL)

ATTEST:

Secretary

PRINCIPAL: _____

By: _____

Title: _____

SURETY: _____

WITNESS:

By: _____

Title: _____

PAYMENT BOND

CITY OF WILMINGTON, NORTH CAROLINA

PRINCIPAL: _____

SURETY: _____

BOND AMOUNT: _____
_____ DOLLARS (\$ _____)

BOND DATE: _____

CONTRACT NUMBER: _____

"KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL AND SURETY above named, are held and firmly bound unto the CITY OF WILMINGTON, NORTH CAROLINA, hereinafter called the CITY, in the penal sum of the amount stated above 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 whereas the Principal entered into a certain contract with the CITY, numbered as shown above and hereto attached:

"NOW, THEREFORE, if the Principal shall promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the Surety being hereby waived, then this obligation to be void; otherwise to remain in full force and virtue.

"IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals on the date indicated above, 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."

(CORPORATE SEAL)

ATTEST:

Secretary

PRINCIPAL: _____

By: _____

Title: _____

SURETY: _____

WITNESS:

By: _____

Title: _____

(TO BE EXECUTED ON BEHALF OF SURETY AGENT)

STATE OF _____

COUNTY OF _____

On this the _____ day of _____, 2026 before me the subscriber, Notary Public of the State of _____, in and for the County of _____, duly commissioned and qualified came _____, to me personally known, and to me personally known to be the individual who executed the foregoing Payment Bond and Performance Bond: Pages C-9 and C-10, and he acknowledges the execution of the same, and being by me duly sworn deposes and says that he has Power-of-Authority from _____, with their principal offices at _____, to execute the preceding instruments in the amount specified in the Payment Bond and Performance Bond on their behalf, that his signature was duly affixed and he subscribed to the said Payment Bond and Performance Bond by authority and direction of said corporation.

IN WITNESS, I have hereunto set my hand and affixed my official seal at the City of _____, the day and year first above written.

My Commission expires:

Notary Public

(SEAL)

POWER OF ATTORNEY

DOCUMENTS

(Attached hereto original or validated documents which give to individual who signed Contract Bond Power of Attorney for Surety)

INSURANCE CERTIFICATES

(Staple Insurance Certificates as required
under Paragraph G-1.06 to this sheet)

CITY OF WILMINGTON

NORTH CAROLINA

**PROPOSAL
FOR
DOCK STREET SHORELINE STABILIZATION
PROJECT NO. 2TRST20151
CONTRACT NO. DSSS-AD-1026**

1. The undersigned, having carefully examined the site of the proposed work, the entire Bidding Document, including but not limited to the Advertisement, Special Notice, General Provisions, Technical Specifications, Federal Requirements (if any), Contract and Plans and/or Standard Details attached hereto, all of which are fully understood and hereby agreed to, proposes to furnish all materials, labor, equipment and plant necessary to complete in-place the specified improvements, in strict accordance with the above mentioned bidding documents.
2. Where an interpretation as to specifications is necessary, or as to the character of the work performed, or as to further instructions relating to the work, before or during construction, the undersigned bidder hereby agrees that (hereinafter called "ENGINEER") shall be the authority and his word shall be final.
3. The prices, as stated, are for the work completed and also to include all charges and expenses for furnishing all labor, materials, equipment and plant for completing the specified work in the manner specified in the specifications, and according to the instructions of the ENGINEER, unless otherwise shown in the Proposal.
4. If awarded this contract, the undersigned agrees to begin construction on the date to be specified in the written order by the Purchasing Manager, and to complete all work within 180 calendar days of the date of beginning. The CONTRACTOR further agrees to pay, as liquidated damages, the sum of \$530.00 for each consecutive calendar day thereafter as hereinafter provided in paragraph G-1.47 of the General Conditions.
5. The undersigned hereby certifies that this Proposal is made without connection with any person or persons making bids or proposals for the above work, and that the bid is in all respects fair and without collusion or fraud.
6. The undersigned further agrees that in case of failure on his part to execute the said contract and bond within ten (10) consecutive calendar days after written notice of award of the contract by the Purchasing Manager, the check or bid bond, or both, accompanying this bid and the monies payable thereon shall be paid into the funds of the City of Wilmington, North Carolina, as liquidated damages for such failure; otherwise the check and/or bid bond accompanying this Proposal shall be returned to the undersigned.
7. The undersigned understands and agrees that if awarded this contract he will execute the contract and post a Performance Bond and Payment Bond to the extent of one hundred percent (100%) of the amount of this contract.
8. The undersigned understands and agrees that all extra work shall be done and paid for as provided under the applicable sections of the specifications. In the event that extra work is necessary, the

percentage to be added to the actual payroll cost to cover Social Security, small hand tools, office overhead on labor management only, Workmen's Compensation Insurance and other insurance for labor costs shall be 5% percent.

All extra work shall be done using actual payroll and material costs, and a profit of ten percent (10%) of the total cost shall be added thereto. All items of materials shall be billed to the CITY on the extra work invoice, and a delivery slip from the vendor shall be submitted therewith to verify actual cost. No additional profit will be allowed on materials other than the normal overall ten percent (10%) above stated. Items not provided for above shall be agreed upon between the CONTRACTOR and the ENGINEER prior to invoicing.

9. The undersigned understands that, if awarded this contract, he must guarantee, for a period of one year after date of final payment, all work accomplished under this contract to the extent that he will repair any defects due to faulty workmanship, or materials which may appear in his work during this period.
10. The undersigned supplies the information recorded below for use in the preparation of the contract documents, in event of contract award:

10.1 Please indicate type of business organization:

- (a) Proprietorship _____
(b) Partnership _____
(c) Corporation _____
(d) Limited Liability Co. _____

10.2 If business is a Corporation, please answer the following questions:

Name and title of officers, authorized by Corporate Resolution, who will execute the contract on behalf of corporation (generally President and Secretary).

Firm is incorporated in what state?

If firm is a foreign corporation, does firm have a certificate of authority from the North Carolina Secretary of State? _____

10.3 If business is a Partnership, please answer the following:

Name in full or all general partners and addresses:

_____ Is this
a limited or general partnership? _____

If a limited partnership, what is state of registration? _____

If business is a foreign limited partnership, does business have a certificate of authority from the North Carolina Secretary of State? _____

- 10.4 If business is a Proprietorship, please answer the following:

Name of owner: _____

- 10.5 If business is a limited liability company, please answer the following:

List the names and title of managers or member-managers who will execute the contract on behalf of the company? _____

What is state of organization? _____

If business is a foreign limited liability company, does business have a certificate of authority from the North Carolina Secretary of State? _____

- 10.6 For all bidders:

If the business operates under an assumed name, what is the assumed name?

Has a certificate of assumed name been filed in the New Hanover County Registry?

If so, please provide the recording information. Deed Book _____ at Page _____.

11. Bid Surety Information - Please fill in the applicable paragraph.

- 11.1 Attached hereto is a cash deposit in the amount of _____ Dollars (\$ _____), this amount being not less than five percent (5%) of the total bid.

OR

- 11.2 Attached hereto is a certified check on the _____ Bank of _____ in the amount of _____ Dollars (\$ _____), made payable to the City of Wilmington, North Carolina. The bank on which the certified check is submitted is warranted to be a member of the Federal Deposit Insurance Corporation, and the amount of the check is not less than five percent (5%) of the total bid.

OR

11.3 Attached hereto is a bid bond in the amount of five percent (5%) of the total bid, said bid bond being indemnified by the _____
(Insert Name of Bonding Company)
whose address is _____. This bond is

executed by a corporate surety licensed to issue such bonds in the State of North Carolina and is made payable to the City of Wilmington. This bid bond is conditioned so that the surety will upon demand make payment to the City of Wilmington upon said bond if the bidder fails to execute the contract the surety shall pay to the CITY an amount equal to the amount of said bid bond in an amount not less than five percent (5%) of the total bid.

12. Additional Information - Please respond to each:

12.1 North Carolina Tax Payer Identification Number: _____

12.2 Does your company have an Affirmative Action Plan _____

Yes _____ No _____

13. The undersigned proposes to accomplish the work as described in the following at the unit prices and/or lump sum price shown. In the event of a discrepancy in the unit prices and the extended prices, the unit prices shall prevail.

BASE BID:

The project shall generally consist of the installation of a new fabric-formed concrete storm bag retaining wall outboard of the existing deteriorated bulkhead wall; replacement of the existing timber access ladder with a new stainless steel ships ladder along with relocation of the existing access hatch; replacing existing cap-to-column plates and bolts with new stainless steel plates and bolts; and related appurtenances for the LUMP SUM PRICE OF:

_____ (\$ _____)Dollars

UNIT PRICES:

Unit prices quoted and accepted shall apply through the life of the contract except as otherwise specifically noted. Unit prices shall be applied as appropriate, to compute the total value of changes in the scope of the work, in accordance with the contract documents.

Unit prices are net. No profit or overhead will be added or deducted in the application of unit prices. All unit prices must be provided as part of the Proposal.

<u>Description</u>	<u>Unit</u>	<u>Unit Price</u>
Replace Deteriorated Timber Joists with PT 2x8 Joists (Add)	LF	\$ _____
Additional 2X Timber Decking (Add)	SF	\$ _____
Additional City Std Guardrail System (rails, including timber posts) (Add)	LF	\$ _____
Additional Two-Rail Guardrail System (rails, including posts) (Add)	LF	\$ _____

14. The undersigned understands that the award under this Proposal will be made to the lowest responsible bidder as described in Section G-1.02 of the General Provisions, on the proposal page or in Section 15 Special Conditions.
15. The undersigned acknowledges receipt of any issued Addendums to this Project by recording the Addendum number and date acknowledged below:

Addendum #1:	_____	Dated:	_____
Addendum #2:	_____	Dated:	_____
Addendum #3:	_____	Dated:	_____
Addendum #4:	_____	Dated:	_____

If awarded the work, I/we agree to begin work as soon as given the notice to proceed and complete the work ready for occupancy within the time limits specified.

This Proposal is submitted by:

Company Name _____

Signed by: _____
Authorized Person's Signature

Type or Print Name of Person Signing Above

Title: _____

Address: _____ Zip _____

Phone: _____

Date: _____

North Carolina Contractor's License Number: _____

Rev.

Cover Sheet Structural Technical Specifications

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DIVISION 01 - GENERAL REQUIREMENTS

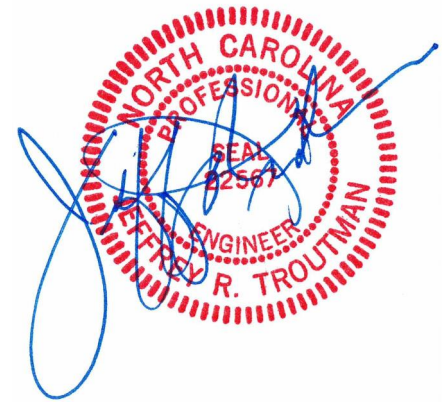
- 015200 CLEANING UP
- 015600 ENVIRONMENTAL PROTECTION

DIVISION 03 - CONCRETE

- 033053 MISCELLANEOUS CAST-IN-PLACE CONCRETE

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

- 061063 EXTERIOR ROUGH CARPENTRY
- 061500 WOOD FLOOR DECKING



DIVISION 1 - GENERAL REQUIREMENTS

SECTION 015200 CLEANING UP

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 CLEANING DURING CONSTRUCTION

- A. Conduct cleaning and disposal operations to comply with all applicable local, state and federal regulations.
 - 1. Do not burn or bury rubbish and waste materials on the site.
 - 2. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
 - 3. Do not dispose of wastes into streams or waterways.
- B. Wet down dry materials and rubbish to lay dust and prevent blowing dust.
- C. Do not allow materials and rubbish to drop free or be thrown from upper floors, but remove by use of a material hoist or rubbish chutes.
- D. Maintain the Site free from accumulations of waste, debris, and rubbish.
- E. Provide on-site containers for collection of waste materials and rubbish.
- F. At the end of each day, remove and legally dispose waste materials and rubbish from site. Keep site as clean as possible.
- G. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process will not fall on wet, newly painted surfaces.
- H. Disposal of materials shall be in compliance with all applicable laws, ordinances, codes, and by-laws.

1.3 FINAL CLEANING

- A. Prior to submitting a request to the Engineer to certify Substantial Completion of the Work, the Contractor shall inspect all interior and exterior spaces and verify that all waste materials, rubbish, tools, equipment, machinery, and surplus materials have been removed, and that all sight-exposed surfaces are clean. Leave the Project clean and ready for occupancy.

- B. Unless otherwise specified under other sections of the Specifications, the Contractor shall perform final cleaning operations as herein specified prior to final inspection.
- C. Cleaning shall include all surfaces, interior and exterior, which the Contractor has had access to, whether new or existing.
- D. Employ experienced workmen or professional cleaners for final cleaning.
- E. Use only cleaning materials recommended by the manufacturer of the surface to be cleaned.
- F. Use cleaning materials which will not create a hazard to health or property and which will not damage surfaces.
- G. All broken or defective glass caused by the Contractor's Work shall be replaced at the expense of the Contractor.
- H. Remove grease, mastic, adhesive, dust, dirt, stains, labels, fingerprints, and other foreign materials from sight-exposed interior and exterior surfaces. This includes cleaning of the Work of all finishing trades where needed, whether or not cleaning by such trades is included in their respective specifications.
- I. Clean and polish all new and existing glass and plastic glazing (if any) throughout the building(s), on both sides. Clean plastic glazing in accordance with the manufacturer's directions. This cleaning shall be completed by qualified window cleaners at the expense of the Contractor just prior to acceptance of the Work.
- J. Repair, patch, and touch up marred surfaces to the specified finish, to match adjacent surfaces.
- K. Broom clean exposed concrete surfaces and paved surfaces. Rake clean other surfaces of grounds.
- L. Ventilating systems - Replace filters and clean ducts, blowers, and coils if units were operated during construction.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 015200

Dock Street Shoreline Stabilization
City of Wilmington
No. S6-1015.1 Call #1

DIVISION 1 - GENERAL REQUIREMENTS

SECTION 015600 - ENVIRONMENTAL PROTECTION

Part 1 – General

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUBMITTALS

- A. Environmental Protection Plan:

- 1. The Contractor shall be responsible for the preparation and submission of an environmental protection plan. After the contract is awarded, prior to the commencement of the work, the Contractor shall meet with the Engineer or his representative and discuss the proposed environmental protection plan. The meeting shall develop mutual understanding relative to details of environmental protection, including required reports and measures to be taken should the Contractor fail to provide adequate protection in an adequate and timely manner. Not more than 14 days after the meeting, the Contractor shall submit for approval his proposed environmental protection plan.

1.3 GENERAL REQUIREMENTS:

- A. The Contractor shall provide and maintain environmental protection during the life of the contract as defined herein. Environmental protection shall be provided to correct conditions that develop during the construction of permanent environmental protection features, or that are required to control pollution that develops during normal construction practices but are not associated with permanent control features incorporated in the project. The Contractor's operations shall comply with all federal, state and local regulations pertaining to water, air, solid waste, hazardous waste and substances, oily substances, and noise pollution.

1.4 DEFINITIONS OF CONTAMINANTS:

- A. Sediment: Soil and other debris that has been eroded and transported by runoff water.
- B. Solid Waste: Rubbish, debris, garbage and other discarded solid materials resulting from industrial, commercial, and agricultural operations and from community activities.
- C. Rubbish: A variety of combustible and noncombustible wastes such as paper, boxes, and glass and crockery, metal and lumber scrap, tin cans, and bones.
- D. Debris: Includes both combustible and noncombustible wastes, such as ashes, waste materials that result from construction or maintenance and repair work, leaves, and tree trimmings.

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- E. Chemical Waste: Includes petroleum products, bituminous materials, salts, acids, alkalies, herbicides, pesticides, organic chemicals, and inorganic wastes.
- F. Sanitary Wastes:
 - 1. Sewage: That which is considered as domestic sanitary sewage.
 - 2. Garbage: Refuse and scraps resulting from preparation, cooking, dispensing and consumption of food.

1.5 PROTECTION OF NATURAL RESOURCES:

- A. General: It is intended that the natural resources within the project boundaries and outside the limits of permanent work performed under this contract be preserved in their existing condition or be restored to an equivalent or improved condition upon completion of the work. The Contractor shall confine his construction activities to areas defined by work schedule, plans, and specifications.
- B. Land Resources: Except in areas indicated to be cleared, the Contractor shall not remove, cut, deface, injure, or destroy trees or shrubs without special permission from the Engineer. No ropes, cables, or guys shall be fastened to or attached to any existing nearby trees for anchorages unless specifically authorized. Where such special emergency use is permitted, the Contractor shall be responsible for any damage resulting from such use.
 - 1. Protection Plan: The Contractor shall submit a plan for protecting existing trees which are to remain and which may be injured, bruised, defaced or otherwise damaged by construction operations. Rocks that are displaced into uncleared areas shall be removed. Monuments, markers, and works of art shall be protected before beginning operations. A preconstruction survey including photographs shall be accomplished by the Contractor and a report of survey furnished when required by the Engineer.
 - 2. Repair or Restoration: All trees or other landscape features scarred or damaged by the Contractor's equipment or operations shall be repaired and/or restored to their original condition at the Contractor's expense. The Engineer shall approve the repair and/or restoration prior to its initiation.
 - 3. Temporary Construction: The Contractor shall obliterate all signs of temporary construction facilities such as haul roads, work areas, structures, foundations of temporary structures, stockpiles of excess or waste materials, and all other vestiges of construction. Temporary roads, parking areas and similar temporary use areas shall be graded in conformance with surrounding areas, tilled and seeded. Seeding shall include topsoil and/or nutriment as necessary to establish a suitable stand of grass.
- C. Water Resources: All work under this contract shall be performed in such a manner that any adverse environmental impacts, where applicable, are reduced to a level that is acceptable to the Engineer.
 - 1. Stream Crossings: Stream crossings by fording with equipment shall be limited so as to control turbidity, and in areas of frequent crossings temporary culverts or bridge structures shall be installed. Such temporary culverts or bridge structures shall be removed upon completion of the project and the area repaired in conformance with its original condition or as indicated or specified.
 - 2. Oily and Hazardous Substances: At all times, special measures shall be taken to prevent oily or other hazardous substances from entering the ground, drainage areas, or local bodies of water.
- D. Fish and Wildlife Resources: The Contractor shall at all times perform all work and take such steps required to prevent any interference or disturbance to fish and wildlife. The Contractor will not be

Dock Street Shoreline Stabilization
City of Wilmington
No. S6-1015.1 Call #1

permitted to alter water flows or otherwise significantly disturb native habitat adjacent to the project area which are critical to fish and wildlife except as may be indicated or specified.

- E. Historical and Archaeological Resources: All items having any apparent historical or archaeological interest which are discovered in the course of any construction activities shall be carefully preserved and reported immediately to the City's Project Manager for determination of actions to be taken.

1.6 EROSION AND SEDIMENT CONTROL MEASURES:

- A. Provide turbidity barrier as indicated.

1.7 CONTROL AND DISPOSAL OF SOLID WASTES, AND CHEMICAL AND SANITARY WASTES:

- A. General: Wastes shall be picked up and placed in containers which are emptied on a regular schedule. All handling and disposal shall be so conducted as to prevent contamination of the site and any other areas. On completion, the areas shall be left clean and natural looking. All signs of temporary construction and activities incidental to construction of the required permanent work in place shall be obliterated.
- B. Disposal of Rubbish and Debris: The disposition shall be as follows:
 - 1. Removal from Property: The Contractor shall transport all waste off City property and dispose of it in a manner that complies with federal, state and local requirements.
- C. Garbage Disposal: Where the construction project is located in an area where garbage collection by the City is accomplished on a scheduled basis, the Contractor shall place garbage in an appropriate container and the City shall provide pickup and disposal service. In areas where there is no scheduled garbage collection, the Contractor shall transport the garbage to a pickup point or disposal area. The preparation, cooking, and disposing of food is strictly prohibited on the project site.
- D. Sewage, Odor, and Pest Control: Sewage shall be disposed of through connection to municipal, district, or station sanitary sewage systems. Where such systems are not available, chemical toilets or comparably effective units shall be used with wastes periodically emptied into municipal, district, or station sanitary sewage systems as approved by the appropriate regulatory entity(ies). Provisions shall be made for pest control and for elimination of odors.
- E. Chemical Waste: Chemical waste shall be stored in corrosion resistant containers, removed from the project site, and disposed of not less frequently than monthly unless directed otherwise. Disposal of chemical waste shall be in accordance with standard established practices. Fueling and lubricating of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spills and evaporation. Lubricants to be discarded and burned oil shall be disposed of in accordance with approved procedures meeting federal, state and local regulations. For oil and hazardous material spills which may be large enough to violate federal, state, and local regulations, the City's Project Manager shall be notified immediately.

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City of Wilmington
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1.8 DUST CONTROL:

- A. Dust shall be kept down at all times, including non-working hours, weekends and holidays. Soil at the site, haul roads and other areas disturbed by the Contractor's operations shall be sprinkled or treated with dust suppressors as necessary to control dust. No dry power brooming will be permitted. Vacuuming, wet mopping, wet sweeping, or wet power brooming shall be used instead. Air blowing will be permitted only for cleaning off non-particulate debris, such as reinforcing bars. No sandblasting will be permitted unless the dust therefrom is confined. Only wet cutting of concrete blocks, concrete and asphalt will be permitted. No unnecessary shaking of bags will be permitted where concrete mortar and plaster milling is done.

1.9 PAYMENT:

- A. All work included under this section shall be considered incidental to other work being paid for by the various items in the contract. No special payment shall be made for erosion and sedimentation control measures during construction.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 015600

SECTION 033053 - MISCELLANEOUS CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes cast-in-place concrete, including reinforcement, concrete materials, mixture design, placement procedures, and finishes.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Design Mixtures: For each concrete mixture.

1.4 QUALITY ASSURANCE

- A. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C94/C94M requirements for production facilities and equipment.

PART 2 - PRODUCTS

2.1 CONCRETE, GENERAL

- A. Comply with the following sections of ACI 301 unless modified by requirements in the Contract Documents:
 - 1. "General Requirements."
 - 2. "Formwork and Formwork Accessories."
 - 3. "Reinforcement and Reinforcement Supports."
 - 4. "Concrete Mixtures."
 - 5. "Handling, Placing, and Constructing."

2.2 STEEL REINFORCEMENT

- A. Reinforcing Bars: ASTM A615/A615M, Grade 60, deformed.

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- B. Plain-Steel Wire: ASTM A1064/A1064M, as drawn.

2.3 CONCRETE MATERIALS

- A. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from single source, and obtain admixtures from single source from single manufacturer.
- B. Cementitious Materials:
 - 1. Portland Cement: ASTM C150/C150M, Type I or Type II.
 - 2. Fly Ash: ASTM C618, Class C or F.
 - 3. Slag Cement: ASTM C989/C989M, Grade 100 or 120.
- C. Normal-Weight Aggregate: ASTM C33/C33M, 3/4-inch.
- D. Air-Entraining Admixture: ASTM C260/C260M.
- E. Chemical Admixtures: Certified by manufacturer to be compatible with other admixtures and that do not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.
 - 1. Water-Reducing Admixture: ASTM C494/C494M, Type A.
 - 2. Retarding Admixture: ASTM C494/C494M, Type B.
 - 3. Water-Reducing and Retarding Admixture: ASTM C494/C494M, Type D.
 - 4. High-Range, Water-Reducing Admixture: ASTM C494/C494M, Type F.
 - 5. High-Range, Water-Reducing and Retarding Admixture: ASTM C494/C494M, Type G.
 - 6. Plasticizing and Retarding Admixture: ASTM C1017/C1017M, Type II.
- F. Water: ASTM C94/C94M.

2.4 CURING MATERIALS

- A. Evaporation Retarder: Waterborne, monomolecular film forming; manufactured for application to fresh concrete.
- B. Absorptive Cover: AASHTO M 182, Class 3, burlap cloth or cotton mats.
- C. Moisture-Retaining Cover: ASTM C171, polyethylene film or white burlap-polyethylene sheet.
- D. Water: Potable.
- E. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C309, Type 1, Class B.

2.5 CONCRETE MIXTURES

- A. Comply with ACI 301.

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B. Normal-Weight Concrete:

1. Minimum Compressive Strength: 3000 psi at 28 days.
2. Maximum W/C Ratio: 0.45.
3. Cementitious Materials: Use fly ash, pozzolan, slag cement, and blended hydraulic cement as needed to reduce the total amount of portland cement, which would otherwise be used, by not less than 40 percent.
4. Slump Limit: 8 inches for concrete with verified slump of 2 to 4 inches before adding high-range water-reducing admixture or plasticizing admixture plus or minus 1 inch.
5. Air Content: Maintain within range permitted by ACI 301. Do not allow air content of trowel-finished floor slabs to exceed 3 percent.

2.6 CONCRETE MIXING

A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C94/C94M and furnish batch ticket information.

1. When air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.

PART 3 - EXECUTION

3.1 FORMWORK INSTALLATION

A. Design, construct, erect, brace, and maintain formwork according to ACI 301.

3.2 EMBEDDED ITEM INSTALLATION

A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.

3.3 STEEL REINFORCEMENT INSTALLATION

A. Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.

1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.

3.4 CONCRETE PLACEMENT

A. Comply with ACI 301 for placing concrete.

B. Before test sampling and placing concrete, water may be added at Project site, subject to limitations of ACI 301.

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- C. Do not add water to concrete during delivery, at Project site, or during placement.
- D. Consolidate concrete with mechanical vibrating equipment according to ACI 301.

3.5 FINISHING FORMED SURFACES

- A. Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defects repaired and patched. Remove fins and other projections exceeding 1/2 inch.
 - 1. Apply to concrete surfaces not exposed to public view.
- B. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defective areas. Remove fins and other projections exceeding 1/8 inch.
 - 1. Apply to concrete surfaces exposed to public view.
- C. Rubbed Finish: Apply the following rubbed finish, defined in ACI 301, to smooth-formed-finished as-cast concrete where indicated:
 - 1. Smooth-rubbed finish.
 - 2. Grout-cleaned finish.
 - 3. Cork-floated finish.
- D. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces unless otherwise indicated.

3.6 FINISHING UNFORMED SURFACES

- A. General: Comply with ACI 302.1R for screeding, restraighening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- B. Screed surfaces with a straightedge and strike off. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane before excess moisture or bleedwater appears on surface.
 - 1. Do not further disturb surfaces before starting finishing operations.
- C. Slip-Resistive Broom Finish: Apply a slip-resistive finish to surfaces indicated and to exterior concrete platforms, steps, and ramps. Immediately after float finishing, slightly roughen trafficked surface by brooming with fiber-bristle broom perpendicular to main traffic route.

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3.7 CONCRETE PROTECTING AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and with ACI 305.1 for hot-weather protection during curing.
- B. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.
- C. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.
- D. Curing Methods: Cure formed and unformed concrete for at least seven days by one or a combination of the following methods:
 - 1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
 - a. Water.
 - b. Continuous water-fog spray.
 - c. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.
 - 2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period, using cover material and waterproof tape.
 - 3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.

3.8 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- B. Tests: Perform according to ACI 301.
 - 1. Testing Frequency: Obtain one composite sample for each day's pour of each concrete mixture exceeding 5 cu. yd., but less than 25 cu. yd., plus one set for each additional 50 cu. yd. or fraction thereof.
 - 2. Testing Frequency: Obtain at least one composite sample for each 100 cu. yd. or fraction thereof of each concrete mixture placed each day.

END OF SECTION 033053

DIVISION 6 – WOOD, PLASTICS AND COMPOSITES

SECTION 061063 – EXTERIOR ROUGH CARPENTRY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Framing with dimension lumber.
 - 2. Framing with timber.
 - 3. Fasteners and miscellaneous accessories for wood framing.
- B. Related Requirements:
 - 1. Section 055213 “Pipe and Tube Railings”
 - 2. Section 06130 “Heavy Timber Construction”
 - 3. Section 061500 “Wood Decking” for replacement of wood decking

1.3 DEFINITIONS

- A. Exposed Framing: Framing not concealed by other construction.
- B. Dimension Lumber: Lumber of 2 inches nominal or greater but less than 5 inches nominal in least dimension.
- C. Timber: Lumber of 5 inches nominal or greater in least dimension.
- D. Lumber grading agencies, and the abbreviations used to reference them, include the following:
 - 1. SPIB: The Southern Pine Inspection Bureau

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.
 - 1. For preservative-treated wood products, include chemical treatment manufacturer's written instructions for handling, storing, installing, and finishing treated material.
 - 2. For metal framing anchors, include installation instructions.

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3. Include copies of warranties from chemical treatment manufacturers for each type of treatment.

1.5 INFORMATIONAL SUBMITTALS

A. Material Certificates:

1. For preservative-treated wood products. Indicate type of preservative used and net amount of preservative retained.
2. For products receiving a waterborne treatment, include statement that moisture content of treated materials was reduced to levels specified before shipment to Project site.
3. Field Moisture Testing Reports: For products receiving a waterborne treatment that contain moisture content higher than specified limits at the time of shipment to Project site, include statement from a qualified testing agency that moisture content of treated materials was reduced to levels specified prior to installation.

B. Evaluation Reports: For the following, from ICC-ES:

1. Wood-preservative-treated wood.
2. Power-driven fasteners.
3. Cold-formed metal straps and fasteners.
4. Decking fasteners.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store materials under cover and protected from weather and contact with damp or wet surfaces. Stack lumber flat with spacers beneath and between each bundle to provide air circulation. Protect lumber from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

PART 2 - PRODUCTS

2.1 WOOD PRODUCTS, GENERAL

- A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, provide lumber that complies with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Provide lumber graded by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.

1. Factory mark each piece of lumber with grade stamp of grading agency.
2. For items that are exposed to view in the completed Work, mark grade stamp on end or back of each piece.
3. Where nominal sizes are indicated, provide actual sizes required by DOC PS 20 for moisture content specified. Where actual sizes are indicated, they are minimum dressed sizes for dry lumber.
4. Provide dressed lumber, S4S, unless otherwise indicated.

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- B. Moisture Content: Provide timber with 19 percent maximum moisture content at time of dressing.

2.2 DIMENSION LUMBER

- A. Stringers and Blocking: Southern Pine (SPIB) No. 1 grade.
 - 1. Preservative Treatment: Use Category 5B
- B. Decking: Southern Pine (SPIB): No. 1 prime grade
 - 1. Preservative Treatment: Use Category 4B
 - 2. Provide 0.25 inch radius at edges
 - 3. Provide material hand-selected for uniformity of appearance and freedom from characteristics, on exposed surfaces and edges, that would impair finish appearance, including decay, honeycomb, knot-holes, shake, splits, torn grain, and wane.
- C. Band: Southern Pine (SPIB) No. 2 prime grade.
 - 1. Preservative Treatment: Use Category 4B.

2.3 TIMBER

- A. Bollards and Curbs: Southern Pine (SPIB) No. 1 prime grade.
 - 1. Preservative Treatment: Use Category 4B.
- B. Girders: Southern Pine (SPIB) No. 1 Dense grade, Dressing Rough.
 - 1. Preservative Treatment: Use Category 5B

2.4 WOOD-PRESERVATIVE-TREATED LUMBER

- A. Preservative Treatment by Pressure Process: AWP A U1
 - 1. Treatment with CCA shall include post-treatment fixation process.
- B. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium.
- C. Use processes for dimension lumber that includes water-repellent treatment.
- D. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.
 - 1. For exposed items, mark each piece on surface that is not exposed.

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- E. Application: Treat all rough carpentry unless otherwise indicated.

2.5 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture. Provide nails or screws, in sufficient length, to penetrate not less than 1-1/2 inches into wood substrate.
1. Where rough carpentry is exposed to weather, in ground contact, pressure-preservative treated, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M (bolts) or Type 304 stainless steel (screws) as noted on drawings.
 2. Where fastening to aluminum, use AISI Type 316 stainless steel fasteners.
- B. Nails, Brads, and Staples: ASTM F 1667.
- C. Power-Driven Fasteners: NES NER-272.
- D. Wood Screws: ASME B18.6.1.
1. Decking screws to be AISI Type 316 stainless steel.
- E. Lag Bolts: ASME B18.2.1.
- F. Carbon-Steel Bolts: Steel bolts complying with ASTM A 307, Grade A; with ASTM A 563 hex nuts and, where indicated, flat washers.
- G. Stainless-Steel Bolts: ASTM F 593, Alloy Group 2; with ASTM F 594, Alloy Group 2 hex nuts, and flat washers unless otherwise indicated.
1. Contractor Option: Stainless-Steel threaded rod, Alloy Group 2; with ogee washers and nuts each end.
- H. Washers: Provide washers at each end of bolts and as follows:
1. Flat Washers: ASME B18.21.1, of material and finish matching fastener.
 2. Ogee Washers: Material and finish matching fastener.
 3. Insulating washers: PTFE

2.6 METAL FRAMING ANCHORS

- A. Basis-of-Design products: Subject to compliance with requirements, provide products indicated on Drawings by Simpson Strong-Tie Co., Inc. or comparable products by one of the following:
1. Cleveland Steel Specialty Co.
 2. KC Metals Products, Inc.
 3. Phoenix Metal Products, Inc.
 4. USP Structural Connectors.

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- B. Allowable Design Loads: Provide products with allowable design loads, as published by manufacturer, that meet or exceed those of products of manufacturers listed. Manufacturer's published values shall be determined from empirical data or by rational engineering analysis and demonstrated by comprehensive testing performed by a qualified independent testing agency. Framing anchors shall be punched for fasteners adequate to withstand same loads as framing anchors.
- C. Provide metal framing anchors, ties, and accessories indicated with manufacturer's recommended fasteners.
- D. Hot-Dip, Heavy-Galvanized Steel Sheet: ASTM A 653; structural steel (SS), high-strength low-alloy steel Type A (HSLAS Type A), or high-strength low-alloy steel Type B (HSLAS Type B); G185 coating designation; and not less than 0.036 inch thick.
 - 1. Use for wood-preserved-treated lumber and where indicated.
- E. Stainless-Steel Sheet: ASTM A 666, Type 316.
 - 1. Use for exterior locations and where indicated.
- F. Steel Plates, Shapes, and Bars: ASTM A 36.
 - 1. Hot-Dip Galvanized Finish: Apply zinc coating by the hot-dip process according to ASTM A 123.
- G. Joist Hangers: U-shaped joist hangers with 2-inch- long seat and 1-1/4-inch- wide nailing flanges at least 85 percent of joist depth.
 - 1. Thickness: 0.050 inch min.
- H. Hurricane Tie-Downs: Bent strap tie for fastening stringers to caps, 1-1/2 inches wide min. by 0.050 inch thick and as noted on the drawings.

2.7 MISCELLANEOUS MATERIALS

- A. Water-Repellent Preservative: NWWDA-tested and -accepted formulation containing 3-iodo-2-propynyl butyl carbamate, combined with an insecticide containing chlorpyrifos as its active ingredient.
- B. Galvanizing Repair Paint: High-zinc-dust-content paint complying with SSPC-Paint 20 and compatible with paints specified to be used over it.
- C. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D 1187/D 1187M.

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PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Clean substrates of projections and substances detrimental to application.

3.3 INSTALLATION, GENERAL

- A. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry to other construction; scribe and cope as needed for accurate fit.
- B. Framing Standard: Comply with AF&PA WCD1 unless otherwise indicated.
- C. Metal Framing Anchors: Install metal framing anchors to comply with manufacturer's written instructions. Install fasteners through each fastener hole.
- D. Install metal framing anchors to comply with manufacturer's written instructions.
- E. Predrill for fasteners using templates.
- F. Install fasteners with same orientation within each connection and in similar connections.
- G. Provide blocking and framing as indicated and as required to support framing and decking.
- H. Sort and select lumber so that natural characteristics will not interfere with installation or with fastening other materials to lumber. Do not use materials with defects that interfere with function of member or pieces that are too small to use with minimum number of joints or optimum joint arrangement.
- I. Comply with AWPAC M4 for applying field treatment to cut surfaces of preservative-treated lumber.
 - 1. Use inorganic boron for items that are continuously protected from liquid water.
 - 2. Use copper naphthenate for items not continuously protected from liquid water, for brackish water usage.
- J. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
 - 1. NES NER-272 for power-driven fasteners.
 - 2. Table 2304.9.1, "Fastening Schedule," in ICC's International Building Code.

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- K. Use steel common nails unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood. Drive nails snug but do not countersink nail heads unless otherwise indicated.
- L. For exposed work, arrange fasteners in straight rows parallel with edges of members, with fasteners evenly spaced, and with adjacent rows staggered.
- M. Install timber with crown edge up and provide not less than 4 inches of bearing on supports. Provide continuous members unless otherwise indicated; tie together over supports as indicated if not continuous.
- N. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.
 - 1. Coat, with a heavy coat of bituminous paint, concealed surfaces of aluminum that are in contact with concrete, pressure-treated wood, or dissimilar metals unless indicated otherwise.
 - 2. Provide insulating washers where fasteners are in contact with dissimilar metals unless otherwise indicated.
- O. Treat ends of timber beams and posts exposed to weather by dipping in water-repellent preservative for 15 minutes.
- P. Repair damaged surfaces and finishes after completing erection. Replace damaged members if repairs are not approved by Designer.

3.4 ELEVATED DECK JOIST FRAMING INSTALLATION

- A. General: Install joists & stringers with crown edge up and support ends of each member with not less than 1-1/2 inches of bearing on wood or metal, or 3 inches on masonry. Attach floor joists where framed into wood supporting members by using by using metal joist hangers. Do not notch joists.
- B. Frame openings with headers and trimmers supported by metal joist hangers; double headers and trimmers where span of header exceeds 48 inches.
- C. Lap members framing from opposite sides of beams or girders not less than 4 inches or securely tie opposing members together. Provide solid blocking of 2-inch nominal thickness by depth of joist over supports.
- D. Provide solid blocking of 2-inch nominal thickness by depth of joist at intervals at bearing and at mid-span, between stringers.

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3.5 PROTECTION

- A. Protect wood that has been treated with inorganic boron (SBX) from weather. If, despite protection, inorganic boron-treated wood becomes wet, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.
- B. Protect rough carpentry from weather. If, despite protection, rough carpentry becomes sufficiently wet that moisture content exceeds that specified, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.

END OF SECTION 061063

SECTION 061500 – WOOD FLOOR DECKING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Solid-sawn wood floor decking.

B. Related Requirements:

1. Section 061063 "Rough Carpentry" for dimension lumber items associated with wood decking.

1.2 ACTION SUBMITTALS

A. Product Data:

1. For each type of product.
2. For preservative-treated wood products, include chemical treatment manufacturer's written instructions for handling, storing, installing, and finishing treated material. Preservative treatment retention levels.

1.3 QUALITY ASSURANCE

A. Standard for Solid-Sawn Wood Decking: Comply with AITC 112.

B. Standard for Composite Decking: ASTM D7032-17.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Schedule delivery of wood roof decking to avoid extended on-site storage and to avoid delaying the Work.

B. Store materials under cover and protected from weather and contact with damp or wet surfaces. Provide for air circulation within and around stacks and under temporary coverings. Stack wood roof decking with surfaces that are to be exposed in the final Work protected from exposure to sunlight.

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PART 2 - PRODUCTS

2.1 WOOD ROOF DECKING, GENERAL

- A. General: Comply with DOC PS 20 and with applicable grading rules of inspection agencies certified by ALSC's Board of Review.
- B. Moisture Content: Provide wood decking with 19 percent maximum moisture content at time of dressing.

2.2 SOLID-SAWN WOOD ROOF DECKING

- A. PT 2x6 Decking: As specified per Section 061063 "Exterior Rough Carpentry."

2.3 ACCESSORY MATERIALS

- A. Fasteners for Solid-Sawn Floor Decking: Provide fastener size and type complying with AITC 112 for thickness of deck used.

2.4 FABRICATION

- A. Shop Fabrication: Where preservative-treated roof decking is indicated, complete cutting, trimming, surfacing, and sanding before treating.
- B. Predrill floor decking for lateral spiking to adjacent units to comply with AITC 112.
- C. Seal Coat: After fabricating and surfacing floor decking, apply a saturation coat of penetrating sealer.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine support framing in areas to receive wood floor decking for compliance with installation tolerances and other conditions affecting performance of wood floor decking.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install decking to comply with referenced decking standard.
 - 1. Locate end joints for:
 - a. Pressure Treated Decking – continuous decking with no joints showing.
 - 2. Locate fasteners:

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- a. Two fasteners to be located at each stringer. Fastener locations to be consistent from decking ends and centered along stringer.
- b. Predrill decking at fastener locations to allow fasteners to be evenly counter sunk.

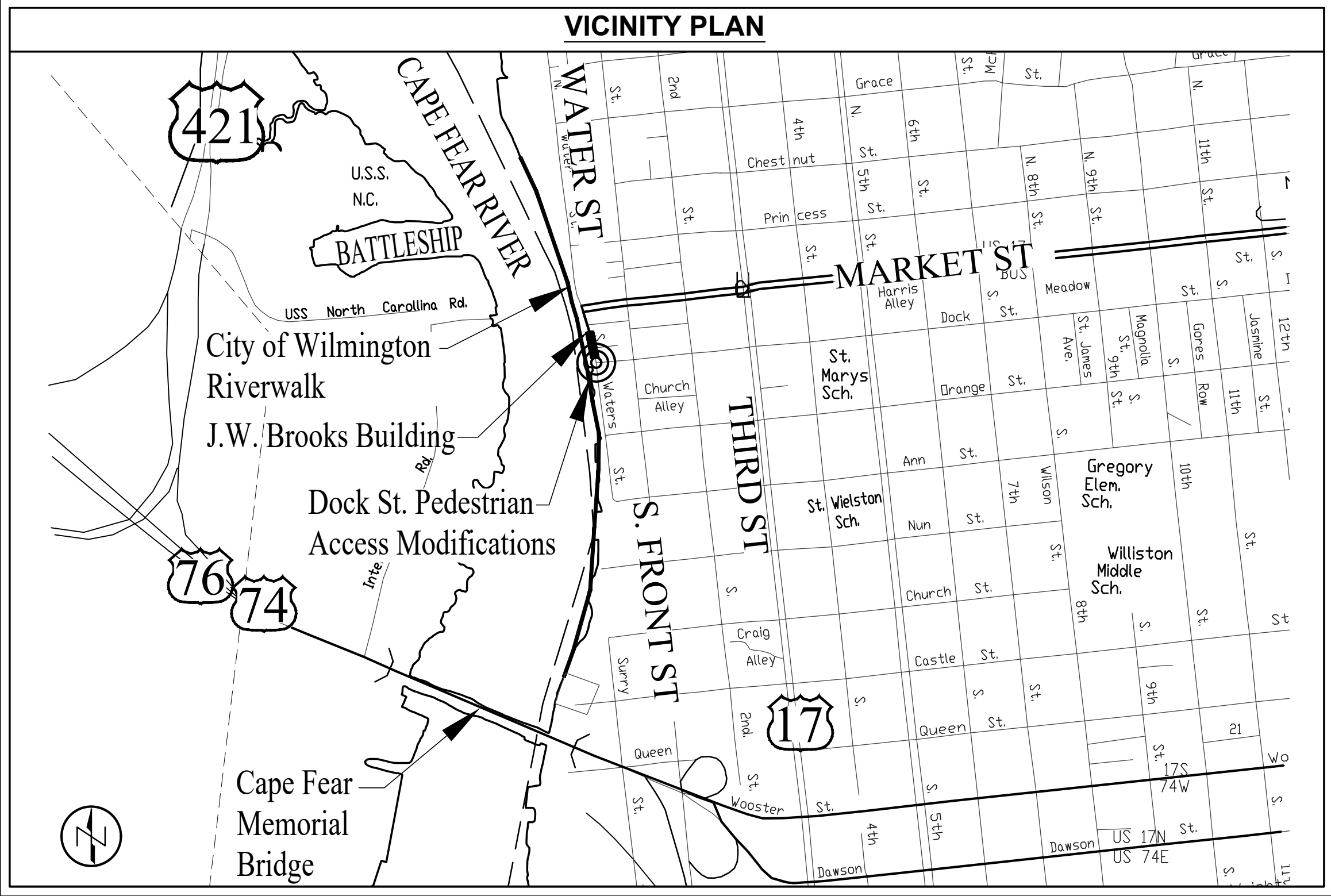
3.3 ADJUSTING

- A. Repair damaged surfaces and finishes after completing erection. Replace damaged floor decking if repairs are not approved by Engineer.

END OF SECTION 061500

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GENERAL NOTES

GENERAL

- DESIGN LOADS (ASCE/SEI 7-10):
 - LIVE LOAD: 100 PSF
 - DESIGN WIND LOAD: 145 MPH (ULTIMATE)
112.3 MPH (NOMINAL)
RISK CATEGORY: II
EXPOSURE: D
- CONTRACTOR SHALL VISIT THE JOB SITE, PRIOR TO BIDDING PROJECT. ANY QUANTITIES SHOWN ARE ESTIMATED AND ARE FOR CONTRACTOR'S GENERAL INFORMATION ONLY.
- CONTRACTOR SHALL PROVIDE ALL LAYOUT REQUIRED TO CONSTRUCT HIS WORK.
- CONTRACTOR SHALL PROVIDE A TEMPORARY CONSTRUCTION ENTRANCE/EXIT FROM ALL ACCESS ROADS TO SITE WHERE INTERSECTING WITH PUBLIC ROADWAY(S).
- CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND CONDITIONS FOR REPAIRS TO EXISTING CONSTRUCTION TO SATISFY HIMSELF AS TO EXISTING CONDITIONS, RELATIONSHIP BETWEEN STRUCTURES WITH RESPECT TO WATER & ALL EXISTING GRADE ELEVATIONS & ACCESS LOCATIONS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/ENGINEER PRIOR TO CONSTRUCTION COMMENCING.
- A BENCHMARK IS PROVIDED, WHICH IS NGS BENCHMARK "865 8120 TIDAL 11," WHICH IS A DISK MOUNTED ON THE WEST FACE OF RETAINING WALL OF WEST SIDE OF US CUSTOM HOUSE, 147 FEET NORTH OF NORTH CURB OF MARKET STREET, 12 FEET EAST OF EAST CURB OF WATER STREET AND 2.7 FEET ABOVE THE SIDEWALK. THE DISK IS STAMPED WITH AN ELEVATION OF 8.074'. THIS IS NOT THE CURRENT ELEVATION. THE CURRENT ELEVATION IS 7.57' NAVD88.
 - BASE FLOOR ELEVATION: AE +9 NAVD88
- CONTRACTOR IS CAUTIONED TO TAKE EXTREME CARE WHEN WORKING AROUND EXISTING STRUCTURES.
- CONTRACTOR SHALL ADHERE TO ALL OSHA REGULATIONS AND CONDITIONS OF ALL PERMITS.
- CONTRACTOR SHALL LIMIT THE AMOUNT OF DISTURBANCE ADJACENT TO THE WORK. ALL ITEMS TO BE REMOVED OR REPLACED SHALL BE DISPOSED OF OFF-SITE, U.N.O.
- ANY DAMAGE DONE DURING CONSTRUCTION TO EXISTING SIDEWALKS, STREETS, BUILDING, RIVERWALK, ETC. SHALL BE REPAIRED BY THE CONTRACTOR.
- ALL TEMPORARY TRAFFIC CONTROL SHALL BE PER CITY OF WILMINGTON AND NCDOT STANDARDS. CONTRACTOR SHALL COORDINATE ANY TEMPORARY TRAFFIC CONTROL BY CONTACTING THE CITY TRAFFIC ENGINEER AT 341-4676 AND ALLEN HANCOCK WITH THE NCDOT AT 341-2200 (WHERE APPROPRIATE).
- CONTRACTOR SHALL OBTAIN ALL BUILDING PERMITS REQUIRED OR NECESSARY TO PROVIDE CONSTRUCTION OF THE PROJECT.
- CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FOR ANY WORK, WHICH HE CONSIDERS OUT OF THE WORK SCOPE, PRIOR TO BEGINNING THE WORK.
- PROTECT ADJACENT MATERIALS AND SURFACES TO REMAIN FREE FROM DAMAGE. REPAIR OR REPLACE DAMAGED ITEMS REQUIRED FOR PROJECT COMPLETION AT NO COST TO OWNER.
- PROVIDE SHORING OR TEMPORARY SUPPORT FOR ADJACENT BUILDING ELEMENTS THROUGHOUT DEMOLITION AND CONSTRUCTION.
- PROTECT NEIGHBORING PROPERTIES DURING PROJECT.
- MAINTAIN PUBLIC ACCESS OF RIGHT OF WAY AND SIDEWALKS UNLESS PERMITS STATING OTHERWISE ARE GRANTED. MAINTAIN SAFETY RAILS OR OTHER PROTECTION FROM HAZARDS INCLUDING FALLING AT SITE AND FALLING OBJECTS.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE BRACING, SHORING, AND PROTECTION DURING CONSTRUCTION AND IS RESPONSIBLE FOR ANY FAILURES AND DAMAGES DUE TO THE LACK OF SUCH.
- ITEMS TO BE REMOVED AND REINSTALLED BY THE CONTRACTOR SHALL BE ADEQUATELY PROTECTED, ADEQUATELY STORED, AND THOROUGHLY CLEANED BY THE CONTRACTOR PRIOR TO REINSTALLATION.
- CONTRACTOR SHALL PROVIDE PHOTO AND VIDEO SURVEYS OF THE SURROUNDING STRUCTURES (BROOKS BUILDING, RIVERWALK, STREET, ETC.) PRIOR TO STARTING WORK AND PROVIDE AN ELECTRONIC COPY TO THE CITY.
- CONTRACTOR SHALL NOT STAGE OR STORE MATERIALS ON ELEVATED TIMBER PLATFORMS OR WALKWAYS.
- ACCESS TO WORK AREA SHALL BE THRU THE EXISTING/NEW HATCH IN THE ELEVATED PLATFORM OR FROM WATER OR COMBINATION THEREOF.
- CONTRACTOR SHALL MAINTAIN A CLEAN STAGING AREA AT THE END OF EACH WORKDAY AND CLEAN ALL TRASH FROM AREAS BOTH ABOVE WORK AREA AND WITHIN WORK AREA.

RETAINING WALL FOUNDATION:

- RETAINING WALL BASED ON SOIL RECOMMENDATIONS FROM REPORT ENTITLED "GEOTECHNICAL ENGINEERING LETTER, BULKHEAD WALL - CITY OF WILMINGTON" BY ECS SOUTHEAST, LLP, DATED JUNE 3, 2020 (ECS PROJ. NO. 2229061).
 - NET ALLOWABLE SOIL BEARING: 2,000 PSF
 - RETAINING SOIL UNIT WEIGHT: 115 PCF; (COHESION, C - 0 PSF)
 - RETAINING SOIL ANGLE OF INTERNAL FRICTION: 25 DEGREES
 - AT REST EARTH PRESSURE: 0.47
 - AT REST ACTIVE EARTH PRESSURE: 0.31
- BACKFILL MATERIAL: #57 STONE
- RETAINING WALL: CONCRETE FILLED STORM BAGS - SEE SHEET S3.0 FOR GENERAL NOTES FOR FABRIC-FORMED, CONCRETE-FILLED STORM BAG RETAINING WALL.
- CONTRACTOR SHALL PREPARE WALL BASE AS SHOWN. ANY SOFT SUBGRADES OR DISCOVERED STRUCTURES SHALL BE BROUGHT TO THE ATTENTION OF THE CITY AND ENGINEER.

CONCRETE

- FINE AGGREGATE FLOWABLE (GROUT) CONCRETE SHALL CONFORM TO THE LATEST EDITION OF ACI CODE 318.
- CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS: 2,500 PSI (WITH CORROSION INHIBITOR ADDITIVE)
- REINFORCING STEEL: ASTM A615, GRADE 60
- MINIMUM CLEAR CONCRETE COVER ON REINFORCING:

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:	3 INCHES
CONCRETE EXPOSED TO EARTH OR WEATHER:	2 INCHES (UNO)
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:	3/4 INCH (UNO)
SLABS, WALLS, JOISTS:	1-1/2 INCHES
- DOWELS AND CONTINUOUS REINFORCING SHALL HAVE A MINIMUM LAP OF 42 BAR DIAMETERS, BUT SHALL NOT BE LESS THAN 12 INCHES.
- PROVIDE AIR ENTRAINMENT OF 4 TO 6 PERCENT.
- CONCRETE FINISH: STEEL TROWEL
- PROVIDE FINE AGGREGATE FLOWABLE CONCRETE (GROUT).
 - PROVIDE ADMIXTURES AND/OR POZZOLAN ADDITIVES TO MIX DESIGN AS RECOMMENDED BY STORM BAG MANUFACTURER.
 - SUPERPLASTICIZERS, ADDITIONAL WATER AND/OR SILICA FUME IS NOT RECOMMENDED.
- ADHESIVE ANCHORS INTO CONCRETE SHALL BE HILTI HIT-RE500V4 EPOXY INJECTION ADHESIVE SYSTEM USING HILTI HAS-E OR THREADED ANCHOR RODS (H.D. GALV. TYP. & 316 SSTL FOR AREAS SUBJECT TO SUBMERSION) SET-3G BY SIMPSON STRONG-TIE, PURE 110+ BY DEWALT, ULTRABOND HS-200 BY ADHESIVE TECHNOLOGY CORP, EPOCON G5+ BY ITW RED HEAD OR EQUIVALENT ADHESIVE ANCHORING SYSTEM.
 - ALL ADHESIVE ANCHORS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
 - ALL ANCHORS SHALL HAVE A MINIMUM EMBEDMENT AS SHOWN ON THE DRAWINGS OR AS RECOMMENDED BY THE MANUFACTURER, WHICHEVER IS GREATER.
 - THREADED ANCHOR RODS SHALL BE IN ACCORDANCE WITH ASTM F1554 (55 KSI).
- USE A CORROSION INHIBITOR ADDITIVE IN ALL CONCRETE, DOSED AT A MINIMUM RATE OF 4.5 GAL/CY.

TIMBER & MISCELLANEOUS:

- ALL HARDWARE SHALL BE HOT DIP GALVANIZED (ASTM 153), UNLESS NOTED OTHERWISE.
- USE CUT WASHERS UNDER ALL BOLT HEADS AND NUTS UNLESS NOTED OTHERWISE.
- COAT ALL FIELD CUTS AND HOLES IN TIMBER IN CONTACT WITH EARTH WITH COPPER NAPHTHENATE IN ACCORDANCE WITH AWPA M4.
- SCREW DECK TO STRINGERS WITH 316 STAINLESS STEEL WOOD SCREWS. #10 x 3", FLAT HEAD WITH NIBS WITH SQUARE OR STAR SLOT (DECK-DRIVE DWP WOOD SS SCREW BY SIMPSON STRONG-TIE OR EQUIVALENT BY ITW BUILDEX, MITEK OR DEKFAST).
- ALL TIMBER NOT EXPOSED TO PUBLIC VIEW AND IN DIRECT CONTACT WITH EARTH AND/OR CONCRETE SHALL BE MARINE GRADE PRESSURE TREATED.
- USE ACCORDING TO GOOD CARPENTRY PRACTICE & 2018 NC STATE BUILDING CODE.
- DRILL UNDERSIZED HOLES FOR FASTENERS IN SMALL MEMBERS AS NECESSARY TO PREVENT SPLITTING.
- SOLID DECK COATING: EXTERIOR DECK COATING, IF REQUIRED FOR NEW ACCESS HATCH, SHALL BE A 2-COAT HIGH-BUILD/HIGH SOLIDS, WATER-BASED, SOLID COLOR, 100% ACRYLIC EMULSION TYPE, WITH SLIP RESISTANT FINISH (TEXTURED BASE COAT) FOR USE ON WEATHERED WOOD AND COMPLYING WITH ONE OF THE LISTING MANUFACTURER'S PRODUCTS AS APPROVED UNDER MPI #127. SUBMIT COATING SYSTEM FOR REVIEW AND APPROVAL.
 - PRIME AND PREPARE EXISTING TIMBER DECKING IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS.
 - PAINT COLOR SHALL MATCH EXISTING. SUBMIT COLOR SAMPLES FOR SELECTION AND APPROVAL BY THE CITY.

WOOD MATERIAL SCHEDULE					
MATERIAL	SIZE	S.Y. PINE GRADE	SURFACE	MOISTURE CONTENT	USE CATEGORY AND COA RETENTION
GIRDERS	P1"	#1 DENSE	ROUGH	S-DRY 19	UC3B
STRINGERS	P1"	#1	S4S	S-DRY 19	UC3B
FLOOR DECKING	PT 2x6"	#1 PRIME	S4S	ADATKDAT 19	UC4B
BOARD	P1"	#2 PRIME	S4S	ADATKDAT 19	UC3B
BOLLARDS & CURBS	PT 6x6"	#1 PRIME	S4S	ADATKDAT 19	UC4B

1 - AS REQUIRED BY STRUCTURAL DESIGN
2 - UNLESS OTHERWISE APPROVED

FABRIC-FORMED CONCRETE STORM BAGS - SEE GENERAL NOTES ON SHEET S3.0

STABILIZATION/SEPARATION GEOTEXTILE FABRIC:

- FABRIC SHALL BE AS MANUFACTURED BY ONE OF THE FOLLOWING:
 - US 315 BY US FABRICS
 - 315F BY WYNFAB
 - 315ST BY GEOTEX
 - 600X BY MIRAFI
 - 2006 BY PROPEX
 - C300 BY CONTEC
 - FX-66 BY CARTHAGE MILLS
 - W315 BY SKAPS

SHIPS LADDER (316 STAINLESS STEEL):

- REMOVE EXISTING TIMBER ACCESS LADDER AND PROVIDE NEW PREFABRICATED 316 STAINLESS STEEL SHIPS LADDER x 2" WIDE, MINIMUM.
- PROVIDE 75 DEGREE INCLINE.
- PROVIDE 2" x 6" x 1/4" MIN. HEAVY DUTY CHANNEL SIDE RAIL STRINGERS.
- PROVIDE 2" SCHEDULE 40 GUARDRAIL POSTS AND RAILS WITH RAIL SAFETY END CAPS.
- PROVIDE 5" MIN. x 1-1/4" SERRATED TREADS, SPACED AT 9-1/2" O.C. VERTICALLY, SUCH THAT THE TOTAL OF THE TREAD DEPTH PLUS THE NOSING PROJECTION IS NOT LESS THAN 8-1/2".
- PROVIDE LADDER COMPLYING WITH PERFORMANCE REQUIREMENTS AND COMPLYING WITH OSHA (1910.27 - FIXED LADDERS) STANDARD FOR SAFETY.

STRUCTURAL STEEL

- DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE STEEL CONSTRUCTION MANUAL OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, SIXTEENTH EDITION, UNLESS OTHERWISE MODIFIED ON THE DRAWINGS OR IN THE SPECIFICATIONS.
- STRUCTURAL STEEL: A36 PLATES, CHANNELS, & ANGLES.
- BOLTS: A325 3/4" DIAMETER H.S. OR A307 BOLTS, UNO AND SHALL BE H.D. GALV.
- WELDING ELECTRODES: E-70XX SERIES.
- STRUCTURAL STEEL CLEANING: STEEL STRUCTURES PAINTING COUNCIL, SP3 - LATEST EDITION (POWER TOOL). ALL FABRICATIONS SHALL BE SHOP FABRICATED & HOT DIP GALVANIZED AFTER FABRICATION.
- OIL OR GREASE REMOVAL: SSPC-SP1-LATEST EDITION.
- ALL ERECTION WORK FOR STRUCTURAL STEEL SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH LATEST OSHA REQUIREMENTS.
- TOUCH-UP OF DAMAGED HOT-DIPPED GALV. SURFACES USING A COLD-APPLIED GALVANIZING COMPOUND MEETING ASTM A780.

DRAWING INDEX

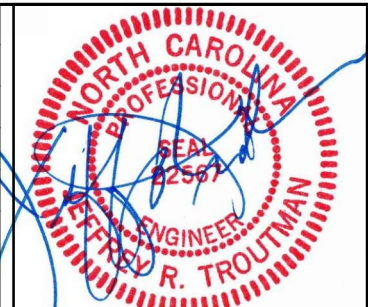
S0.0	GENERAL NOTES
S0.1	STATEMENT OF SPECIAL INSPECTIONS
S1.0	DEMOLITION PLAN & SCHEDULE
S2.0	PARTIAL PLAN NEW RETAINING WALL
S2.1	ELEVATIONS - EXISTING & NEW RETAINING WALLS
S3.0	NEW RETAINING WALL SECTIONS
S3.1	NEW RETAINING WALL SECTIONS & DETAILS

PROJECT WORK SCOPE

GENERAL WORK SCOPE:

- PROVIDE NEW FABRIC-FORMED CONCRETE STORM BAG RETAINING WALL.
- PROVIDE NEW 2" WIDE STAINLESS STEEL SHIPS LADDER.
- REPLACE EXISTING CAP-TO-COLUMN PLATES AND THRU-BOLTS WITH NEW 316 STAINLESS STEEL PLATES AND BOLTS - TYPICAL OF 30 LOCATIONS.

0	Issued For Construction	08.18.2026
REVISIONS		



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08.18.2026	DATE

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FILE NAME



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North Carolina
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P.O. Box 1810 • 305 Chestnut Street • Wilmington, NC 28401 • (910) 341-7807

DATE	08.18.2026
PROJECT NUMBER	S6-1015.1 Call #1

Dock Street Shoreline
Stabilization

GENERAL NOTES



300 North Third Street, Suite 301
Wilmington, North Carolina 28401
Phone: (910) 762-4200
www.Ardurra.com
NC FIRM LICENSE NUMBER F-0374
PROJECT 2017-0978-01

SCALE
AS SHOWN

SHEET
S0.0 of 7

Project: City of Wilmington – Dock Street Shoreline Stabilization
Location: Dock and Front Streets
Owner's Representative: Ms. Leslie Bowles-Early, Project Manager
Owner's Address: 929 N. Front Street, 10th Floor, Wilmington, NC 28402-1810

This Statement of Special Inspections is submitted as a condition for permit issuance in accordance with the Special Inspection requirements of the 2018 North Carolina State Building Code. It includes a Schedule of Special Inspection Services applicable to this project as well as the name of the Special Inspector and the identity of other approved agencies intended to be retained for conducting these inspections.

Interim reports shall be submitted to New Hanover County, Owner & Structural Engineer.

A Final Report of Special Inspections documenting completion of all required Special Inspections and correction of any discrepancies should be submitted prior to issuance of a Certificate of Use and Occupancy.

Statement of Special Inspections Prepared by (Structural Engineer of Record):

NC Firm License Number: F-0374

Date _____

Accepted by Code Enforcement
Official by:

Date _____

Date _____

The following sheets comprise the required schedule of special inspections for this project. The construction divisions which require special inspections for this project are as follows.

- | | | | |
|-------------------------------------|----------------------------------|--------------------------|--------------------------------------|
| ☐ | Structural Steel | ☐ | Special Foundations (Piles or Piers) |
| ☐ | Cold-Formed Steel Framing | ☐ | Wall Panels/Veneer |
| ☒ | Cast-in-Place Concrete | ☐ | Sprayed Fire Resistant Material |
| ☐ | Masonry | ☐ | Exterior Insulation & Finish System |
| ☐ | Wood Construction | ☐ | Smoke Control |
| ☐ | Soils | ☐ | Seismic Requirements |
| ☒ | Retaining Walls Exceeding 5 Feet | ☐ | Fire Rated Penetrations |

Inspection Agents	Qualifications	Address
1. Special Inspector	SI	
2. Structural Engineer of Record Ardura Group North Carolina	SER	300 North Third Street, Suite 301 Wilmington, NC 28401
3. Testing Laboratory	ITL	
4. Other	G-TECH 2, GE, SE, S-EIT	

Seismic Design Category: N/A

Basic Wind Speed: 145 MPH (Ult), Risk Cat. II

Wind Exposure Category: D

Item	Qualifications	Scope
1. Mix Design/Material Certifications	SER / SI	Collect mix designs and verify appropriate mix use during specific installation
2. Reinforcement Installation	SER / SI SI SI	- Periodic inspection of reinforcing steel, including prestressing tendons and welded wire fabric - Collection of certified mill test reports - Continuous inspection of reinforcing steel welding in accordance with Table 1704.3, Item 5b
3. Concrete Placement/Monitoring Fresh Concrete, Sampling & prep of test samples	SI SI / ITL SER / SI SI / ITL SI SI	- Continuous inspection of cast-in-place concrete placement - Continuous monitoring of sampling of fresh concrete, slump test, air content test, temperature of concrete and creation of strength test specimens - Periodic inspection of formwork - Periodic verification of concrete strength prior to removal of shores and forms from beams and structural slabs - Continuous inspection of bolts to be installed in concrete prior to and during placement - Periodic inspection of anchors installed in hardened concrete
4. Curing & Protection	SI	Periodic inspections of curing techniques

Item	Qualifications	Scope
1.Site Preparation	SI	- Determine that the subgrade has been prepared in accordance with the approved soils report and the construction document
2. Fill Placement	SI	- Periodic classification and testing of compacted fill materials - Continuous observation of materials used, densities, and lift thickness ensuring compliance with the approved soils report and the construction documents
3. Evaluation	SI / ITL	Determine that the materials below shallow foundations are adequate to achieve the design bearing capacity

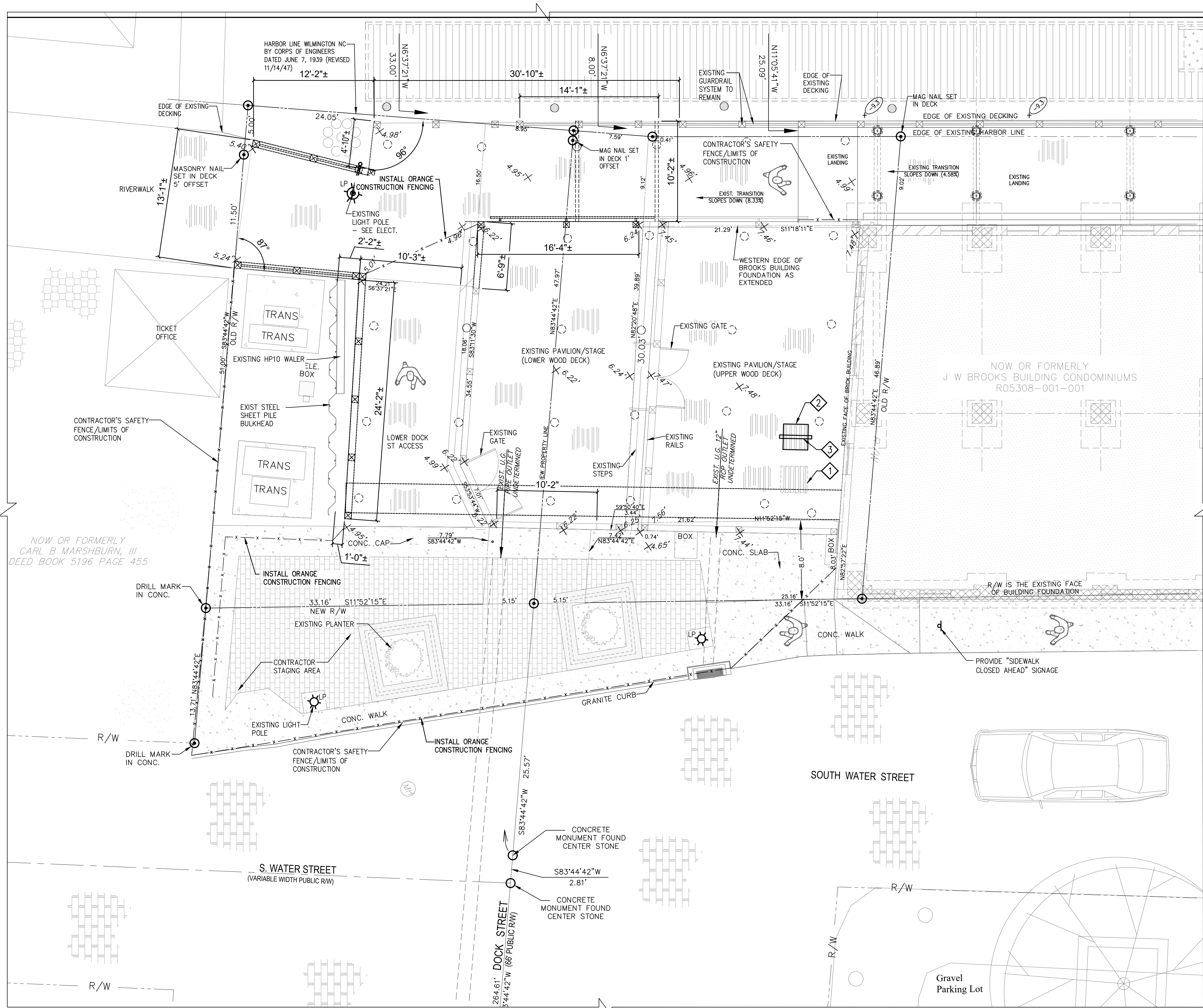
The qualifications of all personnel performing Special Inspection activities are subject to the approval of the Building Official. The credentials of all Inspectors and testing technicians shall be provided, if requested. When the Structural Engineer of Record deems it appropriate that the individual performing a stipulated test or inspection have a specific certification or license as indicated below, such designation shall appear below on the *Schedule of Special Inspections*.

The Special Inspector (SI) shall be a licensed Professional Engineer with a minimum of 3 years of experience as a Special Inspector.

1. **SE - Structural Engineer:** a licensed PE or SE specializing in the design of building structures.
2. **GE - Geotechnical Engineer:** a licensed PE specializing in soil mechanics and foundations.
3. **S-EI - Structural Engineer-In-Training:** a graduate engineer who has passed the Fundamentals of Engineering examination with experience in the design of building structures and working under the supervision of a licensed structural PE or SE.
4. **G-EI - Geotechnical Engineer-In-Training:** a graduate engineer who has passed the Fundamentals of Engineering examination with experience in soil mechanics and foundations and working under the supervision of a licensed geotechnical PE or SE.
5. **G-TECH1 - Geotechnical Technician 1:** an experienced technician with National Institute for Certification in Engineering Technologies: Level 2 – Soils Certification.
6. **G-TECH2 - Geotechnical Technician 1:** an experienced technician with National Institute for Certification in Engineering Technologies: Level 2 – Geotechnical Engineering.

Item	Qualification	Scope
1.Retaining Systems	SI / ITL / SER	All retaining walls exceeding 5 feet in height require special inspections. Refer to the applicable material schedules for explicit requirements
1. Application	SI / ITL	- Periodic examination of backfill materials for compliance with the approved specifications - Confirm that all subsoil drainage piping is undamaged, drains freely to the designated outlet or structure, and has been installed per the approved engineered design

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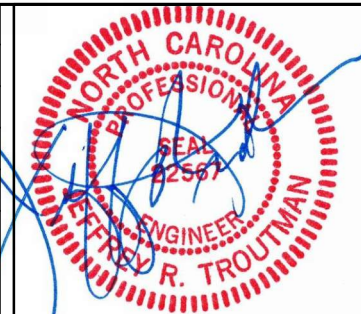
1 PARTIAL PLAN - EXISTING DECKING LAYOUT
SCALE: 3/16" = 1'-0"

NEW HATCH MODIFICATION SCHEDULE	
1	EXISTING HATCH, SEE 1/S2.0
2	LOCATION OF NEW HATCH, SEE 1/2.0
3	SAWCUT & REMOVE EXISTING PT4x12 STRINGER & DECKING. INSTALL (2) NEW PT 4x12 HEADERS SEE 2/S2.1 FOR CONNECTION TO EXISTING STRINGERS.

PLAN - LEGEND	
LP:	DENOTES LIGHT POLE
LB:	DENOTES LOAD-BEARING WALL - SEE S2.0 DWGS.
x	EXISTING T/DECK SPOT ELEVATION (NAVD88).
+9.7	DENOTES T/DECK ELEVATION.
+(-19.0)	DENOTES APPROXIMATE MUDLINE HYDROGRAPHIC ELEVATION.

PLAN - NOTES	
1.	SURVEY & SPOT ELEVATIONS PROVIDED BY THE CITY OF WILMINGTON DATED APRIL 4, 2017 ENTITLED "RIGHT-OF-WAY CLOSURE AND EASEMENT RESERVATION PLOT OF: A PORTION OF DOCK STREET, LOCATED BETWEEN BLOCK 138 AND 151 - MAP BOOK 11, PAGE 11."
2.	ALL ELEVATIONS ARE VERTICAL BASED ON NAVD88 DATUM. 0.0 NAVD88 = -2.6 MLW = +1.83 MHW
3.	CONTRACTOR SHALL NOT STAGE OR STORE MATERIALS ON ELEVATED TIMBER PLATFORMS OR WALKWAYS.

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PROJ. ENGR.	JRT	

DATE	08.18.2026
FILE NAME	



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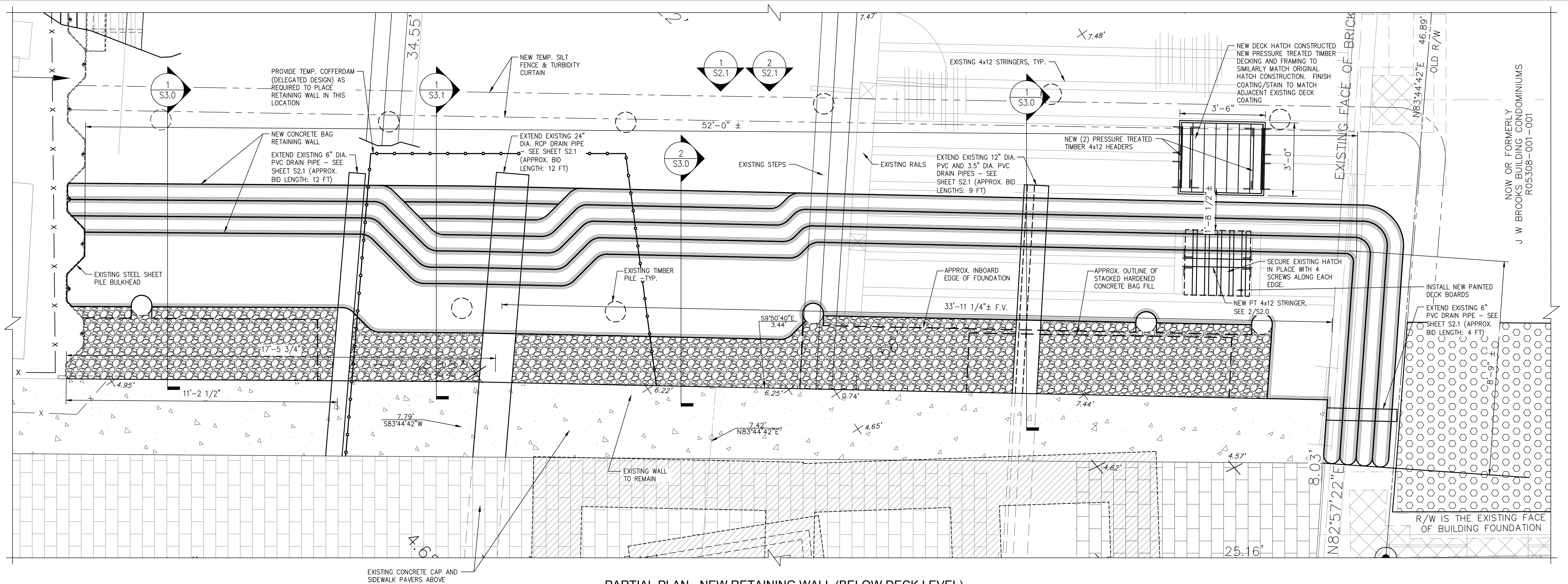
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PROJECT NUMBER	S6-1015.1 Call #1

Dock Street Shoreline
Stabilization
DEMOLITION PLAN &
SCHEDULE



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Wilmington, North Carolina 28401
Phone: (910) 762-4200
www.ardurra.com
NC FIRM LICENSE NUMBER F-4374
PROJECT 2017-0978-01

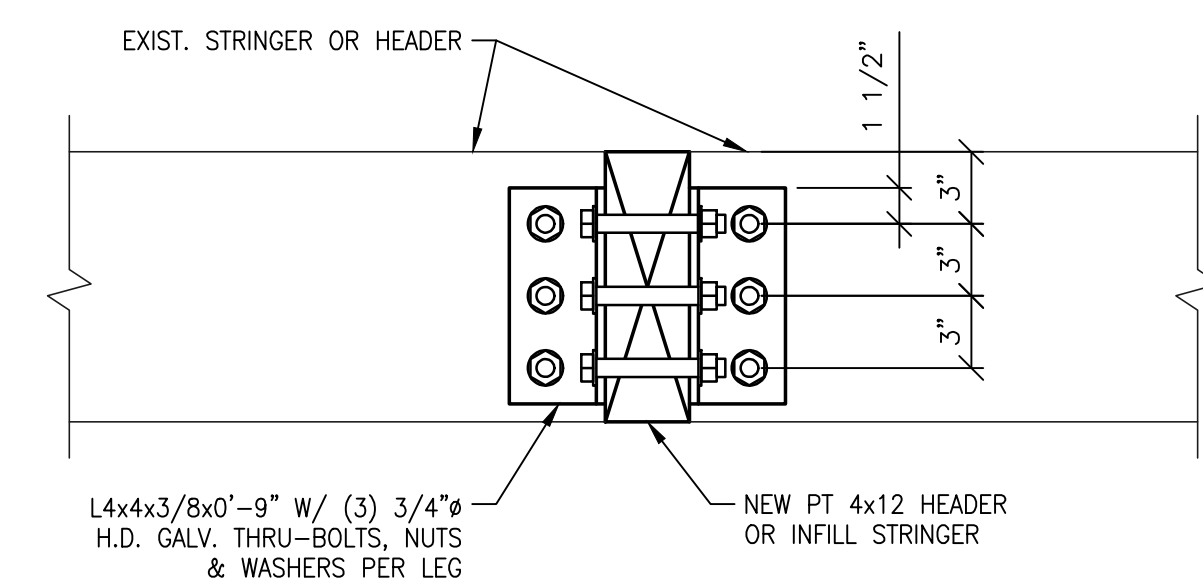
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S1.0 of 7



PARTIAL PLAN - NEW RETAINING WALL (BELOW DECK LEVEL) & RELOCATED HATCH AT DECK LEVEL

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

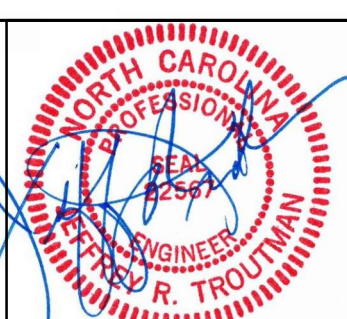
- NOTE:
1. NEW RETAINING WALL SHOWN BELOW EXISTING DECKING AND FRAMING, WHICH HAVE BEEN SHOWN OUTBACK FOR CLARITY.
 2. RETAINING WALL PLAN SHOWN FOR GENERAL REPRESENTATION ONLY.



SECTION - TIMBER CONNECTION

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

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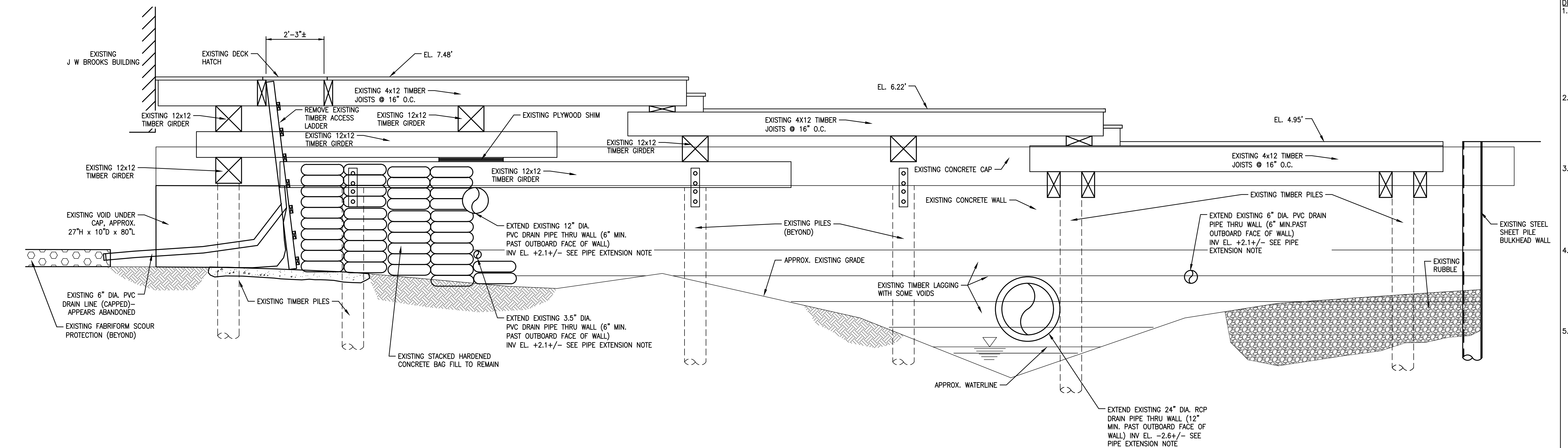
Dock Street Shoreline
Stabilization
PARTIAL PLAN
NEW RETAINING WALL



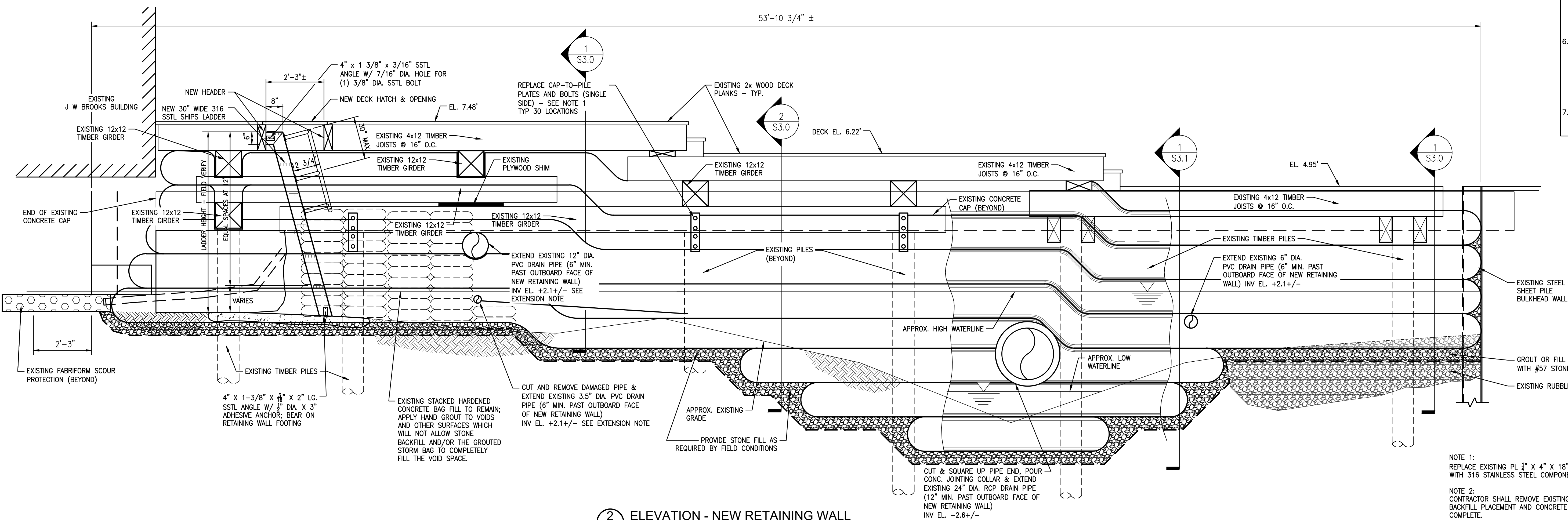
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NC FIRM LICENSE NUMBER F-4374
PROJECT 2017-0978-01

SCALE
AS SHOWN
SHEET
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NOW OR FORMERLY
J W BROOKS BUILDING CONDOMINIUMS
R05308-001-001



1 ELEVATION - EXISTING RETAINING WALL
SCALE: 1/2" = 1'-0"

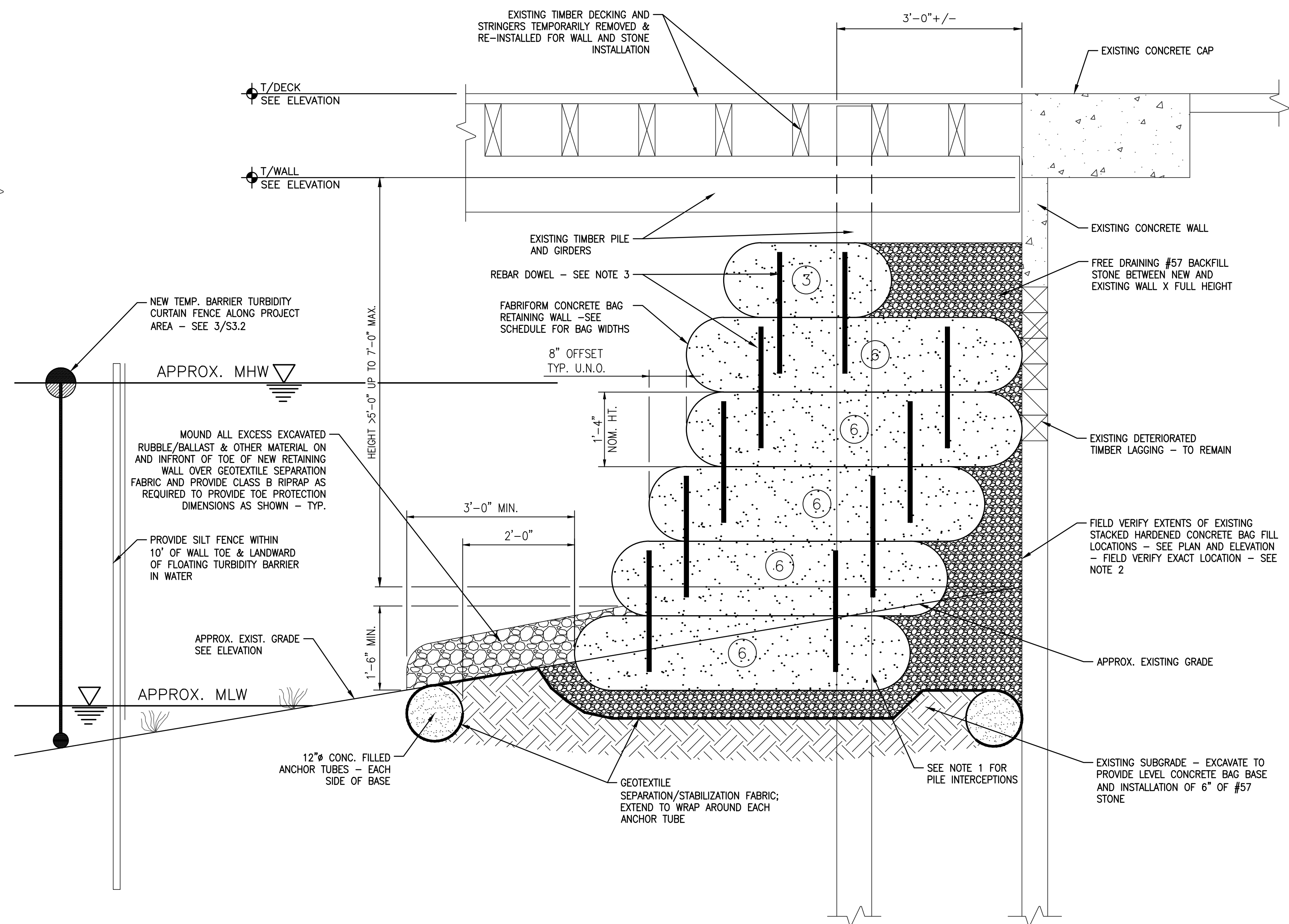


2 ELEVATION - NEW RETAINING WALL
SCALE: 1/2" = 1'-0"

- DRAIN PIPE EXTENSIONS:**
- CONTRACTOR SHALL FIELD VERIFY EXISTING PIPE SIZE, OUTSIDE DIAMETER, INVERT AND SLOPE.
 - MAINTAIN EXISTING INVERT ELEVATION FLOW LINE, HYDRAULIC CAPACITY AND PIPE SLOPE.
 - SQUARE UP END OF EXISTING PIPE AS FIELD REQUIRED.
 - PROTECT END OF EXISTING DRAIN PIPES AND NEW PIPE EXTENSIONS FROM DAMAGE DURING CONSTRUCTION.
 - EXTEND EXISTING PIPES THRU NEW RETAINING WALL AND EXTEND A MINIMUM OF 6" PAST THE OUTBOARD FACE OF WALL.
 - FIELD VERIFY FINAL PIPE EXTENSION LENGTHS AND ADJUST TO SUIT THE CONSTRUCTION RETAINING WALL THICKNESS. INSTALL THE PIPE EXTENSIONS DURING THE STAGED WALL CONSTRUCTION.
 - PVC PIPE EXTENSIONS SHALL BE AS FOLLOWS OR APPROVED EQUIVALENT PIPE MATERIAL:
 - 12" & 24" DIAMETER PIPE EXTENSIONS: SDR 26 PVC, MEETING ASTM F679 OR HDPE CORRUGATED EXTERIOR/SMOOTH INTERIOR, MEETING AASHTO M294, TYPE S.
 - 8" DIAMETER AND SMALLER PIPE EXTENSIONS: SDR 35 PVC, MEETING ASTM D3034.
 - EXTEND EXISTING PVC DRAIN PIPES BY FIELD VERIFYING TO MATCH EXISTING DIAMETER AND EXTENDED WITH PVC PIPE.
 - CONNECT EXISTING PVC TO PVC PIPE EXTENSION USING A SOLVENT-WELDED PVC COUPLING AND PRIMER/CEMENT IN ACCORDANCE WITH THE PIPE MANUFACTURER'S RECOMMENDATIONS AND ASTM REQUIREMENTS.
 - EXTEND EXISTING RCP PIPE BY FIELD VERIFYING EXISTING DIAMETER AND EXTENDING WITH PVC OR HDPE PIPE, WHICH SHALL MATCH THE EXISTING HYDRAULIC OPENING (INSIDE DIAMETER) AS CLOSELY AS PRACTICAL.
 - CONNECT EXISTING RCP PIPE WITH PIPE EXTENSION WITH A SHIELDED, FLEXIBLE, REINFORCED ELASTOMERIC TRANSITION COUPLING WITH 316 STAINLESS STEEL SHIELD AND BANDS.
 - COUPLING SHALL BE SPECIFICALLY MANUFACTURED FOR THE VERIFIED OUTSIDE DIAMETERS OF BOTH PIPE MATERIALS.
 - TIGHTEN CLAMPS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
 - ACCEPTABLE MANUFACTURER'S RECOMMENDATIONS:
 - FERNCO STRONG BACK 1000RC SERIES
 - MISSION RUBBER FLEX-SEAL ARC-MR56 SERIES
 - PRESS-SEAL GASKET CORPORATION PSX SERIES
 - APPROVED EQUIVALENT
 - ISOLATE PIPE EXTENSIONS FROM NEW RETAINING WALL USING 1" CLOSED-CELL EXPANSION JOINT FILLER WRAP ALONG LENGTH OF PIE WITHIN THE RETAINING WALL TO ALLOW FOR EXPANSION AND ISOLATION OF THE PIPE EXTENSION AND PREVENT DIRECT WALL BEARING ON THE PIPE.
 - SEAL EXPOSED ANNULAR SPACES WITH FLEXIBLE MARINE SEALANT.
 - COORDINATE THE PIPE EXTENSION PENETRATION LOCATION WITH THE RETAINING WALL VENDOR TO AVOID COMPROMISING THE WALL GEOMETRY.

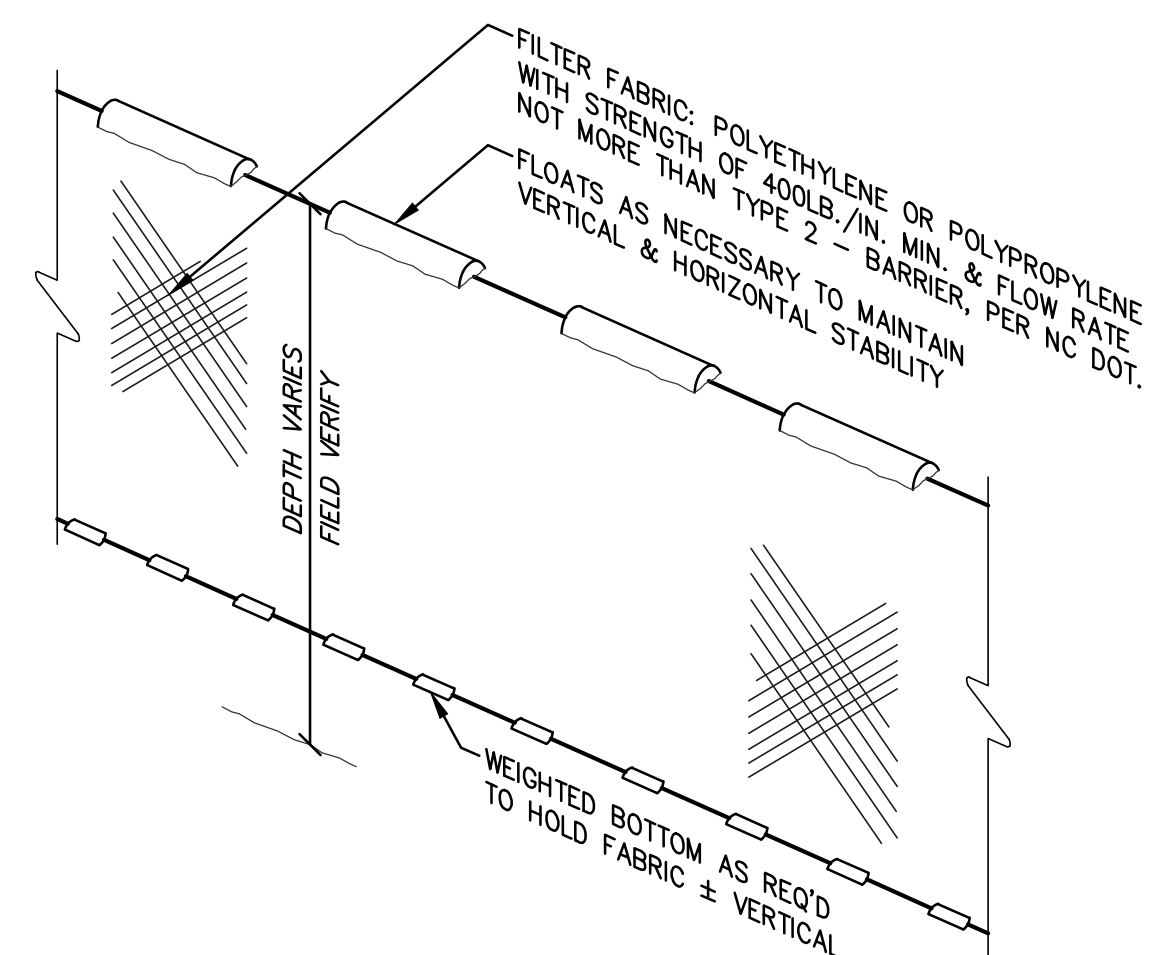
NOTE 1:
REPLACE EXISTING PL 3/4" X 4" X 18" HD GALV PLATES & (4) 3/4" DIA. THRU-BOLTS IN-KIND WITH 316 STAINLESS STEEL COMPONENTS.

NOTE 2:
CONTRACTOR SHALL REMOVE EXISTING OVERHEAD TIMBER DECKING AS REQUIRED FOR STONE BACKFILL PLACEMENT AND CONCRETE PUMPING OPERATIONS AND RE-INSTALL AFTER WORK IS COMPLETE.



2 SECTION - CONCRETE BAG RETAINING WALL HEIGHT > 5'-0" TO 7'-0" (TYPE 2)
S3.0 SCALE: 3/4" = 1'-0" NOTES:

1. PROVIDE 1/2" ELASTOMERIC ISOLATION WRAP AT ALL PILE PENETRATIONS THRU CONCRETE BAGS.
 - A. NOTCH BAG PER MFR'S RECOMMENDATIONS AT PILE INTERSECTION AND INSTALL EXPANSION/ISOLATION WRAP MATERIAL AROUND PILE IN CONTACT WITH BAG.
 - B. REINFORCED JOINTS
 - C. EXPANSION JOINT WRAP MATERIAL SHALL BE INSTALLED AROUND PILE SURFACES IN CONTACT WITH BAG.
 - a. EXPANSION JOINT WRAP MATERIAL SHALL BE AN ELASTOMERIC RUBBER WRAP, COMPLYING WITH ASTM D2000, GRADE M2BC (OR EQUIVALENT), WITH A DUROMETER HARDNESS OF 40-70 SHORE A.
 - b. WRAP MATERIAL SHALL BE RESISTANT TO WATER ABSORPTION, UV DEGRADATION, BIOLOGICAL ATTACH AND CYCLIC LOADING.
 - D. BAG MATERIAL SHALL BE CLAMPED TIGHTLY WITH TIES/CLAMPS PER MANUFACTURER'S STANDARD DETAIL TO PREVENT CONCRETE FLOWING OUT AT INTERFACE AND/OR TO PROVIDE TIGHT INTERFACE BETWEEN THE HARDENED CONCRETE AND PILE SURFACE.
 - a. SEAL TOP SURFACE WITH 1/2" THICK GRADE POLYURETHANE SEALANT SUCH AS 3M MARINE ADHESIVE SEALANT 5200; SIKAFLEX-291 MARINE SEALANT; BOATLITE LIFE SEAL; LOCTITE PL MARINE FAST CURE; OR APPROVED EQUIVALENT.
2. FIELD ADJUST CONCRETE BAG AGAINST EXISTING STACKED HARDENED CONCRETE BAG FILL - FIELD VERIFY EXTENTS.
 - A. APPLY HAND BACKFILL TO VOIDS AND OTHER SURFACES WHICH WILL NOT ALLOW STONE GROUT FILL AND/OR THE GROUTED STORM BAG TO COMPLETELY FILL THE VOID SPACE.
3. PROVIDE (2) #4 HD GALV. REBAR (ASTM A767) OR (2) #4 GFRP REBAR (ASTM D7957) DOWELS @ 5'-0" O.C. FOR INTERCONNECTION BETWEEN UPPER & LOWER CONCRETE BAG.



3
S3.0

DETAIL - FLOATING TURBIDITY BARRIER CURTAIN

NOT TO SCALE

TURBIDITY BARRIER: TYPE 2 HEAVY DUTY FLOATING TURBIDITY BARRIER
CAT. NO. FTR 225052 BY ACE ENVIRONMENTAL OR EQUIVALENT

FABRIFORM CONCRETE BAG SCHEDULE	
③	INDICATES 3' WIDE CONCRETE FILLED BAG
④	INDICATES 4' WIDE CONCRETE FILLED BAG
⑥	INDICATES 6' WIDE CONCRETE FILLED BAG

DESIGNED	JRT	<table><tr><td>PATH</td></tr><tr><td>FILE_NAME</td></tr></table>	PATH	FILE_NAME
PATH				
FILE_NAME				
DRAWN	LMN			
CHECKED	JRT			
PROJ. ENGR.	JRT			



WILMINGTON
North Carolina

Development Services • **Engineering Division**
P.O. Box 1810 • 305 Chestnut Street • Wilmington, NC 28401 • (910) 341-7807

DATE	08.18.2026
PROJECT NUMBER	S6-1015.1 Call #1

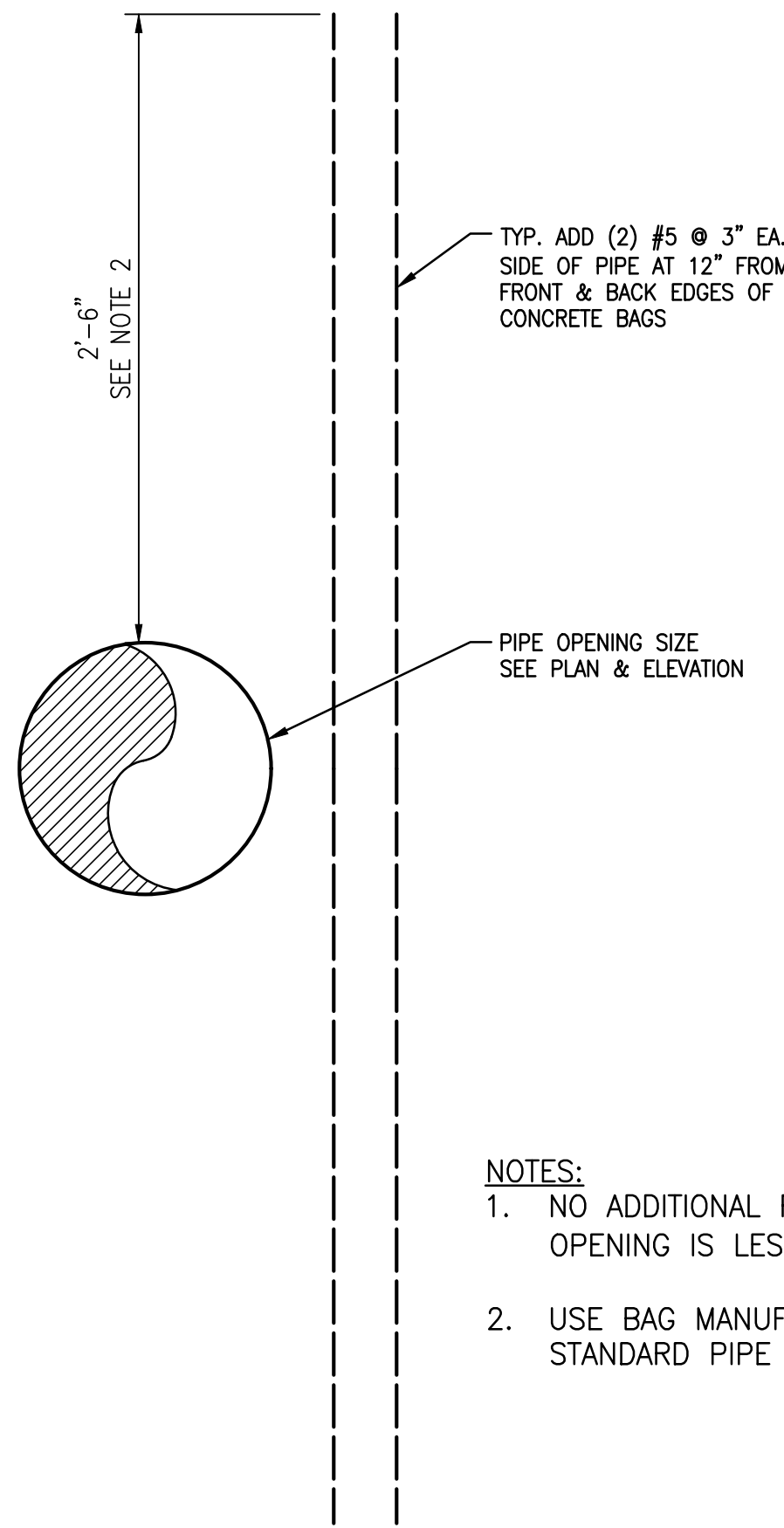
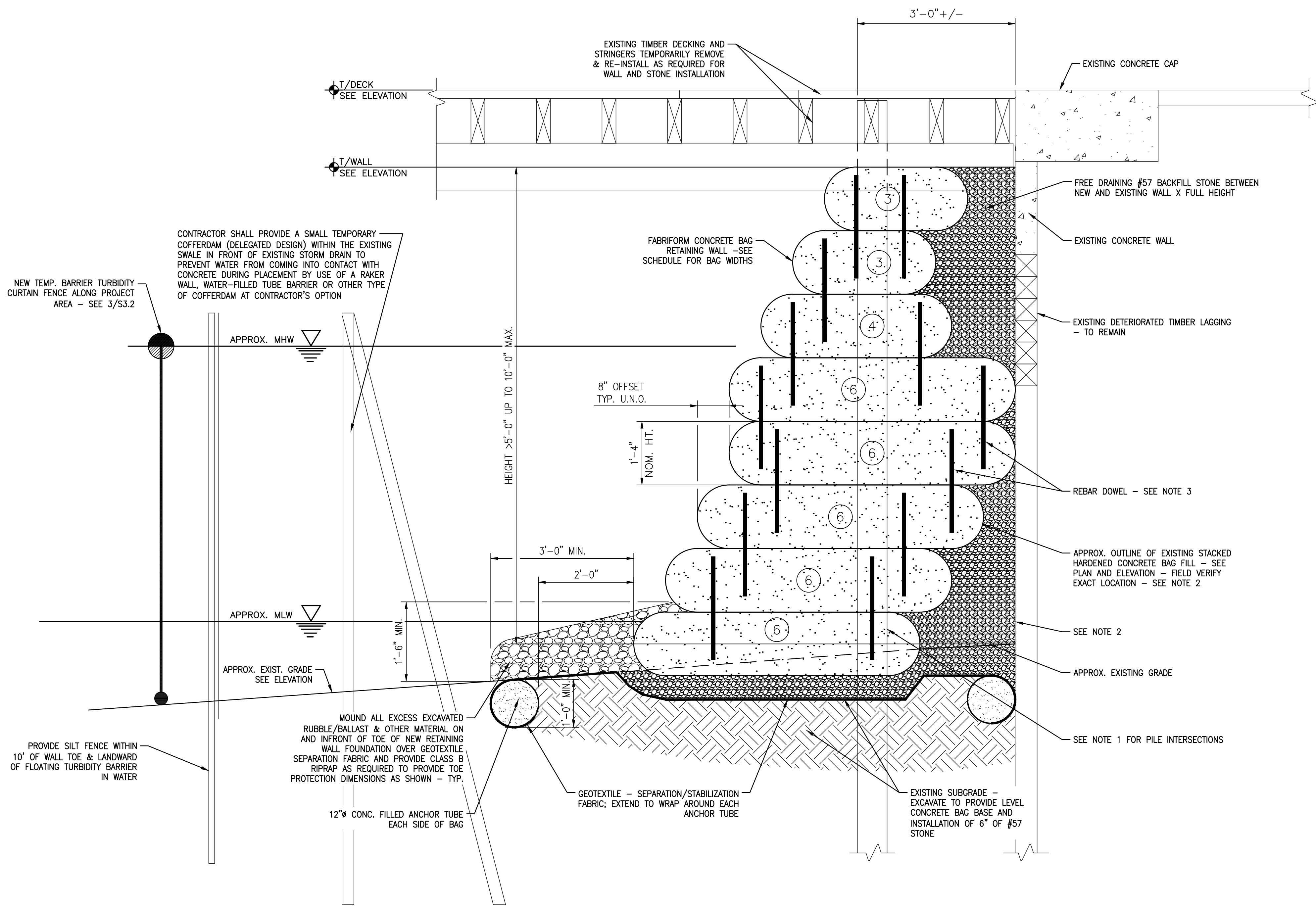
Dock Street Shoreline Stabilization NEW RETAINING WALL SECTIONS



300 North Third Street, Suite 301
Wilmington, North Carolina 28401
Phone: (910) 762-4200
www.Ardurra.com
NC FIRM LICENSE NUMBER F-0374
PROJECT 2017-0978-01

SCALE
AS SHOWN

SHEET
S3.0 of 7



- NOTES:
1. NO ADDITIONAL REINF. REQUIRED IF OPENING IS LESS THAN 6" DIA.
 2. USE BAG MANUFACTURER'S STANDARD PIPE PENETRATION DETAIL.

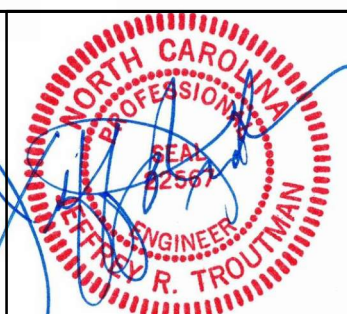
1 SECTION - RETAINING WALL HEIGHT >7'-0" TO 9'-0" MAX. (TYPE 3)
S3.1 SCALE: 3/4" = 1'-0"

2 DETAIL - PIPE OPENING REINFORCEMENT (6" DIA. AND GREATER)
S3.1 SCALE: NTS

- NOTES:
1. PROVIDE 1/2" ELASTOMERIC ISOLATION WRAP AT ALL PILE PENETRATIONS THRU CONCRETE BAGS.
A. NOTCH BAG PER MFR'S RECOMMENDATIONS AT PILE INTERSECTION AND INSTALL EXPANSION/ISOLATION WRAP MATERIAL AROUND PILE IN CONTACT WITH BAG.
B. REINFORCED JOINTS
C. EXPANSION JOINT WRAP MATERIAL SHALL BE INSTALLED AROUND PILE SURFACES IN CONTACT WITH BAG.
a. EXPANSION JOINT WRAP MATERIAL SHALL BE AN ELASTOMERIC RUBBER WRAP, COMPLYING WITH ASTM D2000, GRADE M2BC (OR EQUIVALENT), WITH A DUROMETER HARDNESS OF 40-70 SHORE A.
b. WRAP MATERIAL SHALL BE RESISTANT TO WATER ABSORPTION, UV DEGRADATION, BIOLOGICAL ATTACK AND CYCLIC LOADING.
D. BAG MATERIAL SHALL BE CLAMPED TIGHTLY WITH TIES/CLAMPS PER MANUFACTURER'S STANDARD DETAIL TO PREVENT CONCRETE FLOWING OUT AT INTERFACE AND/OR TO PROVIDE TIGHT INTERFACE BETWEEN THE HARDENED CONCRETE AND PILE SURFACE.
a. SEAL TOP INTERFACE WITH MARINE-GRADE POLYURETHANE SEALANT SUCH AS 3M MARINE ADHESIVE SEALANT 5200; SIKAFLEX-291 MARINE SEALANT; BOATLIFT LIFE SEAL; LOCTITE PL MARINE FAST CURE; OR APPROVED EQUIVALENT.
 2. FIELD ADJUST CONCRETE BAG AGAINST EXISTING STACKED HARDENED CONCRETE BAG FILL - FIELD VERIFY EXTENTS.
A. APPLY HAND GROUT TO VOIDS AND OTHER SURFACES WHICH WILL NOT ALLOW STONE BACKFILL AND/OR THE GROUTED STORM BAG TO COMPLETELY FILL THE VOID SPACE.
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FABRIFORM CONCRETE BAG SCHEDULE	
3	INDICATES 3' WIDE CONCRETE FILLED BAG
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0	Issued For Construction	08.18.2026
REVISIONS		



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Dock Street Shoreline
Stabilization
NEW RETAINING WALL
SECTIONS & DETAILS

ARDURRA
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