

BIDDING DOCUMENTS, CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS

**TOWN OF NORTHUMBERLAND, NH
WATER, SEWER, DRAINAGE AND ROADWAY IMPROVEMENTS
DRAINAGE AND SANITARY SEWER CLEANING AND UV CIPP LINING
NORTHUMBERLAND, NEW HAMPSHIRE
OCTOBER 2024
REVISED OCTOBER 21, 2024
REVISED NOVEMBER 1, 2024**



34 SCHOOL STREET • LITTLETON, NH 03561 • PHONE 603-444-4111 • FAX 603-444-1343 • www.horizonsengineering.com

BIDDING, CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS

FOR

**TOWN OF NORTHUMBERLAND
WATER, SEWER, DRAINAGE AND ROADWAY IMPROVEMENTS
DRAINAGE AND SANITARY SEWER CLEANING AND UV CIPP LINING
NORTHUMBERLAND, NEW HAMPSHIRE**

**OCTOBER 2024
REVISED OCTOBER 18, 2024
REVISED NOVEMBER 1, 2024**

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Horizons Engineering, Inc.**

Horizons Engineering, Inc.

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**DIVISION 00 – BIDDING AND CONTRACTING
REQUIREMENTS**

ADVERTISEMENT FOR BIDS

TOWN OF NORTHUMBERLAND, NEW HAMPSHIRE

**WATER, SEWER, DRAINAGE AND ROADWAY IMPROVEMENTS
DRAINAGE AND SANITARY SEWER CLEANING AND UV CIPP LINING**

General Notice

The Town of Northumberland, New Hampshire (Owner) is requesting Bids for the construction of the following Project:

**WATER, SEWER, DRAINAGE AND ROADWAY IMPROVEMENTS
DRAINAGE AND SANITARY SEWER CLEANING AND UV CIPP LINING**

Bids for the construction of the Project will be received at the office of **Horizons Engineering, Inc**, located at **34 School Street, Littleton, New Hampshire 03561**, until **WEDNESDAY, November 27, 2024, at 3:00 pm** local time or submitted electronically via email to Stephen LaFrance, P.E. at slafrance@horizonsengineering.com by the time and date listed above. At that time the Bids received will be **publicly** opened and read.

The Project includes the following Work:

Cleaning, video inspection, and UV CIPP lining of approximately 1,500 linear feet of 15, 12, 10 and 8 inch diameter storm drainage and gravity sanitary sewer.

Bids are requested for the following Contract: **Town of Northumberland, New Hampshire – Water, Sewer, Drainage and Roadway Improvements – Drainage and Sanitary Sewer Cleaning and UV CIPP Lining.**

Obtaining the Bidding Documents

Information and Bidding Documents for the Project can be found at the following designated website:

www.horizonsengineering.com

The Issuing Office for the Bidding Documents is:

**Horizons Engineering, Inc.
34 School Street Littleton, New Hampshire 03561**

Prospective Bidders may obtain or examine the Bidding Documents at the Issuing Office on Monday through Friday between the hours of **8:00 AM and 4:30 PM**, and may obtain copies of the Bidding Documents from the Issuing Office as described below. Partial sets of Bidding Documents will not be available from the Issuing Office. Neither Owner nor Engineer will be responsible for full or partial sets of Bidding Documents, including addenda, if any, obtained from sources other than the Issuing Office.

Printed copies of the Bidding Documents may be obtained from the Issuing Office. Make deposit checks for Bidding Documents payable to **HORIZONS ENGINEERING INC.**

Bidding Documents (hard copy) may be purchased from the Issuing Office during the hours indicated above upon receipt of a non-refundable payment of **\$250** for each set. Cost does not include shipping

charges. Upon Issuing Office's receipt of payment, printed Bidding Documents or electronic documents on compact disk will be sent via the prospective Bidder's delivery service. The shipping charge amount will depend on the shipping method chosen.

PAYMENT AND PERFORMANCE BONDS

Payment and performance bonds are required if the contract amount exceeds \$125,000 in accordance with NH RSA 447:16.

SUSPENSION AND DEBARMENT

By entering into this agreement, the Bidders and contractors certify that the Bidder and contractor is not debarred or suspended. Furthermore, the Bidder and contractors certify that no part of this contract will be subcontracted to a debarred or suspended person or firm.

PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

This term and condition implements 2 CFR 200.216 and is effective for obligations and expenditures of EPA financial assistance funding on or after 8/13/2020. Bidders/contractors and their subcontractors must comply with the above provision when procuring or obtaining equipment, services, or systems that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

CIVIL RIGHTS COMPLIANCE

The sub-grantee, contractor, subcontractor, successor, transferee, and assignee shall comply, and shall include in every contract or agreement funded with these funds this same requirement to comply, with Title VI of the Civil Rights Act of 1964, which prohibits recipients of federal financial assistance from excluding from a program or activity, denying benefits of, or otherwise discriminating against a person on the basis of race, color, or national origin (42 U.S.C. § 2000d et seq.), as implemented by the Department of the Treasury's Title VI regulations, 31 CFR Part 22, which are herein incorporated by reference and made a part of this contract (or agreement). Title VI also includes protection to persons with "Limited English Proficiency" in any program or activity receiving federal financial assistance, 42 U.S.C. § 2000d et seq., as implemented by the Department of the Treasury's Title VI regulations, 31 CFR Part 22, and herein incorporated by reference and made a part of this contract or agreement.

RESTRICTIONS ON LOBBYING

The Contractor shall comply with the terms of 15 CFR part 28 and 2 CFR Part 200 Subpart E which prohibit the use of federal Contract funds to influence (or attempt to influence) a federal employee, and requires the submission of Standard Form LLL ("Disclosure of Lobbying Activities") if *nonfederal* funds have been used to influence (or attempt to influence) a federal employee.

DRUG-FREE WORKPLACE

The Contractor shall comply with the terms of 2 CFR part 1329 which require that as a condition of the Agreement, certification that they maintain a drug-free workplace. By signing and submitting the Agreement, the Contractor certifies that they will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity associated with the Agreement.

The Contractor shall comply with the terms of 41 U.S.C. §471 regarding Whistleblower protections. As described in 41 USC §471 “an employee of a contractor, subcontractor, grantee, or subgrantee or personal services contractor may not be discharged, demoted, or otherwise discriminated against as a reprisal for disclosing to a person or body described in paragraph (2) information that the employee reasonably believes is evidence of gross mismanagement of a Federal contract or grant, a gross waste of Federal funds, an abuse of authority relating to a Federal contract or grant, a substantial and specific danger to public health or safety, or a violation of law, rule, or regulation related to a Federal contract (including the competition for or negotiation of a contract) or grant.”

This Advertisement is issued by:

Owner: Town of Northumberland, New Hampshire

Date: November 15, 2024

BID FORM FOR CONSTRUCTION CONTRACT

The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 1—OWNER AND BIDDER

- 1.01 This Bid is submitted to: **The Town of Northumberland, 19 Main Street, Groveton, New Hampshire, 03582**
- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2—ATTACHMENTS TO THIS BID

- 2.01 The following documents are submitted with and made a condition of this Bid:
- ~~A. Required Bid security;~~
 - ~~B. List of Proposed Subcontractors;~~
 - ~~C. List of Proposed Suppliers;~~
 - ~~D. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such authority within the time for acceptance of Bids;~~
 - ~~E. Contractor's license number as evidence of Bidder's State Contractor's License or a covenant by Bidder to obtain said license within the time for acceptance of Bids;~~
 - ~~F. Required Bidder Qualification Statement with supporting data; and~~
 - G. If Bid amount exceeds \$10,000, signed Compliance Statement (RD 400-6). Refer to specific equal opportunity requirements set forth in the Supplementary Conditions of the Construction Contract (EJCDC C-800);**
 - H. If Bid amount exceeds \$25,000, signed Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions (AD-1048);**
 - I. If Bid amount exceeds \$100,000, signed RD Instruction 1940-Q Exhibit A-1, Certification for Contracts, Grants, and Loans.**

ARTICLE 3—BASIS OF BID—LUMP SUM BID AND UNIT PRICES

- 3.01 *Unit Price Bids*
- A. Bidder will perform the following Work at the indicated unit prices:
 - B. Bidder acknowledges that:
 - 1. each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and

2. estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents.
3. Bidders must bid on each item
4. Bids must include sales tax and other associated fees
5. All bids must be written clearly in ink in both words and figures
6. **In the event that the total item bid does not equal the unit bid price written in words multiplied by the bid quantity, the extended total item bid price shall be corrected accordingly and accepted as the assumed total item price bid.**
7. Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

BID

Item No.	Brief Description; Unit or Lump Sum Price (both words and numbers)	Quantity and Units	Item Price
----------	---	-----------------------	------------

1.	Mobilization; Per Lump Sum: _____ Dollars and _____ Cents (\$_____)	1 LS	\$_____
2.	Drainage and Sanitary Sewer Main Cleaning; Per Day: _____ Dollars and _____ Cents (\$_____)	5 DAY	\$_____
3.	Drainage and Sanitary Sewer Main Video Inspection; Per Day: _____ Dollars and _____ Cents (\$_____)	2 DAY	\$_____
4.	10 Inch UV CIPP Drainage and Sanitary Sewer Liner; Per Linear Foot: _____ Dollars and _____ Cents (\$_____)	1130 LF	\$_____
5.	8 Inch UV CIPP Sanitary Sewer Liner; Per Linear Foot: _____ Dollars and _____ Cents (\$_____)	285 LF	\$_____

6. Compliance with Railroad Requirements ;
 _____ Dollars
 and _____ Cents (\$ _____) **Allowance** \$ 10,000.00

TOTAL BASE BID \$ _____

Base Bid - Total of Lump Sum and Unit Price Bid Amounts = Total Bid Price in Words

Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 4 — BASIS OF BID — COST PLUS FEE

4.01 The Contract Price will be the Cost of the Work, determined as provided in Paragraph 13.01 of the General Conditions, together with the following fee, and subject to the Guaranteed Maximum Price.

4.02 *Contractor's Fee*

A. Contractor's fee will be ~~[number]~~ percent of the Cost of the Work. No fee will be payable on the basis of costs itemized as excluded in Paragraph 13.01.C of the General Conditions.

1. The maximum amount payable by Owner as a percentage fee (Guaranteed Maximum Fee) will not exceed ~~\$(insert cap amount)~~, subject to increases or decreases for changes in the Work.

B. Contractor's fee will be determined by applying the following percentages to the various portions of the Cost of the Work as defined in Article 13 of the General Conditions. No fee will be payable on the basis of costs itemized as excluded in Paragraph 13.01.C of the General Conditions:

Costs	Percent
-------	---------

Payroll costs (See Paragraph 13.01.B.1, General Conditions)	
Materials and Installed Equipment cost (GC-13.01.B.2)	
Amounts to be paid to Subcontractors (GC-13.01.B.3)	
Amount to be paid to special consultants (GC-13.01.B.4)	
Other costs (GC-13.01.B.5)	

1. The maximum amount payable by Owner as a percentage fee (Guaranteed Maximum Fee) will not exceed ~~\$(insert cap amount)~~, subject to increases or decreases for changes in the Work.

C. Contractor's fee will be the fixed sum of ~~\$(number)~~.

4.03 *Guaranteed Maximum Price*

A. The Guaranteed Maximum Price to Owner of the Cost of the Work including Contractor's Fee will not exceed ~~\$(Bidder fill in GMP)~~.

Deleted

ARTICLE 5—PRICE PLUS TIME BID

5.01 *Price-Plus-Time Contract Award (Stipulated Price Contract)*

A. The Bidder to which an award of the Contract will be made will be determined in part on the basis of the Total Bid Price and the total number of calendar days to substantially complete the Work, in accordance with the following:

	Description		Amount
A	1. Total Bid Price		\$(number)
	2. Total number of calendar days to substantially complete the Work	[number] days	
	3. Liquidated Damages Rate (from Agreement)	\$(number)/day	
B	4. Adjustment Amount (2 x 3)		\$(number)
A+B	5. Amount for Comparison of Bids		\$(number)

B. The purpose of the process in the table above is only to calculate the lowest price-plus-time (A+B) bid amount for bid comparison purposes. The price for completion of the Work (the Contract Price) is the Total Bid Price.

C. Bonds required under Paragraph 6.01 of the General Conditions will be based on the Contract Price.

5.02 *Price-Plus-Time Contract Award (Cost Plus Fee with Guaranteed Maximum Price Contract)*

A. The Bidder to which an award of Contract will be made will be determined in part on the basis of the Guaranteed Maximum Price and the total number of calendar days to substantially complete the Work, in accordance with the following:

	Description		Amount
A	1. Guaranteed Maximum Price		\$(number)

	2. Total number of calendar days to substantially complete the Work	[number] days	
	3. Liquidated Damages Rate (from Agreement)	\$/[number]/day	
B	4. Adjustment Amount (2 x 3)		\$/[number]
A+B	5. Amount for Comparison of Bids		\$/[number]

B. The purpose of the process in the table above is only to calculate the lowest price-plus-time (A+B) bid amount for bid comparison purposes. The price for completion of the Work (the Contract Price) is based on the cost of the Work, plus a fee, subject to a guaranteed maximum price, as set forth in the Agreement.

C. Bonds required under Paragraph 6.01 of the General Conditions will be based on the Contract Price.

Deleted

ARTICLE 6 — TIME OF COMPLETION

6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

6.02 Bidder agrees that the Work will be substantially complete on or before [Bidder inserts date], and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before [Bidder inserts date].

Deleted

6.03 Bidder agrees that the Work will be substantially complete within [Bidder inserts number] calendar days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within [Bidder inserts number] calendar days after the date when the Contract Times commence to run.

Deleted

6.04 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 — BIDDER'S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

7.01 *Bid Acceptance Period*

A. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

7.02 *Instructions to Bidders*

A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.

7.03 *Receipt of Addenda*

A. Bidder hereby acknowledges receipt of the following Addenda:

Addendum Number	Addendum Date

ARTICLE 8—BIDDER’S REPRESENTATIONS AND CERTIFICATIONS

8.01 *Bidder’s Representations*

A. In submitting this Bid, Bidder represents the following:

1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.
2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work, **including all American Iron and Steel requirements.**
- ~~4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.~~
- ~~5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.~~
6. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder’s (Contractor’s) safety precautions and programs.
7. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
8. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
9. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.

10. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

8.02 *Bidder's Certifications*

A. The Bidder certifies the following:

1. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.
2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
3. Bidder has not solicited or induced any individual or entity to refrain from bidding.
4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:
 - a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.
 - b. Fraudulent practice means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition.
 - c. Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels.
 - d. Coercive practice means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

BIDDER hereby submits this Bid as set forth above:

Bidder:

(typed or printed name of organization)

By: _____
(individual's signature)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Date: _____
(typed or printed)

If Bidder is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.

Attest: _____
(individual's signature)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Date: _____
(typed or printed)

Address for giving notices:

Bidder's Contact:

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Phone: _____

Email: _____

Address: _____

Bidder's Contractor License No.: (if applicable) _____

USDA
Form RD 400-6
(Rev. 12-09)

COMPLIANCE STATEMENT

This statement relates to a proposed contract with _____

(Name of borrower or grantee)

who expects to finance the contract with assistance from either the Rural Housing Service (RHS), Rural Business-Cooperative Service (RBS), or the Rural Utilities Service (RUS) or their successor agencies, United States Department of Agriculture (whether by a loan, grant, loan insurance, guarantee, or other form of financial assistance). I am the undersigned bidder or prospective contractor, I represent that:

1. I have, have not, participated in a previous contract or subcontract subject to Executive Order 11246 (regarding equal employment opportunity) or a preceding similar Executive Order.
2. If I have participated in such a contract or subcontract, I have, have not, filed all compliance reports that have been required to file in connection with the contract or subcontract.
 If the proposed contract is for \$50,000 or more: or If the proposed nonconstruction contract is for \$50,000 or more and I have 50 or more employees, I also represent that:
3. I have, have not previously had contracts subject to the written affirmative action programs requirements of the Secretary of Labor.
4. If I have participated in such a contract or subcontract, I have, have not developed and placed on file at each establishment affirmative action programs as required by the rules and regulations of the Secretary of Labor.

I understand that if I have failed to file any compliance reports that have been required of me, I am not eligible and will not be eligible to have my bid considered or to enter into the proposed contract unless and until I make an arrangement regarding such reports that is satisfactory to either the RHS, RBS or RUS, or to the office where the reports are required to be filed.

I also certify that I do not maintain or provide for my employees any segregated facilities at any of my establishments, and that I do not permit my employees to perform their services at any location, under my control, where segregated facilities are maintained. I certify further that I will not maintain or provide for my employees any segregated facilities at any of my establishments, and that I will not permit my employees to perform their services at any location, under my control, where segregated facilities are maintained. I agree that a breach of this certification is a violation of the Equal Opportunity clause in my contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and wash rooms, restaurants and other eating areas time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise. I further agree that (except where I have obtained identical certifications for proposed subcontractors for specific time periods) I will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause; that I will retain such certifications in my files; and that I will forward the following notice to such proposed subcontractors (except where the proposed subcontractors have submitted identical certifications for specific time periods):

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays the valid OMB control number. The valid OMB control number for this information collection is 0575-0018. The time required to complete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

**NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENTS FOR
CERTIFICATIONS OF NON-SEGREGATED FACILITIES**

A certification of Nonsegregated Facilities, as required by the May 9, 1967, order (32F.R. 7439, may 19, 1967) on Elimination of Segregated Facilities, by the Secretary of Labor, must be submitted prior to the award of a subcontract exceeding \$ 10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semiannually, or annually).

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

DATE _____

(Signature of Bidder or Prospective Contractor)

Address (including Zip Code)

U.S. DEPARTMENT OF AGRICULTURE

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY
AND VOLUNTARY EXCLUSION - LOWER TIER COVERED TRANSACTIONS**

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 7 CFR Part 3017, Section 3017.510, Participants' responsibilities. The regulations were published as Part IV of the January 30, 1989, Federal Register (pages 4722-4733). Copies of the regulations may be obtained by contacting the Department of Agriculture agency with which this transaction originated.

(BEFORE COMPLETING CERTIFICATION, READ INSTRUCTIONS ON REVERSE)

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Organization Name

PR/Award Number or Project Name

Name(s) and Title(s) of Authorized Representative(s)

Signature(s)

Date

Instructions for Certification

1. By signing and submitting this form, the prospective lower tier participant is providing the certification set out on the reverse side in accordance with these instructions.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms “covered transactions,” “debarred,” “suspended,” “ineligible,” “lower tier covered transactions,” “participant,” “person,” “primary covered transaction,” “principal,” “proposal,” and “voluntarily excluded,” as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this form that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this form that it will include this clause titled “Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions,” without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

CERTIFICATION FOR CONTRACTS, GRANTS AND LOANS

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant or Federal loan, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant or loan.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant or loan, the undersigned shall complete and submit Standard Form - LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including contracts, subcontracts, and subgrants under grants and loans) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

(name)

(date)

(title)

oOo

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Use the SF-LLL-A Continuation Sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a follow-up report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organizations filing the report in item 4 checks "Subawardee", then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below the agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g. Request for Proposal (PFP) number, Invitation for Bid (IFB) number, grant announcement number, the contract, grant, or loan award number, the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, state and zip code of the lobbying entity engaged by the reporting entity in item 4 to influence the covered Federal action.
(b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).
11. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (item 4) to the lobbying entity (item 10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. If this is a material change report, enter the cumulative amount of payment made or planned to be made.
12. Check the appropriate box(es). Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.
13. Check the appropriate box(es). Check all boxes that apply. If other, specify nature.
14. Provide a specific and detailed description of the services that the lobbyist has performed, or will be expected to perform, and the date(s) of any services rendered. Include all preparatory and related activity, not just time spent in actual contact with Federal officials. Identify the Federal official(s) or employee(s) contacted or the officer(s), employee(s), or Member(s) of Congress that were contacted.
15. Check whether or not a SF-LLL-A Continuation Sheet(s) is attached.
16. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, D.C. 20503.

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

CONTRACT FOR CONSTRUCTION OF A SMALL PROJECT

Prepared By



Endorsed By



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GUIDELINES FOR USE OF EJCDC® C-522, CONTRACT FOR CONSTRUCTION OF A SMALL PROJECT

1.0 PURPOSE AND INTENDED USE OF THE DOCUMENT

- 1.1 EJCDC® C-522, Contract for Construction of a Small Project, is intended to be used for smaller, less complex projects, such as small water and wastewater utilities, roads and paving, drainage improvements, and site development. This Contract is appropriate for projects where:
- A. The construction cost is \$500,000 or less, the scheduling for the Work is relatively simple with few constraints, scheduled duration is less than 12 months, and little coordination is required with entities other than the Engineer, Owner, and Contractor.
 - B. The change and claims process is relatively simple. If it is anticipated there could be significant changes to the Work in response to differing site conditions, client requirements, or other factors, it is recommended that EJCDC® C-520, Agreement Between Owner and Contractor for Construction Contract (Stipulated Price) (2018) or EJCDC® C-525, Agreement Between Owner and Contractor for Construction Contract (Cost-Plus-Fee) (2018) be used, together with the comprehensive EJCDC® C-700, Standard General Conditions of the Construction Contract (2018).
 - C. There is little chance of changed or differing site conditions.
 - D. No hazardous environmental conditions are anticipated.
 - E. Substitutions for material or equipment will be handled through the change order process.
 - F. There is no assignment to Contractor of an equipment purchase contract entered into by Owner.
 - G. The Contract Documents do not delegate any professional design services to the Contractor.
 - H. There is little need for coordination with others working at the Site, other than for incidental tasks such as routine utility relocations (see Paragraph 7.03).
 - I. The Engineer is involved with the review of submittals, interpretation of the documents, and development of change orders that affect the design of the Project.
- 1.2 C-522 provides that builder's risk insurance and/or property insurance will be provided by the Contractor. If the Owner wants to provide this insurance, the Contract will need to be modified.

2.0 OTHER DOCUMENTS

C-522 is intended to be used as a stand-alone document. It contains the core elements of an Owner-Contractor agreement form (such as identification of the parties, Contract Price, and Contract Times) as well as essential general terms and conditions. Thus if C-522 is used, do not use the EJCDC agreement forms (C-520 or C-525), or the Standard General Conditions, C-700.

C-522 has not been fully integrated with other EJCDC documents. For example, terms used in C-522 may differ somewhat from corresponding terms in other EJCDC documents. Other EJCDC® C-series documents, such as EJCDC® C-200, Instructions to Bidders for Construction Contract (2018), and EJCDC® C-800, Supplementary Conditions of the Construction Contract (2018), are written to be used with C-700; they

would require substantial modification to be used with C-522. This document is not to be used under any circumstances with the Design-Build (D-series) or Procurement (P-series) documents.

The EJCDC standard professional services agreements, including EJCDC® E-500, Agreement Between Owner and Engineer for Professional Services, and EJCDC® E-520, Short Form of Agreement Between Owner and Engineer for Professional Services, may be used in conjunction with C-522 providing that modifications are made to the scope of services in the Owner-Engineer Agreement to be consistent with the engineering services contemplated by C-522. Because E-520 (Short Form) is intended for use only for professional services of limited scope and complexity, particular care should be taken in E-520 to define and coordinate the obligations and duties of the Owner and Engineer relative to the requirements of C-522.

3.0 ORGANIZATION OF INFORMATION

If CSI MasterFormat™ is used for organizing the Project Manual, consult CSI MasterFormat™ for the appropriate document number (e.g., under 00 11 00, Advertisements and Invitations), and accordingly number the document and its pages.

4.0 GUIDANCE NOTES AND NOTES TO USER

EJCDC documents include Notes to User to provide guidance regarding the preparation of Project-specific documents. In C-522, the Notes to User are lightly shaded to distinguish them from the proposed text of the Contract itself. As a project-specific Contract is prepared and made ready for distribution to bidders or prospective Contractors, or for execution by Owner and Contractor, all shaded text (Notes to Users) should be deleted. These notes are intended to guide the user in the preparation of the document and are not intended to be included in the completed document.

Notes to User provide specific information for editing the document. When two or more alternative paragraphs are presented, explanations on how to select the most appropriate alternative are provided, with direction to delete those paragraphs not used.

5.0 EDITING THIS DOCUMENT

5.1 It is intended that this document be edited for each Contract. Guidelines for editing include:

- A. Remove the cover pages which consist of the title pages and these Guidelines for Use.
- B. Type in required information as indicated by brackets ([]). Bracketed text will usually provide instructions for what is to be inserted in place of the brackets. Delete brackets and change formatting to match existing text after project specific text has been added, e.g. change “[Project Name]” to “Peach Street Renovation” (without brackets or bold, or quotation marks).
- C. Fill in blanks, if any. It will be more common for information to be inserted by user to be indicated by a prompt in brackets, as described in Paragraph B above, rather than by an underline-style blank.
- D. Most Notes to User are presented before the text to which they apply; some Notes to Users are interspersed in the text, usually within brackets. Delete all “Notes to User” after reviewing each note and taking appropriate action. Delete all associated numbering and brackets.

- E. Complete tables.
- F. Modify check-boxes as required by clicking in the box.

6.0 LICENSE AGREEMENT

This document is subject to the terms and conditions of the **License Agreement, 2018 EJDC® Construction Series Documents**. A copy of the License Agreement was furnished at the time of purchase of this document, and is available for review at www.ejcdc.org and the websites of EJDC's sponsoring organizations.

CONTRACT FOR CONSTRUCTION OF A SMALL PROJECT

This Contract is by and between the Town of Northumberland, New Hampshire (Owner) and [Legal name of Contractor] (Contractor). Owner and Contractor hereby agree as follows:

ARTICLE 1—THE WORK

1.01 *Work*

- A. Work includes all labor, materials, equipment, services, and documentation necessary to construct the Project defined herein. The Work may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
- B. The Contractor shall complete all Work as specified or indicated in the Contract Documents. The Project is generally described as follows:
 1. **Water, Sewer, Drainage and Roadway Improvements – St. Lawrence & Atlantic Railroad** which consists of cleaning, video recording, and UV CIPP lining of existing drainage and sanitary sewer.
 2. The Site of the Work includes property, easements, and designated work areas described in greater detail in the Contract Documents but generally located **south of Cumberland Street within the St. Lawrence & Atlantic Railroad right-of-way**.

ARTICLE 2—CONTRACT DOCUMENTS

2.01 *Intent of Contract Documents*

- A. It is the intent of the Contract Documents to describe a functionally complete Project. The Contract Documents do not indicate or describe all of the Work required to complete the Project. Additional details required for the correct installation of selected products are to be provided by the Contractor and coordinated with Owner and Engineer. This Contract constitutes the entire agreement between Owner and Contractor, and supersedes prior negotiations, representations, and agreements, whether written or oral. The Contract Documents are complementary; what is required by one part of the Contract Documents is as binding as if required by other parts of the Contract Documents.
- B. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work under the Contract Documents. During the performance of the Work and until final payment, Contractor and Owner shall submit to Engineer all matters in question concerning the requirements of the Contract Documents, or relating to the acceptability of the Work. Engineer will render a written clarification, interpretation, or decision on the issue submitted, or initiate a modification to the Contract Documents.
- C. Contractor, and its subcontractors and suppliers, shall not have or acquire any title to or ownership rights to any of the Drawings, Specifications, or other documents (including copies or electronic media versions) prepared by Engineer or its consultants.
- D. *Contract Price or Contract Times*: References to a change in “Contract Price or Contract Times” or “Contract Times or Contract Price” or similar, indicate that such change applies to

(1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term “or both” is not expressed.

- E. Nothing in the Contract Documents creates any contractual relationship between Owner or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity.

2.02 *Contract Documents Defined*

- A. The Contract Documents consist of the following documents:

1. This Contract for Construction of a Small Project.
2. Performance bond.
3. Payment bond.
4. Specifications as listed in the Specifications Table of Contents.
5. Drawings as listed on the Drawing Sheet Index.
6. Addenda.
7. Exhibits to this Contract (enumerated as follows):
 - a. **None**
8. The following which may be delivered or issued on or after the Effective Date of the Contract:
 - a. Notice to Proceed (EJCDC® C-550).
 - b. Work Change Directives (EJCDC® C-940).
 - c. Change Orders (EJCDC® C-941).
 - d. Field Orders (EJCDC® C-942).

ARTICLE 3—ENGINEER

3.01 *Engineer*

- A. The Engineer for this Project is **Horizons Engineering, Inc.**

ARTICLE 4—CONTRACT TIMES

4.01 *Contract Times*

- A. ~~The Work will be substantially complete on or before [date] and completed and ready for final payment on or before [date]. Deleted~~
- B. ~~The Work will be substantially complete within [number of days] days after the Effective Date of the Contract and completed and ready for final payment within [number of days] days after the Effective Date of the Contract. The Owner must issue a Notice to Proceed. The Notice to Proceed must be no later than 30 days after the Effective Date of the Contract. The Work will be substantially complete within 60 days after the Notice to~~

Proceed and completed and ready for final payment within 75 days after the Notice to Proceed.

4.02 *Liquidated Damages*

- A. Contractor and Owner recognize that time is of the essence in the performance of the Contract, and that Owner will incur damages if Contractor does not complete the Work according to the requirements of Paragraph 4.01. Because such damages would be difficult and costly to determine, Owner and Contractor agree that as liquidated damages for delay in completion (but not as a penalty) Contractor shall pay Owner \$[amount calculated for liquidated damages] for each day that expires after the Contract Time for substantial completion.

4.03 *Delays in Contractor’s Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times or Contract Price.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor or its subcontractors or suppliers.
- C. If Contractor’s performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times.
- D. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor or Contractor’s subcontractors or suppliers.

4.04 *Progress Schedules*

- A. Contractor shall develop a progress schedule and submit it to Engineer for review and comment before starting Work on the Site. Contractor shall modify the schedule in accordance with Engineer’s comments.
- B. Contractor shall update and submit the progress schedule to Engineer each month. Owner may withhold payment if Contractor fails to submit the schedule.

ARTICLE 5—CONTRACT PRICE

5.01 *Payment*

- A. ~~Owner shall pay Contractor, in accordance with the Contract Documents, the lump sum amount of \$[Contract Price] for all Work.~~
- B. Owner shall pay Contractor, in accordance with the Contract Documents, at the following unit prices for each unit of Work completed:

Item No.	Description	Unit	Estimated Quantity	Unit Price	Extended Price
	See attached Bid Form				

Total of all extended prices for Estimated Quantities of Work					\$

Payment will be made in an amount equal to the total of all extended prices for actual Work completed. The extended price is determined by multiplying the unit price times the actual quantity of that Work item completed. Actual quantities installed will be determined by the Engineer.

ARTICLE 6—BONDS AND INSURANCE

6.01 *Bonds*

- A. When Contractor delivers the signed counterparts of the Contract to Owner, Contractor shall also deliver the performance bond and payment bond to Owner. Each bond must be in an amount equal to the Contract Price, as security for the faithful performance and payment of all of Contractor’s obligations under the Contract. These bonds must remain in effect until the completion of the correction period specified in Paragraph 7.12 but, in any case, not less than one year after the date when final payment becomes due. **The Performance and Payment bond forms to be used on this Project are EJCDC C-610 and C-615 respectively.**
- B. Upon request, Owner will provide a copy of the payment bond to any person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work.

6.02 *Insurance*

- A. When Contractor delivers the signed counterparts of the Contract to Owner, Contractor shall furnish certificates, endorsements, and any other evidence of insurance requested by Owner. Insurance is to be provided by companies that are duly licensed or authorized in the jurisdiction in which the Project is located with a minimum A.M. Best rating of A-VII or better. Contractor shall provide insurance in accordance with the following:
 - 1. Contractor shall provide coverage for not less than the following amounts, or greater where required by Laws and Regulations:
 - a. *Workers’ Compensation and Employer’s Liability*

Workers’ Compensation	Statutory
Employer’s Liability	
Each Accident	\$ 500,000
Each Employee	\$ N/A
Policy Limit	\$ 500,000

b. *Commercial General Liability*

General Aggregate	\$ 2,000,000
Products - Completed Operations Aggregate	\$ 1,000,000
Personal and Advertising Injury	\$ 1,000,000
Bodily Injury and Property Damage—Each Occurrence	\$ 1,000,000

c. *Automobile Liability*

Bodily Injury	
Each Person	\$ 1,000,000
Each Accident	\$ 1,000,000
Property Damage	
Each Accident	\$ 1,000,000
[OR]	
Combined Single Limit (Bodily Injury and Property Damage)	\$

d. *Excess or Umbrella Liability*

Per Occurrence	\$ 2,000,000
General Aggregate	\$ 2,000,000

e. *Contractor's Pollution Liability*

Each Occurrence/Claim	\$ 1,000,000
General Aggregate	\$ 1,000,000

f. *Railroad Protective Liability Insurance:* Prior to commencing any Work within 50 feet of railroad-owned and controlled property, Contractor shall (1) endorse its commercial general liability policy with ISO CG 24 17, removing the contractual liability exclusion for work within 50 feet of a railroad, (2) purchase and maintain railroad protective liability insurance meeting the following requirements, (3) furnish a copy of the endorsement to Owner, and (4) submit a copy of the railroad protective policy and other railroad-required documentation to the railroad, and notify Owner of such submittal.

Railroad Protective Liability Insurance	Policy limits of not less than:
Each Claim	\$
Aggregate	\$

- B. All insurance policies required to be purchased and maintained will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days after notice has been received by the purchasing policyholder. Within three days of receipt of any such notice, the purchasing policyholder shall provide a copy of the notice to each other insured and Engineer.
- C. Automobile liability insurance provided by Contractor will be written on an occurrence basis and provide coverage against claims for damages because of bodily injury or death of any

- person or property damage arising out of the ownership, maintenance, or use of any motor vehicle.
- D. Contractor's commercial general liability policy will be written on a 1996 or later ISO commercial general liability occurrence form and include the following coverages and endorsements:
1. Products and completed operations coverage maintained for three years after final payment;
 2. Blanket contractual liability coverage to the extent permitted by law;
 3. Broad form property damage coverage; and
 4. Severability of interest; underground, explosion, and collapse coverage; personal injury coverage.
- E. The Contractor's commercial general liability and automobile liability, umbrella or excess, and pollution liability policies will include and list Owner and Engineer and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each as additional insureds; and the insurance afforded to these additional insureds will provide primary coverage for all claims covered thereby (including, as applicable, those arising from both ongoing and completed operations) on a non-contributory basis.
1. Additional insured endorsements will include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together). If Contractor demonstrates to Owner that the specified ISO endorsements are not commercially available, then Contractor may satisfy this requirement by providing equivalent endorsements.
 2. Contractor shall provide ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent for design professional additional insureds.
- F. Umbrella or excess liability insurance will be written over the underlying employer's liability, commercial general liability, and automobile liability insurance. The coverage afforded must be at least as broad as that of each and every one of the underlying policies. Contractor may meet the policy limits specified for employer's liability, commercial general liability, and automobile liability through the primary policies alone, or through combinations of the primary insurance policy's policy limits and partial attribution of the policy limits of an umbrella or excess liability policy that is at least as broad in coverage as that of the underlying policy.
- G. The Contractor shall provide property insurance covering physical loss or damage during construction to structures, materials, fixtures, and equipment, including those materials, fixtures, or equipment in storage or transit.
- H. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 15.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.01 *Contractor's Means and Methods of Construction*

- A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. If professional engineering or other design services are needed to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor's expense. Neither Owner nor Engineer has any responsibility with respect to (1) Contractor's determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

7.02 *Supervision and Superintendence*

- A. Contractor shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who will not be replaced without notice to and approval by the Owner and Engineer except under extraordinary circumstances.
- C. Contractor shall maintain good discipline and order at the Site.
- D. Except as otherwise required for the safety or protection of the Work or persons or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site will be performed during regular working hours, Monday through Friday.

7.03 *Other Work at the Site*

- A. In addition to and apart from the Work of the Contractor, other work may occur at or adjacent to the Site. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.
- B. Contractor shall notify Owner, the owners of adjacent property, the owners of underground facilities and other utilities (if the identity of such owners is known to Contractor), and other contractors and utility owners performing work at or adjacent to the Site when Contractor knows that prosecution of the Work may affect them; and Contractor shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.

7.04 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for everything necessary for the performance, testing, start-up, and completion of the Work.
- B. All materials and equipment incorporated into the Work must be new and of good quality, and be stored, applied, installed, connected, erected, protected, used, cleaned, and

conditioned in accordance with instructions of the applicable supplier, except as otherwise may be provided in the Contract Documents.

7.05 *Subcontractors and Suppliers*

- A. Just as Contractor is responsible for its own acts and omissions, Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of Contractor's employees; of suppliers and subcontractors, and their employees; and of any other individuals or entities performing or furnishing any of the Work. The Contractor's retention of a subcontractor or supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.

7.06 *Licenses, Fees and Permits*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to performing the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others.
- B. Contractor shall obtain and pay for all construction permits, licenses, and certificates of occupancy, unless otherwise provided in the Contract Documents.

7.07 *Laws and Regulations; Taxes*

- A. Contractor shall give all notices required by, and shall comply with, all local, state, and federal laws and regulations applicable to the performance of the Work. Neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any laws or regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to laws or regulations, Contractor shall bear all resulting costs and losses, and to the fullest extent permitted by law Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all such claims, costs, losses, and damages.
- C. Contractor shall pay all applicable sales, consumer, use, and other similar taxes.

7.08 *Record Documents*

- A. Contractor shall maintain one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved shop drawings in a safe place at the Site. Contractor shall annotate them to show changes made during construction. Contractor shall deliver these record documents to Engineer upon completion of the Work.

7.09 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work.
- B. Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.

- C. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. All persons on the Site or who may be affected by the Work;
 - 2. All the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. Other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and underground facilities not designated for removal, relocation, or replacement in the course of construction.
- D. All damage, injury, or loss to any property caused, directly or indirectly, in whole or in part, by Contractor, or anyone for whose acts the Contractor may be liable, will be remedied by Contractor at its expense (except damage or loss attributable to the fault of the Contract Documents or to the acts or omissions of Owner or Engineer and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor).
- E. Contractor shall be responsible for coordinating any exchange of safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with laws or regulations.
- F. In emergencies affecting the safety or protection of the Work or persons or property at the Site or adjacent thereto, Contractor shall act to prevent damage, injury, or loss. Contractor shall give Engineer prompt notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused by an emergency, or are required as a result of Contractor's response to an emergency. If Engineer determines that a change in the Contract Documents is required because of an emergency or Contractor's response, a Work Change Directive or Change Order will be issued.

7.10 *Submittals*

- A. Contractor shall review and coordinate shop drawings, samples, and other submittals with the requirements of the Work and the Contract Documents, and shall verify all related field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information. Contractor shall confirm that the submittal is complete with respect to all related data included in the submittal.
- B. Shop drawings and samples must bear a stamp or specific written certification that Contractor has satisfied its obligations under the Contract Documents with respect to Contractor's review of that submittal, and that Contractor approves the submittal.
- C. With each shop drawing or sample submittal, Contractor shall give Engineer specific written notification, in a communication separate from the shop drawing or sample, of any variations that the shop drawing or sample may have from the requirements of the Contract Documents.
- D. Engineer will provide timely review of submittals. Engineer's review and approval of submittals will not extend to the means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs.

- E. Engineer's review of shop drawings and samples will be only to determine if the items covered will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be compatible with the design concept of the completed Project as a functioning whole.
- F. Engineer's review and approval of a separate item in a shop drawing or sample does not indicate approval of the assembly in which the item functions.
- G. Contractor shall make corrections required by Engineer, return the required number of corrected copies of shop drawings, and submit new samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.
- H. Shop drawings are not Contract Documents.

7.11 *Warranties and Guarantees*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its consultants are entitled to rely on Contractor's warranty and guarantee.

7.12 *Correction Period*

- A. If within one year after the date of substantial completion, any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, or other adjacent areas used by Contractor as permitted by laws and regulations, is found to be defective, then Contractor shall promptly correct any such defective Work and repairs, at no cost to Owner.

7.13 *Indemnification*

- A. To the fullest extent permitted by law, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from all losses, damages, costs, and judgments (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Contractor, any subcontractor, any supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.

ARTICLE 8—OWNER'S RESPONSIBILITIES

8.01 *Responsibilities*

- A. Except as otherwise provided in the Contract Documents, Owner shall issue all communications to Contractor through Engineer.
- B. Owner shall make payments to Contractor as provided in this Contract.

- C. Owner shall provide the Site and easements required to construct the Project.
- D. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- E. Owner shall furnish copies of any applicable Owner safety programs to Contractor.
- F. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, unless stated elsewhere in the Contract Documents, Owner shall have sole authority and responsibility for such coordination.
- G. Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or for related safety precautions and programs, or for any failure of Contractor to comply with laws and regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

ARTICLE 9—ENGINEER'S STATUS DURING CONSTRUCTION

9.01 *Engineer's Status*

- A. Engineer will be Owner's representative during construction.
- B. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility, or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, its subcontractors, suppliers, or sureties, or to any employee or agent of any of them.
- C. Engineer will make visits to the Site at intervals appropriate to the various stages of construction. Engineer will not be required to make exhaustive or continuous inspections to check the quality or quantity of the Work.
- D. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or for related safety precautions and programs, or for any failure of Contractor to comply with laws and regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

ARTICLE 10—CHANGES IN THE WORK

10.01 *Authority to Change the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work.

10.02 *Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 1. Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive. **The Engineer or Owner shall contact the**

Agency for concurrence on each Work Change Directive prior to issuance. Once authorized by Owner, a copy of each Work Change Directive shall be provided by Engineer to the Agency.

2. Changes in the Work which are: (a) ordered by Owner or (b) agreed to by the parties or (c) resulting from the Engineer's decision, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
 3. Changes in the Contract Price or Contract Times or other changes which embody the substance of any final binding results under Article 12.
- B. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.
- C. **The Engineer or Owner must contact the Agency for concurrence on each Change Order prior to issuance. All Contract Change Orders must be concurred on (signed) by Agency before they are effective. The Change Order form to be used on this Project is EJCDC C-941 (2018).**

10.03 *Work Change Directive*

- A. A Work Change Directive may be issued to Contractor ordering an addition, deletion, or revision in the Work. A Work Change Directive will not change the Contract Price or Contract Times, but is evidence that the parties expect that the modification ordered or documented by the Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on Contract Price or Contract Times. **The Work Change Directive form to be used on this Project is EJCDC C-940 (2018). Agency approval is required before a Work Change Directive is issued.**

10.04 *Field Orders*

- A. Engineer may issue a Field Order to authorize minor changes in the Work, provided that the changes do not involve an adjustment in the Contract Price or Contract Times.
- B. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, then Contractor shall request such adjustment before proceeding with the Work.

ARTICLE 11—DIFFERING SUBSURFACE OR PHYSICAL CONDITIONS

11.01 *Differing Site Conditions Process*

- A. If Contractor believes that any subsurface or physical condition (including but not limited to utilities or other underground facilities) that is uncovered or revealed at the Site either (1) differs materially from that shown or indicated in the Contract Documents, or (2) is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract Documents, then Contractor shall promptly notify Owner and Engineer about such condition. Contractor

shall not further disturb such condition or perform any Work in connection with the condition (except with respect to an emergency) until receipt of authorization to do so.

1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if Contractor knew of, or should have known of, the existence of the condition prior to entry into the Contract.
- B. After receipt of notice regarding a possible differing subsurface or physical condition, Engineer will promptly:
1. Review the condition in question;
 2. Determine if it is necessary for Owner to obtain additional exploration or tests with respect to the condition;
 3. Determine whether the condition falls within one of the two differing site condition categories described in Paragraph 11.01.A.;
 4. Obtain any pertinent cost or schedule information from Contractor;
 5. Advise Owner of Engineer's findings, conclusions, and recommendations, including recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question, the need for any change in the Drawings or Specifications, and possible Contract Price or Contract Times adjustments.
- C. After receipt of Engineer's findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part, and granting any equitable adjustment in Contract Times or Contract Price to which Contractor is entitled.

ARTICLE 12—CLAIMS AND DISPUTE RESOLUTION

12.01 *Claims Process*

- A. The party submitting a claim shall deliver it directly to the other party to the Contract and the Engineer promptly (but in no event later than 10 days) after the start of the event giving rise thereto.
- B. The party receiving a claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the claim through the exchange of information and direct negotiations. All actions taken on a claim must be stated in writing and submitted to the other party.
- C. If efforts to resolve a claim are not successful, the party receiving the claim may deny it by giving notice of denial to the other party. If the receiving party does not take action on the claim within 45 days, the claim is deemed denied.

- D. If the dispute is not resolved to the satisfaction of the parties, Owner or Contractor shall give notice to the other party of the intent to submit the dispute to a court of competent jurisdiction unless the Owner and Contractor both agree to an alternative dispute resolution process.

ARTICLE 13—TESTS AND INSPECTIONS; CORRECTION OF DEFECTIVE WORK

13.01 *Tests and Inspections*

- A. Owner and Engineer will have access to the Site and the Work at reasonable times for observation, inspection, and testing. Contractor shall provide proper and safe conditions for such access.
- B. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- C. Except as otherwise provided in the Contract Documents, Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required: (1) by the Contract Documents; (2) by codes, laws, or regulations; (3) to attain Owner's and Engineer's acceptance of materials or equipment; and (4) to obtain Engineer's approval prior to purchase of materials, mix designs, or equipment.
- D. If any Work that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering will be at Contractor's expense.

13.02 *Defective Work*

- A. Contractor warrants that the Work is not defective.
- B. Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. The Contractor shall promptly correct all defective Work.
- E. When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's warranty and guarantee on said Work.
- F. If the Work is defective or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated.

ARTICLE 14—PAYMENTS TO CONTRACTOR

14.01 *Progress Payments*

- A. Contractor shall prepare a schedule of values that will serve as the basis for progress payments. The schedule of values will be in a form acceptable to Engineer. Lump sum items

will be broken into units that allow for measurement of Work in progress. For unit price work, the unit price breakdown in Article 5 will be used as the schedule of values.

14.02 *Applications for Payments*

- A. Contractor shall submit signed applications for payment to Engineer monthly, in a form acceptable to the Engineer. Contractor shall provide supporting documentation required by the Contract Documents. Owner will pay for Work completed as of the date of the application for payment. **The Application for Payment form to be used on this Project is EJDC C-620.**
- B. Beginning with the second application for payment, each application must include an affidavit of Contractor stating that all previous progress payments have been applied to discharge Contractor's obligations associated with the prior applications for payment.

14.03 *Retainage*

- A. ~~The Owner shall retain [~~percentage of Contract Price to be held as retainage~~] % of each progress payment until the Work is substantially complete.~~ **The Owner shall retain 5% of each progress payment until the Work is substantially complete. No payment will be made that would deplete the retainage, place in escrow any funds that are required for retainage or invest the retainage for the benefit of the Contractor.**

14.04 *Review of Applications*

- A. Within 10 days after receipt of each application for payment, Engineer will either recommend payment and present the application for payment to Owner, or return the application for payment to Contractor indicating Engineer's reasons for refusing to recommend payment. The Contractor will make the necessary corrections and may resubmit the application for payment.
- B. Engineer will recommend reductions in payment (set-offs) which, in the opinion of the Engineer, are necessary to protect Owner from loss because the Work is defective and requires correction or replacement.
- C. The Owner is entitled to impose set-offs against payment based on any claims that have been made against Owner, or any incurred costs, losses, or damages, on account of Contractor's conduct in the performance of the Work; for defective Work; or for liquidated damages that have accrued as a result of Contractor's failure to complete the Work.
- D. **Agency must approve all Applications for Payments before payment is made.**

14.05 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than ~~7 days~~ after the time of payment by Owner.

14.06 *Substantial Completion*

- A. When Contractor considers the Work ready for its intended use, Contractor shall request that Engineer issue a certificate of substantial completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.

- B. Promptly after Contractor's request, Engineer will inspect the Work with Owner and Contractor to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor and Owner of the reasons for Engineer's decision.
- C. If Engineer considers the Work substantially complete, or upon resolution of all reasons for non-issuance of a certificate, Engineer will deliver to Owner and Contractor a certificate of substantial completion that will fix the date of substantial completion and include a punch list of items to be completed or corrected before final payment.

14.07 *Final Inspection*

- A. Upon notice from Contractor that the entire Work is complete, Engineer will promptly make a final inspection with Owner and Contractor, and will notify Contractor of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work and remedy such defects.

14.08 *Final Payment*

- A. Contractor may make application for final payment after satisfactorily completing all Work, including providing all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents, and other documents.
- B. The final application for payment must be accompanied (except as previously delivered) by:
 - 1. All documentation called for in the Contract Documents;
 - 2. Consent of the surety to final payment;
 - 3. Satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any liens or other title defects, or will so pass upon final payment;
 - 4. A list of all pending claims; and
 - 5. Complete and legally effective releases or waivers (satisfactory to Owner) of all lien rights arising out of the Work, and of liens filed in connection with the Work.
- C. The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment and issuance of notice of the acceptability of the Work.

14.09 *Waiver of Claims*

- A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by Contractor, except as set forth in an outstanding claim, set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted as a claim.

ARTICLE 15—SUSPENSION OF WORK AND TERMINATION

15.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 60 consecutive days by notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or Contract Times, to the extent directly attributable to any such suspension.

15.02 *Owner May Terminate for Cause*

- A. Contractor's failure to perform the Work in accordance with the Contract Documents or other failure to comply with a material term of the Contract Documents will constitute a default by Contractor and justify termination for cause.
- B. If Contractor defaults in its obligations, then after giving Contractor and any surety 10 days' notice that Owner is considering a declaration that Contractor is in default and the termination of the Contract, Owner may proceed to:
 - 1. Declare Contractor to be in default, and give Contractor and any surety notice that the Contract is terminated; and
 - 2. Enforce the rights available to Owner under any applicable performance bond.
- C. Owner may not proceed with termination of the Contract under Paragraph 15.02.B if Contractor within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- D. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- E. In the case of a termination for cause, if the cost to complete the Work, including related claims, costs, losses, and damages, exceeds the unpaid contract balance, Contractor shall pay the difference to Owner.
- F. If Contractor has provided a performance bond, the provisions of that bond will govern over any inconsistent provisions of Paragraph 15.02.

15.03 *Owner May Terminate for Convenience*

- A. Upon 7 days' notice to Contractor, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for the following, without duplication of any items:
 - 1. Completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, less any set-offs, and including fair and reasonable sums for overhead and profit on such Work;
 - 2. Expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in

connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and

3. Other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid for any loss of anticipated profits, or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

15.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 60 consecutive days by Owner or under an order of court or other public authority, or (2) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon 7 days' notice to Owner, and provided Owner does not remedy such suspension or failure within that time, either stop the Work until payment is received, or terminate the Contract and recover payment from the Owner.

ARTICLE 16—CONTRACTOR'S REPRESENTATIONS

16.01 *Contractor Representations*

- A. Contractor makes the following representations when entering into this Contract:
1. Contractor has examined and carefully studied the Contract Documents.
 2. Contractor has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 3. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
 4. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that, without exception, all prices in the Contract are premised upon performing and furnishing the Work required by the Contract Documents.

ARTICLE 17—MISCELLANEOUS

17.01 *Giving Notice*

- A. Whenever any provision of the Contract Documents requires the giving of notice to Owner, Engineer, or Contractor, such notice must be in writing, and delivered in person (by commercial courier or otherwise); by registered or certified mail; or by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

17.02 *Cumulative Remedies*

- A. The duties and obligations expressly imposed by this Contract, and the rights and remedies expressly available to the parties under this Contract, are in addition to, and are not to be construed in any way as a limitation of, any duties, obligations, rights, or remedies otherwise imposed or available by laws or regulations, by warranty or guarantee, or by other provisions of the Contract.

17.03 *Limitation of Damages*

- A. Neither Owner, Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

17.04 *No Waiver*

- A. A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.

17.05 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of Contractor.

17.06 *Contractor's Certifications*

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or entering into the Contract.

17.07 *Controlling Law*

17.08 *Tribal Sovereignty*

- A. **No provision of this Agreement will be construed by any of the signatories as abridging or debilitating any sovereign powers of the [insert name of Tribe] Tribe; affecting the trust-beneficiary relationship between the Secretary of the Interior, Tribe, and Indian landowner(s); or interfering with the government-to-government relationship between the United States and the Tribe.**

Article 18 – FEDERAL REQUIREMENTS

18.01 *Agency Not a Party*

- A. **This Contract is expected to be funded in part with funds provided by Agency. Neither Agency, nor any of its departments, entities, or employees, is a party to this Contract.**

18.02 *Contract Approval*

- A. **Owner and Contractor will furnish Owner's attorney such evidence as required so that Owner's attorney can complete and execute the "Certificate of Owner's Attorney" before Owner submits the executed Contract Documents to Agency for approval. Refer to Certificate of Owner's Attorney and Agency Concurrence provided in these Contract Documents.**
- B. **Agency concurrence is required on both the Bid and the Contract before the Contract is effective.**

18.03 *Conflict of Interest*

- A. **Contractor may not knowingly contract with a Supplier or Manufacturer if the individual or entity who prepared the Drawings and Specifications has a corporate or financial**

affiliation with the Supplier or Manufacturer. Owner's officers, employees, or agents shall not engage in the award or administration of this Contract if a conflict of interest, real or apparent, would be involved. Such a conflict would arise when: (i) the employee, officer or agent; (ii) any member of their immediate family; (iii) their partner or (iv) an organization that employs, or is about to employ, any of the above, has a financial interest or other interest in or a tangible personal benefit from the Contractor. Owner's officers, employees, or agents shall neither solicit nor accept gratuities, favors or anything of monetary value from Contractor or subcontractors.

18.04 *Gratuities*

- A. If Owner finds after a notice and hearing that Contractor, or any of Contractor's agents or representatives, offered or gave gratuities (in the form of entertainment, gifts, or otherwise) to any official, employee, or agent of Owner or Agency in an attempt to secure this Contract or favorable treatment in awarding, amending, or making any determinations related to the performance of this Contract, Owner may, by written notice to Contractor, terminate this Contract. Owner may also pursue other rights and remedies that the law or this Contract provides. However, the existence of the facts on which Owner bases such findings shall be an issue and may be reviewed in proceedings under the dispute resolution provisions of this Contract.
- B. In the event this Contract is terminated as provided in paragraph 18.04.A, Owner may pursue the same remedies against Contractor as it could pursue in the event of a breach of this Contract by Contractor. As a penalty, in addition to any other damages to which it may be entitled by law, Owner may pursue exemplary damages in an amount (as determined by Owner) which shall not be less than three nor more than ten times the costs Contractor incurs in providing any such gratuities to any such officer or employee.

18.05 *Small, Minority and Women's Businesses*

- A. If Contractor intends to let any subcontracts for a portion of the work, Contractor will take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible. Affirmative steps will include:
 - 1. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
 - 2. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
 - 3. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
 - 4. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
 - 5. Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

18.06 ***Anti-Kickback***

- A. Contractor shall comply with the Copeland Anti-Kickback Act (40 USC 3145) as supplemented by Department of Labor regulations (29 CFR Part 3, “Contractors and Subcontractors on Public Buildings or Public Works Financed in Whole or in Part by Loans or Grants of the United States”). The Act provides that Contractor or subcontractor shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public facilities, to give up any part of the compensation to which they are otherwise entitled. Owner shall report all suspected or reported violations to Agency.

18.07 ***Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended***

- A. Contractor to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

18.08 ***Equal Employment Opportunity***

- A. The Contract is considered a federally assisted construction contract. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of “federally assisted construction contract” in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, “Equal Employment Opportunity” (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at 41 CFR part 60, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.”

18.09 ***Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)***

- A. Contractors that apply or bid for an award exceeding \$100,000 must file the required certification (RD Instruction 1940-Q Exhibit A-1). The Contractor certifies to the Owner and every subcontractor certifies to the Contractor that it will not and has not used federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining the Contract if it is covered by 31 U.S.C. 1352. The Contractor and every subcontractor must also disclose any lobbying with non-federal funds that takes place in connection with obtaining any federal award. Such disclosures are forwarded from tier to tier up to the Owner. Necessary certification and disclosure forms shall be provided by Owner.

18.10 ***Environmental Requirements***

- A. When constructing a Project involving trenching and/or other related earth excavations, Contractor shall comply with the following environmental conditions:
 - 1. Wetlands – When disposing of excess, spoil, or other Construction Materials on public or private property, Contractor shall not fill in or otherwise convert wetlands.
 - 2. Floodplains – When disposing of excess, spoil, or other Construction Materials on public or private property, Contractor shall not fill in or otherwise convert 100-year

floodplain areas (Standard Flood Hazard Area) delineated on the latest Federal Emergency Management Agency Floodplain Maps, or other appropriate maps, e.g., alluvial soils on NRCS Soil Survey Maps.

3. **Historic Preservation - Applicants shall ensure that Contractors maintain a copy of the following inadvertent discovery plan onsite for review:**
 - a. **If during the course of any ground disturbance related to any Project, any post review discovery, including but not limited to, any artifacts, foundations, or other indications of past human occupation of the area are uncovered, shall be protected by complying with 36 CFR § 800.13(b)(3) and (c) and shall include the following:**
 - 1) **All Work, including vehicular traffic, shall immediately stop within a 50 ft. radius around the area of discovery. The Contractor shall ensure barriers are established to protect the area of discovery and notify the Engineer to contact the appropriate RD personnel. The Engineer shall engage a Secretary of the Interior (SOI) qualified professional archeologist to quickly assess the nature and scope of the discovery; implement interim measures to protect the discovery from looting and vandalism; and establish broader barriers if further historic and/or precontact properties, can reasonably be expected to occur.**
 - 2) **The RD personnel shall notify the appropriate RD environmental staff member, the Federal Preservation Officer (FPO), and State Historic Preservation Office (SHPO) immediately. Indian tribe(s) or Native Hawaiian Organization (NHOs) that have an interest in the area of discovery shall be contacted immediately. The SHPO may require additional tribes or NHOs who may have an interest in the area of discovery also be contacted. The notification shall include an assessment of the discovery provided by the SOI qualified professional archeologist.**
 - 3) **When the discovery contains burial sites or human remains, the Contractor shall immediately notify the appropriate RD personnel who will contact the RD environmental staff member, FPO, and the SHPO. The relevant law enforcement authorities shall be immediately contacted by onsite personnel to reduce delay times, in accordance with tribal, state, or local laws including 36 CFR Part 800.13; 43 CFR Part 10, Subpart B; and the Advisory Council on Historic Preservation's Policy Statement Regarding treatment of Burial Sites, Human Remains, or Funerary Objects (February 23, 2007).**
 - 4) **When the discovery contains burial sites or human remains, all construction activities, including vehicular traffic shall stop within a 100 ft. radius of the discovery and barriers shall be established. The evaluation of human remains shall be conducted at the site of discovery by a SOI qualified professional. Remains that have been removed from their primary context and where that context may be in question may be retained in a secure location, pending further decisions on treatment and disposition. RD may expand this radius based on the SOI professional's assessment of the discovery and establish broader barriers if further subsurface burial sites, or human remains can reasonably be expected to occur. RD, in consultation**

with the SHPO and interested tribes or NHOs, shall develop a plan for the treatment of native human remains.

- 5) Work may continue in other areas of the undertaking where no historic properties, burial sites, or human remains are present. If the inadvertent discovery appears to be a consequence of illegal activity such as looting, the onsite personnel shall contact the appropriate legal authorities immediately if the landowner has not already done so.
 - 6) Work may not resume in the area of the discovery until a notice to proceed has been issued by RD. RD shall not issue the notice to proceed until it has determined that the appropriate local protocols and consulting parties have been consulted.
 - 7) Inadvertent discoveries on federal and tribal land shall follow the processes required by the federal or tribal entity.
4. **Endangered Species** – Contractor shall comply with the Endangered Species Act, which provides for the protection of endangered and/or threatened species and critical habitat. Should any evidence of the presence of endangered and/or threatened species or their critical habitat be brought to the attention of Contractor, Contractor will immediately report this evidence to Owner and a representative of Agency. Construction shall be temporarily halted pending the notification process and further directions issued by Agency after consultation with the U.S. Fish and Wildlife Service.
 5. **Mitigation Measures** – The following environmental mitigation measures are required on this Project: [Insert mitigation measures from the Letter of Conditions here].

18.11 *Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708)*

- A. Where applicable, for contracts awarded by the Owner in excess of \$100,000 that involve the employment of mechanics or laborers, the Contractor will comply with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, the Contractor will compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic will be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

18.12 *Debarment and Suspension (Executive Orders 12549 and 12689)*

- A. A contract award (see 2 CFR 180.220) must not be made to parties listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), “Debarment and Suspension.” SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

18.13 ***Procurement of recovered materials***

- A. The Contractor will comply with 2 CFR Part 200.322, "Procurement of recovered materials."

18.14 ***Agency: The USDA Rural Utilities Service***

- A. The Project is financed in whole or in part by USDA Rural Utilities Service pursuant to the Consolidated Farm and Rural Development Act (7 USC Section 1921 et seq.). The Rural Utilities Service programs are administered through the USDA Rural Development offices; therefore, the Agency for these documents is USDA Rural Development.

18.15 ***Domestic Preference***

- A. **Build America, Buy America Act (BABA).** All Iron and Steel Products, Manufactured Products, and Construction Materials used in this project must comply with the Build America, Buy America Act (BABA) requirements mandated by Title IX of the Infrastructure Investment and Jobs Act (IIJA), Pub. L. 117-58, §§ 70901-70953, in accordance with 2 CFR 184. BABA does not apply to aggregates, sand, and cement.
- B. All materials and products incorporated into the Work must meet Domestic Preference requirements.
- C. **Manufacturer's Certification**
1. **Definition:** Documentation provided by the manufacturer stating that Domestic Preference requirements have been satisfied for all provided items. Manufacturers' Certifications must include (at a minimum): specific list of products (using common names) associated with the certificate, location of the final manufacturing, signature of the manufacturer's representative, and a reference to the Domestic Preference statute.
 2. A Manufacturer's Certification must be provided for each item in every submittal unless the item is covered by an approved waiver.
 3. Contractor must check that the Manufacturers' Certifications include the information required in the definition above.
 4. Contractor must have copies of the Manufacturer's Certifications accessible at the site.
- D. Installation of products and materials that are non-compliant with Domestic Preference requirements shall be considered defective work. Installation of products and materials that are not accompanied by acceptable manufacturer's certification, and are not subject to a waiver, shall also be considered defective work.
- E. By submitting an Application for Payment, based in whole or in part on furnishing equipment or materials, Contractor certifies that such equipment and materials are compliant with Domestic Preference requirements.
- F. **Contractor's Certification:**
1. **Definition:** A certification submitted by Contractor that, to the best of the Contractor's knowledge and belief, all Work complies with Domestic Preference requirements.
 2. Contractor must submit Contractor's Certification prior to final payment.

G. The following waivers apply to this Contract:

1. BABA De Minimis, Small Grants and Minor Components

- a. For projects utilizing a De Minimis waiver, Contractor shall maintain an itemized list of non-domestically produced components and ensure that the cost is less than 5% of total project cost up to a maximum of \$1,000,000 waived.
- b. [add project specific waivers as applicable].

18.16 Telecommunications and Video Surveillance Services or Equipment Prohibitions

A. The telecommunication and video surveillance services and equipment prohibitions under 2 CFR 200.216 apply to this contract. This contract may not be used to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. Covered telecommunications equipment is:

1. Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
2. Video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
3. Telecommunications or video surveillance services provided by such entities or using such equipment.
4. Telecommunication or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

The Effective Date of the Contract is **[date to be inserted at the time of execution]**.

Owner:

Town of Northumberland, New Hampshire

(typed or printed name of organization)

By: _____
(individual's signature)

Date: _____
(date signed)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Attest: _____
(individual's signature)

Title: _____
(typed or printed)

Address for giving notices:

Designated Representative:

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Address:

Phone: _____

Email: _____
Agreement.)

Contractor:

(typed or printed name of organization)

By: _____
(individual's signature)

Date: _____
(date signed)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____
(individual's signature)

Title: _____
(typed or printed)

Address for giving notices:

Designated Representative:

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Address:

Phone: _____

Email: _____

License No.: _____
(where applicable)

State: _____

St. Lawrence & Atlantic Railroad Insurance Requirements

General Liability Insurance:

General Liability, Automobile Liability and Umbrella/Excess Liability provides additional insured status to the certificate holder and any other party(ies) specified in or required by written contract between the named insured and the certificate holder.

All policies include a blanket automatic waiver of subrogation endorsement that provides this feature in favor of the certificate holder and any other party(ies) specified in or required by written contract between the named insured and the certificate holder.

- General Liability insurance must meet the minimum requirements of \$2M per occurrence and \$6M aggregate per the terms of the attached agreement.
- Automobile Insurance must meet the minimum requirements of \$1M bodily injury and property damage per occurrence.
- The General Liability certificate is required to show proof of **CG2417 or its equivalent**. (Contractual Liability Railroads)
- Evidence of Workers Compensation must be provided on certificate.
- Certificate Holder naming St. Lawrence and Atlantic Railroad Company, and all its affiliated and parent companies and respective shareholders, directors, officers, and employees of each

Railroad Protective Liability Insurance:

- A current certificate of Railroad Protective Liability insurance naming St. Lawrence and Atlantic Railroad Company as named "Insured". The minimum limits are \$2M per occurrence and \$6M aggregate. If the contractor does not carry a policy of Railroad Protective Liability insurance, this coverage can be purchased through the railroad at the cost of \$1,150 for 60 days. An application for this coverage is attached.

Crystal Galbreath

Manager - Real Estate Utilities and Access

Genesee & Wyoming Railroad Services, Inc.

13901 Sutton Park Drive South

Suite 270

Jacksonville, Florida 32224

904-596-7782

crystal.galbreath@gwrr.com

Railroad Protective Liability Application

Named Insured Railroad: St Lawrence and Atlantic Railroad Company
Address: 13901 Sutton Park Dr., S., Ste. 270, Jacksonville, FL 32224

Name of Designated Contractor: _____
Address: _____

Contractors GL Limits: _____
Carrier: _____

Contractors Umbrella Limits: _____
Carrier: _____

Will the Contractor be holding the Railroad Harmless? Yes No

Will the Railroad be listed as an "Additional Insured" on the Contractor's CGL and Umbrella policies? Yes No

Will the Contractor's GL & Umbrella policies remove the contractual exclusion for work within 50' of a Railroad? Yes No

Railroad Protective Limits Required: yes
Per Occurrence: \$2M Aggregate: \$6M

Name & Address for Whom Work is Being Performed: _____

Description of Job: _____

Approximate Length of Job (years/months): _____

Total Cost of Job: _____ Cost of Work Within 50' of Tracks: _____

Daily Train Traffic: _____ Freight: _____ Passenger: _____

Will there be any Railroad flagmen/supervisors? Yes No

Will there be any other work performed by any railroad employees? Yes No

If yes, please describe: _____

Will there be any Railroad equipment assigned to the contractor? Yes No

If yes, please describe: _____

Signature: _____ Date: _____

Printed Name: _____

Title: _____



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
DATE

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Your Insurance Company	CONTACT NAME:	
	PHONE (A/C, No. Ext):	FAX (A/C, No):
	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	NAIC #
INSURED Your Company (must match name on agreement)	INSURER A :	Insurer Name
	INSURER B :	Insurer Name
	INSURER C :	Insurer Name
	INSURER D :	Insurer Name
	INSURER E :	
	INSURER F :	

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Policy Number	Effective Date	Expiration Date	EACH OCCURRENCE \$ 2,000,000
	DAMAGE TO RENTED PREMISES (Ea occurrence) \$						
	GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						MED EXP (Any one person) \$
							PERSONAL & ADV INJURY \$
							GENERAL AGGREGATE \$ 6,000,000
							PRODUCTS - COMP/OP AGG \$
							\$
B	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Policy Number	Effective Date	Expiration Date	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	BODILY INJURY (Per person) \$						
							BODILY INJURY (Per accident) \$
							PROPERTY DAMAGE (Per accident) \$
							\$
D	UMBRELLA LIAB EXCESS LIAB DED RETENTION \$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Umbrella Policy may be used to meet CGL requirements. If used, policy must "follow form"			EACH OCCURRENCE \$
	OCCUR CLAIMS-MADE						AGGREGATE \$
							\$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	<input type="checkbox"/>	N/A	Policy Number	Effective Date	Expiration Date	PER STATUTE OTH-ER
	E.L. EACH ACCIDENT \$ 1,000,000						
							E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
							E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Agreement # _____ Commercial General Liability, [Umbrella/Excess Liability], and Auto Liability policies include additional insured status to the certificate holder, and any other party(ies) specified in or required by written contract. Commercial General Liability, [Umbrella/Excess Liability], Worker's Comp, and Auto Liability policies include a waiver of subrogation endorsement in favor of the certificate holder, and any other party(ies) specified in or required by written contract. [CG2417 Endorsement is included under Commercial General Liability policy or No exclusion to work within 50' of railroad property.][Umbrella/Excess policy follows form to Commercial General Liability.]

CERTIFICATE HOLDER**CANCELLATION**

St. Lawrence & Atlantic Railroad Company, and all its affiliated and parent companies and respective shareholders, directors, officers, and employees of each c/o Genesee & Wyoming Railroad Services, Inc. 13901 Sutton Park Drive, South, Suite 270 Jacksonville, FL 32224	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE agent signature

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CONTRACTOR RIGHT OF ENTRY LICENSE AGREEMENT

THIS AGREEMENT (the “Agreement”) is made as of _____, 20___, (the “Effective Date”), by and between St. Lawrence & Atlantic Railroad Company (“Railroad”) and Town of Northumberland (“Licensee”).

WITNESSETH:

WHEREAS, Licensee has submitted a written request or application to Railroad requesting permission to enter Railroad’s property at or near the location specified in Section 1 below for the limited purpose of performing certain work; and

WHEREAS, Railroad is willing to grant to Licensee the limited right and permission to enter upon such property for the limited purpose of performing such work in accordance with the terms provided herein.

NOW THEREFORE, in consideration of these promises, the Agreement herein, and other good and valuable consideration the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

Section 1. LOCATION/PAYMENT/WORK PRACTICES:

1.1 Railroad hereby conveys to Licensee the limited right and permission to enter upon the Railroad’s property located at or near Milepost 122.0334, BERLIN Subdivision, Latitude: 44.601092, Longitude: -71.507805 located in GROVETON, in the County of COOS, State of NH as reflected on the map attached hereto as Exhibit A and incorporated herein by reference (the “Property”) for the purpose of Licensee, through its employees, agents or contractors to INSTALL UNDERGROUND SANITARY SEWER - 600’ PARALLELISM TO REPLACE EXISTING (the “Work”); and

1.2 Upon payment of a fee referenced in Section 11 herein, Railroad hereby grants to Licensee, the right and permission to enter upon Railroad’s Property for the purpose of performing the Work, subject to the terms, conditions and provisions set forth in this Agreement.

1.3 The Work shall be performed at the entire cost and expense of Licensee, in accordance with good and sound engineering practices, to the satisfaction of Railroad’s Chief Engineer, or his duly authorized representative (the “Representative”), and in a manner to avoid accident, damage or harm to persons or property and delays to or interference with the operations of Railroad.

Section 2. PRIOR NOTICE/FLAGGING/OTHER CONDITIONS.

2.1 Licensee or Licensee’s contractor shall notify the Representative at least ten (10) business days before proceeding with any phase of the Work on the Property and shall abide by the instructions of the Representative concerning the safety of the Railroad. All persons entering the Property pursuant to the permission granted herein shall comply with and perform the Work in accordance with the following policies:

- a) Genesee & Wyoming Inc.’s Contractor Safety Rules, available at: <https://www.gwrr.com/wp-content/uploads/2021/05/GWI-Contractor-Safety-Rules.pdf>; and
- b) Genesee & Wyoming Inc.’s Code of Ethics and Conduct, available at: gwrr.com/about_us/code-of-ethics

The following Personal Protective Equipment (“PPE”) must be worn at all times on the Property: Hard hats, safety footwear, certified eye protection with side shields and approved high-visibility work wear. Additional forms of PPE may be required under certain circumstances as specified in the aforesaid Contractor Safety Rules or as required by the Representative.

2.2 Railroad shall furnish such personnel, flagman or watchman which, in Railroad's sole discretion, may be necessary to protect the facilities and traffic of Railroad during the performance of the Work. If flagging or other special protective or safety measures are performed by Railroad, Railroad will invoice Licensee for such expenses incurred by Railroad based on the current fee schedule annexed hereto as Exhibit D. Licensee shall pay such invoices within thirty (30) days of Licensee's receipt of billing. If Railroad performs any flagging, or other special protective or safety measures are performed by Railroad, Licensee agrees that Licensee is not relieved of any of its responsibilities or liabilities set forth in this Agreement. The Licensee or its contractor shall reimburse Railroad promptly for the actual cost of said services, including all applicable surcharges, upon receipt of bill or bills therefor.

2.3 Unless Prior arrangements have been made with the Chief Engineer or his representative, Licensee shall not place or operate equipment at a distance of less than fifty (50) feet from the center of track, nor perform any Work at a distance of less than fifty (50) feet from the center of Railroad's track. Further, no equipment shall be moved across the Railroad's track(s) except at an established public crossing, unless prior arrangements have been made with the Chief Engineer or his Representative. All reasonable precautions must be taken by Licensee to avoid interference with and/or damage to Railroad's facilities during the course of the Work.

2.4 Prior to entering upon the Property, Licensee agrees to comply with **RAILROAD'S ROADWAY WORKER PROTECTION TRAINING POLICY** as set forth in Exhibit B, attached hereto and incorporated herein by reference, if such training is applicable as determined in the sole discretion of Railroad.

2.5 The permission herein granted is subject to all existing leases, licenses and occupancies of the Property by third parties. Licensee acknowledges that, in executing this Agreement, Railroad acts on its own behalf only and has no authority to act, and does not claim to act, on behalf of any other entity or person with respect to any right any such other entity or person may have to object to this Agreement. Licensee shall secure the consent, and protect the facilities, of each such third-party occupier of the Property.

2.6 Licensee shall implement and enforce a safety program conforming to all applicable requirements of federal, state and local laws, rules and regulations.

Section 3. LEGAL COMPLIANCE.

Licensee expressly agrees, at its own cost and expense, to comply and cause its agents, employees and contractor(s) to comply with all applicable ordinances, rules, regulations, requirements and laws of any governmental authority (state, federal or local) having jurisdiction over the Work or Licensee's activities, including the location, contact, excavation and protection regulations of the Occupational Safety and Health Act and state "One Call" - "Call Before You Dig" or similar requirements. Licensee shall indemnify, defend and save harmless Railroad, its parents, affiliates and subsidiaries, and the respective shareholders, directors, officers and employees of each (hereinafter collectively the "Railroad Indemnitees"), from and against, and shall pay, all expenses, damages, penalties, and claims, including without limitation reasonable counsel fees, that may arise from, or be imposed because of the failure of Licensee to comply with this Section.

Section 4. LIABILITY/INDEMNITY.

4.1 Licensee hereby assumes risk of and agrees to indemnify, defend, protect and save the Railroad Indemnitees harmless from and against (a) injury to or death of any person or persons whomsoever, including but not limited to the agents, employees or contractor(s) of the parties hereto, and (b) the loss or damage to any property whatsoever, including property claims, demands, suits, judgments or expenses incurred in connection therewith, resulting from or arising out of the acts or omissions of Licensee, its agents, employees or contractor(s), or resulting from, arising out of, or occurring in connection with the entry or presence of Licensee, its agents, employees or contractor(s) on the Property, or resulting from, arising out of, or occurring in connection with the

performance or execution of the Work performed under this Agreement or incidental thereto, regardless of any negligence on the part of Licensee or Railroad. THE INDEMNITY PROVIDED IN THIS SECTION 4 IS SPECIFICALLY MEANT TO INCLUDE INDEMNITY OF THE RAILROAD INDEMNITEES FOR THEIR OWN ORDINARY NEGLIGENCE, EVEN IF THE INJURY OR DAMAGE IS CAUSED ENTIRELY BY THE ORDINARY NEGLIGENCE OF THE RAILROAD INDEMNITEES AND THERE IS NO NEGLIGENCE ON THE PART OF THE LICENSEE. LICENSEE'S INDEMNITY OBLIGATIONS IN THIS SECTION 4 SHALL NOT BE LIMITED IN ANY WAY BY ANY LIMITATION ON THE AMOUNT OR TYPE OF DAMAGES, COMPENSATION OR BENEFITS AVAILABLE UNDER WORKERS' OR WORKMEN'S COMPENSATION ACTS, DISABILITY ACTS OR EMPLOYEE BENEFITS ACTS.

4.2 IN NO EVENT UNDER THIS AGREEMENT WILL THE RAILROAD INDEMNITEES HAVE ANY LIABILITY FOR INDIRECT, SPECIAL, PUNITIVE, INCIDENTAL OR CONSEQUENTIAL DAMAGES. ADDITIONALLY, THE TERM "RAILROAD INDEMNITEES" AS USED IN THIS SECTION 4 SHALL INCLUDE ANY OTHER RAILROAD COMPANY THAT MAY BE LAWFULLY OPERATING UPON AND OVER THE TRACKS OR THE TRACKS CROSSING OR ADJACENT TO THE TRACKS, AND THE OFFICERS, AGENTS, INVITEES AND EMPLOYEES THEREOF.

Section 5. INSURANCE.

Licensee agrees to comply with the **INSURANCE REQUIREMENTS FOR CONTRACTOR RIGHT-OF-ENTRY LICENSE AGREEMENTS** attached hereto as Exhibit C and incorporated herein by reference and shall provide the required Certificate of Insurance to Railroad with return of the signed duplicate original of this Agreement prior to the commencement of the Work.

Section 6. NOTIFICATION.

Licensee shall promptly notify the Chief Engineer of any loss, damage, injury or death arising out of or in connection with the Work.

Section 7. RESTORATION.

Upon completion of the Work or the termination or expiration of this Agreement, Contractor shall promptly remove from the Property all tools, equipment and materials placed thereon by Contractor. Contractor shall restore the Property to the same state and condition as when Contractor first entered thereon and shall leave the Property in a condition satisfactory to the Chief Engineer or the Representative.

Section 8. TERM/TERMINATION.

This Agreement and the permission conferred, and the license granted by it does not constitute a grant of permanent easement and shall terminate upon completion of the Work or at midnight 60 calendar days following the Effective Date, whichever occurs first, unless extended in writing by Railroad. Notwithstanding the foregoing, Railroad shall have the right to terminate this Agreement and the license granted hereunder immediately if Licensee defaults on any of the terms and/or conditions set forth herein.

Section 9. COMPLIANCE AND DOCUMENTATION.

Licensee agrees, and shall cause its agents, employees and contractor(s), to (a) understand and comply with the terms and conditions of this Agreement, (b) carry a copy of this Agreement at all times while on the Property, and (c) promptly present the copy of this Agreement to any employee of Railroad upon request.

Section 10. RAILROAD CONTACT INFORMATION.

The Railroad's Chief Engineer is:

Andre Lapalme
9001, boul, de l'Acadie, Bureau 600
Montreal, QC H4N 3H5

The Railroad's Representative is:

Signal Maintainer, Christopher Fletcher
225 E. Eighth Drive, Suite 204
Auburn, ME 04210
802.624.6184

Railroad **EMERGENCY** Phone Number: **(800) 979-4958**

Reference Location: **St. Lawrence & Atlantic Railroad Company Subdivision BERLIN Milepost 122.0334**

Section 11. FEE.

Upon execution of this Agreement, Licensee shall pay Railroad the sum of \$1750 toward the cost of preparing this Agreement and for the privileges granted to the Licensee.

Section 12. NON-WAIVER.

If either party fails to enforce its respective rights under this Agreement, or fails to insist upon the performance of the other party's obligations hereunder, such failure shall not be construed as a permanent waiver of any rights or obligations in this Agreement.

Section 13. APPLICABLE LAW.

This Agreement shall be governed by and construed under the laws of the State of NH, without regard to the choice of law provisions thereof.

Section 14. ASSIGNMENT.

Licensee shall not assign this Agreement without the prior written consent of Railroad, which consent may be granted or withheld at Railroad's sole discretion. This Agreement shall be binding upon the parties and their respective successors and permitted assigns.

Section 15. INTERPRETATION/SEVERABILITY.

To the maximum extent possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by, or held to be invalid under, applicable law, such provision shall be ineffective solely to the extent of such prohibition or invalidity, and this shall not invalidate the remainder of such provision or any other provision of this Agreement.

Section 16. COUNTERPARTS.

This Agreement may be executed in multiple counterparts, each of which shall, for all purposes, be deemed an original but which together shall constitute one and the same instrument, and counterparts of this Agreement may also be exchanged electronically and any electronic facsimile of any party's signature shall be deemed to be an original signature for all purposes.

Section 17. HEADINGS.

The headings of the sections of this Agreement are inserted for convenience only and are not intended to govern, limit or aid in the construction of any term or provision of this Agreement.

Section 18. CONSTRUCTION OF TERMS.

The terms of this Agreement have been arrived at after mutual negotiation and, therefore, it is the intention of the Parties that its terms not be construed against any of the Parties by reason of the fact that it was prepared by one of the Parties.

Section 19. CONFIDENTIALITY.

The parties shall not disclose the terms of this Agreement to a third party (a) other than as required by law so long as such party required to disclose the terms of this Agreement under applicable law provides the other party with prior written notice of such requirement, or (b) as otherwise agreed in writing between the parties. Notwithstanding the foregoing, the parties may disclose the terms and conditions of the Agreement to (1) a parent, subsidiary or affiliated company; or (2) to their lawyers and consultants, including but not limited to its auditors, provided that all such parties agree to maintain the confidentiality of such information in accordance with the terms of this provision. If any party violates this paragraph, any adversely affected party may cancel this Agreement without penalty and exercise any available remedies under applicable law.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the Effective Date.

RAILROAD:
ST. LAWRENCE & ATLANTIC RAILROAD COMPANY

LICENSEE:
TOWN OF NORTHUMBERLAND

By: _____

By: _____

Name:

Name:

Its:

Its:

EXHIBIT A


DESCRIPTION OF PROPERTY

TOWN OF NORTHUMBERLAND

SEWER, WATER, DRAINAGE AND ROADWAY IMPROVEMENTS


FUNDING: DWSRF 1781010-02, DWGT-106, 1781010-02 ARPA & USDA RUS WEP

NORTHUMBERLAND, NEW HAMPSHIRE
DRAINAGE AND SANITARY SEWER CLEANING AND UV CIPP LINING
OCTOBER 2024



NORTHUMBERLAND

NEW HAMPSHIRE



PROJECT LOCATION

OWNER:
TOWN OF NORTHUMBERLAND
2 STATE STREET
GROVETON, NH 03582
(603) 636-1450

ENGINEER/SURVEYOR:
ho iz'ns
Engineering
34 SCHOOL STREET
LITTLETON, NH 03561
(603) 444-4111

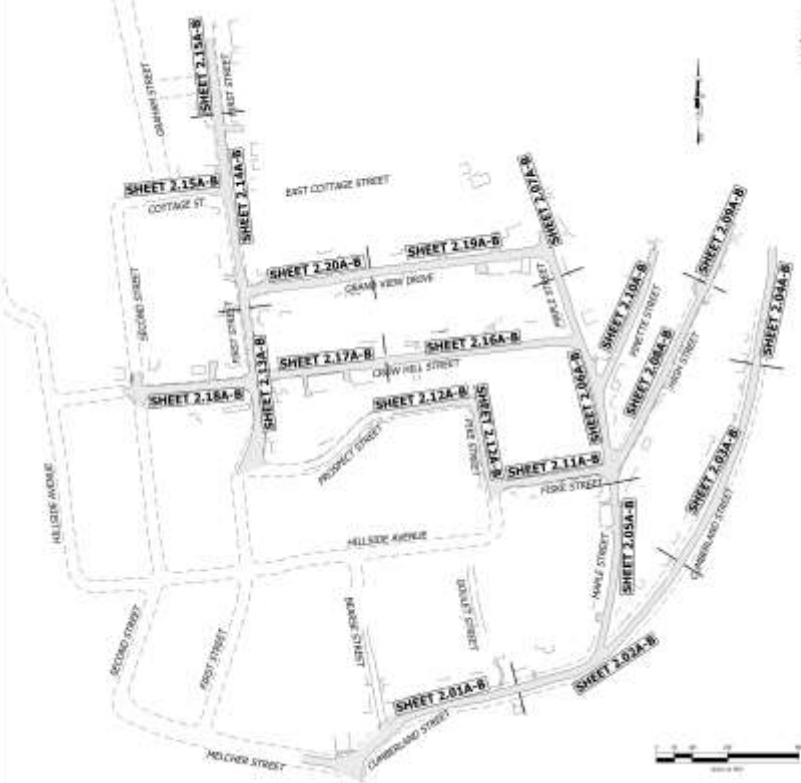
SHEET INFO:

1.8	COVER
1.1	OVERVIEW, GENERAL NOTES AND LEGEND
1.01A-1.03A	CUMBERLAND STREET PLAN AND SEWER PROFILES
2.01A	HAILE STREET PLAN AND SEWER PROFILES

LOCATION PLAN
SCALE: 1" = 100'

FOR REVIEW
NOT FOR CONSTRUCTION

OCTOBER 03, 2024



LEGEND


—	Proposed Sewer Line	—	Proposed Water Line
—	Proposed Storm Sewer Line	—	Proposed Gas Line
—	Proposed Fire Line	—	Proposed Electric Line
—	Proposed Telephone Line	—	Proposed Cable TV Line
—	Proposed Fiber Optic Line	—	Proposed Other Utility Line
—	Proposed Easement	—	Proposed Right-of-Way
—	Proposed Street	—	Proposed Sidewalk
—	Proposed Driveway	—	Proposed Walkway
—	Proposed Utility Pole	—	Proposed Manhole
—	Proposed Catch Basin	—	Proposed Valve
—	Proposed Meter	—	Proposed Sign
—	Proposed Light Pole	—	Proposed Tree
—	Proposed Tree	—	Proposed Building
—	Proposed Fence	—	Proposed Other Structure

GENERAL NOTES

1. ALL UTILITIES SHOWN ARE BASED ON RECORD DRAWINGS AND FIELD SURVEY.
2. THE TOWN OF NORTHUMBERLAND IS NOT RESPONSIBLE FOR THE ACCURACY OF THE UTILITIES SHOWN ON THIS PLAN.
3. THE USER OF THIS PLAN SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION.
4. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE UNLESS OTHERWISE NOTED.
5. ALL UTILITIES SHALL BE PROTECTED BY A MINIMUM OF 18" OF GRANULAR FILL.
6. ALL UTILITIES SHALL BE PROTECTED BY A MINIMUM OF 18" OF GRANULAR FILL.
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20. ALL UTILITIES SHALL BE PROTECTED BY A MINIMUM OF 18" OF GRANULAR FILL.

**FOR REVIEW
NOT FOR CONSTRUCTION**

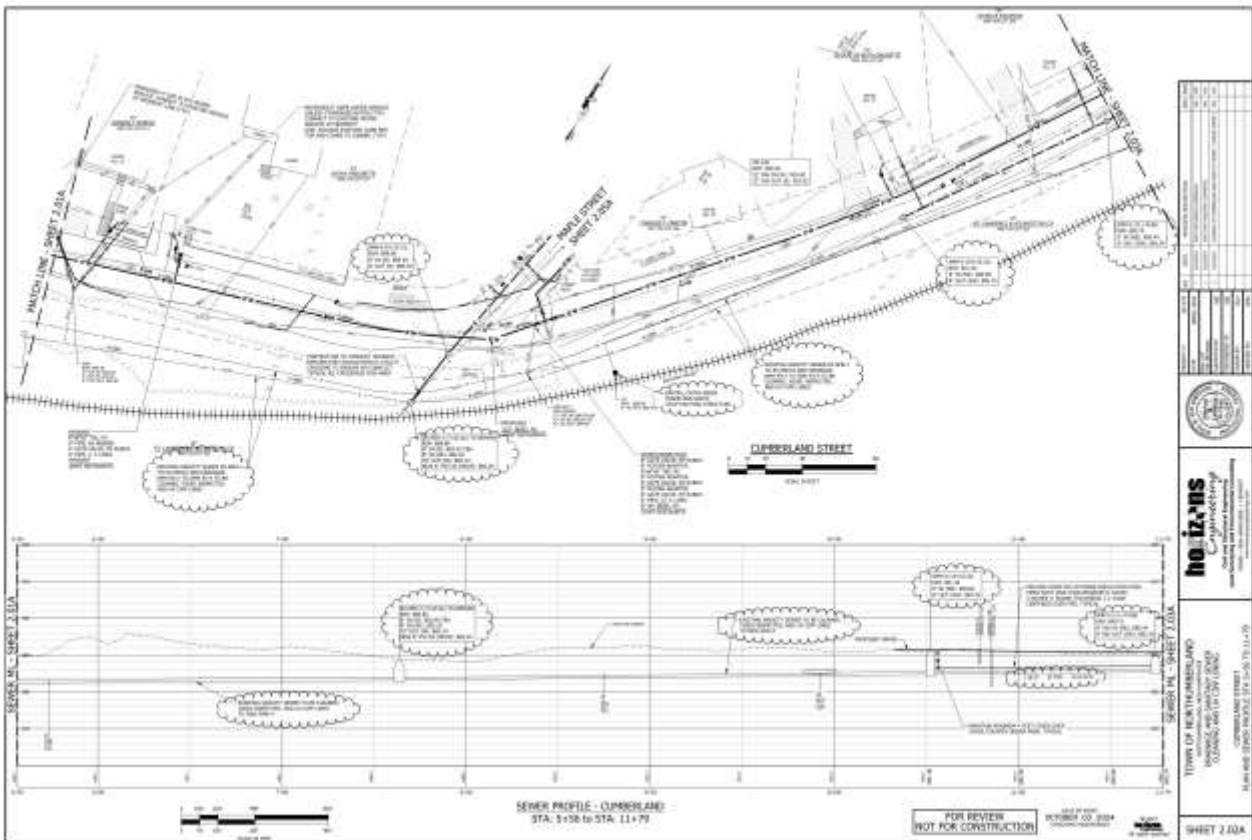
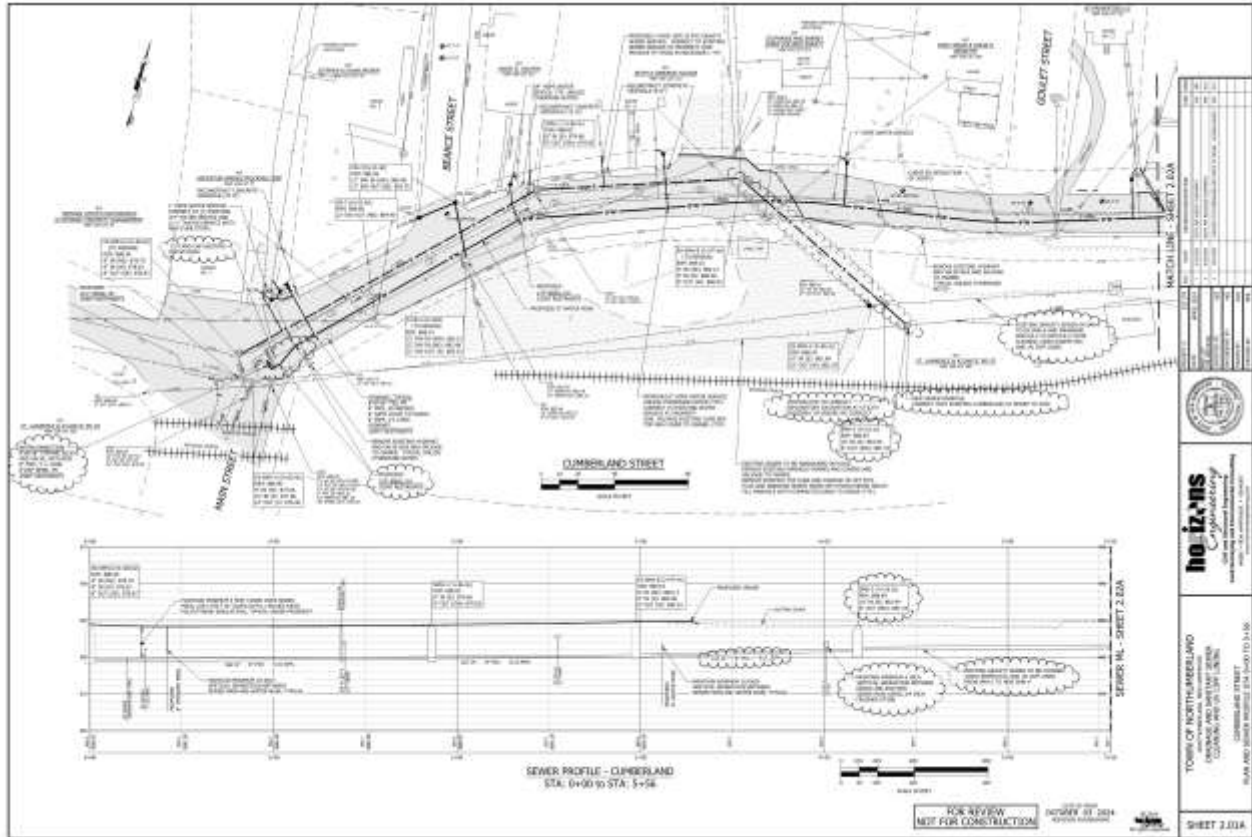
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ho iz'ns
Engineering
34 SCHOOL STREET
LITTLETON, NH 03561
(603) 444-4111

TOWN OF NORTHUMBERLAND
2 STATE STREET
GROVETON, NH 03582
(603) 636-1450

SHEET 1.1



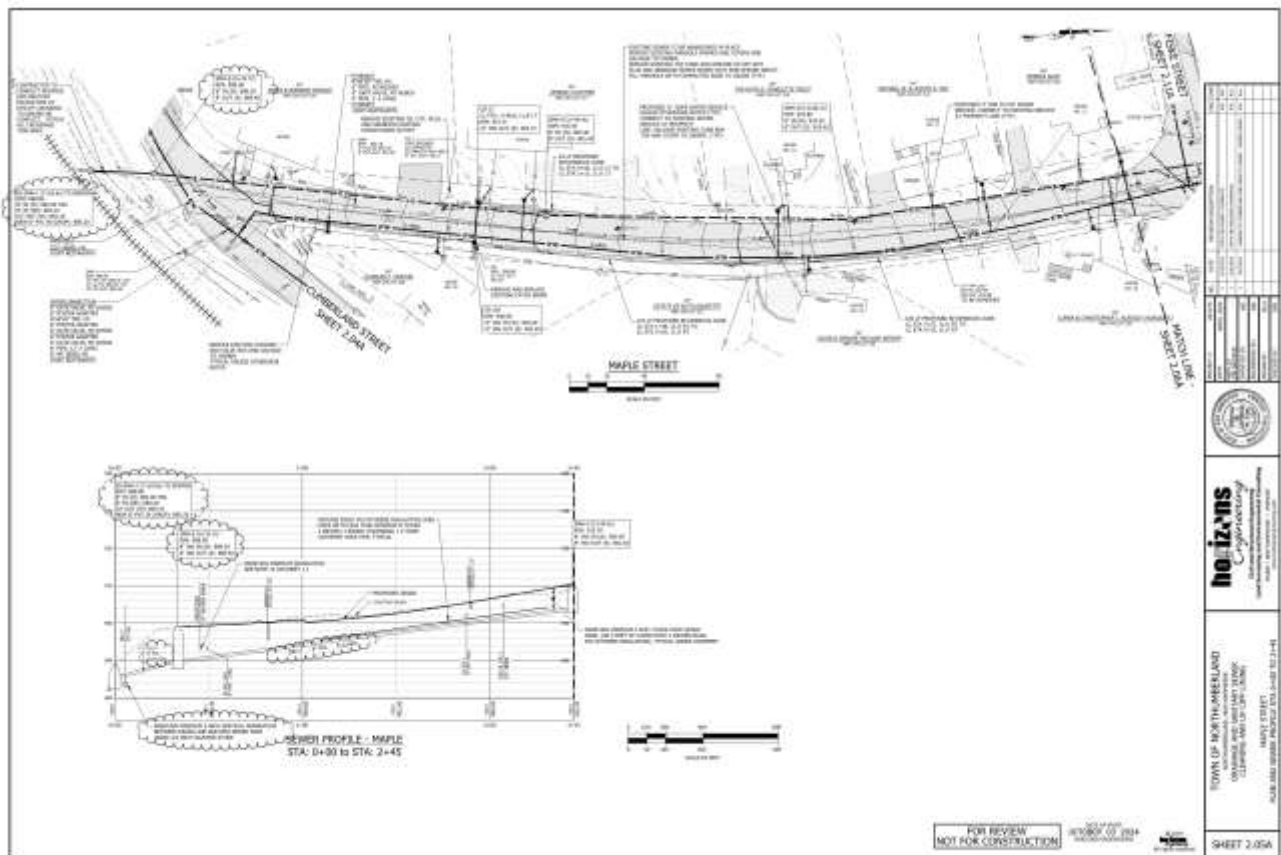
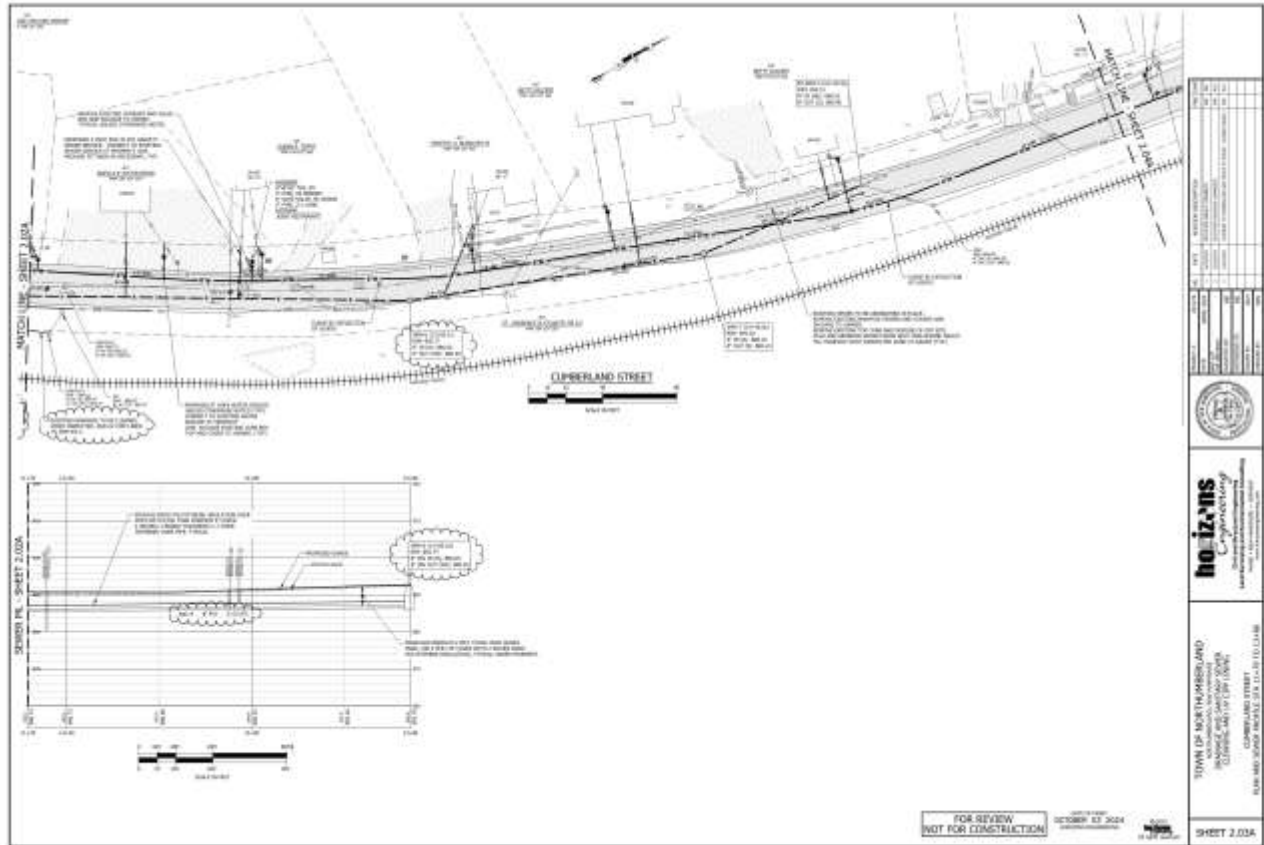


EXHIBIT B

ROADWAY WORKER PROTECTION TRAINING POLICY

A. In order to maintain the integrity and security of the Property and Railroad's operations, prior to each employee of Licensee and its contractor entering upon the Property (each a "Licensee Applicant"), Licensee shall cause its employees, and shall cause its contractor to require its employees, to successfully complete the Genesee & Wyoming Inc. Roadway Worker Training Program (the "Program") on an annual basis to be administered by Roadway Worker Training, Inc. (the "Program Administer"), at the sole cost and expense of the Licensee or contractor, as the case may be (the current cost of which is \$75.00 USD per Licensee Applicant). The Program shall be available via the internet and instructions to access the Program set forth in Paragraph K.

B. Upon completion of the Program, the Licensee Applicant shall be required to satisfactorily complete a test administered by the Program Administer. The Program Administer shall be responsible for scoring such test and verifying whether the Licensee Applicant satisfies the requirements of Railroad to perform work on the Property. Any Licensee Applicant who fails to achieve a satisfactory score or who refuses to complete such test shall not be permitted to enter the Property.

C. When a satisfactory score is achieved by the Licensee Applicant, the Program Administrator shall furnish a certificate (the "Certificate") to the business address of Licensee or its contractor, as the case may be, for distribution to the Licensee Applicant. Until receipt of the Certificate from the Program Administrator, the Licensee Applicant shall print a temporary certificate authorizing the Licensee Applicant's access to the Property.

D. For the avoidance of doubt, satisfactory completion of the Program as evidenced by receipt of a Certificate does not in itself grant permission to the Licensee Applicant to enter the Property, except as expressly permitted under and in strict compliance with the terms of the Agreement.

E. The Licensee Applicant shall be responsible for carrying the Certificate at all times when on the Property.

F. All communications regarding Licensee Applicants, the Program, or any other matters described in this Exhibit B should be addressed to:

Kyle Baker
GWI Safety Department
13901 Sutton Park Drive South, Suite 270
Jacksonville, FL 32224
kyle.baker@gwrr.com
(904) 999-3356

G. Licensee and its contractor shall be responsible for managing and recovering Certificates from their employees who resign, retire or are terminated.

H. Notwithstanding the receipt of a Certificate by a Licensee Applicant, Railroad reserves the right to reject any Licensee Applicant from entering upon the Property in Railroad's sole discretion in accordance with:

- i) Genesee & Wyoming Inc. Code of Ethics and Conduct,
- ii) Genesee & Wyoming Inc. Contractor Safety Rules, or
- iii) upon failure to comply with the terms and conditions of the Agreement and all applicable laws.

I. To the extent that any portion of the requirements set forth in this Exhibit B violates any law, ordinance, statute or regulation that portion shall be ignored and the Licensee or contractor, as the case may be, shall comply with all remaining portions of Railroad's Roadway Protection Training Policy, the Program or the related application process.

J. Licensee or its contractor, as the case may be, shall be primarily responsible for enforcement of the Program; *provided, however*, that both Railroad and the Federal Railroad Administration reserve the right to audit Licensee and its contractor, as the case may be, for compliance with the Program and Railroad's Roadway Protection Training Policy. Should a Licensee or its contractor, as applicable, be found out of compliance, any and all fines or penalties incurred by Railroad due to such non-compliance shall be the sole obligation of the Licensee.

K. To access the G&W Roadway Worker Protection Training for Railroad Contractors Course on the RWT On-Line please follow these instructions:

- Start at website:
<https://www.bistrainer.com/store/railpros-store/productdetails/genesee-and-wyoming-roadway-worker-protection-for-contractors-training>
- Click on the "On-Line Courses" button
- Select the G&W course by clicking on the course name
- On the right hand side of the page select "New User Registration"
- Fill out all of the fields on the registration page and submit
- You will receive a username and password via email
- After receiving the username and password go back to the On-Line Courses page and select the G&W course again
- Complete the registration process and training.

EXHIBIT C

INSURANCE REQUIREMENTS FOR RIGHT-OF-ENTRY LICENSE AGREEMENT

(a) The Licensee shall, at its own cost and expense, prior to entry onto the Property or the commencement of any work pursuant to this Agreement, procure and thereafter maintain throughout the term of this Agreement the following types and minimum amounts of insurance:

(i) The Licensee shall maintain Public Liability or Commercial General Liability Insurance (“CGL”), including Contractual Liability Coverage and CG 24 17 “Contractual Liability – Railroads” endorsement, covering all liabilities assumed by the Licensee under this Agreement, without exception or restriction of any kind, with a combined single limit of not less than Two Million Dollars (\$2,000,000) for Bodily Injury and/or Property Damage Liability per occurrence, and an aggregate limit of not less than Six Million Dollars (\$6,000,000) per annual policy period. Such insurance policy shall be endorsed to provide a **Waiver of Subrogation in favor of the Railroad Indemnitees** and shall name the **Railroad Indemnitees as Additional Insureds**. An Umbrella or Excess policy may be utilized to satisfy the required limits of liability under this section but must “follow form” and afford no less coverage than the primary policy.

(ii) The Licensee shall maintain Commercial Automobile Insurance for all owned, non-owned and hired vehicles with a combined single limit of not less than One Million Dollars (\$1,000,000) for Bodily Injury and/or Property Damage Liability per occurrence. Such insurance policy shall be endorsed to provide a **Waiver of Subrogation in favor of the Railroad Indemnitees** and shall name the **Railroad Indemnitees as Additional Insureds**.

(iii) The Licensee shall maintain Statutory Workers’ Compensation and Employers’ Liability Insurance for its employees (if any) with minimum limits of not less than One Million Dollars (\$1,000,000) for Bodily Injury by Accident, Each Accident; One Million Dollars (\$1,000,000) for Bodily Injury by Disease, Policy Limit; One Million Dollars (\$1,000,000) for Bodily Injury by Disease, Each Employee. Such insurance policy shall be endorsed to provide a **Waiver of Subrogation in favor of the Railroad Indemnitees**.

(iv) **Prior to construction within 50’ of the railroad tracks**, the Licensee shall purchase Railroad Protective Liability Insurance naming the Railroad Indemnitees as the named insured with limits of Two Million Dollars (\$2,000,000) each occurrence and Six Million Dollars (\$6,000,000) aggregate limit. The policy shall be issued on a standard ISO form CG 00 35 12 03 or, if available, obtain such coverage from the Railroad.

(b) The following general insurance requirements shall apply:

(i) The specified insurance policies must be affected under standard form policies underwritten by insurers licensed in the state where work is to be performed and carry a minimum Best’s rating of “A-” and size “Class VII” or better. The Railroad reserves the right to reject as inadequate any insurance coverage provided by an insurer that is rated less than the ratings specified in this section.

(ii) All coverages shall be **primary and non-contributory to any insurance coverages maintained by the Railroad Indemnitees**.

(iii) All insurance policies shall be endorsed to provide the Railroad with thirty (30) days prior written notice of cancellation, non-renewal or material changes.

(iv) The Licensee shall provide the Railroad with certificates of insurance evidencing the insurance coverages, terms and conditions required prior to commencement of any activities on or about the Property. Said certificates should reference this Contractor Right of Entry License Agreement by agreement date and description and shall be furnished to the Railroad at the following address, or to such other address as the Railroad may hereafter specify:

St. Lawrence & Atlantic Railroad Company
C/O Genesee & Wyoming Railroad Services, Inc.
13901 Sutton Park Drive South, Suite 270
Jacksonville, FL 32224

(v) If any policies providing the required coverages are written on a Claims-Made basis, the following shall apply:

- (1) The retroactive date shall be prior to the commencement of the work;
- (2) The Licensee shall maintain such policies on a continuous basis;
- (3) If there is a change in insurer or policies are canceled or not renewed, the Licensee shall purchase an extended reporting period of not less than three (3) years after the contract completion date; and
- (4) Licensee shall arrange for adequate time for reporting of any loss under this Agreement.

(c) The Railroad may require the Licensee to purchase additional insurance if the Railroad reasonably determines that the amount of insurance then being maintained by the Licensee is insufficient in light of all relevant factors. If the Licensee is required to purchase additional insurance, the Railroad will notify the Licensee. Failure of the Licensee to comply within thirty (30) days shall be considered a default subject to termination of the Agreement.

(d) Furnishing of insurance by the Licensee shall not limit the Licensee's liability under this Agreement but shall be additional security therefor.

(e) The above indicated insurance coverages shall be enforceable by any legitimate claimant after the termination or cancellation of this Agreement, or any amendment hereto, whether by expiration of time, by operation of law or otherwise, so long as the basis of the claim against the insurance company occurred during the period of time when the Agreement was in effect and the insurance was in force.

(f) Failure to provide the required insurance coverages or endorsements (including contractual liability endorsement) or adequate reporting time shall be at Licensee's sole risk.

(g) If contractors are utilized, the Licensee agrees to require all such contractors to comply with the insurance requirements of this Exhibit C.

EXHIBIT D

APPLICABLE EXHIBIT D PER RAILROAD REGION WILL BE PROVIDED BY FLAGGING
COORDINATOR UPON EXECUTION

NOTICE TO PROCEED

Owner: Town of Lisbon, NH Owner's Project No.: _____
Engineer: Horizons Engineering, Inc Engineer's Project No.: 21215
Contractor: _____ Contractor's Project No.: _____
Project: _____
Contract Name: _____
Effective Date of Contract: _____

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on **[date Contract Times are to start]** pursuant to Paragraph 4.01 of the General Conditions.

On that date, Contractor shall start performing its obligations under the Contract Documents. No Work will be done at the Site prior to such date.

In accordance with the Agreement:

The number of days to achieve Substantial Completion is **[number of days, from Agreement]** from the date stated above for the commencement of the Contract Times, resulting in a date for Substantial Completion of **[date, calculated from commencement date above]**; and the number of days to achieve readiness for final payment is **[number of days, from Agreement]** from the commencement date of the Contract Times, resulting in a date for readiness for final payment of **[date, calculated from commencement date above]**.

Before starting any Work at the Site, Contractor must comply with the following:

[Note any access limitations, security procedures, or other restrictions]

Owner: Town of Lisbon, NH
By (signature): _____
Name (printed): _____
Title: _____
Date Issued: _____
Copy: Engineer

PERFORMANCE BOND

<p>Contractor Name: [Full formal name of Contractor] Address <i>(principal place of business)</i>: [Address of Contractor's principal place of business]</p>	<p>Surety Name: [Full formal name of Surety] Address <i>(principal place of business)</i>: [Address of Surety's principal place of business]</p>
<p>Owner Name: Town of Northumberland, NH Mailing address <i>(principal place of business)</i>: 19 Main Street Groveton, New Hampshire 03582</p>	<p>Contract Description <i>(name and location)</i>: Water, Sewer, Drainage and Roadway Improvements Contract Price: [Amount from Contract] Effective Date of Contract: [Date from Contract]</p>
<p>Bond Bond Amount: [Amount] Date of Bond: [Date] <i>(Date of Bond cannot be earlier than Effective Date of Contract)</i> Modifications to this Bond form: <input type="checkbox"/> None <input type="checkbox"/> See Paragraph 16</p>	
<p>Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Performance Bond, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.</p>	
Contractor as Principal	Surety
_____ <i>(Full formal name of Contractor)</i>	_____ <i>(Full formal name of Surety) (corporate seal)</i>
By: _____ <i>(Signature)</i>	By: _____ <i>(Signature)(Attach Power of Attorney)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
Attest: _____ <i>(Signature)</i>	Attest: _____ <i>(Signature)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
<p><i>Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.</i></p>	

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond will arise after:
 - 3.1. The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice may indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 will be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement does not waive the Owner's right, if any, subsequently to declare a Contractor Default;
 - 3.2. The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
 - 3.3. The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.
4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 does not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.
5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
 - 5.1. Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;
 - 5.2. Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;
 - 5.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or
 - 5.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

- 5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
 - 5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.
6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment, or the Surety has denied liability, in whole or in part, without further notice, the Owner shall be entitled to enforce any remedy available to the Owner.
7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner will not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety will not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:
 - 7.1. the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
 - 7.2. additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and
 - 7.3. liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.
9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price will not be reduced or set off on account of any such unrelated obligations. No right of action will accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.
10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
11. Any proceeding, legal or equitable, under this Bond must be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and must be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit will be applicable.
12. Notice to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears.
13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted therefrom and provisions conforming to such

statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.

14. Definitions

- 14.1. *Balance of the Contract Price*—The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.
 - 14.2. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.
 - 14.3. *Contractor Default*—Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.
 - 14.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
 - 14.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.
15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
16. Modifications to this Bond are as follows: None

PAYMENT BOND

<p>Contractor Name: [Full formal name of Contractor] Address <i>(principal place of business):</i> [Address of Contractor's principal place of business]</p>	<p>Surety Name: [Full formal name of Surety] Address <i>(principal place of business):</i> [Address of Surety's principal place of business]</p>
<p>Owner Name: Town of Northumberland, NH Mailing address <i>(principal place of business):</i> 19 Main Street Groveton, New Hampshire 03582</p>	<p>Contract Description <i>(name and location):</i> Water, Sewer, Drainage and Roadway Improvements Contract Price: [Amount, from Contract] Effective Date of Contract: [Date, from Contract]</p>
<p>Bond Bond Amount: [Amount] Date of Bond: [Date] <i>(Date of Bond cannot be earlier than Effective Date of Contract)</i> Modifications to this Bond form: <input type="checkbox"/> None <input type="checkbox"/> See Paragraph 18</p>	
<p>Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Payment Bond, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.</p>	
Contractor as Principal	Surety
<i>(Full formal name of Contractor)</i>	<i>(Full formal name of Surety) (corporate seal)</i>
By: _____ <i>(Signature)</i>	By: _____ <i>(Signature)(Attach Power of Attorney)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
Attest: _____ <i>(Signature)</i>	Attest: _____ <i>(Signature)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
<p><i>Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.</i></p>	

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond will arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
5. The Surety's obligations to a Claimant under this Bond will arise after the following:
 - 5.1. Claimants who do not have a direct contract with the Contractor
 - 5.1.1. have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
 - 5.1.2. have sent a Claim to the Surety (at the address described in Paragraph 13).
 - 5.2. Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).
6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
 - 7.1. Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
 - 7.2. Pay or arrange for payment of any undisputed amounts.
 - 7.3. The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 will not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

8. The Surety's total obligation will not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond will be credited for any payments made in good faith by the Surety.
9. Amounts owed by the Owner to the Contractor under the Construction Contract will be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfying obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.
11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
12. No suit or action will be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit will be applicable.
13. Notice and Claims to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, will be sufficient compliance as of the date received.
14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted here from and provisions conforming to such statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.
15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.
16. Definitions
 - 16.1. *Claim*—A written statement by the Claimant including at a minimum:
 - 16.1.1. The name of the Claimant;
 - 16.1.2. The name of the person for whom the labor was done, or materials or equipment furnished;
 - 16.1.3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
 - 16.1.4. A brief description of the labor, materials, or equipment furnished;

- 16.1.5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
 - 16.1.6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
 - 16.1.7. The total amount of previous payments received by the Claimant; and
 - 16.1.8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.
- 16.2. *Claimant*—An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic’s lien or similar statute against the real property upon which the Project is located. The intent of this Bond is to include without limitation in the terms of “labor, materials, or equipment” that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor’s subcontractors, and all other items for which a mechanic’s lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.
- 16.3. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.
- 16.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
- 16.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.
17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
18. Modifications to this Bond are as follows: **“None”**

CERTIFICATE OF OWNER'S ATTORNEY AND AGENCY CONCURRENCE

CERTIFICATE OF OWNER'S ATTORNEY

PROJECT NAME:

CONTRACTOR NAME:

I, the undersigned, _____, the duly authorized and acting legal representative of _____, do hereby certify as follows: I have examined the attached Contract(s) and performance and payment bond(s) and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements is adequate and has been duly executed by the proper parties thereto acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties named thereon; and that the foregoing agreements constitute valid and legally binding obligations upon the parties executing the same in accordance with the terms, conditions, and provisions thereof.

Name

Date

AGENCY CONCURRENCE

As lender or insurer of funds to defray the costs of this Contract, and without liability for any payments thereunder, the Agency hereby concurs in the form, content, and execution of this Agreement.

Agency Representative

Date

Name

Contractor's Application for Payment

Owner: _____	Owner's Project No.: _____
Engineer: _____	Engineer's Project No.: _____
Contractor: _____	Contractor's Project No.: _____
Project: _____	
Contract: _____	
Application No.: _____	Application Date: _____
Application Period: From _____ to _____	

1. Original Contract Price	\$	-
2. Net change by Change Orders	\$	-
3. Current Contract Price (Line 1 + Line 2)	\$	-
4. Total Work completed and materials stored to date (Sum of Column G Lump Sum Total and Column J Unit Price Total)	\$	-
5. Retainage		
a. _____ X \$ _____ - Work Completed =	\$	-
b. _____ X \$ _____ - Stored Materials =	\$	-
c. Total Retainage (Line 5.a + Line 5.b)	\$	-
6. Amount eligible to date (Line 4 - Line 5.c)	\$	-
7. Less previous payments (Line 6 from prior application)		
8. Amount due this application	\$	-
9. Balance to finish, including retainage (Line 3 - Line 4 + Line 5.c)	\$	-

Contractor's Certification

The undersigned Contractor certifies, to the best of its knowledge, the following:

(1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with the Work covered by prior Applications for Payment;

(2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or covered by this Application for Payment, will pass to Owner at time of payment free and clear of all liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such liens, security interest, or encumbrances); and

(3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

Contractor: _____

Signature: _____ **Date:** _____

Recommended by Engineer	Approved by Owner
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____
Approved by Funding Agency	
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____

Progress Estimate - Unit Price Work

Contractor's Application for Payment

Owner:		Owner's Project No.:	
Engineer:		Engineer's Project No.:	
Contractor:		Contractor's Project No.:	
Project:			
Contract:			

Application No.: _____ Application Period: From _____ to _____ Application Date: _____

A	B	C	D	E	F	G	H	I	J	K	L		
Bid Item No.	Description	Contract Information				Work Completed		Materials Currently Stored (not in G) (\$)	Work Completed and Materials Stored to Date (H + I) (\$)	% of Value of Item (J / F) (%)	Balance to Finish (F - J) (\$)		
		Item Quantity	Units	Unit Price (\$)	Value of Bid Item (C X E) (\$)	Estimated Quantity Incorporated in the Work	Value of Work Completed to Date (E X G) (\$)						
Original Contract													
					-		-		-		-		
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					-		-		-		-		
Original Contract Totals					\$	-		\$	-	\$	-	\$	-

CHANGE ORDER NO.: [Number of Change Order]

Owner: _____ Owner's Project No.: _____
 Engineer: _____ Engineer's Project No.: _____
 Contractor: _____ Contractor's Project No.: _____
 Project: _____
 Contract Name: _____
 Date Issued: _____ Effective Date of Change Order: _____

The Contract is modified as follows upon execution of this Change Order:

Description:

[Description of the change]

Attachments:

[List documents related to the change]

Change in Contract Price	Change in Contract Times [State Contract Times as either a specific date or a number of days]
Original Contract Price: \$ _____	Original Contract Times: Substantial Completion: _____ Ready for final payment: _____
[Increase] [Decrease] from previously approved Change Orders No. 1 to No. [Number of previous Change Order] : \$ _____	[Increase] [Decrease] from previously approved Change Orders No.1 to No. [Number of previous Change Order] : Substantial Completion: _____ Ready for final payment: _____
Contract Price prior to this Change Order: \$ _____	Contract Times prior to this Change Order: Substantial Completion: _____ Ready for final payment: _____
[Increase] [Decrease] this Change Order: \$ _____	[Increase] [Decrease] this Change Order: Substantial Completion: _____ Ready for final payment: _____
Contract Price incorporating this Change Order: \$ _____	Contract Times with all approved Change Orders: Substantial Completion: _____ Ready for final payment: _____

Recommended by Engineer (if required)

Accepted by Contractor

By: _____
 Title: _____
 Date: _____

Authorized by Owner

Approved by Funding Agency (if applicable)

By: _____
 Title: _____
 Date: _____

WORK CHANGE DIRECTIVE

1.0 PURPOSE AND INTENDED USE OF THE DOCUMENT

The Work Change Directive is used by Owner to order additions, deletions, or revisions in the Work to proceed without waiting until Owner and Contractor have agreed upon the impact, if any, of these changes on Contract Price, Contract Times, or both. See Paragraph 11.03, EJCDC® C-700, Standard General Conditions of the Construction Contract (2018).

The document is unilateral in nature and does not require Contractor's signature. Owner or Engineer should maintain documentation of the transmittal of a Work Change Directive to Contractor.

Because, by definition, Work Change Directives involve changes to the Work, EJCDC presumes that all Work Change Directives must be supported by Engineer's recommendation. See C-700, Paragraph 11.01.C.

Although the General Conditions do not require any estimates of the impact of the ordered change on the schedule or Contract Price, such estimates are considered good practice and are commonly provided. The estimates may serve as a starting point for determination of schedule and cost impacts.

WORK CHANGE DIRECTIVE NO.: [Number of Work Change Directive]

Owner:	Owner's Project No.:
Engineer:	Engineer's Project No.:
Contractor:	Contractor's Project No.:
Project:	
Contract Name:	
Date Issued:	Effective Date of Work Change Directive:

Contractor is directed to proceed promptly with the following change(s):

Description:

[Description of the change to the Work]

Attachments:

[List documents related to the change to the Work]

Purpose for the Work Change Directive:

[Describe the purpose for the change to the Work]

Directive to proceed promptly with the Work described herein, prior to agreeing to change in Contract Price and Contract Time, is issued due to:

Notes to User—Check one or both of the following

Non-agreement on pricing of proposed change. Necessity to proceed for schedule or other reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price: \$ _____ [increase] [decrease] [not yet estimated].

Contract Time: _____ days [increase] [decrease] [not yet estimated].

Basis of estimated change in Contract Price:

Lump Sum Unit Price Cost of the Work Other

Recommended by Engineer

Authorized by Owner

By: _____

Title: _____

Date: _____

FIELD ORDER

1.0 PURPOSE AND INTENDED USE OF THE DOCUMENT

The Field Order is used by Engineer to order minor changes to the Work that do not change the Contract Price or Contract Times. See Paragraph 11.04, EJCDC® C-700, Standard General Conditions of the Construction Contract (2018).

FIELD ORDER NO.: [Number of Field Order]

Owner:	Owner's Project No.:
Engineer:	Engineer's Project No.:
Contractor:	Contractor's Project No.:
Project:	
Contract Name:	
Date Issued:	Effective Date of Field Order:

Contractor is hereby directed to promptly perform the Work described in this Field Order, issued in accordance with Paragraph 11.04 of the General Conditions, for minor changes in the Work without changes in Contract Price or Contract Times. If Contractor considers that a change in Contract Price or Contract Times is required, submit a Change Proposal before proceeding with this Work.

Reference:

Specification Section(s):

Drawing(s) / Details (s):

Description:

[Description of the change to the Work]

Attachments:

[List documents supporting change]

Issued by Engineer

By: _____

Title: _____

Date: _____

CERTIFICATE OF SUBSTANTIAL COMPLETION

Owner: Town of Lisbon, New Hampshire
Engineer: Horizons Engineering, Inc
Contractor:
Project: Water Improvements
Contract Name:

Owner's Project No.: N/A
Engineer's Project No.: 21215
Contractor's Project No.:

This Preliminary Final Certificate of Substantial Completion applies to:

All Work The following specified portions of the Work:

[Describe the portion of the work for which Certificate of Substantial Completion is issued]

Date of Substantial Completion: **[Enter date, as determined by Engineer]**

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor, and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Work or portion thereof designated above is hereby established, subject to the provisions of the Contract pertaining to Substantial Completion. The date of Substantial Completion in the final Certificate of Substantial Completion marks the commencement of the contractual correction period and applicable warranties required by the Contract.

A punch list of items to be completed or corrected is attached to this Certificate. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

Amendments of contractual responsibilities recorded in this Certificate should be the product of mutual agreement of Owner and Contractor; see Paragraph 15.03.D of the General Conditions.

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance, and warranties upon Owner's use or occupancy of the Work must be as provided in the Contract, except as amended as follows:

Amendments to Owner's Responsibilities: None As follows:

[List amendments to Owner's Responsibilities]

Amendments to Contractor's Responsibilities: None As follows:

[List amendments to Contractor's Responsibilities]

The following documents are attached to and made a part of this Certificate:

[List attachments such as punch list; other documents]

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents, nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract Documents.

Engineer

By (signature): _____

Name (printed): _____

Title: _____

NOTICE OF ACCEPTABILITY OF WORK

1.0 PURPOSE AND INTENDED USE OF THE DOCUMENT

The Notice of Acceptability of Work is used by Engineer to notify the Owner and the Contractor that Engineer has determined that the Work is acceptable, and Engineer recommends that Owner make final payment to Contractor. The Notice is expressly subject to several conditions regarding the limitations of Engineer's review and determinations.

NOTICE OF ACCEPTABILITY OF WORK

Owner: Town of Lisbon, New Hampshire	Owner's Project No.: N/A
Engineer: Horizons Engineering, Inc.	Engineer's Project No.: 21215
Contractor:	Contractor's Project No.:
Project:	
Contract Name:	
Notice Date:	Effective Date of the Construction: Contract:

The Engineer hereby gives notice to the Owner and Contractor that Engineer recommends final payment to Contractor, and that the Work furnished and performed by Contractor under the Construction Contract is acceptable, expressly subject to the provisions of the Construction Contract's Contract Documents ("Contract Documents") and of the Agreement between Owner and Engineer for Professional Services dated **[date of professional services agreement]** ("Owner-Engineer Agreement"). This Notice of Acceptability of Work (Notice) is made expressly subject to the following terms and conditions to which all who receive and rely on said Notice agree:

1. This Notice has been prepared with the skill and care ordinarily used by members of the engineering profession practicing under similar conditions at the same time and in the same locality.
2. This Notice reflects and is an expression of the Engineer's professional opinion.
3. This Notice has been prepared to the best of Engineer's knowledge, information, and belief as of the Notice Date.
4. This Notice is based entirely on and expressly limited by the scope of services Engineer has been employed by Owner to perform or furnish during construction of the Project (including observation of the Contractor's Work) under the Owner-Engineer Agreement, and applies only to facts that are within Engineer's knowledge or could reasonably have been ascertained by Engineer as a result of carrying out the responsibilities specifically assigned to Engineer under such Owner-Engineer Agreement.
5. This Notice is not a guarantee or warranty of Contractor's performance under the Construction Contract, an acceptance of Work that is not in accordance with the Contract Documents, including but not limited to defective Work discovered after final inspection, nor an assumption of responsibility for any failure of Contractor to furnish and perform the Work thereunder in accordance with the Contract Documents, or to otherwise comply with the Contract Documents or the terms of any special guarantees specified therein.

6. This Notice does not relieve Contractor of any surviving obligations under the Construction Contract, and is subject to Owner's reservations of rights with respect to completion and final payment.

Engineer

By (*signature*): _____

Name (*printed*): _____

Title: _____

DIVISION 01 – GENERAL REQUIREMENTS

SECTION 01 11 12

GENERAL REQUIREMENTS

PART 1 – GENERAL

1.1 GENERAL CONDITIONS

- A. All work of this section is specifically subject to the General Conditions for the entire project.
- B. Provide all items, articles, materials, operations, or methods listed, mentioned, scheduled on the Drawings and/or specified herein including all labor, materials, equipment and incidentals necessary and required for their completion.

1.2 INTENT

- A. The intent of the Specifications and drawings is to call for finish work, tested and ready for operation.
- B. Any apparatus, appliance, material or service not specified or indicated but necessary to make the work complete and perfect in all respects and ready for operations shall be provided.
- C. The Drawings are generally diagrammatic, intended to convey the scope of the work and indicate the general arrangement of equipment and piping and approximate sizes and locations of equipment.

1.3 WORKMANSHIP

- A. All work shall be executed in the best and most thorough manner under the direction of and to the satisfaction of the Engineer.
- B. The Contractor shall, at all times, keep a competent foreman in charge of the works on the project, and shall facilitate it's inspection by the Engineer.

1.4 RULES AND REGULATIONS

- A. All work shall comply with applicable portions of all state or local laws, ordinances, rules and regulations of local utility companies and fire departments, B.O.C.A., National Plumbing Code, recommendations of the National Board of Fire Underwriters, National Electrical Code and all other authorities having jurisdiction.
- B. Nothing contained in these Specifications or indicated on the Drawings shall be construed to conflict with applicable portions of any laws, ordinances, rules and regulations.

End of Section

1. All pressure vessels shall be furnished and installed in strict accordance with the applicable regulations of the state and the ASME codes and shall be equipped with all appurtenances required by the aforesaid codes.

1.5 GUARANTEE

- A. Guarantee all work performed and materials and equipment installed to the full extent required by the Drawings and Specifications to be free from inherent defects.
- B. Any materials or equipment which are corroded or otherwise damaged, through the Contractor's failure to properly operate and maintain the installation during construction or testing, shall be replaced prior to final acceptance.
- C. Keep the work in repair and replace any defective materials, equipment or workmanship upon notice from the Owner's/Engineer's Representative for a period of one year from date of substantial completion.
- D. Materials or equipment requiring excessive service during the first year of operation shall be considered defective.
- E. The date of acceptance shall be that which appears on the Owner's/Engineer's Certificate of Substantial Completion.

1.6 SEQUENCE OF WORK

- A. Refer to the General Supplementary and Special Conditions for timing and coordination of the work.
- B. Schedule the work accordingly and coordinate schedule with other Contractors to prevent delay.

1.7 OPERATING AND MAINTENANCE MANUALS

- A. Furnish manufacturer's printed operating and maintenance instructions for each piece of equipment furnished under this Division.
- B. Each manual shall be suitably and neatly marked to identify the particular equipment furnished and shall include lubricating charts.
- C. All instructions and charts shall be bound in appropriate cover binders properly indexed, identified, and titled to provide three complete manuals.
- D. Completed manuals shall be submitted to the Engineer for review and approval.

End of Section

SECTION 01 11 13

SUMMARY OF WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 PROJECT DESCRIPTION

- A. The Project consists of the cleaning, video inspection, and UV CIPP lining of existing gravity sewer and storm drainage.

1.3 WORK SEQUENCE

- A. The Work will be conducted in a sequence and in such a manner as to minimize utility and traffic interruptions and to minimize the risk to health and the environment

1.4 CONTRACTOR USE OF PREMISES

- A. General: Limit use of the premises to construction activities in areas indicated; allow for Owner operation and use by the public and the railroad.
 - 1. Confine operations to areas within Contract limits indicated. Portions of the site beyond areas in which construction operations are indicated are not to be disturbed.
 - 2. Keep driveways, entrances and rail lines serving the premises clear and available to the Owner and the general public at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on site.
 - 3. Disposal of Excess, Unsuitable and/or Waste Materials: Unless otherwise approved by Engineer, all excess, unsuitable or waste materials shall be removed from the project site and shall be lawfully disposed of at Contractor's expense. Do not dispose of hazardous material on site, either by burial or by burning.

1.5 OWNER OCCUPANCY

- A. Full Owner Occupancy: The Owner will occupy the site during the entire construction period. Cooperate with the Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with the Owner's operations.

1.6 MISCELLANEOUS PROVISIONS

- A. The Project has been designed and the Contract Documents prepared with the intention that resulting Work will comply with applicable local, State, and Federal rules and regulations.

PART 2 - PRODUCTS

Not Applicable

PART 3 – EXECUTION

Not Applicable

END SECTION

SECTION 01 11 17

DRAWINGS AND SPECIFICATIONS

PART 1 – GENERAL

1.1 DESCRIPTION

- A. This Section is intended to describe the general Intent of the Drawings and Specifications.
- B. The Owner will furnish the Contractor up to five (5) copies of the drawings and specifications without charge.

1.2 EXISTING CONDITIONS

- A. All existing conditions shown on the drawings are for information purposes only and are based on limited information. The Contractor shall verify existing conditions and shall not be entitled to extra compensation for failure to do so.

1.3 INTENT OF DRAWINGS AND SPECIFICATIONS

- A. The drawings and specifications are intended to show the general intent of the work. The Owner has contracted for a complete project although every detail, component, fitting and appurtenance may not have been shown. The Contractor shall be responsible for all items necessary to make a complete functional system.

1.4 DIMENSIONS

- A. Drawings should not be scaled. All dimensions shall be taken from figured dimensions on the drawings or by actual field measurements. The Contractor shall notify the Engineer immediately of any discrepancy between figured dimensions labeled on the drawings and actual field measurements, whenever such discrepancy may impact the installation or operation of the Work.

End of Section

SECTION 01 22 13

MEASUREMENT AND PAYMENT

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. The provisions of the Contract, including General and Supplemental Conditions and General Requirements (if any), apply to the work specified in this Section.

1.2 RELATED WORK SPECIFIED ELSEWHERE

General Conditions
Supplemental Conditions

1.3 DESCRIPTION

- A. For unit price items, the Contractor shall be paid for the actual amount of work accepted and for the actual amount of materials in place during the period of construction. After the work is completed and before final payment is made therefore, the Engineer shall make final measurements to determine the quantities of the various items of work accepted as the basis for final payment.
- B. For lump sum items, the Contractor shall be paid on the basis of actual work accepted until the work item is completed. Upon completion of the item, 100 percent of the lump sum price may be paid, subject to the terms of the General Conditions or Supplemental Conditions.
- C. All units of measurement shall be standard United States convention as applied to the specific items of work by tradition and as interpreted by the Engineer.

1.4 SCOPE OF PAYMENT

- A. Payments to the Contractor will be made for the actual quantities of the contract items performed and accepted in accordance with the Contract Documents. Upon completion of construction, if these actual quantities show either an increase or decrease from the quantities given in the Bid, the contract unit prices will still prevail, except as provided hereinafter.
- B. The Contractor shall accept in compensation, as herein provided, in full payment for furnishing all materials, labor, tools, equipment, and incidentals necessary to complete the work and for performing all work contemplated and embraced by the Contract; also for all loss or damage arising from the nature of the Work, or from the action of the elements, or from any unforeseen difficulties which may be encountered during the prosecution of the work and until its final acceptance by the Engineer; and for all risks of every description connected with the prosecution of the work, except as provided herein; also for all expenses incurred in consequence of the suspension of the work as herein authorized.
- C. No extra payment shall be made to the Contractor for any delays caused by lack of progress, defective workmanship, or rescheduling of work by other contractors,

subcontractors, or equipment and material suppliers.

- D. No additional payment will be allowed because of differences between field dimensions and those shown on the Drawings.
- E. Additional costs caused by ill-timed or defective work, or work not conforming to Contract Documents including costs for additional services of Engineer, shall be paid for by the party causing the rejected or non-conforming work.
- F. Work done on written instructions of Engineer, other than defective or non-conforming work, shall be paid for by the Owner.
- G. The cost of shop drawing reviewed by the Engineer in excess of two submissions shall be deducted from the Contractor's monthly invoices, based upon a rate of \$100 per hour.

1.5 PAYMENT FOR INCREASED OR DECREASED QUANTITIES

- A. When alterations in the quantities of work not requiring Change Orders, as herein provided for, are ordered and performed, the Contractor shall accept payment in full at the contract price for the actual quantities of work done. No allowance will be made for anticipated profits. Increased or decreased work involving Change Orders will be paid for as stipulated in such Change Orders.

1.6 ELIMINATED ITEMS

- A. Should any unit price items contained in the proposal form be found unnecessary for the proper completion of the work contracted, the Engineer may eliminate such unit price items from the Contract, and such action shall in no way invalidate the Agreement, and no allowance will be made for items so eliminated in making final payment to the Contractor.
- B. Should any equipment or material be eliminated under a lump sum item, a Change Order shall be issued as stipulated in the General Conditions.

1.7 PARTIAL PAYMENTS

- A. Partial payments shall be made monthly as the work progresses. All partial invoices and payments shall be subject to correction in the final quantity invoice and payment.
- B. No monthly payment shall be required to be made when, in the judgment of the Engineer, the Work is not proceeding in accordance with the provisions of the Contract Documents, or when in his judgment the total value of the Work performed since the last payment amounts to less than \$1,000.
- C. Retained amounts shall be limited, except where greater retention is necessary under specific circumstances specifically provided for in the General Conditions.

- D. No partial payment shall be made upon fuels, supplies, lumber, false work, or other materials, or on temporary structures of any kind which are not a permanent part of the Contract.

1.8 FINAL PAYMENT

BLANK

1.9 PAYMENT FOR MATERIAL DELIVERED

- A. When requested by the Contractor, and at the discretion of the Owner, payment may be made for all or part of the value of acceptable, non-perishable materials and equipment which are to be incorporated into the Work, which have not been used and which have been delivered to the construction site and placed in storage places acceptable to the Owner. The Application for Payment shall be accompanied by such data, satisfactory to the Owner, that will establish the Owner's title to the material and equipment and protect the Owner's interest therein, including insurance.

Each subsequent Application for Payment shall include an affidavit of the Contractor stating that all previous progress payments received on account of the Work have been applied to discharge in full all of the Contractor's obligations reflected in prior Applications for Payment. The Owner shall have the right to deduct from the next progress payment an amount equal to payment for said material and/or equipment if reasonable and adequate proof is not submitted.

- B. Materials and equipment, when so paid for by the Owner, shall become the property of the Owner and, in the event of default on the part of the Contractor, the Owner may use, or cause to be used, these materials and equipment in the construction of the Work. The Contractor shall be responsible for any damage to, or loss of, the materials and equipment. The amount thus paid by the Owner shall reduce the estimated amounts due the Contractor as the material is incorporated into the Work.

1.10 DESCRIPTION OF PAY ITEMS

- A. The following pay items describe the measurement of and payment for the work to be done under the respective items listed in the Bid.
- B. Each unit or lump sum price stated in the Bid shall constitute full compensation, as herein specified, for each item of the work completed.

1.11 PAY ITEMS

Item No. 1 Mobilization

- A. Measurement for payment for General Conditions and Mobilization shall consist of project management, preparatory, and miscellaneous work and operations including but not limited to the following:
 - 1. Supervision and project management

2. Overnight accommodations
3. Submittals
4. Equipment delivery
5. Detour/construction/project signs
6. Furnishing of Bonds/Insurance (including railroad insurance and permitting)
7. Testing

B. Payments:

1. Payment shall be made at the contract lump sum price, which price shall be full compensation for all costs incurred in furnishing labor, tools, materials and equipment and incidental work item costs for the preparatory work and operations described in the above Measurement section for General Conditions and Mobilization.
2. For the purpose of computing payments, the adjusted contract price shall include all contract unit price and lump sum items except the contract lump sum price for this Item.
3. Payments shall be made as follows:
 - a. First payment of fifty percent (50%) of the contract lump sum price for Mobilization or 2.5 percent of the adjusted contract price, whichever is less, will be made not later than payment of the first application for payment following the completion of five percent (5%) of the total contract price.
 - b. Second payment of twenty five percent (25%) of the contract lump sum price for Mobilization or 1.2 percent of the adjusted contract price, whichever is less, will be made not later than payment of the first application for payment following the completion of fifty percent (50%) of the total contract price.
 - c. Upon substantial completion of all work on the project, payment of the remainder of the contract lump sum price for Mobilization will be paid.

Item No. 2 – Drainage and Sanitary Sewer Main Cleaning

- A.** Measurement for payment shall be by the day as ordered and approved by the Engineer.
- B.** Payment for drainage and sanitary sewer main cleaning shall be at the unit price per day as stated in the Bid. Payment shall be full compensation for setup, cleaning equipment and operation, coordination with the Town and the St. Lawrence & Atlantic Railroad, collection, transport, and disposal of all removed debris at a Town designated site (excluding disposal fees if any) within 10 miles of the site, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 3 – Drainage and Sanitary Sewer Main Video Inspection

- A.** Measurement for payment shall be by the day as ordered and approved by the Engineer.

- B. Payment for video inspection shall be at the unit bid price per day as stated in the Bid. Payment shall be full compensation for setup, video equipment, logging and compilation of data, submission of recordings and final report with findings and evaluation in digital format, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 4 – Ten Inch UV CIPP Drainage and Sanitary Sewer Liner

- A. Measurement for payment shall be per the actual length in feet of liner furnished and installed. Measurement shall be made along the centerline of the pipe.
- B. Payment for furnishing and installing liner of the size specified shall be made for the quantity installed at the unit bid price per linear foot as stated in the Bid. Payment shall be full compensation for setup, traffic control, coordination with the Town and the St. Lawrence & Atlantic Railroad, dewatering/bypass, liner, testing, cutting for services, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 5 – Eight Inch UV CIPP Sanitary Sewer Liner

- A. Measurement for payment shall be per the actual length in feet of liner furnished and installed. Measurement shall be made along the centerline of the pipe.
- B. Payment for furnishing and installing liner of the size specified shall be made for the quantity installed at the unit bid price per linear foot as stated in the Bid. Payment shall be full compensation for setup, traffic control, coordination with the Town and the St. Lawrence & Atlantic Railroad, dewatering/bypass, liner, testing, cutting for services, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 6 – Compliance with Railroad Requirements

- A. Measurement shall be actual costs incurred by the Contractor for compliance with railroad requirements.
- B. Payment for compliance with railroad requirements for work within the railroad right of way shall be made for actual costs incurred plus a 5% Contractor fee. Payment shall be full compensation for the application fee for a Right of Entry (ROE) Agreement (if required), flaggers, and other requirements/costs for which payment is not provided under other items. The cost for railroad insurance, as outlined in the SLAR Railroad Protective Application will be paid for with all other insurances under Item 1. - Mobilization.

End of Section

DIVISION 02 – EXISTING CONDITIONS

SECTION 02 01 00

EXISTING UTILITIES AND UNDERGROUND STRUCTURES

PART 1 – GENERAL

1.1 DESCRIPTION

- A. The Engineer and Owner have made limited investigations to determine the locations of underground utilities and structures. Because of the nature of subsurface utilities and the difficulty in determining exact locations, the locations as shown on the plans should be considered approximate. Wherever underground utilities are encountered by the Contractor during construction they shall be protected by the Contractor, at his own expense, until the construction work is complete and the existing structures are made secure. Injury to any such utilities/structures caused by or resulting from the Contractor's work shall be repaired at the Contractor's expense. No additional compensation will be allowed for any delays sustained by the Contractor due to any interference from underground utilities.
- B. It shall be the Contractor's responsibility to notify Dig Safe and locate all utilities within the construction area prior to proceeding with construction.
- C. The restoration of existing property shall be done as promptly as practicable and shall not be left until the end of the construction period.
- D. Cooperation with Utilities:
 - 1. The Contractor shall allow the Owner or its agents and other contractors, and public service corporations, or their agents, to enter upon the work for the purpose of constructing, maintaining, repairing, removing, altering or replacing such pipes, sewers, conduits, manholes, wires, poles, or other structures and appliances as are now located or as may be required or permitted at or on the work by the Engineer.

The Contractor shall cooperate with all aforesaid parties and shall allow reasonable facilities for the prosecution of any other work by the Owner, or of public service corporation, to be done in connection with this work. Care shall be taken at all times to inconvenience abutters as little as possible.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

End of Section

DIVISION 33 – UTILITIES

SECTION 33 01 30.51

SEWER CLEANING

PART 1 – GENERAL

1.1 SUMMARY

- A. Section includes sewer line cleaning, manhole cleaning, and internal obstruction removal.

1.2 SYSTEM DESCRIPTION

- A. Cleaning shall remove sediment, rocks, debris, roots, grease accumulations and obstructions from length of sewer and manholes to be lined.
- B. Cleaning of sewer and manhole walls in vicinity of lining shall remove grease, scale, encrustation and loose mortar so that no foreign intrusion shall cause imperfections in lining (e.g. bumps, folds, dimples).
- C. Sewer cleaning methods shall be washing with high pressure water or other as approved by the Engineer.

1.3 SUBMITTALS

- A. Submit letter that identifies methods that will be used to remove sediment, debris, grease, scale, encrustations, loose concrete, and roots throughout section of sewer to be cleaned. Include the following:
 - 1. Detailed explanation of cleaning process.
 - 2. Schedule of activities.

1.4 PROJECT CONDITIONS

- A. Access to manholes shall be provided by Owner.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Do not use chemicals without written approval of the Engineer. Do not use chemical which may be considered hazardous or detrimental to organisms or equipment of wastewater treatment plant.

2.2 EQUIPMENT

- A. High-Velocity Hydraulic (Hydro-Cleaning) Equipment: Equipment shall be capable of removing dirt, grease rocks, sand, roots, and other materials and obstructions from sewer lines and manholes.
- B. Equipment shall have selection of two or more high-velocity nozzles. Nozzles shall be capable of producing scouring action from 15 to 45 degrees in all size lines designated to be cleaned, with nozzle capable of producing flows from fine spray to solid stream.
- C. Equipment shall carry its own water tank, auxiliary engines, and high pressure water pump.
- D. Combination Unit Pump: Capable of pumping at least 80 gallons per minute (300 liters per minute) at 2,000 psi (13.8 MPa), measured at beginning of hose reel.
- E. Water Pump: Able to run at 2,000 psi (13.8 MPa) while pulling full vacuum, completely independent from vacuum system, with ability to vary vacuum without affecting water pressure.

2.3 WATER

- A. When water from fire hydrants is necessary, apply to Engineer for permission to use potable water source.
- B. Provide temporary piping, valves, certified reduced pressure backflow preventors, equipment, and other items for handling potable water and wastewater.
- C. Do not utilize water source until it has been approved for use by the Engineer.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Contractor shall be aware of flow conditions, and be able to identify potential access problems to sewer access points.

3.2 APPLICATION

- A. Line Cleaning: Clean designated sewer lines using approved methods and equipment.
 - 1. Remove internal obstructions such as roots or gaskets by trenchless techniques when obstruction encountered prevents further pipe cleaning.
 - a). Provide special attention during cleaning operation to assure almost complete removal of roots from joints.

- b). Procedures to remove internal obstructions may include use of equipment such as rodding machines, root saws, bucket machines and winches using root cutters, porcupines, and jet machines equipped with hydraulically driven cutters.
 - 2. If cleaning of entire section cannot be successfully performed from one manhole, set up equipment at other manhole and attempt cleaning again.
 - a). If successful cleaning cannot be performed or equipment fails to traverse entire sewer line section, it will be assumed that major blockage exists.
 - b). Temporarily suspend cleaning effort and immediately notify Engineer.
 - c). Upon removal of obstruction, complete cleaning operation.
 - 3. Employ satisfactory precautions to protect sewer line from damage that might be inflicted by improper use of cleaning equipment.
 - a). Immediately notify Engineer if fresh soil, pieces of pipe, or other visible signs of potential problems occur during cleaning operation.
 - b). Ensure that water pressure created does not cause damage due to flooding of property being served by sewer section(s) involved.
- B. Manhole Cleaning:** Include entire manhole interior, including manhole benches and walls. Incorporate into line cleaning operation by scouring walls with high velocity nozzle after pipe segment cleaning operation is complete.
- C. Removal of Debris:** Flush debris downstream and do not remove. In the event that debris removal is necessary, Engineer will coordinate requirements with a Waste Management Liaison.
- 1. Do not discharge sewage or solids removed from downstream manholes, onto streets, or into ditches, catch basins or storm drains.

3.3 CLEANING

- A.** Keep premises free from accumulations of waste materials, rubbish and other debris resulting from work.
- B.** Remove waste materials, rubbish, and debris from and about premises.
- C.** Remove tools, construction equipment and machinery, and surplus materials.
- D.** Restore to original condition portions of site not designated for alterations by Contract Documents.

End of Section

SECTION 33 01 30.72

ULTRAVIOLET CURED-IN-PLACE PIPE LINING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and DIVISION 01 specifications sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Cured-in-Place Pipe
- B. Related Requirements:
 - 1. Section 33 01 30.51 – Sewer Cleaning
 - 2. Section 33 31 13 Sanitary Sewers, Manholes, and Appurtenances

1.3 COORDINATION

- A. Coordinate Work of this Section with the Owner, Engineer, and users connected to system.

1.4 DESIGN CRITERIA

- A. Design liner thickness in accordance with ASTM F1216, F1743, or F2019 (as appropriate for the proposed liner product) using the following criteria:
 - 1. Pipe Diameters: Per Project Drawings
 - 2. Ovality: 3 percent, or as shown on plans.
 - 3. Pipe Condition: Assume fully deteriorated.
 - 4. External Water: Ground Surface
 - 5. Short-Term Tensile Strength (ASTM D638):
 - a. Unreinforced: 3,000 psi
 - b. Reinforced: 9,000 psi
 - 6. Tensile Strength Reduction Factor: 50 percent
 - 7. Long-Term Tensile Strength:
 - a. Unreinforced: 1,500 psi
 - b. Reinforced: 4,500 psi
 - 8. Flexural Strength (ASTM D790):
 - a. Unreinforced: 4,500 psi
 - b. Reinforced: 6,500 psi
 - 9. Short-Term Flexural Modulus (ASTM D790):
 - a. Unreinforced: 250,000 psi, or as shown on plans
 - b. Reinforced: 700,000 psi, or as shown on plans

10. Flexural Modulus and Flexural Strength Reduction Factor:
 - a. Unreinforced: 50 percent
 - b. Reinforced: 35 percent, contingent upon approval of Owner after review of submittal with long-term test data, otherwise 50 percent shall be used.
11. Long Term Flexural Strength:
 - a. Unreinforced: 2,250 psi
 - b. Reinforced: 3,250 psi
12. Long-Term Flexural Modulus:
 - a. Unreinforced: 125,000 psi, or as shown on plans
 - b. Reinforced: 455,000 psi, or as shown on plans
13. k Enhancement Factor: 7
14. Soil Modulus: 1,000 psi, or as shown on plans.
15. Soil Density: 120 pcf, or as shown on plans.
16. Railroad Live Load: E-80
17. Safety Factor: 2 minimum
18. Minimum Thickness: 0.125 inches
19. Poisson's Ratio: 0.3
20. Liner shall be watertight.

1.5 SUBMITTALS

A. Action Submittals

1. Resin
2. Annular Space Sealant
3. Service Connection Fittings
4. In-Line Curing Temperature Monitoring System

B. Informational Submittals

1. Design Calculations
 - a. Manufacturer's certification of material to values utilized in calculations.
 - b. If reinforced liners are proposed, submit long-term ASTM D790 and ASTM D2990 test data supporting reduction factor used in design
2. Manufacturer's installation instructions and procedures, including:
 - a. Wet Out
 - b. Insertion
 - c. Curing
 - d. Cool Down
 - e. Finished Pipe
3. Wet out and curing schedule.
4. Process control sheets for temperature/time during curing
5. Installer's and accredited testing laboratory statement of qualifications
6. Manufacturer's Certificate of Compliance certifying compliance with the applicable specifications and standards
7. Warranty and/or Special Guarantee
8. Manufacturer's instructions for material shipping, storage, and handling requirements

9. Certified copies of test reports of factory tests required by the applicable standards and this section.
10. Dye testing results
11. Digital files of CCTV inspections.

1.6 QUALITY ASSURANCE

- A. Installer shall have a minimum of 3 years' experience with the selected liner product and method of curing.
- B. Superintendent shall have a minimum of 3 years' of onsite experience with the selected liner product and method of curing.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products as recommended by the manufacturer to prevent damage. Materials shall be made safe from theft, vandalism, and damage.
- B. All products and materials specified herein shall be inspected at the request of the Owner or Engineer. All materials that fail to conform to these specifications shall be rejected. After delivery to the Site, any materials that have been damaged in transit or are otherwise unsuitable for use in the Work shall be rejected and removed from the Site by the Contractor at no cost to the Owner.
- C. Ship resin directly to wet out facility from manufacturer.
- D. Maintain resin-impregnated tubes in refrigerated truck trailers at a temperature below 45° F to prevent premature curing. Prior to beginning inversion, no portion of the resin-impregnated liner shall be subjected to sunlight or ultraviolet radiation. Resin-impregnated tubes with signs of premature curing shall not be installed and shall be removed from the Site at no cost to the Owner.

1.8 SPECIAL GUARANTEE

- A. Provide manufacturer's extended guarantee or warranty, with the Owner named as the beneficiary, in writing, as a special guarantee. The special guarantee shall provide for correction, or at the option of the Owner, removal and replacement of Work specified in this section found to be defective, due to material or workmanship failure, during a period of 5 years after the date of Substantial Completion. A warranty inspection can be completed by the Owner up to 5 years after final acceptance.

2.1 CURED-IN-PLACE PIPE

- A. Resin:
 1. Unless otherwise specified, the Contractor shall furnish a general purpose, unsaturated, polyester, epoxy, isophthalic neopentyl glycol, or thermosetting vinyl ester resin, catalyst

system, initiators, or hardeners that provide specified cured physical strengths and properties, and compatible with reconstruction inversion process.

2. Resistant to municipal wastewater environment and immersion in septic sewage at temperatures up to 75° F.

3. Curing:

a. Designed to cure properly within selected curing method.

b. Initiation temperature: 180° F, maximum for water cure.

4. Resins shall be chemical resistant and tested and manufactured in accordance with ASTM F1216 and ASTM D543.

5. For lines smaller than 24 inches, PET resins, resin fillers, resin additives, and resin enhancement agents are prohibited. Only neat resins are acceptable.

6. For lines 24 inches and larger, any resin additives are contingent upon Owner approval. All enhanced resins shall be submitted as a part of the action submittal process.

7. For reinforced liners, only neat resins are acceptable.

8. Old resins and reworked resins are prohibited, regardless of whether or not they are mixed with new resin.

9. Produce a cured tube resistant to shrinkage that will not corrode or oxidize and is resistant to abrasion from solids, grit, and sand in wastewater.

10. Bond between tube layers shall be strong and uniform. Layers, after cure, shall be saturated with resin.

11. Styrenated resins are prohibited for pipes that will discharge directly to the environment such as treatment plant effluent lines.

12. Manufacturers and Products:

a. Reichhold

b. Interplastic Corporation

c. Ashland Specialty Chemical Company

d. AOC

B. Catalysts:

1. Primary catalyst shall not exceed 1% of the resin by volume.

2. Secondary catalyst shall not exceed 0.5% of the resin by volume.

3. Catalysts shall be as required to meet the performance requirements of the liner.

C. Tube:

1. Consist of layers of flexible nonwoven and absorbent polyester felt manufactured under quality-controlled conditions set by manufacturer and applicable requirements set forth in ASTM F1216 and ASTM F1743 that, when cured, will be chemically resistant to reagents as defined in ASTM D543.

2. Lining shall be correct diameter; after installation, there shall be no wrinkles or form permanent fins. Tube shall be capable of stretching to fit irregular pipe sections and fabricated and sized for each section to ensure snug and firm fit inside existing sewer; produce required thickness after resin is cured.

3. Wastewater-contact inside layer of tube shall be coated with an impermeable material compatible with resin and felt and shall not be a dark or non-reflective nature that inhibits proper CCTV inspection.

4. For lines 24 inches and larger: if reinforcement is utilized it shall consist of impregnated flexible fiberglass. Each lot of fiberglass liner shall be inspected for defects and tested in accordance with ASTM F2019.

5. Manufacturers:

- a. Applied Felt
- b. Insituform Technologies
- c. Liner Products
- d. National Liner
- e. Layne Inliner
- f. Mississippi Textile

D. Accessories:

1. Hydrophilic Rubber Joint Seal:

- a. Greenstreak, Inc.
- b. Hydrotite, LMK, Insignia
- c. Adeka, KM-String

2. PVC Saddle Tees: Solvent welded type for 8-inch CIPP sewer main connections. Tee shall fit the existing pipe and have an integral 6-inch branch connection with gasket. The saddle shall include two stainless steel straps. Saddle tees shall meet the requirements of ASTM D3034 and ASMT F477.

3. Connections to CIPP mains greater than 8 inches in diameter shall be with a minimum 6-inch "Inserta-Tee" manufactured by Inserta Fittings Company and specifically designed for the thickness of the installed CIPP liner.

4. Curing Temperature Monitoring System:

- a. ZIA Systems
- b. Pipeline Renewal Technologies, VeriCure

PART 3 - EXECUTION

3.1 WORKER SAFETY

- A. Contractor shall implement all current recommendations, guidelines, and regulations of the National Institute for Occupational Safety and Health (NIOSH), and the Occupational Health and Safety Administration (OSHA) for the safety of workers and the public affected by the CIPP installation.
- B. Records of any complaints or incidents shall be provided to the Owner and/or Engineer.

3.2 PREPARATION

- A. Complete the following activities, unless otherwise approved by the Owner and/or Engineer.
 1. Pre-Insertion Cleaning: Rewash, re-clean and ready existing sewer pipe immediately before the pre-insertion television inspection.

2. Pre-Insertion CCTV Inspection: Inspect sewer pipe before insertion of resin impregnated tube to ensure pipe is clean and existing pipe conditions are acceptable for lining. Provide a digital file or link of the CCTV inspection.
3. Dye Testing: Where sewer line segments may contain abandoned services, the Contractor shall be responsible for performing dye testing to determine if the services are live and require re-instatement.
4. Bypassing Wastewater: Contractor shall make provisions for dewatering/bypass of sewage flows during the prosecution of the work.
5. Line Obstructions: If pre-insertion video CCTV inspection reveals an obstruction in the existing pipe (such as heavy solids, dropped joints, protruding service taps or collapsed pipe which may prevent completion of the inversion process), that is not identified in the Drawings and cannot be removed by sewer cleaning equipment, then a point repair using a shielded coupling may be made with the approval of the Owner and/or Engineer.
6. Remove active infiltration prior to the installation of the liner.

3.3 INSTALLATION

A. Wet Out:

1. Verify lengths in the field before cutting liner to length.
2. Wet out shall be vacuum impregnated with resin under controlled conditions.
3. Use roller system to uniformly distribute resin throughout the tube.
4. Resin shall fill all voids in the tube material with no air spaces or pockets.
5. Handle resin impregnated tube to retard or prevent settling until it is ready for insertion.
6. Use of alternative methods of resin impregnation shall be approved by the Owner prior to implementation.

B. Insertion:

1. Install CIPP in accordance with ASTM F1216 (direct inversion) or ASMT F1743 (pull installations) or F2019 (reinforced liners) as appropriate for the liner product being used.
2. Dewater existing host pipe prior to installation.
3. Insert wet out tube through an existing manhole or approved access point by means of an inversion method and application of sufficient hydrostatic head to extend the tube to the next designated termination point.
4. A pull in method using a bladder to expand the tube may be employed if approved by the Owner.
5. After insertion, maintain sufficient pressure to hold tube tight against the host pipe.

C. Curing:

1. Complete a curing process control sheet for every lining completed.
2. UV Curing - Material shall be a polyester needle felt or fiberglass based CIPP liner impregnated with an isophthalic neopentyl glycol resin.
3. Curing parameters, such as curing speed, inner air pressure, and wattage, per the manufacturer.

4. Optimal curing speed or travel speed of energized UV light sources is determined for each length of liner based on liner diameter, liner thickness, and exothermic reaction temperature.
5. Invert liner into pipe with standard pressure drum or pull into pipe using a slip sheet.
6. After completion of inversion process introduce light chain in liner and close ends with couplings.
7. Remove and discard inner film material after curing to provide optimal quality of final product.
8. Control panel operating UV curing unit light chain may be pulled on a trailer attached to UV unit.

D. The finished CIPP shall:

1. Be continuous over entire length from manhole to manhole and be free from visual defects such as foreign inclusions, dry spots, keel, boat hull, pinholes, wrinkles, and other deformities.
2. For lines 24 inches or larger the CIPP shall have no radially positioned (perpendicular to flow) wrinkles, fins or other discontinuities in the lower third of the pipe which exceed more than 3% of the host pipe inside diameter. Have no radial wrinkles, fins or other discontinuities in the upper 2/3rds of the pipe having a height of 5% or more of the host pipe inside diameter, unless approved.
3. When passing through or terminating in a manhole shall be carefully cut out in a shape and manner approved by OWNER.
4. Annular space between existing pipe and the CIPP shall be sealed with a hydrophilic rubber joint seal per manufacturer's instructions.
5. Meet leakage requirements of pressure test as specified in Section 33 31 13 Sanitary Sewers, Manholes, and Appurtenances.

3.4 SEALING AND BENCHES IN MANHOLE

- A. CIPP shall make a tight-fitting seal with existing pipe(s) in manhole. For CIPP that is installed continuous through manhole, the top half of the pipe shall be neatly cut off and not broken or sheared off at least 2 inches away from wall. The channel in the manhole shall be a smooth continuation of the pipe(s) and shall be merged with other pipes or channels, if any.
- B. At each pipe opening into manhole, hydrophilic rubber joint seal shall be bonded with adhesive to the host sewer pipe or to the opening in the manhole barrel to hold it in place during inversion and creating a water-tight seal after curing.
- C. Seal CIPP and existing pipe in manhole as stated above before proceeding on to next manhole section. Manholes shall be individually inspected for liner cut-offs, benches, and sealing of liner annular space.

3.5 MANHOLE DROP CONNECTIONS

- A. Drop connections on existing sewer mains shall be abandoned prior to the installation of CIPP by plugging the manhole to pipe connection with a bulkhead and filling the drop assembly with flowable fill.
- B. Use of internal manhole drop connections shall be indicated on the Drawings or directed and approved by the Owner and/or Engineer.

3.6 SERVICE LATERALS

- A. Shutdown
 - 1. Notify Owner at least one week prior to the shutdown when it is necessary to shut down a private service line while Work is in progress and before the service lines are reconnected. Notify building occupants with an Owner approved door hanger not less than 36 hours prior to shut down.
 - 2. No service is to remain shut down without sewer flow control or a leak free temporary connection. Commercial sewer services shall be maintained when businesses are open.
- B. Temporary Service Reinstatements:
 - 1. The exact location and number of service connections shall be determined from a pre-CCTV inspection and field located by marking existing service connections. Contractor shall determine and identify all active services. Contractor shall perform temporary service cut outs at active service connections immediately after liner has cured. Initial internal service cut outs shall be made to the lesser of a 6-inch diameter opening or 90 percent of the original diameter of the connection. Do not damage liner pipe and allow to normalize to ambient temperature before 6-inch diameter hole is drilled out.
 - 2. If the service cannot be replaced through excavation, then internally reinstate the service to 100% of original opening, and provide a smooth opening with no ragged edges. The Owner must approve all permanent lateral cut outs.
 - 3. Services shall not be reconnected from abandoned or vacant lots, unless directed otherwise by the Owner and/or Engineer. Restore and correct missed or faulty reconnections as well as damage caused to property owners for not reconnecting the services soon enough or for not giving notice to the owners.
- C. Permanent Service Connection by Excavation:
 - 1. Excavate existing active service connections. Disconnect at joints and existing sewer (now the carrier pipe for the liner) and remove to expose the liner to the extent necessary. Coat cut out hole in liner with approved resin/epoxy that will cure at the ambient temperature.
 - 2. Install PVC saddle tee for the new sewer service lateral over the cut out. Saddle shall be a one-piece saddle attached to the liner with epoxy so that a complete seal is accomplished when the strap-on saddle is tightened with two stainless steel bands; one on each side. The stub-out attached to the saddle shall protrude into liner a distance equal to the wall thickness of liner.

3. All permanent lateral re-instatements shall be completed within 30 days of the initial temporary cut out.
4. Services which are reconnected to rehabilitated liner shall be shown on the record drawings with the distance from the nearest downstream manhole, depth at clean out, and the cleanout distant from mainline.
5. Replace sewer service laterals per Section 33 31 13 – Sanitary Sewers, Manholes, and Appurtenances.

3.7 TESTING FOR ACCEPTANCE

- A. CCTV televising shall be done after service connections have been made, unless required earlier by Owner and/or Engineer. Provide CCTV digital files or link within two weeks after permanent lateral reinstatements have been completed.
- B. Lines shall be tested as specified in Section 33 31 13 – Sanitary Sewers, Manholes, and Appurtenances.
- C. No visible leak around liner at manhole connections will be allowed.
- D. Correct failed liner or liner deemed unacceptable by Owner and/or Engineer as a result of the post-video inspection or test reports for structural values and thickness.

END OF SECTION

SECTION 33 31 13

SANITARY SEWERS, MANHOLES, and APPURTENANCES – NH

PART 1 – GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Furnishing and installing sanitary sewers
2. Furnishing and installing building sewer service laterals
3. Furnishing and installing pre-cast concrete manholes
4. Furnishing and installing manhole frames and covers
5. Miscellaneous sewerage system appurtenances
6. Testing

1.2 SUBMITTALS

A. General: Provide submittals in accordance with Specification 01 33 23.

1. Name, address and telephone number of suppliers of all manufactured products.
2. Product data containing information and instructions relating to the storage, handling, installation, and inspection of furnished pipe, fittings and appurtenances.
3. Pipe and fitting manufacturers' Certificate of Compliance with specified standards and tests for each lot of pipe and fittings supplied. Immediately turn certificates over to Engineer. Materials delivered to the job site without accompanying certificates will be subject to rejection.
4. Shop drawings and technical data for pre-cast concrete sanitary manholes, including frames and covers, pipe penetration and wall joint sealing systems, and water proof coatings.
5. Certified copy of all leakage tests including all failures and retests.

1.3 QUALITY ASSURANCE

A. Pipe and fittings shall be produced in a plant of recognized reputation that is regularly engaged in the production of pipe conforming to the specified standards. Pipe and pipe fittings of the same type shall be the product of a single manufacturer.

- B. All pre-cast concrete manhole sections and all castings shall be the product of a single manufacturer who can furnish evidence of satisfactory experience in the production of high quality products of the type indicated and specified.
- C. Provide at least one skilled mason who shall be present at all times during the installation of inverts, shelves and chimneys and who shall personally direct the masonry work performed under this Section.
- D. Comply with applicable regulations and standards of all local, state, and federal regulatory authorities having jurisdiction.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Carefully handle all pipes and fittings when loading and unloading. Lift pipes by hoists or lower on skid-ways in manner to avoid shock. Lower pipe into trench with suitable equipment as recommended by manufacturer. Do not dump or drop pipe or fittings. Those that are dumped or dropped are subject to rejection by Engineer.
- B. Each length of pipe delivered to the job site shall be clearly marked with the name of the manufacturer, class of pipe and pipe diameter. Store in accordance with manufacturer's recommendations.
- C. Pre-cast manhole sections shall not be shipped until the concrete has attained a compressive strength of 3,000 psi or until 5 days after fabrication, whichever is longer.
- D. All pre-cast manhole sections shall be lifted and moved by use of suitable lifting slings, plugs, and holes so as not to damage ship-lap joints or edges.
- E. All materials found at anytime during the work to be defective will be rejected, marked and promptly removed from the job site.

1.5 PROJECT CONDITIONS

- A. Verify existing utility and connection locations and elevations. Affirm that sewerage system piping may be installed in compliance with original design and referenced standards. Immediately notify the Engineer of any conflicts which may require design modifications and do not initiate or resume construction until such conflicts have been resolved.
 - 1. Locate existing sanitary sewerage system piping and structures that are to be abandoned and closed.

1.6 SEQUENCING AND SCHEDULING

- A. Coordinate construction schedule, service interruptions, traffic control, leakage testing and project start-up with Owner, Engineer and regulatory authorities having jurisdiction.

- B. Coordinate building sewer service lateral construction with interior building sanitary sewerage piping.
- C. Coordinate with other utility work.

PART 2 – PRODUCTS

2.1 PIPE AND FITTINGS

- A. General: Provide pipe and pipe fitting materials compatible with each other.
- B. Ductile-Iron Pressure Pipe: AWWA C151, Class 52, for push-on joints.
 - 1. Lining: AWWA C104, cement lining.
 - 2. Gaskets: AWWA C 111, rubber.
 - 3. Ductile-Iron Fittings: AWWA C110, ductile-iron, or AWWA C153, ductile-iron compact fittings.
 - a. Lining: AWWA C104, cement lining.
 - b. Gaskets: AWWA C111, rubber.
- C. PVC (Polyvinyl Chloride) Sewer Pipe and Fittings:
 - 1. Gravity Sewer - ASTM D3034, SDR 35, elastomeric gasket joints. Gaskets to meet ASTM F477, elastomeric seal.
 - 2. Force Main (Pressure) Sewer – ASTM D2241 or ASTM D1785, SDR 26, elastomeric gasket joints.
- D. Non-pressure Couplings: Rubber or elastomeric sleeve and stainless steel band assembly fabricated to match outside diameters of pipes to be joined.
 - 1. Sleeves: ASTM C 425, rubber for vitrified clay pipe; ASTM C 443, rubber for concrete pipe; ASTM C 564, rubber for cast-iron soil pipe; and ASTM F 477, elastomeric seal for plastic pipe. Sleeves for dissimilar or other pipe materials shall be compatible with pipe materials being joined.
 - 2. Bands: Stainless steel, one at each pipe insert.
- E. Non-pressure Joint Seals: Rubber or elastomeric compression gasket, made to match pipe inside diameter or hub, and adjoining pipe outside diameter.
 - 1. Gaskets: ASTM C 425, rubber for vitrified clay pipe; ASTM C 443, rubber for concrete pipe; ASTM C 564, rubber for cast-iron soil pipe; and ASTM F 477, elastomeric seal for plastic pipe. Gaskets for dissimilar or other pipe materials shall be compatible with pipe materials being joined.

2.2 MANHOLES

- A.** Precast Concrete Manholes: ASTM C 478, pre-cast reinforced H-20 loading rated concrete, of depth indicated with provision for rubber gasket joints.
1. Base Section: 6-inch minimum floor thickness and 5-inch minimum thickness for walls and base riser section, and having a base section with integral floor.
 2. Riser Sections: 5-inch minimum thickness; 48-inch minimum diameter, and barrel heights to provide depth indicated.
 3. Top Section: Eccentric cone type, unless concentric cone or flat-slab-top type is indicated.
 4. Horizontal Joint Sealant: Double row, Bitumastic.
 5. Pipe Connectors: Lock-Joint Flexible Manhole Sleeve or Kor-N-Seal Joint Sleeve, for each pipe connecting to base section.
 6. Inverts and Shelves: Brick paved.
 7. Mortar and Parging: ASTM C 270, Type S, using ASTM C 150, Type II Portland cement.
 8. Bricks: Bricks for shelves, inverts, and grade adjustment shall conform to Env-Wq 704.13 (a) (9), Grade SS hard brick. No more than five (5) brick courses shall be allowed for grade adjustment.
 9. Manhole Mortar: Mortar for pointing and sealing manholes shall conform to Env-Wq 704.13 (c).
 10. All manholes shall be water proofed, at the factory, with two seal coats applied to the exterior of the manhole in accordance with the seal coating manufacturer's recommendations. Water proofing shall be masonry seal MSP-1 waterproofing material as made by the Masonry Seal Foundation, 7500 West Ridge Road, Elyria, Ohio, or Foundation Coating 47-461 as made by TNEMEC. Exterior of all joints shall be coated with waterproofing after setting.
- B.** Reinforcement: Steel conforming to the following:
1. Fabric: ASTM A 185, welded wire fabric, plain.
 2. Reinforcement Bars: ASTM A 615, Grade 60, deformed.
- C.** Precast Concrete Structure Steps: Manholes shall not be provided with steps. Steps for other structures, if required shall be as follows: Stainless steel or plastic covered steel or

plastic shaped so they cannot be pulled out of the concrete wall in which they are secured. All steps shall meet the requirements of ASTM C478 for load carrying capacity and pull-out resistance and steps shall not be secured with mortar. The steps shall have a drop section or raised abutments to prevent sideways slippage off the step, the foot contact surface shall have non-skid safety serrations and steps shall be approximately 14" X 10".

- D. Manhole Frames and Covers: ASTM A 48, Grade 30, heavy-duty, grey cast iron, H-20 loading rated, 30-inch minimum clear opening, 6-inch minimum riser with 4-inch minimum width flange, and 31-3/4-inch diameter cover, indented top design, with 3-inch lettering "SANITARY SEWER" cast into cover, coal tar epoxy coated.

1. Standard Frame and Cover: Quality Water Products, Style 30, or equivalent.
2. Water-Tight Frame and Cover: Quality Water Products Style C-47 WT.

2.3 IDENTIFICATION

- A. Metallic-Lined Plastic Underground Warning Tapes: Polyethylene plastic tape with metallic core, 6 inches wide by 4 mils thick, solid green in color with continuously printed caption in black letters "CAUTION - SEWER LINE BURIED BELOW."

PART 3 – EXECUTION

3.1 PREPARATION OF FOUNDATION FOR BURIED SANITARY SEWERAGE SYSTEMS

- A. Grade trench subgrade to provide a smooth, firm, stable, and rock-free foundation, throughout the length of the pipe.
- B. Remove unstable, soft, and unsuitable materials below subgrade to depth directed by Engineer. Refill to subgrade with course gradation crushed stone or screened gravel.
- C. Place stone bedding and shape bottom of trench to fit bottom of pipe. Dig bell holes at each pipe joint to relieve the bells of all loads and to ensure continuous bearing of the pipe barrel on the bedding.

3.2 PIPE APPLICATIONS FOR UNDERGROUND SANITARY SEWERS

- A. Gravity Sewers: PVC SDR 35 sewer pipe and fittings or DI Pressure Class 350 pipe and fittings, materials and sizes as indicated on plan profile drawings.
- B. Building Sewer Service Laterals: PVC SDR 35 sewer pipe and fittings, 4-inch minimum diameter.

3.3 INSTALLATION - GENERAL

- A. General Locations and Arrangements: Drawings (plans and details) indicate the general location and arrangement of the underground sanitary sewerage system piping. Location and arrangement of piping layout take into account many design considerations. Install the piping as indicated, to the extent practical.
- B. Install piping beginning at low point of systems, true to grades and alignment indicated with unbroken continuity of invert. Place bell ends of piping facing upstream. Place stone haunching and chink pipe to grade. Install gaskets, seals, sleeves, and couplings in accordance with manufacturer's recommendations for use of lubricants, cements, and other installation requirements. Place and compact initial backfill and suitable backfill materials as indicated in "Section 31 23 16 – Earthwork".
- C. Use manholes for changes in direction and at all main intersections. Use wye or tee fittings for branch connections, except where direct tap into existing sewer is indicated.
- D. Use proper size increasers, reducers, and couplings, where different size or material of pipes and fittings are connected. Reduction of the size of piping in the direction of flow is prohibited.
- E. When installing below pavement sewers at depths less than 6-feet or cross-country sewers less than 4-feet, install 2-inch thick extruded polystyrene insulation 6 inches over piping. Width of insulation shall be a minimum of 24 inches, centered on the centerline of pipe. Joints between sheets shall be covered with a 12-inch long sheet of insulation, centered on the joint. Any variation from the minimum depth requirements (six feet under pavement or four feet under cross country areas) must be granted a waiver prior to construction in accordance with the requirements of Env-Wq 716.02.
- F. Install building sewer service laterals, of sizes and in locations indicated or directed. Plug service at street right-of-way, connect to existing building sewer or terminate or connect to building sanitary drains at a point 5 feet beyond foundation exterior wall, as indicated or directed.
- G. When installing building sewer service laterals at depths less than 3 feet, install 2-inch thick extruded polystyrene over piping. Width of insulation shall extend minimum of 12 inches beyond each side of pipe. Install directly over and center on pipe center line.
- H. Tunneling: Install pipe under streets or other obstructions that cannot be disturbed, by tunneling, jacking, or a combination of both.

3.4 PIPE JOINT CONSTRUCTION AND INSTALLATION

- A. Join and install ductile-iron pipe with ductile-iron push-on joint fittings and rubber gaskets in accordance with AWWA C600.
- B. Join and install PVC pipe as follows:

1. Pipe and gasketed fittings, joining with elastomeric seals in accordance with ASTM D 3212.
 2. Installation in accordance with ASTM D 2321.
- C. Join different types of pipe with standard manufactured couplings and fittings intended for that purpose.

3.5 MANHOLES

- A. General: Install manholes complete with accessories as indicated. Utilize overlapping joint type for pre-cast concrete construction. Construct continuous brick paved inverts and shelves between inlets and outlet. Set tops of frames and covers flush with finish surface where manholes occur in pavements. Elsewhere, set tops 3 inches above finish surface, unless otherwise indicated.
- B. Place pre-cast concrete manhole sections as indicated, and install in accordance with ASTM C 891.
- C. Provide a double row of bitumastic joint sealant at horizontal wall section joints.
- D. Apply bituminous mastic coating at joints of sections.

3.6 INSTALLATION OF IDENTIFICATION

- A. Install continuous plastic metallic lined underground warning tape during back-filling of trench for underground water service piping. Locate two feet above pipe crown and centered on pipe.

3.7 FIELD QUALITY CONTROL

- A. Perform testing of sewer system in accordance with local authorities having jurisdiction.
- B. Gravity Sewer Testing: All new gravity sewers shall be tested for water tightness by the use of low-pressure air tests. The Engineer shall observe all testing. Low-pressure air testing shall be in conformance with ASTM F 1417-92 (2005) "Standard Test Methods for Installation Acceptance of Plastic Gravity Sewer Lines Using Low-Pressure Air"; or Uni-Bell PVC Pipe Association Uni-B-6, "Low-Pressure Air Testing of Installed Sewer Pipe" (1998). All new gravity sewer pipes shall be cleaned and visually inspected using a lamp and shall be true to line and grade following installation and prior to use. All new gravity sewer pipe shall be deflection tested not less than 30 days nor more than 90 days following installation. The maximum allowable deflection of flexible sewer pipe shall be 5% percent of average inside diameter. A rigid ball or mandrel with a diameter of at least 95% of the average inside pipe diameter shall be used for testing pipe deflection. The deflection test

shall be conducted without mechanical pulling devices. Sections which do not permit ball passage shall be reinstalled to attain satisfactory results.

- C. Force Main and Low Pressure Sewer Testing:** Force mains shall be tested in accordance with Section 5 of AWWA C600-10 "Installation of Cast Iron Water Mains and Their Appurtenances", at a pressure equal to the greater of 150 percent of the design operating total dynamic head or at least 100 psi. The Engineer shall observe all testing.

D. Manhole Testing

(a) Manholes shall be tested for leakage using a vacuum test in accordance with the ASTM C1244 standard in effect when the testing is performed. A manhole may be backfilled prior to performing a vacuum test, but if the manhole fails the vacuum test, backfill shall be removed so repairs to the manhole can be made from the outside of the manhole prior to retesting.

(b) The manhole vacuum test shall conform to the following:

- (1) The initial vacuum gauge test pressure shall be 10 inches Hg; and
- (2) The minimum acceptable test hold time for a 1-inch Hg pressure drop to 9 inches Hg shall be:

- a. Not less than 2 minutes for manholes less than 10 feet deep in depth;
- b. Not less than 2.5 minutes for manholes 10 to 15 feet deep; and
- c. Not less than 3 minutes for manholes more than 15 feet deep;

(c) The manhole shall be repaired and retested if the test hold times fail to achieve the acceptance limits specified in (b), above.

(d) Inverts and shelves shall not be installed until after successful testing is completed.

(e) Immediately following completion of the leakage test, the frame and cover shall be placed on the top of the manhole or some other means used to prevent accidental entry by unauthorized persons, children, or animals, until the contractor is ready to make final adjustment to grade.

1. Cleaning: Clear interior of piping and structures of dirt and other superfluous material as work progresses. Place plugs in ends of uncompleted pipe at end of day or whenever work stops.
2. Flush piping between manholes, if required by local authority, to remove collected debris.

- E. Interior Inspection:** Inspect piping to determine whether line displacement or other damage has occurred.

1. Make inspections after pipe between manholes and manhole locations has been installed and approximately 2 feet of backfill is in place, and again at completion of project.
2. If inspection indicates poor alignment, debris, displaced pipe, infiltration or other defects correct such defects, and re-inspect.

3.8 PROTECTION OF WATER SUPPLIES

- A.** There shall be no physical connection between a public or private potable water supply system and a sewer or sewer appurtenance which would permit the passage of sewage or polluted water into the potable supply. No water pipe shall pass through or come in contact with any part of a sewer or sewer manhole.
- B.** No sewer shall be located within the well protective radii established in Env-Ws 300 for any public water supply wells or within 100 feet of any private water supply well.
- C.** Sewers shall be located at least 10 feet horizontally from any existing or proposed water main.
- D.** A deviation from the separation requirements of B or C above shall be allowed where necessary to avoid conflict with subsurface structures, utility chambers and building foundations, provided that the sewer is constructed in accordance with the force main construction requirements specified in Env-Wq 704.06.
- E.** Whenever sewers must cross water mains, the sewer shall be constructed as follows:
 - 1. Vertical separation of the sewer and water main shall be not less than 18 inches, with the water above sewer; and,
 - 2. Sewer joints shall be located at least 6 feet horizontally from the water main.

END OF SECTION