



Town of
LITCHFIELD
CONNECTICUT

CONTRACT DOCUMENTS
For
REHABILITATION OF
RICHARDS ROAD EXTENSION CULVERT
OVER HUMASTON BROOK

Denise Raap
First Selectman

Raz Alexe, P.E.
Director of Public Works

November 18, 2022

Affirmative Action/Equal Opportunity Employer
Minority/Women Business Enterprises are encouraged to apply

CONSULTING ENGINEERS

CARDINAL
ENGINEERING ASSOCIATES

180 Research Parkway
Meriden, Connecticut 06450

REHABILITATION OF RICHARDS ROAD EXTENSION CULVERT
OVER HUMASTON BROOK

CONTRACT DOCUMENTS

TABLE OF CONTENTS

LEGAL NOTICE - ADVERTISEMENT FOR BIDS

<u>INFORMATION TO BIDDERS</u>	<u>PAGE</u>
1. Use of Separate Bid Forms	1
2. Interpretations or Addenda	1
3. Inspection of Site	1
4. Alternative Bids	1
5. Bids	1
6. Bid Guaranty	3
7. Collusive Agreements	3
8. Statement of Bidders Qualifications	3
9. Unit Prices	4
10. Corrections	4
11. Time for Receiving Bids	4
12. Opening of Bids	4
13. Withdrawal of Bids	4
14. Award of Contract: Rejection of Bids	4
15. Execution of Agreement: Performance Bond and Labor and Material Bond	5
16. Notice to Proceed	6
17. Wages and Salaries	6
18. Equal Employment Opportunities	6
19. Taxes	6
20. Allowances	6
21. Time for Commencement and Completion	7

PROPOSAL

	<u>PAGE</u>
Contractor's Check List	8
1. Bid Proposal Pages	9 - 13
2. Bid Bond, Certificate as to Corporate Principal and Form of Surety Guaranty	14 - 18
3. Non-Collusion Affidavit of Prime Bidder	19 - 20
4. Affirmative Action Program Certification	21
5. Statement of Bidder's Qualifications	22 - 26
6. Town of Litchfield Non-Discrimination Certification	27 -28
7. Town of Litchfield Hold Harmless and Supplemental Agreement	29
8. Contractor's Wage Certifications Form	30
9. Wage Rates (Attached after this page)	31

FORMS

1. Agreement	32 - 34
2. Town of Litchfield Certification	35
3. Performance Bond	36 - 37
4. Payment Bond	38 - 39
5. Acknowledgment of Surety Company	40
6. Certification of Non-Arrearage	41
7. Certificate of Waiver and Release of Claims	42 - 43
8. Contractor's Final Payment Release/Affidavit	44 -45
9. Statement of Surety Company	46
10. Maintenance Bond	47 - 48
11. Notice of Award / Acceptance of Notice	49 -50
12. Notice to Proceed / Acceptance of Notice	51
10. Change Order Form	52

NOTICE TO CONTRACTOR

1. Notice to Contractor – Applicability of Connecticut DOT – Form 818	53
2. Notice to Contractor – Prequalification Requirement – DNA	53
3. Notice to Contractor – Bid Rejection	53
4. Notice to Contractor – Procurement of Materials	53
5. Notice to Contractor – Supervision and Inspection	53
6. Notice to Contractor – Verification of Existing Conditions	53
7. Notice to Contractor – Unanticipated Discovery of Cultural Resources	54
8. Notice to Contractor – Time of Year Restrictions	54
9. Notice to Contractor – Flood Contingency Plan Requirements	54
10. Notice to Contractor – No Storage or Staging of Materials within Floodplain without Review and Written Approval	55
11. Notice to Contractor – Noise Pollution	55
12. Notice to Contractor - Call Before You Dig	55
13. Notice to Contractor – Protection of Existing Overhead Utilities	56
14. Notice to Contractor – Endangered Species – Northern Long Eared Bat	56
15. Notice to Contractor – Invasive Vegetation	57
16. Notice to Contractor – Permits	57

SPECIAL PROVISIONS

1. Section 1.01 – Definitions of Terms and Permissible Abbreviations	58
2. Section 1.02 – Proposal Requirements and Conditions	59 - 60
3. Section 1.03 – Award and Execution of Contract	61
4. Section 1.04 – Scope of Work	62
5. Section 1.05 – Control of the Work	63 - 64
6. Section 1.06 – Control of Materials	65
7. Section 1.07 – Legal Relations and Responsibilities	66- 67
8. Section 1.08 – Prosecution and Progress	68
9. Section 1.09 – Measurement and Payment	69
10. Section 1.10 – Environmental Compliance	70
11. Section 1.11 – Claims	71
12. Division II – Construction Details	72
a. 0204151A Handling Water	73
b. 0651645A Centrifugally Cast Cementitious Lining (60” RCP)	74 - 79
c. 0732999A Reset Stone Retaining Wall	80
d. 1700005A Testing	81

LEGAL NOTICE

ADVERTISEMENT FOR BIDS

REHABILITATION OF RICHARDS ROAD EXTENSION CULVERT OVER HUMASTON BROOK

The Town of Litchfield, Connecticut is seeking sealed bids for furnishing all labor, tools, materials and equipment required for the REHABILITATION OF RICHARDS ROAD EXTENSION CULVERT OVER HUMASTON BROOK.

Bids will be received by the Department of Public Works (DPW) Office, 101 Russell Street, Litchfield, Connecticut 06759 until 10:30 A.M., local time, on Wednesday, December 21st, 2022, after which no further bids will be accepted at which time the bids will be publicly opened and read.

Plans and Specifications for the above project can be downloaded free of charge from the Town Website. It shall be each Bidder's responsibility to make inquiry (Town Website or by calling DPW) as to any Addenda issued.

Form 818 Standard Specifications and Supplemental Specifications may be obtained via the Connecticut Department of Transportation's website: <http://www.ct.gov/dot/cwp/view.asp?a=3609&q=430362>. All Proposals must be on the form furnished by the Town of Litchfield and must be requested for the above-named project.

Each Bidder must deposit with his/her bid a certified check, or a bid bond, for not less than five percent (5%) of the bid as provided in the Information for Bidders.

The attention of the Bidders is called to the requirement for minimum wage rates to be paid under this Contract.

The right is reserved to reject any or all bids in whole or in part, to award any item, group of items, or total bid and to waive any informality or technical defects, if it is deemed to be in the best interest of the Town of Litchfield.

No Bidder may withdraw their bid within ninety (90) days after the actual date of the opening thereof.

CONTRACTORS that find discrepancies and/or errors in or between plans, specifications, quantities and other matters, must immediately notify DPW c/o Raz Alexe, P.E., Director of Public Works/ Town Engineer, 101 Russell Street, Litchfield, CT 06759 or at ralexe@townoflitchfield.org in writing not less than seven (7) calendar days before the scheduled bid opening.

INFORMATION TO BIDDERS

1. USE OF SEPARATE BID FORMS

These Contract Documents include a complete set of bidding and agreement forms, which are for the convenience of Bidders and are not to be detached from the Contract Documents, filled out, or executed;

Separate copies of the Bid package are included

2. INTERPRETATIONS OR ADDENDA

No oral interpretation will be made to any bidder as to the meaning of the Contract Documents or any part thereof. Every request for such an interpretation shall be made in writing to Cardinal Engineering Associates, Inc., 180 Research Parkway, Meriden, Connecticut 06450 with carbon copy to the Town Engineer. Any inquiry received seven (7) or more days prior to the date fixed for opening of bids will be given consideration. Every interpretation made to Bidders will be in the form of an Addendum to the Contract Documents and, when issued, will be on file at the Public Works Department at least five (5) days before Bids are opened. In addition, all Addenda will be mailed and/or faxed to each person to whom Contract Documents have been issued, but it shall be the Bidder's responsibility to make inquiry as to, and to obtain, the Addenda issued, if any. All such Addenda shall become part of the Contract and each Bidder shall be bound by such Addenda, whether or not received by the Bidder.

3. INSPECTION OF SITE

Each Bidder shall visit the site of the proposed work and fully acquaint itself with the existing conditions there relating to construction and labor and should fully inform itself as to the facilities involved, the difficulties and restrictions attending the performance of the Contract. The Bidder shall thoroughly examine and familiarize itself with the Drawings, Technical Specifications and all other Contract Documents. The bidders shall also examine all records on file with the Town of Litchfield, "Call Before You Dig" and State Authorities regarding the Project, and the areas within the Project limits, so as to be apprised of all subsurface conditions and other relevant information. The Contractor, by the execution of the Contract, shall in no way be relieved of any obligation under it due to the failure to receive or examine any form or legal instrument or to visit the site and acquaint itself with the conditions there existing and the Town of Litchfield will reject any claim based on the facts regarding which it should have been on notice.

4. ALTERNATE BIDS

No alternate bids will be considered unless alternate bids are specifically requested.

5. BIDS

a.) Each bid must be submitted on the prescribed, separately bound bid forms. All blank spaces must be filled in as noted in ink. Bids must give the prices proposed both in words and figures and no changes shall be made in the forms or in the items mentioned therein. Erasure and other changes in the bid must be explained or noted over the initials of the bidder. In the event of any discrepancy between the written amounts and the figures, the written amounts shall govern.

b.) The Bidder shall sign the bid in the blank space provided for this purpose. If the bid is made by a partnership or corporation, the name and address of the partnership or corporation shall be indicated, together with the names and addresses of the partners or officers. If the bid is made by a partnership, it must be acknowledged by one of the partners; if made by a corporation, by one of the officers.

Bidders shall furnish with their bids the following:

1. Bid Bond, Certificate as to Corporate Principal and Form of Surety Guaranty
2. Non-Collusion Affidavit of Prime Bidder (including notification of outstanding financial and other obligations to the Town of Litchfield)
3. Affirmative Action Certification
4. Statement of Bidder's Qualifications
5. Town of Litchfield Non-Discrimination Certification
6. Town of Litchfield Hold Harmless and Supplemental Agreement
7. Contractor's Wage Certification Form

The information required under (1) to (7), inclusive, shall be furnished on the forms included in the separately bound Bid Insert and shall be subject to all requirements of the General Conditions, Special Conditions and the Specifications and Drawings.

c.) The successful Bidder is specifically advised that he/she, and any person, firm or other party to whom it is proposed to award a subcontract under this Contract, must submit a letter regarding compliance with the Equal Employment Opportunity requirements included in this Project. Approval of the contractor/subcontractor award cannot be given by the Owner unless and until the proposed contractor/subcontractor has submitted the certification and/or other evidence that it has fully complied with any reporting requirements to which it is or was subject.

Although the Bidder is not required to attach such certification of compliance to its bid, the Bidder is herein advised of this requirement so that appropriate action can be taken to prevent subsequent delay in contract and subcontract awards.

d.) The Owner will consider informal any bid not prepared and submitted in accordance with the provisions hereof and may, at its option, waive any informalities/irregularities or accept or reject any and all bids. Any bid received after the time, date and place specified shall not be considered. No Bidder may withdraw a bid within ninety (90) days after the actual date of the opening thereof.

6. BID GUARANTY

a.) The bid must be accompanied by a bid guaranty, which shall not be less than specified in the Advertisement for Bids. At the option of the Bidder, the guaranty may be a certified check, bank draft, negotiable U.S. Government Bond (at par value) or a bid bond in the form attached.

The bid bond shall be secured by a guaranty or Surety Company authorized and qualified to do business in the State of Connecticut and listed in the latest issue of the U.S. Treasury Circular 570. The amount of such bid bond shall be within the maximum amount specified for such company in said Circular 570. Bids will be considered non-responsive unless accompanied by the required guaranty. Certified check or bank draft must be made payable to the order of the Town of Litchfield. Cash deposits will not be accepted. The bid guaranty shall insure the execution of the Agreement and the furnishing of the surety bond or bonds by the successful Bidder, all as required by the Contract Documents.

b.) Revised bids submitted before the opening of the bids, whether forwarded by mail or telegram, if representing an increase in excess of two percent (2%) of the original bid, must have the bid guaranty adjusted accordingly, otherwise the Bid will not be considered.

c.) Certified checks or bank drafts, or the amount thereof, bid bonds and negotiable U.S. Government bonds of successful Bidders, will be returned as soon as practicable after the opening of the bids.

7. COLLUSIVE AGREEMENT

a.) Each Bidder submitting a bid to the Town of Litchfield for any portion of the work contemplated by the documents on which bidding is based, shall execute, and attach thereto, an affidavit substantially in the form herein provided to the effect that it has not colluded with any other person, firm or corporation in regard to any bid submitted.

b.) Before executing any subcontract, the successful Bidder shall submit the name of any proposed subcontractor for prior approval and an affidavit substantially in the form herein provided in the section SUBCONTRACTS under the General Conditions.

8. STATEMENT OF BIDDER'S QUALIFICATIONS

Each Bidder shall, as noted in the Bid Package, submit on the form furnished for that purpose (a copy of which is included in the Contract Documents), a statement of the Bidder's qualifications, its experience record in constructing the type of improvements embraced in the Contract and its organization and equipment available for the work contemplated; and, when specifically requested by the Town, shall also submit a detailed financial statement. The Town shall have the right to take such steps as it deems necessary to determine the ability of the Bidder to perform the obligations under the Contract and the Bidder shall furnish the Town all such information and data for this purpose as it may request. The right is reserved to reject any bid where an investigation of the available evidence or information does not satisfy the Town that the Bidder is qualified to carry out properly the terms of the Contract.

9. UNIT PRICES

The unit prices for each of the several items in the proposal of each Bidder shall include the pro rata share of overhead, so that the sum of the products obtained by multiplying the quantity shown for each item by the unit price represents the total bid. Any bid not conforming to this requirement may be rejected as informal. The special attention of all Bidders is called to this provision for, should conditions make it necessary to revise the quantities, increase or decrease thereof may be made without limit and adjustment and compensation shall be made on the basis of the unit prices for such items.

10. CORRECTIONS

Erasures or other changes in the Bids must be noted over the signature of the Bidder.

11. TIME FOR RECEIVING BIDS

a.) Bids received prior to the advertised hour of opening will be kept securely sealed. The officer whose duty it is to open them will decide when the specified time has arrived and no bid received thereafter will be considered, except that, when a bid arrives in the mail after the time fixed for opening, but before the reading of all other bids is completed, and it is shown to the satisfaction of the Town that the non-arrival on time was due solely to delay in the mails for which the Bidder was not responsible, such bid will be received and considered.

b.) Bidders are cautioned that, while facsimile modification of bids may be received as provided above, such modifications, if not explicit and it in any sense subject to misrepresentations, shall make the bid so modified or amended, subject to rejection.

12. OPENING OF BIDS

At the time and place fixed for the opening of bids, the Town will cause to be opened and publicly read aloud every bid received within the time set for receiving bids, irrespective of any irregularities therein. Bidders and other persons properly interested may be present, in person or by a representative.

After the bid opening, the Town or Engineer shall evaluate each submitted bid for conformance to the bid submittal requirements and check each Bid Proposal for errors and agreement between unit prices in numbers and written words.

13. WITHDRAWAL OF BIDS

Bids may be withdrawn on written or facsimile request dispatched by the Bidder and received by the Town of Litchfield in time for the bid opening; provided that the written confirmation of any facsimile withdrawal over the signature of the Bidder shall be placed in the mail and postmarked prior to the time set for bid opening. The bid guaranty of any Bidder withdrawing their bid in accordance with the foregoing conditions will be returned promptly.

14. AWARD OF CONTRACT; REJECTION OF BIDS

a.) The Contract will be awarded within ninety (90) days after the date of the bid opening to the responsible Bidder submitting the lowest bid complying with the conditions of the Advertisement for Bids. The Bidder to whom the award is made will be notified at the earliest

possible date. The Town, however, reserves the right to reject any and all bids or to waive any informality in submitted bid documents whenever such rejection or waiver is in its interest.

b.) The Town reserves the right to consider as unqualified to do the work required by these Contract Documents any Bidder who does not habitually perform with their own forces the major portion of the work involved in construction of the improvements in these Contract Documents.

c.) The ability of any Bidder to obtain a performance bond will not be regarded as the sole test of such Bidder's competency or responsibility.

d.) The Town will not award the Contract to any Contractor who is, at the time of the award, ineligible for such Contract under the provisions of any applicable regulations issued by the Secretary of Labor, United States Department of Labor, or is not qualified under applicable State and local laws and regulations.

e.) If the Contract is awarded, it will be awarded by the Town to a responsible Bidder on the basis of the lowest Base Bid. The Contract will require the completion of work in accordance with the Contract Documents.

15. EXECUTION OF AGREEMENT, PERFORMANCE, LABOR AND MATERIAL BOND

a.) Subsequent to the notice of award and within ten (10) days after the prescribed forms are presented for signature, the successful Bidder shall execute and deliver, to the Town, the Agreement in the form included in the Contract Documents in such number of copies as the Town shall require.

b.) Having satisfied all conditions of award, as set forth elsewhere in these documents, the successful Bidder shall, within the period specified in Paragraph "a." above, furnish a surety bond in a penal sum not less than the amount of the Contract as awarded, as security for the faithful performance of the Contract and a labor and material bond for payment of all persons, firms or corporations to whom the Contractor may become legally indebted for labor, materials, tools, equipment or services of any nature, including utility and transportation services, employed or used by him in performing the work. Such bonds shall be in the same form as those included in the Contract Documents and shall bear the same date or a date subsequent to that of the Agreement. These bonds shall be signed and issued by a guaranty or surety company satisfactory to the Town, authorized and qualified to do business in the State of Connecticut and listed in the latest issue of the U.S. Treasury Circular 570 and the penal sum of any such bond shall be within the maximum specified for such company in said Circular 570. The current Power of Attorney for the person who signs for any surety company shall be attached to such bonds.

c.) The failure of the successful Bidder to execute such agreement and to supply the required bonds or submit the insurance policies required in the section INSURANCE of the GENERAL CONDITIONS within ten (10) days after the prescribed forms are presented for signature, or within such extended period as the Town grants, based upon reasons determined sufficient by the Town, shall constitute a default and the Bidder's bid bond or guaranty shall be forfeited to the Town of Litchfield as liquidated damages. The Town may either award the Contract to the next lowest responsible Bidder or re-advertise for bids and may charge against the defaulting Bidder the difference between the amount of the bid and the amount for which a Contract for the work is subsequently executed, irrespective of whether the favorable bid is received by re-advertising, the defaulting Bidder shall have no claim against the Town for a refund.

16. NOTICE TO PROCEED

A notice to proceed will be issued by the Town of Litchfield within thirty (30) calendar days after the execution of the Contract by the Town or the deposition of the required bonds and insurance policies, whichever is last.

17. WAGES AND SALARIES

a.) Attention of the Bidders is particularly directed to the requirements concerning the payment of not less than the prevailing wage and salary rates specified in the Contract Documents and the classification of employees.

b.) The rate of pay set forth in the Contract Documents are the minimum to be paid during the life of the contract. It is, therefore, the responsibility of the Bidders to inform themselves as to local labor conditions, such as the length of work day and the work week, overtime compensation, health and welfare contributions, labor supply and prospective changes and adjustments of rates.

18. EQUAL EMPLOYMENT OPPORTUNITY

Attention of the Bidders is particularly called to the requirements for insuring that employees and applicants for employment are not discriminated against because of their race, creed, color or national origin or physical handicap.

19. TAXES

Bids should not include federal excise or state sales taxes (State Sales Tax exempt under Connecticut General State Statute Sec. 12-412 (1) as the Town is exempt from payment of any such taxes). The Town is also exempt from transportation taxes when goods are consigned to the Town. Tax exemption certificates will be furnished by the Supervisory Auditor-Accounts Payable upon satisfactory proof of delivery to the Town. Shipments should be consigned to the Town in care of the Contractor.

20. ALLOWANCES

The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Town may direct, but the Contractor shall not be required to employ persons or entities against which the Contractor makes reasonable objection.

Unless otherwise provided in the Contract Documents:

- a). Materials and equipment under an allowance shall be selected promptly by the Town to avoid delay in the Work;
- b). Allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- c). Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the allowances; and
- d). Whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order.

21. TIME FOR COMMENCEMENT AND COMPLETION AND LIQUIDATED DAMAGES

The Contractor shall commence work under this Contract within ten (10) days of the date of "Notice to Proceed" issued by the Town of Litchfield and shall fully complete all work stipulated in these Contract Documents within 60 consecutive calendar days thereafter.

It is mutually agreed that, if the Contractor fails to complete all or a portion of its work within the time stipulated in the Contract Documents, the Owner will be damaged; and because the amount of the Owner's damages is difficult, if not impossible, to definitely ascertain and prove, it is hereby agreed that the amount of such damages shall be as follows: Five Hundred Dollars (\$500.00) per day as liquidated damages for each and every day of delay in the completion of the work in accordance with the Contract Documents.

The Contractor agrees that said liquidated damages shall be deducted from monies due the Contractor under the Contract, or, if no money is due the Contractor, the Contractor hereby agrees to pay to the Owner as liquidated damages, and not by way of penalty, such total sum as shall be due for such delay.

TOWN OF LITCHFIELD
CONTRACTOR'S CHECK LIST

PROJECT: REHABILITATION OF RICHARDS ROAD EXTENSION CULVERT
OVER HUMASTON BROOK

The following forms are required for submittal for the above referenced bid and shall be submitted with the bid proposal pages by the time and date specified. This checklist is provided for the Bidder's use and shall not be required for submittal.

The following forms shall be submitted in duplicate.

FORM DESCRIPTION

1. BID PROPOSAL PAGES
2. BID BOND
3. CERTIFICATE AS TO CORPORATE PRINCIPAL
4. FORM OF SURETY GUARANTY
5. NON-COLLUSION AFFIDAVIT OF PRIME BIDDER/PROPOSER
6. AFFIRMATIVE ACTION PROGRAM CERTIFICATION
7. STATEMENT OF BIDDER'S QUALIFICATIONS
8. TOWN OF LITCHFIELD NON-DISCRIMINATION CERTIFICATION
9. TOWN OF LITCHFIELD HOLD HARMLESS AND SUPPLEMENTAL AGREEMENT
10. CONTRACTOR'S WAGE CERTIFICATION FORM

BID

TOWN OF LITCHFIELD, CONNECTICUT

REHABILITATION OF RICHARDS ROAD EXTENSION CULVERT OVER HUMASTON BROOK

Bid Submitted by:

Company Name	

Street Address	

City, State and Zip Code	

Contact	
()	()
Telephone #	Fax #

Denise Raap
First Selectman
Town Hall, 74 West Street
Litchfield, Connecticut 06759

Dear Mrs. Raap:

The undersigned, having familiarized themselves with the existing conditions of the Project area affecting the cost of the work and with the Contract Documents (which includes Advertisement For Bids, Bid Form, Bid Bond, Instructions to Bidders, Non-Collusion Affidavit, Addenda, General Conditions, Special Conditions, Technical Specifications, Drawings as listed in the Schedule of Drawings and Form of Surety Bond or Bonds as prepared by the Town of Litchfield and on file at the Department of Public Works' Office, 101 Russell Street, Litchfield Connecticut 06759, hereby proposes to furnish all machinery, tools, appurtenances, equipment and services, including utility and transportation services required to construct and complete the work, all in accordance with the above listed Documents and submits, herewith, in conformity with the Project Manual and subsequent addenda, the following bid:

BID PROPOSAL
REHABILITATION OF RICHARDS ROAD EXTENSION CULVERT OVER HUMASTON BROOK
LITCHFIELD, CONNECTICUT

ITEM No		Brief Description: Unit or Lump Sum Bid (in both words and figures)	Est Quantity	Ext. Total in Figures
1	0201001	CLEARING AND GRUBBING THE LUMP SUM PRICE OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	LS	\$ _____
2	0204151 A	HANDLING WATER THE LUMP SUM PRICE OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	LS	\$ _____
3	0213100	GRANULAR FILL THE PRICE PER CUBIC YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	20	\$ _____
4	0219001	SEDIMENTATION CONTROL SYSTEM THE PRICE PER LINEAR FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	200	\$ _____
5	0286010 .10	ROCK IN DRAINAGE TRENCH EXCAVATION - 0' - 10' DEEP THE PRICE PER CUBIC YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	2	\$ _____
6	0506040	PRECAST CONCRETE ENDWALL THE PRICE PER CUBIC YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	3	\$ _____
7	0651645 A	CENTRIFUGALLY CAST CEMENTITIOUS LINING (60" RCP) FOR THE LUMP SUM PRICE OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	LS	\$ _____
8	0686240 .18	18" HDPE - (SMOOTH) 0'-10' DEEP THE PRICE PER LINEAR FOOT OF \$ _____ DOLLARS AND _____ CENTS \$ _____	8	\$ _____
9	0703012	INTERMEDIATE RIPRAP THE PRICE CUBIC YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	60	\$ _____
10	073299 A	RESET STONE RETAINING WALL THE LUMP SUM PRICE OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	LS	\$ _____

BID PROPOSAL
REHABILITATION OF RICHARDS ROAD EXTENSION CULVERT OVER HUMASTON BROOK
LITCHFIELD, CONNECTICUT

ITEM No		Brief Description: Unit or Lump Sum Bid (in both words and figures)	Est Quantity	Ext. Total in Figures
11	0822001	TEMPORARY PRECAST CONCRETE BARRIER CURB THE PRICE PER LINEAR FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	40	\$ _____
12	0910023	R-B TERMINAL SECTION THE PRICE PER EACH OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	2	\$ _____
13	0910170	METAL BEAM RAIL (TYPE R-B 350) THE PRICE PER LINEAR FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	75	\$ _____
14	0912503	REMOVE METAL BEAM RAIL THE PRICE PER LINEAR FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	60	\$ _____
15	0944000	FURNISHING AND PLACING TOPSOIL THE PRICE PER SQUARE YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	100	\$ _____
16	0950005	TURF ESTABLISHMENT THE PRICE PER SQUARE YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	100	\$ _____
17	0971001	MAINTENANCE AND PROTECTION OF TRAFFIC THE LUMP SUM PRICE OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	LS	\$ _____
18	0975004	MOBILIZATION AND PROJECT CLOSEOUT THE LUMP SUM PRICE OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	LS	\$ _____
19	0978002	TRAFFIC DRUM THE PRICE PER EACH OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	10	\$ _____
20	0979003	CONSTRUCTION BARRICADE TYPE III THE PRICE PER EACH OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	4	\$ _____

BID PROPOSAL
REHABILITATION OF RICHARDS ROAD EXTENSION CULVERT OVER HUMASTON BROOK
LITCHFIELD, CONNECTICUT

ITEM No		Brief Description: Unit or Lump Sum Bid (in both words and figures)	Est Quantity	Ext. Total in Figures
21	0980001	CONSTRUCTION STAKING THE LUMP SUM PRICE OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	LS	\$ _____
22	1212010	TEMPORARY PLASTIC PAVEMENT MARKING TAPE - 12" WHITE THE PRICE PER LINEAR FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	24	\$ _____
23	1220027	CONSTRUCTION SIGNS THE PRICE PER SQUARE FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	24	\$ _____
24	1700005 A	TESTING THE ESTIMATED PRICE OF \$ THREE THOUSAND DOLLARS AND NO CENTS (\$ 3,000.00)	EST	\$ 3,000.00

TOTAL BID:

DOLLARS

AND

CENTS

\$ (_____)

It is understood and agreed that the written Unit Prices bid for the quantities of work in the various items of work shall control the Contract award and that the quantities noted are approximate (estimated only for use in comparing bids); and that the sum obtained by multiplying the Unit Prices by the estimated quantities and, also, the total of these sums are inserted for the purpose of checking this Bid and for the convenience of the Bidder. The Unit Prices are to be paid for the actual quantities of the several classes of work in the completed work or structures.

Notice to Bidders:

The Bidder's attention is called to Section 9 of the "Instructions to Bidders" regarding the significance of the as-bid unit prices for this Project.

The Bidder understands, by signing this Bid that the Town of Litchfield shall REJECT any bid that has unit prices, which are, in the opinion of the Purchasing Agent, obviously unbalanced. The Bidder is required to calculate the value of the various bid items on the basis of reasonable labor, material, equipment, pro rata profit and pro rata overhead costs to perform the work described in the Contract Documents.

In submitting this Bid, the Bidder understands that the Town of Litchfield reserves the right to reject any and all bids, or to waive any informality in the submitted bid documents. The Bidder also understands that the Town of Litchfield reserves the right to accept any, all, or none of the Alternates, which may be listed above and may accept Alternates in any order at the Town's sole discretion. The Bidder agrees to perform the work of each accepted Alternate for the sum quoted for each and to include such accepted Alternates in the Contract for construction.

If written notice of the acceptance of this Bid and any or all of the Alternates is mailed, telegraphed or otherwise delivered to the undersigned within ninety (90) days after the opening of the Bid, or at any time thereafter before the Bid is withdrawn, the undersigned agrees to execute and deliver any Contract in the prescribed form and furnish the required bonds within ten (10) days after the Contract is presented to them for signature.

Bid Bond:

The undersigned herewith submits security equal to five percent (5%) of the Base Bid, the sum of:

_____ Dollars and No Cents

(\$_____)

This security shall be the sole and exclusive property of the Town of Litchfield as liquidated damages to the Town, if the undersigned fails to execute a Contract in conformity with the accompanying forms, after due date notification therefore in the Contract Documents.

Other Conditions:

Attached hereto is an affidavit in proof that the undersigned has not colluded with any person with respect to this Bid, or any other bid, or in the submitting of this Bid.

The Bidder is enclosing a statement of their qualifications and is prepared to submit a financial statement upon request.

The acceptance of subcontractors shall rest with the Town and their decision shall be final.

Addenda:

The bidder hereby acknowledges receipt of the following Addenda. (Include signed copies of addenda with bid submittal)

Addendum Number	Date Received	Signature

Bidder's Official Name and Address:

Company Name: _____

Street Address _____

City, State and Zip Code: _____

Contact: _____

Signature _____ Title _____ Date _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS, THAT, we the undersigned,

(Name of Principal)

as PRINCIPAL, and _____

as SURETY are held and firmly bound unto the Town of Litchfield hereinafter called the "Town", in the penal sum of _____ Dollars (\$_____)

lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITIONS OF THE OBLIGATIONS IS SUCH THAT whereas the Principal has submitted the accompanying bid dated _____, 20__ for REHABILITATION OF RICHARDS ROAD EXTENSION CULVERT OVER HUMASTON BROOK.

NOW THEREFORE, if the Principal shall not withdraw said bid within the period specified therein after the opening of same or if no period be specified within 180 days after the said opening and shall within the period specified therefore, or, if no period be specified within 10 days after the prescribed forms are presented to him for signature, enter into a written Contract with the Town of Litchfield in accordance with the bid as accepted and give bond with good and sufficient surety or sureties, as may be required for the faithful performance and proper fulfillment of such contract, or in the event of the withdrawal of said bid within the period specified, or the failure to enter into such Contract and give such bond within the time specified, if the Principal shall pay the Town of Litchfield the difference between the amount specified in said Bid and the amount for which the Town of Litchfield may procure the required work or supplies or both, if the latter amount be in excess of the former, than the above obligations shall be void and of no effect, otherwise to remain in full force and effect.

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

For Sole Proprietor

(Seal)

In Presence of:

(Witness Signature)

(Individual Principal)

(Witness Signature)

(Business Address)

For Partnership:

In Presence of:

(Seal)

(Witness Signature)

(Partnership)

By: _____

(Witness Signature)

(Business Address)

For Corporation:

Attest:

(Corporate Principal)

(Business Address)

(Affix
Corporate
Seal)

By: _____

Attest:

(Corporate Surety)

(Business Address)

(Affix
Corporate
Seal)

Countersigned:

By: _____

By: _____

Attorney-in-Fact, State of _____

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the Secretary of the Corporation named as Principal in the within bond, that _____ who signed the said bond on behalf of the Principal was then _____ of said Corporation; that I know the signature and the signature thereto is genuine and that said bond was duly signed, sealed and attested to for and in behalf of said Corporation by authority of the governing body.

(Title)

(Corporate
Seal)

(The Surety Company must append statement of their financial condition and a copy of the resolution authorizing the execution of bonds by officers of the company and the power-of-attorney of the surety company's attorney-in-fact, authorized to act within the State of Connecticut).

FORM OF SURETY GUARANTY

(To accompany Bid)

KNOW ALL MEN BY THESE PRESENTS, that for and in consideration of the sum of \$1.00, lawful money of the United States, the receipt whereof is hereby acknowledged, paid the undersigned corporation and for other valuable consideration, the

(Name of Surety Company)

a corporation organized and existing under the laws of the State of _____
and licensed to do business in the State of Connecticut, certified and agrees, that if Contract
REHABILITATION OF RICHARDS ROAD EXTENSION CULVERT OVER HUMASTON
BROOK, is awarded to

_____, the undersigned Corporation will execute the
(Name of Bidder)

bond or bonds as required by the Contract Documents and will become Surety in the full amount of the Contract Price for the faithful performance of the Contract and for payment of all persons supplying labor or furnishing materials in connection thencewith.

(Surety)

(To be accompanied by the usual proof of authority of officers of surety company to execute the same).

TOWN OF LITCHFIELD, CONNECTICUT

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER/PROPOSER
(including notification of outstanding financial and other obligations to the Town of Litchfield)

State of _____)
County of _____) ss:

_____, being first duly sworn, deposes and says that:

1. He/She is (owner, partner, officer, representative or agent) of _____
_____, the Bidder/Proposer that has submitted the attached Bid/Proposal;
(Bidder/Proposer Name)
2. He/She is fully informed respecting the preparation and contents of the attached Bid/Proposal and of all pertinent circumstances respecting such Bid/Proposal;
3. Such Bid/Proposal is genuine and is not a Collusive or Sham Bid/Proposal;
4. Neither the said Bidder/Proposer, nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other bidder/proposer, firm or person to submit a collusive or sham Bid/Proposal in connection with the Contract for which the attached Bid/Proposal has been submitted or to refrain from bidding/proposing in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other bidder/proposer, firm or person to fix the price or prices in the attached Bid/Proposal of any other bidder, or to fix any overhead, profit or cost element of the bid/proposal prices or the Bid/Proposal price of any other bidder/proposer, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the Town of Litchfield or any person interested in the proposed Contract;
5. The price or prices quoted in the attached Bid/Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Bidder/Proposer or any of its agents, representatives, owners, employees or parties in interest, including this affiant; and
6. That no officer or employee or person whose salary is payable in whole or in part from the Town Treasury is directly or indirectly interested in the Bid/Proposal, or in the supplies, materials, equipment, work or labor to which it relates, or in any of the profits thereof.

7. **Check one:**

_____ That neither this Bidder/Proposer, nor any owner, partner, officer, representative, agent or affiliate of this Bidder/Proposer, has outstanding financial or other obligations to the Town of Litchfield nor are they a party to any entity which has any such obligations.

_____ There are such outstanding obligations. (List all obligations on a separate sheet, indicate the nature of the obligation and the parties involved.)

8. That neither this Bidder/Proposer nor any owner, partner, officer, representative, agent or affiliate of this Bidder/Proposer, has failed to file a list of taxable personal property with the Town of Litchfield as required by State law.

9. **Listing of owners, partners, officers, representatives, agents and/or affiliates**

Name	Title	Affiliated Company (if none, state NONE)
1.		
2.		
3.		
4.		
5.		
6.		
7.		

(Use additional sheet if necessary - must be on company letterhead and notarized)

(Signed) _____

(Title) _____

Subscribed and sworn to before me this _____ day of _____, 20_____.

_____ Title _____

My Commission Expires: _____

NOTE: THIS FORM MUST BE NOTARIZED

TO BE COMPLETED BY ORIGINATING DEPARTMENT

BID/PROPOSAL/AGREEMENT TITLE:	
DEPARTMENT:	
RETURN FORM TO:	
ADDRESS:	
ADDRESS:	

AFFIRMATIVE ACTION PROGRAM CERTIFICATION

CITY/TOWN OF: _____

FIRM NAME: _____

ADDRESS: _____

DESCRIPTION OF PROJECT: _____

BID AMOUNT: \$ _____

DATE: _____

I (Name of Person) _____

of the (Name of Firm) _____

intend to honor our Affirmative Action Program on file with the Connecticut Department of Transportation, Office of Contract Compliance. I further certify that our Affirmative Action Program is current and that the last approval was on _____, 20 ____ and it expires on _____, 20 ____.

SIGNED BY: _____

TITLE: _____

EEO OFFICER

STATEMENT OF BIDDER'S QUALIFICATIONS

(To be submitted by the Bidder with the Bid)

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information they desire.

1. Name of Bidder: _____
2. Bidder's Tax Identification Number: _____
3. Permanent Main Office Address: _____
4. When Organized: _____
5. If a Corporation, where incorporated: _____ Date of Incorporation: _____
6. If other than a Corporation or Partnership, describe Organization and name Principals:

7. Number of years engaged in construction under present firm or trade name: _____ Number of years as General Contractor: _____
8. Contracts on hand:

<u>Project Name</u>	<u>Owner</u>	<u>Arch/Engr.</u>	<u>Contract Amount</u>	<u>Contract Date</u>	<u>Percent Complete</u>	<u>Scheduled Completion</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
9. General character of work performed by your firm:

10. Percent of work normally performed with your own forces:

<u>Trade</u>	<u>Percent</u>	<u>Trade</u>	<u>Percent</u>	<u>Trade</u>	<u>Percent</u>

11. Have you ever failed to complete any work awarded to you? If so, where and why:

12. Have you ever defaulted on a Contract? If so, where and why:

13. List the more important contracts completed by you within the past 5 years:

<u>Project Name</u>	<u>Owner</u>	<u>Arch/Eng.</u>	<u>Contract Amount</u>	<u>Contract Date</u>	<u>Date Completed</u>
---------------------	--------------	------------------	------------------------	----------------------	-----------------------

14. List major equipment available for this Contract:

15. Experience in work similar in importance to this project:

16. Background and experience of the principal members of your organization, including the officers:

<u>Individual's Name</u>	<u>Construction Experience/Yrs.</u>	<u>Present Position Years Experience</u>	<u>Previous Position Responsibility</u>	<u>Years Experience</u>
--------------------------	---	--	---	-------------------------

17. Name and background of superintendent who will have principal on-site responsibility for this project:

<u>Individual's Name</u>	<u>Similar Project Experience</u>	<u>Dollar Value</u>	<u>Responsibility</u>
--------------------------	-----------------------------------	---------------------	-----------------------

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

18. List States and Categories in which your Organization is legally qualified to do business:

19. Give bank and trade references:

Bank

Trade

_____	_____
_____	_____
_____	_____

20. Name of Bonding and Insurance Companies and Names and Addresses of Agents:

21. Upon request by the Owner, the undersigned agrees to furnish, if being considered for award of Contract for the Project upon which a Bid Proposal has been submitted, within 48 hours after the Bid Opening, a current Statement of Financial Conditions, including Contractor's latest regular dated financial statement or balance sheet, which must contain the following items:

Current Assets: (Cash, joint venture accounts, accounts receivable, notes receivable, accrued interest on notes, deposits and materials and

prepaid expenses), net fixed assets and other assets.

Current Liabilities: (Accounts payable, notes payable, accrued interest on notes, provision for income taxes, advances received from owners, accrued salaries, accrued payroll taxes), other liabilities and capital (capital stock, authorized and outstanding shares par values, earned surplus).

22. The undersigned hereby authorizes and requests any persons, firm, or corporation to furnish any information requested by the Town of Litchfield in verification of the recitals comprising this statement of the Bidder's qualifications.

Dated at _____ this _____ day of _____, 20____

(Name of Bidder)

By: _____ Title: _____

State of _____)

) ss.

County of _____)

_____, being duly sworn, deposes and says that he/she is _____

of _____ and that he/she answers to the foregoing questions and all statements therein are true and correct.

Subscribed and sworn to before me this _____ day of _____, 20__

Notary Public

My Commission Expires:



TOWN OF LITCHFIELD

NONDISCRIMINATION CERTIFICATION

Representation by Entity

Written representation that complies with the nondiscrimination agreements and warranties under the Connecticut General Statutes ss/ss 4a-60(a)(1) and 4a-60a(a)(1) as amended.

Instructions:

For use by an entity (corporation, limited liability company, or partnership) when entering into any contract type with the Town of Litchfield, regardless of contract value. Submit to the awarding agency prior to contract execution.

Representation of an Entity:

I, _____, _____, of _____,
Authorized Signatory Title Name of Entity

An entity duly formed and existing under the laws of _____
Name State or Commonwealth

Represent that I am authorized to execute and deliver this representation on behalf of

_____ and that _____ has a
Name of Entity Name of Entity

Policy in place that complies with the nondiscrimination and agreements and warranties of Connecticut General Statutes ss/ss 4a-60(a)(1) and 4a-60a(a)(1) as amended.

Authorized Signatory

Date

Printed Name

HOLD HARMLESS AGREEMENT

The Contractor named below agrees that it will indemnify and hold harmless the Town of Litchfield and its respective officers, agents and employees from any loss, costs, damages, expenses, judgements and liability whatsoever kind or nature howsoever the same may be caused resulting directly or indirectly by any negligent act or omission of the contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable resulting in bodily injury including sickness and death, personal injury or damage to property directly or indirectly, including the loss resulting therefrom as permitted by law, unless and to the extent caused by the Town of Litchfield's negligence or its willful acts.

SUPPLEMENTAL AGREEMENT

The Contractor named below is an independent contractor and neither the Contractor nor its employees nor the Contractor's subcontractors under any circumstances, will be considered servants or agents of the Town of Litchfield and the Town will be at no time legally responsible for any negligence or wrong doing by the Contractor, its servants or agents or the Contractor's subcontractors. The Town will not withhold from the contract payments to the Contractor for any federal or state unemployment taxes, federal or state income taxes, Social Security tax, or any other amounts for benefits to the Contractor. The lump sum or unit charges for the services provided does not represent gross wages and further the Town will not provide the Contractor any insurance coverage or other benefits including Workers' Compensation, normally provided by the Town for its employees.

STATE OF CONNECTICUT)
) SS:
COUNTY OF)

Signed: _____

Print Name: _____

Title:

Company: _____

Address; _____

Subscribed and sworn to before me on

this day of , 20

Notary Public

**STATE OF CONNECTICUT
LABOR DEPARTMENT**

REGULATION OF WAGES DIVISION

CONTRACTOR'S WAGE CERTIFICATION FORM

I, _____ of
(Officer, Owner, Authorized Rep. Company Name)

Do hereby certify that the firm of

Company Name

and all of its subcontractors will pay all workmen on the:

REHABILITATION OF RICHARDS ROAD EXTENSION CULVERT
OVER HUMASTON BROOK

Project Name and Address

The wages as listed in the schedule of prevailing rates required for such Project (a copy of which is attached hereto).

(Signature) (Date)

Subscribed and sworn to before me this _____ day of _____, 20____.

Notary Public

Expires: _____ My _____ Commission

Prevailing Wage Rates for this Project are attached following this page.

***It is the responsibility of the Contractor, before bid opening, to request, if necessary, any additional information on State Wage Rates for those trades people who are not covered by the applicable State Wage Determination, but who may be employed for the proposed work under this Contract.**

AGREEMENT

THIS AGREEMENT, made this _____ day of _____, 20____, by and between the TOWN OF LITCHFIELD, hereinafter called the "OWNER", acting through its PUBLIC WORKS DEPARTMENT,

and, _____ (a corporation)

of _____, County of _____ and

State of _____, hereinafter called the "CONTRACTOR".

WITNESSETH THAT: for in consideration of the payments and agreement hereinafter mentioned, to be made and performed by the OWNER, the CONTRACTOR hereby agrees with the OWNER to commence and complete the construction described as follows:

REHABILITATION OF RICHARDS ROAD EXTENSION CULVERT OVER HUMASTON BROOK including addenda thereto, dated _____, being nos. as further described in the Proposal for Construction submitted by the CONTRACTOR, dated _____ and all documents included therein by reference; hereinafter called the "Project" for the sum of _____

_____ (\$ _____) and all extra work in connection therewith, under the terms as stated in the General, Special and Technical Conditions of the Contract, and at (his, her or their) own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurances and other accessories and services necessary to complete the said Project in accordance with the conditions and prices stated in the Contract.

The "Contract" shall consist of the following contract documents:

- a. This Agreement.
- b. The Advertisement for Bids.
- c. The Information for Bidders.
- d. The Proposal.
- e. The General Conditions.
- f. The Special Conditions.
- g. The Technical Conditions.
- h. The Contract Drawings, which include all maps, plates, prints and their drawings and printed or written explanatory matter thereof.
- i. The Specifications and Contract Documents thereof as prepared by Cardinal Engineering Associates, Inc., with offices located at 180 Research Parkway, Meriden, Connecticut, herein entitled the ENGINEER.

all of which, including all Addenda thereto, are made a part hereof and collectively evidence and constitute the Contract. If there is any inconsistency between the provisions of this Agreement and any of the other contract documents, the provisions of this Agreement shall prevail.

The CONTRACTOR hereby agrees to commence work under this Contract on or before a date to

be specified in a written "Notice to Proceed" of the OWNER and to fully complete the Project within the time limit specified in the Special Conditions. The CONTRACTOR further agrees to pay, as liquidated damages, the sum as specified in the Special Conditions and as herein provided in the General Conditions.

The OWNER agrees to pay the CONTRACTOR in current funds for the performance of the Contract, subject to additions and deductions, as provided in the General Conditions of the Contract and to make payments on account thereof as provided in the General Conditions.

The CONTRACTOR shall indemnify and save harmless the OWNER and the ENGINEER as specified in the Special Conditions.

Any claim between the OWNER and CONTRACTOR, shall be resolved as follows:

Prior to the initiation of formal dispute resolution proceedings, the claiming party shall submit a written demand for a conference to be attended by those parties involved in the Project that are reasonably necessary for the resolution of the dispute. Such meeting shall be held within fifteen (15) days of the demand at the offices of the OWNER. Each party requested to attend this conference shall send an authorized representative who has authority to make decisions necessary to resolve the dispute.

If the conference fails to lead to a resolution of the claim or dispute, then the OWNER may submit a written demand to proceed to mediation and the OWNER and CONTRACTOR agree to participate in good faith in the mediation process. Mediation shall commence within forty-five (45) days of the initial demand to mediate and shall be arranged through the American Arbitration Association or any other recognized dispute resolution organization in the State of Connecticut. The costs of mediation (excluding individual legal fees) shall be shared equally.

In the event the OWNER does not elect to proceed to mediation, then all claims, counter-claims, disputes and other matters in question between the OWNER and CONTRACTOR arising out of this Contract or the breach thereof will be decided by arbitration or in a court of competent jurisdiction within the district in which the OWNER is located, as determined by the OWNER. In any such action, the prevailing party shall be entitled to recover its costs and reasonable fees of experts and attorneys.

Notwithstanding the existence of a dispute, the CONTRACTOR shall continue to carry on the Work and maintain the progress schedule set forth in the Contract unless the OWNER elects to terminate the Work in accordance with the Contract or the parties mutually agree in writing to suspend Work while the dispute is pending.

IN WITNESS WHEREOF, the parties to these presents have executed this Contract in three (3) counterparts, each of which shall be deemed an original, in the year and day first above mentioned.

OWNER: _____ (Corporate Seal)

BY: _____ TITLE:

ATTEST:

CONTRACTOR: _____ (Corporate Seal)

BY: _____ TITLE:

ATTEST:

CERTIFICATION

I, the undersigned, _____, the duly authorized
and acting legal representative of the Town of Litchfield, Connecticut

do hereby certify as follows:

I have examined the above Contract(s) and Surety Bonds and the manner of execution thereof, and I am of the opinion that each of the aforesaid Agreements has been duly executed by the proper parties thereto acting through their duly authorized representatives, have full power and authority to execute said Agreements on behalf 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 provision thereof.

By _____

Date: _____

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That we _____ a _____
(Name of Contractor) (Corporation, Partnership, Individual)

hereinafter called the "Principal" and
(Surety)
of _____ State of _____ hereinafter
called the "Surety", are held firmly bound unto the TOWN OF LITCHFIELD, Connecticut,
hereinafter called "OWNER", in the penal sum of

_____ DOLLARS

(\$ _____) in lawful money of the United States, for the payment of

which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and
successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Principal entered into a certain Contract with the Owner, dated the
day of _____, 20____, a copy of which is hereto attached and made a part hereof for
the construction of:

REHABILITATION OF RICHARDS ROAD EXTENSION CULVERT OVER HUMASTON
BROOK

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all
the undertakings, covenants, terms, conditions and agreements of said Contract during the original
term thereof, and any extensions thereof which may be granted by the Owner, with or without
notice to the Surety, and if it shall fully indemnify and save harmless the owner from all costs and
damages which it may suffer by reason of failure to do so, and shall reimburse and repay the owner
all outlay and expense which the Owner may incur in making good any default, then this obligation
shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and
agrees that no change, extension of time, alteration or addition to the terms of the Contract or to
the work to be performed there under of the specifications accompanying the same shall in any
wise affect its obligation on this Bond, and it does hereby waive notice of any such change,
extension of time, alteration or addition to the terms of the Contractor or to work of the
specifications.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, who claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in three (3) counterparts, each one of which shall be deemed an original, this the _____ day of _____, 20____

ATTEST:

Principal

(Principal) Secretary

By: _____

(SEAL)

Address/Zip Code

Witness to Principal

ATTEST:

Surety

(Surety) Secretary

By: _____

(SEAL)

Attorney-in-Fact

Address/Zip Code

Witness to Surety

NOTE: Date of the Bond must not be prior to date of the Contract. If the Contractor is a Partnership, all Partners should execute the Bond.

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS:

That we _____ a _____
(Name of Contractor) (Corporation, Partnership, Individual)
hereinafter called the "Principal" and
of _____, State of _____
(Surety)

hereinafter called the "Surety", are held firmly bound unto the TOWN OF LITCHFIELD, Connecticut, hereinafter called "OWNER", in the penal sum of

_____ DOLLARS

(\$ _____) in lawful money of the United States, for the payment of

which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Principal entered into a certain Contract with the Owner, dated the day of _____, 20____, a copy of which is hereto attached and made a part hereof for the construction of:

REHABILITATION OF RICHARDS ROAD EXTENSION CULVERT OVER HUMASTON BROOK

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, subcontractors and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such Contract and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such work, and all insurance premiums on said work and for all labor, performed in such work, whether by subcontractor or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed there under of the specifications accompanying the same shall in any wise affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contractor or to work of the specifications.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, who claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in three (3) counterparts, each one of which shall be deemed an original, this the _____ day of _____, 20

ATTEST:

Principal

(Principal) Secretary

By: _____

(SEAL)

Address/Zip Code

Witness to Principal

ATTEST:

Surety

(Surety) Secretary

By: _____

(SEAL)

Attorney-in-Fact

Address/Zip Code

Witness to Surety

NOTE: Date of the Bond must not be prior to the date of the Contract. If the Contractor is a Partnership, all Partners should execute Bond.

ACKNOWLEDGMENT OF SURETY COMPANY

State of _____)
County of _____) ss:

On this _____ day of _____, 20____,

before me personally came _____ to me known to be the

person named in the above instrument and who being by me duly sworn, did depose and say (he/she)

resides in _____, that (he/she) is the _____ of the

corporation described in which is executed the above instrument; that (he/she) knows the seal of said

corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed pursuant to a resolution of the Board of Directors of said corporation and that (he/she) signed (his/her) name by like order.

Notary Public

My Commission Expires: _____

(The Surety Company must append statement of its financial condition and a copy of the resolution authorizing the execution of bonds by officers of the company and the Power-of-Attorney of the Surety Company's Attorney-in-Fact, authorized to act within the State of Connecticut.)

The foregoing bond and sureties are hereby approved.

Dated, Litchfield, Connecticut _____, 20____

Corporation Counsel, Town of Litchfield

Town Manager, Town of Litchfield

STATE OF CONNECTICUT)
) ss:
COUNTY OF)

41

CERTIFICATE OF WAIVER AND RELEASE OF CLAIMS

TO ALL TO WHOM THESE PRESENTS SHALL COME OR MAY CONCERN, KNOW THAT

(Subcontractor Name/Address)

a corporation/partnership, business organized under the laws of the State of Connecticut, in consideration of the sum of:

(Written Figures)

(\$_____)

Received from

(General Contractor Name/Address)

receipt whereof is hereby acknowledged, hereby waives and relinquishes for itself, its heir, executors, administrators, successors and assigns, all rights to claim payment for work done and in place as of the date of this Release of the Project commonly known as the REHABILITATION OF RICHARDS ROAD EXTENSION CULVERT OVER HUMASTON BROOK

(Name of Subcontractor)

hereby indemnifies the Town of Litchfield, Connecticut (Owner) against any and all claims for work performance and/or materials supplied by it/him/her/us under the above-mentioned Contract.

IN WITNESS WHEREOF:

(Subcontractor Name/Address)

has caused this Waiver and Release of Claims to be executed by its duly authorized officer this _____ day of _____, 20_____.

Executed and delivered in the presence of:

By: _____

Witness

Witness

State of _____)
County of _____) ss:
_____)

_____ duly authorized, have duly sworn, deposes and
says that he/she is _____ of
and that the statements herein contained are true and correct.

Subscribed and sworn to before me this _____ day of _____. 20____

(Notary Public)

Expires: _____ My _____ Commission

CONTRACTOR'S FINAL PAYMENT RELEASE

KNOW YE MEN BY THESE PRESENTS THAT:

_____ duly authorized to act on behalf of

(Contractor's Name and Address) _____ of
County and State of _____, for and in consideration of final payment is the sum of
Dollars (\$ _____), lawful money of the United States of America, the receipt whereof is hereby
acknowledged, in full satisfaction and payment of all sums of money owing, payable and belonging to
(Contractor) by any means whatsoever, for or on account of a certain agreement hereinafter called the Contract,
between the Town of Litchfield (Owner) and _____ (Contractor),
dated _____.

NOW, THEREFORE, _____ duly authorized to act on behalf of
said _____ (Contractor), its successors, legal representative and assigns does
hereby release, acquit, agree to indemnify and hold harmless and forever discharge the said Town of Litchfield
(Owner), its officers, agents, servants and employees from all claims, demands and causes of action and actions, suits,
debts, dues, duties, sum and sums of money, accounts, reckonings, bonds, bills, specialties, covenants, contracts,
agreements, promises, variances, trespasses, damages, judgments, extent, executions, claims and demands whatsoever
in law or equity, or otherwise that _____ (Contractor), its successors, legal
representative and assigns may now have or that might subsequently accrue to _____
(Contractor) its successors, legal representatives and assigns out of or connected with, directly or indirectly, the
Contract dated _____ between _____ (Contractor)
and _____ the Town of Litchfield (Owner) and any and all other bid documents, agreements and Contract modifications
thereto.

Signed, Sealed and Delivered in the Presence of:

_____ (Witness)

(Witness)

By: _____

Its duly Authorized _____

STATE OF CONNECTICUT)

) ss: _____ Dated: _____

COUNTY OF: _____)

Before me, on behalf of _____ personally appeared _____,
duly authorized, to me known, and known to me to be the person named in and who executed the above release, and
he/she acknowledges to me that he/she executed the same as his/her free act and deed.

Notary Public, Commission of Superior Court

My Commission Expires: _____

CONTRACTOR'S AFFIDAVIT

STATE OF: _____

COUNTY OF: _____

Before me, the undersigned, a _____ in and for said County and State
(NOTARY PUBLIC, JUSTICE OF THE PEACE, ALDERMAN)

personally appeared _____
(INDIVIDUAL, PARTNER OR DULY AUTHORIZED REPRESENTATIVE OF CORPORATE CONTRACTOR)

who, being duly sworn according to law, deposes and says that all labor, materials and outstanding claims and indebtedness of whatever nature arising out of the performance of the Contract of the Town of Litchfield, Connecticut with _____ have been paid in full.
(CONTRACTOR)

(Individual, Partner or duly Authorized Representative of Corp. Contractor)

Sworn to and subscribed before me this

_____ day of _____, 20 _____

NOTARY PUBLIC

My Commission Expires: _____

STATEMENT OF SURETY COMPANY

IN ACCORDANCE with the provisions of the Contract dated _____ between the Town of Litchfield, Connecticut and _____
(Contractor)

the _____ on the Material and Labor Payment Bond of
(Surety)

_____, after a careful examination of the books and records
(Contractor)

of said Contractor or after receipt of an affidavit from Contractor, which examinations of affidavit satisfies said Surety that all claims for labor and materials have been satisfactorily settled, hereby approved of the final payment of the said _____, Contractor, and by these presents witnesseth that payment to the Contractor of the final estimates shall not relieve Surety of any of its obligations to the Town of Litchfield as set forth in the said Surety Company's Bond.

IN WITNESS WHEREOF, SAID SURETY has hereunto set its hand and seal this _____ day of _____, 20____.

ATTEST:

(SEAL) _____ BY _____
(President)

NOTE: THIS STATEMENT, IF EXECUTED BY ANY PERSON OTHER THAN THE PRESIDENT OR VICE PRESIDENT OF THE COMPANY, MUST BE ACCOMPANIED BY A CERTIFICATE OF EVEN DATE SHOWING AUTHORITY CONFERRED UPON THE PERSON SO SIGNING TO EXECUTE SUCH INSTRUMENTS ON BEHALF OF THE COMPANY REPRESENTED.

MAINTENANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned _____
(Contractor)

as Principal, and _____ as Surety, are held and firmly bound unto the

Town of Litchfield, Connecticut, hereinafter called the "Town" in the final sum* of

_____ Dollars
(\$_____) lawful monies of the United States for the payment of which sum will and truly be made,
we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these
presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has executed an Agreement, dated
_____, 20____, for the REHABILITATION OF RICHARDS ROAD
EXTENSION CULVERT OVER HUMASTON BROOK

NOW THEREFORE, the Principal agrees to maintain the work completed in the Contract, stated above, for a period
of two (2) years from the date of final payment and issuance of a Certificate of Completion, without additional cost to
the Town. Failure to comply with such required work shall constitute a violation and all monies covered by this Bond
shall become payable to the Town.

ANY CHANGES MODIFICATIONS, AMENDMENTS AND/OR ALTERATIONS TO THIS ORIGINAL BOND
FORM SHALL BE HIGHLIGHTED AND THE TOWN SHALL BE ADVISED OF SAME AND CONSENT TO
SAME PRIOR TO ITS ACCEPTANCE OF THE BOND AS SO CHANGED, MODIFIED, AMENDED AND/OR
ALTERED.

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

In the presence of:

(Seal)
(Individual Principal)

(Business Address)

_____(Seal)
(Partnership)

(Business Address)

Attest:

By: _____

(Corporate Principal)

(Business Address)

* Final sum shall be the actual final construction cost.

By: _____(Seal)

Attest:

(Corporate Surety)

Countersigned by:

(Seal)

Power-of-Authority for Persons signing for Surety Company must be attached to Bond.

NOTICE OF AWARD

TO: _____

PROJECT DESCRIPTION: REHABILITATION OF RICHARDS ROAD EXTENSION CULVERT OVER
HUMASTON BROOK
LITCHFIELD, CONNECTICUT

The Town of Litchfield has selected your firm as the apparent low bidder to perform construction of the REHABILITATION OF RICHARDS ROAD EXTENSION CULVERT OVER HUMASTON BROOK. **in Litchfield, Connecticut** in response to its advertisement for bids dated _____, 20__ You are hereby advised that your bid has been accepted for items in the amount of:

BASE BID:

(Written Figures) (\$ _____)

_____ will be authorized to proceed with this work or
(Firm Name)

service subject to the following: receipt and approval of the required insurance and bonds as specified in the Contract Documents; encumbrance of funds; and execution of the Agreement incorporating the Contract Documents by the Town Manager of the Town of Litchfield.

You are required by the Information for Bidders to execute the Contract and furnish the required certificates of insurance(s) and bonds within ten (10) calendar days from the date of this Notice to you.

If you fail to execute the Contract and to furnish the required insurance certificate(s) and bond(s) within ten (10) calendar days of this Notice, the Town of Litchfield will be entitled to consider all your rights arising out of the Town's acceptance of your Bid as abandoned and the Town will seek whatever remedies to which it is entitled by law and in equity.

You are required to return an acknowledged copy of this Notice of Award to the Town.

Dated this _____ day of _____, 20__

TOWN OF LITCHFIELD, CONNECTICUT

By: _____

Title: _____

ACCEPTANCE OF NOTICE

The receipt of the Notice of Award is hereby acknowledged by:

(Signature)

(Firm Name)

(Printed Name/Title)

on this the _____ day of _____, 20____

NOTICE TO PROCEED
(Refer to Agreement)

TO: _____

Date: _____

PROJECT DESCRIPTION: REHABILITATION OF RICHARDS ROAD EXTENSION CULVERT OVER
HUMASTON BROOK
LITCHFIELD, CONNECTICUT

You are hereby notified to commence work in accordance with the Agreement dated _____ on or before
_____, 20_____, and you are to complete the work within _____ consecutive calendar days
thereafter.

The date of completion of work is therefore: _____, 20_____

You are required to return an acknowledged copy of this NOTICE TO PROCEED to the Owner.

Town of Litchfield
Owner

By: _____

Title: _____

ACCEPTANCE OF NOTICE

Receipt of the above Notice to Proceed is hereby acknowledged by

this _____ day of _____, 20_____.

Contractor:

By:

Title: _____

TOWN OF LITCHFIELD
CHANGE ORDER

PROJECT: REHABILITATION OF
RICHARDS ROAD EXTENSION CULVERT
OVER HUMASTON BROOK
LITCHFIELD, CT

Contract Date: _____
Change Order Date: _____
Change Order No: _____

CONTRACTOR: _____

TO: TOWN OF LITCHFIELD, CONNECTICUT
PUBLIC WORKS DEPARTMENT
LITCHFIELD, CONNECTICUT

_____, the Contractor,
agrees that this change order adjusts the contract price and time to reflect fairly all overhead, profit, charges costs,
expenses, delays, damages and the payments that may be claimed due and owing to the Contractor as of the above
stated date and agrees that the acceptance of this change order by the owner will constitute a complete and final
accord and settlement of Contractor' claims against the Owner on account of this work through the date of the
Contractor' signature below.

You are directed to make the following changes in this Contract:

Justification:

The Original Contract Sum was: \$ _____
Net Changes by previous Change Orders: \$ _____
The Contract Sum prior to this Change Order was: \$ _____
The Contract Sum will be (increased, decreased)
by this Change Order: \$ _____

The Contract Time will be (increased, decreased, unchanged) by _____ calendar days.
The Date for Completion as of the date of this Change Order therefore is _____

_____ (Engineer)	_____ (Contractor)	_____ (Owner)
_____ (Address)	_____ (Address)	_____ (Address)
By: _____	By: _____	By: _____
Date: _____	Date: _____	Date: _____

NOTICE TO CONTRACTOR - APPLICABILITY OF CONNECTICUT DOT - FORM 818

The State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges, Facilities and Incidental Construction, Form 818, 2020 including Supplemental Specifications dated 7/2020 (otherwise referred to as "ConnDOT Form 818") is hereby made part of this contract, as modified by the Special Provisions contained herein.

All reference to the "State" shall mean "Town of Litchfield" and reference to "Department" shall mean "Town of Litchfield Engineering Bureau". The "Engineer" shall mean the "Town of Litchfield Engineering and its representative". The "Commissioner" shall mean the "Engineer".

The Town shall have the sole and absolute discretion to determine whether any provision of Form 818 shall be applied with respect to any issue which may arise between the parties.

Additionally, where there is a conflict between the terms and conditions set forth in the Town's bid specifications and those set forth in Form 818, the Town's bid specifications shall prevail.

NOTICE TO CONTRACTOR – PREQUALIFICATION REQUIREMENT - DNA

~~The Municipality shall only award the subject contract to a bidder that has been prequalified, prior to the opening of bids, by the Connecticut Department of Transportation for Group No. 8 Minor Bridges construction.~~

NOTICE TO CONTRACTOR - BID REJECTION

Bidders are hereby notified that until the award of the Contract, the Municipality reserves to himself, the right to reject any or all bids for any reason whatsoever, and to waive technicalities as deemed to be in the best interests of the Municipality.

NOTICE TO CONTRACTOR - PROCUREMENT OF MATERIALS

Upon award, the Contractor shall proceed with shop drawings, working drawings, procurement of materials, and all other submittals required to complete the work in accordance with the contract documents.

NOTICE TO CONTRACTOR – SUPERVISION AND INSPECTION

This project will be supervised and inspected by the Municipality or its authorized agent. The "Notice to Proceed", stipulating the date on which the Contractor will begin the construction and from which date the contract time will be charged, will be issued by the Municipality.

NOTICE TO CONTRACTOR - VERIFICATION OF EXISTING CONDITIONS

Included in this contract is the modification, alteration and/or addition to existing structures. Contractors are cautioned that it is their responsibility to verify locations, conditions, and field dimensions of all existing features, as actual conditions may differ from information shown on the plans or contained elsewhere in the specifications.

NOTICE TO CONTRACTOR – UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If historic properties are unexpectedly encountered during Project construction, the contractor will immediately cease all construction activities in the immediate vicinity that may reasonably be assumed to affect the historic properties. Any historic property discoveries shall to the extent possible be protected in situ to allow for consultation among the Parties and the Tribes. The historic properties may be preserved in situ or mitigated on a case-by-case basis in consultation with the Parties and the Tribes. No artifacts are to be removed from the site unless approved by all parties. Notwithstanding anything to the contrary herein, the curation and disposition of any cultural resources shall be consistent with 36 C.F.R. Part 79 and other applicable law. If human remains are unexpectedly encountered during Project construction, the remains will be treated in a respectful manner and in accordance with the respective laws of the State of Connecticut (Connecticut General Statutes Chapter 184a Section 10-388) and State of Connecticut Department of Transportation, Standard Specifications for Roads, Bridges, Facilities and Incidental Construction Form 818, 2020, Section 1.10.06.

NOTICE TO CONTRACTOR – TIME OF YEAR RESTRICTIONS

The Contractor is hereby notified of the following time of year restrictions:

In-Water Work

The Contractor is hereby alerted to the time of year restrictions imposed by the Environmental Permits contained elsewhere in this contract. Unconfined in-water work will only be allowed between July 1st and September 30th.

Confinement of a work area by cofferdam techniques using sand bag placement, sheet pile installation (vibratory method only), portadam, or similar confinement devices is allowed any time of the year unless specifically prohibited by a permit condition. The removal of such confinement devices is allowed any time of the year unless specifically prohibited by a permit condition. Once a work area has been confined, in-water work within the confined area is allowed any time of the year. The confinement technique used shall completely isolate and protect the confined area from all flowing water. The use of silt boom/curtain or similar technique as a means for confinement is prohibited.

NOTICE TO CONTRACTOR – FLOOD CONTINGENCY PLAN REQUIREMENTS

The Contractor is hereby made aware that under "Article 1.10.03 – Water Pollution Control" of Form 818, as amended by the Supplemental Specifications, the Contractor is required to submit a contingency plan for flood events, in writing, to the Municipality or its authorized agent for approval. The contingency plan must be submitted by the Contractor and approved by the Municipality or its authorized agent prior to the commencement of any Project construction in the waterway.

NOTICE TO CONTRACTOR – NO STORAGE OR STAGING OF MATERIALS WITHIN FLOODPLAIN WITHOUT REVIEW AND WRITTEN APPROVAL

The Contractor is hereby made aware that, in conformance with the approved environmental permits and with the Best Management Practices outlined under Section 1.10 – Environmental Compliance of Form 818, as amended by the Supplemental Specifications, the contractor shall not store or stage any materials or equipment within the Floodplain without prior review and written approval by the Engineer.

The Contractor shall submit a written plan detailing the materials and/or equipment to be stored or staged from with the floodplain, including such details as the presence of any materials that are potentially hazardous, buoyant, flammable, explosive, soluble, expansive, radioactive, or which could in the event of a flood be injurious to human, animal or plant life. No materials or equipment shall be stored or staged from within the Floodplain until the plan described above has been reviewed and approved by the Engineer.

NOTICE TO CONTRACTOR-NOISE POLLUTION

The contractor shall take measures to control the noise intensity caused by his construction operations and equipment, including but not limited to equipment used for drilling, pile driving, blasting, excavation or hauling.

All methods and devices employed to minimize noise shall be subject to the continuing approval of the Engineer. The maximum allowable level of noise at the nearest residence or occupied building shall be 90 decibels on the "A" weighted scale (dBA). Any operation that exceeds this standard will cease until a different construction methodology is developed to allow work to proceed within the 90-dBA limit.

NOTICE TO CONTRACTOR - CALL BEFORE-YOU-DIG

The Contractor's attention is called to the fact that they are obligated, by State Law, to notify the Public Utilities Control Authority (1-800-922-4455 or dial 811) 48 hours prior to beginning any digging or discharging of explosives. This "Call Before-You-Dig" system will assure that each utility company will have marked its lines in the field before any digging activity commences. The Contractor assumes all responsibilities for any damage to the various utility services, and all liabilities arising there from.

The Contractor shall make the necessary arrangements with the respective Utility Companies and provide grades for the resetting and adjusting of private utility lines, if necessary. This coordination and/or field work required shall not be considered extra work or as a basis for extending the time for completion.

The Contractor is hereby notified that all utility specifications contained elsewhere herein shall be made a part of this contract, and that the contractor shall be bound to comply with all requirements of such specifications. The requirements and conditions set forth in the subject specifications shall be binding on the contractor just as any other specification would be.

NOTICE TO CONTRACTOR – PROTECTION OF EXISTING OVERHEAD UTILITIES

The Contractor's attention is directed to the need for protection of the existing overhead utilities during the demolition of the existing structure and the construction of the proposed structure. The Contractor is responsible for coordinating all protection and relocation of overhead utilities with the appropriate utility company. A 10-foot minimum clearance is to be provided from any unprotected overhead electric lines. The Contractor may need to adjust means and methods in order to accommodate this requirement, at no additional cost to the Town.

Representatives of the various utility companies shall be allowed access to work.

The Contractor shall be liable for all damages or claims received or sustained by any persons, corporations or property in consequence of damages to the existing utilities, their appurtenances, or other facilities caused directly or indirectly by the operations of the Contractor.

Any damage to any existing utility shall be repaired including all materials, labor, etc., to the engineer's satisfaction at no cost to the Town.

The contractor is hereby notified that all utility specifications contained elsewhere herein shall be made a part of this contract, and that the contractor shall be bound to comply with all requirements of such specifications. The requirements and conditions set forth in the subject specifications shall be binding on the contractor just as any other specification would be.

NOTICE TO CONTRACTOR

ENDANGERED SPECIES – NORTHERN LONG – EARED BAT

The Contractor is hereby notified that the Federally Threatened and State Endangered species northern long-eared bat (NLEB) (*Myotis septentrionalis*), is present within the Project limits. In Connecticut, during the winter, northern long-eared bats hibernate in caves and mines, called hibernacula. They use areas in various sized caves or mines with constant temperatures, high humidity, and no air currents. During the summer, northern long-eared bats roost singly or in colonies underneath bark, in cavities or in crevices of both live trees and snags (dead trees). Males and non-reproductive females may also roost in cooler places, like caves and mines. NLEB seem to be flexible in selecting roosts, choosing roost trees based on suitability to retain bark or provide cavities or crevices. The removal and cutting of all trees $\geq 3''$ in diameter is prohibited under a time-of-year (TOY) restriction by the United States Fish & Wildlife Service (USFWS) during the bats active season which are as follows. These dates are inclusive unless determined otherwise through consultation with the USFWS.

- a. April 15th – August 31st for all Connecticut Towns that do not front Long Island Sound and are not within 1 mile of a designated hibernacula.
- b. April 15th – September 30th for Connecticut Towns that front Long Island Sound and are not within 1 mile of a designated hibernacula.
- c. April 15th – October 31st for any project within 1 mile of a designated hibernacula. Hibernacula location areas are protected by the Department of Energy and Environmental Protection.

This species is protected by state and federal laws which prohibit killing, harming, taking, harassing or keeping them in your possession. Workers shall be notified of the existence of northern long-eared bat in this area and be apprised of the laws protecting them. Observations of

any bat species are to be immediately reported to the Department of Energy and Environmental Protection at 860-424-3011.

NOTICE TO CONTRACTOR – INVASIVE VEGETATION

The Contractor is alerted that Invasive Vegetation may be present within the limits of disturbance of the project site and subject to eradication. All invasive vegetation listed on the following websites will be subject to eradication:

- Connecticut Invasive Plant Working Group (CIPWG) Invasive Plants Council (http://cipwg.uconn.edu/invasive_plant_list/)
- US Army Corps of Engineers (ACOE) New England District Compensatory Mitigation Guidance Appendix K (http://www.nae.usace.army.mil/portals/74/docs/regulatory/Mitigation/2016_New_England_Compensatory_Mitigation_Guidance.pdf)

The Contractor shall be responsible to identify invasive vegetation at all times of the year and to prepare a plan for its eradication without assistance.

Once invasive vegetation has been identified, prior to any ground disturbance, an Invasive Vegetation Removal Plan (IVRP) to outline the materials, labor, and equipment the Contractor plans to use for the complete eradication and treatment of the invasive vegetation shall be developed and approved by the Engineer.

NOTICE TO CONTRACTOR – PERMITS

The Contractor is hereby notified that all permit approvals (contained elsewhere in these specifications) shall be made a part of this Contract, and that the Contractor shall be bound to comply with all requirements of such permits and permit applications as though the Contractor were the permittee.

The requirements and conditions set forth in the permit shall be binding on the Contractor just as any other specification would be. In the case of a conflict between a provision of the environmental permit or permit application and another provision in the contract documents, the former shall govern.

The following permits are attached:

Town of Litchfield Inland Wetlands and Watercourse Commission

Date Pending

SECTION 1.01
DEFINITIONS OF TERMS AND PERMISSIBLE ABBREVIATIONS

1.01.01—Definitions: is amended and supplemented as follows:

Substitute the word "Municipality" or "Municipal" for "Department" wherever "Department" appears in the definitions for each of the following terms: Award, Contract, Highway, Plans, and Project.

Substitute the word "Engineer" for "Commissioner" wherever "Commissioner" appears in the definitions for each of the following terms: Subcontractor and Sub-subcontractor.

Engineer: Delete the definition in its entirety and replace with the following:

The Municipality's First Selectman, acting directly or through a duly authorized representative.

Add the following:

Municipal: Of or relating to the Municipality.

Municipality: Town of Litchfield, Connecticut

SECTION 1.02 PROPOSAL REQUIREMENTS AND CONDITIONS

Section 1.02 is supplemented and amended as follows:

Throughout this Section, make the following substitutions for all occurrences of the word(s) identified below for substitution:

Substitute "Engineer" for "Commissioner" and for "Division of Contracts."

Substitute "Municipality" or "Municipal" for "Department" and for "Contract Section".

1.02.01—Contract Bidding and Awards: is amended as follows:

Add the following two (2) paragraphs to the end of the existing paragraph.

On the date and at the time and place designated in the bid advertisement and in the related Notice to Contractors or addendum notice, the sealed paper bid proposals shall be publicly opened and read out loud. At the time that paper bid proposal is opened, it shall be checked for "responsiveness" in various respects, to determine if it complies with applicable statutes, regulations, and the Municipality's Specifications, including Connecticut DOT's Standard Specifications.

Each bidder is required to include with its paper bid proposal the following documents: the completed paper bid proposal form (incl. the schedule of prices), the required bid bond, a non-collusion affidavit, and any other information required by the bid documents or by the bid advertisement.

Add the sentence below following the end of the last paragraph;

Prequalification by the State of Connecticut Department of Transportation is required for this project.

1.02.04—Examination of Plans, Specifications, Special Provisions, and Site of Work:

Delete the last paragraph and replace with the following:

"Bidders must inform the Municipality's Designer, at the earliest opportunity, in writing, of any and all omissions, errors, and/or discrepancies that the bidder discovers within or among the plans, specifications, and bidding documents. Information and inquiries concerning such matters, and any other information or inquiry concerning the conditions of bidding or award or the interpretation of contract documents must be transmitted in writing to:

Mr. Joseph A. Cermola III, P.E.
Cardinal Engineering Associates, Inc.
180 Research Parkway
Meriden, Connecticut 06450

The Municipality and/or the Municipality's Designer cannot ensure a response to inquiries received later than ten (10) days prior to the scheduled bid opening of the related bid. When deemed warranted by the Municipality and/or the Municipality's Designer, responses to such inquiries that relate to changes in or interpretations of the Project documents (plans and specifications) will be issued to all bidders in the form of addenda and made a part of the Contract. Bidders are responsible for ensuring that they are aware of all addenda. Failure by the Municipality, Municipality's

Designer or postal or other courier services to deliver addenda or other information regarding a Contract being bid does not release the bidder from any obligations under said addenda or the conditions of the bid."

SECTION 1.03 AWARD AND EXECUTION OF CONTRACT

Section 1.03 is supplemented and amended as follows:

Throughout this Section, except for Article 1.03.07, make the following substitutions for all occurrences of the word(s) identified below for substitution:

Substitute "Engineer" for "Commissioner," for "Manager of Contracts" and for "Transportation Manager of Contracts".

Substitute "Municipality" for "Department" and "State".

1.03.02—Award and Execution of Contract:

After the second sentence of the only paragraph add the following:

The successful bidder is hereby notified of the Municipality's intent to award this Contract within ninety (90) days of the bid opening.

1.03.07—Insurance: is amended as follows:

Substitute "State and Municipality" for "Department" and "State".

It is the intent of this Article to designate the State and Municipality as additional insured, as applicable.

1.03.08—Notice to Proceed and Commencement of Work:

Change the first paragraph to read as follows:

The Contractor shall commence and proceed with the Contract work on the date specified in a written Notice to Proceed issued by the Engineer to the Contractor. The date specified will be no later than 45 calendar days after the date of the execution of the Contract by the Municipality; however, the Contractor is hereby put on notice that it is the Municipality's intent to issue the Notice to Proceed no later than thirty (30) calendar days after the execution of the Contract with the Municipality.

SECTION 1.04 SCOPE OF WORK

Section 1.04 is supplemented and amended as follows:

Throughout this Section, make the following substitutions for all occurrences of the word(s) identified below for substitution:

Substitute "Engineer" for "Department's Assistant District Engineer".

Substitute "Municipality" for "Department" and for "State".

1.04.05 – Extra Work: is amended as follows:

Add the following after the fourth sentence:

Bonding costs shall not be included in the contractor's compensation request. However, if the contractor incurs or will incur increased bonding costs related to the extra work, the contractor shall request separate compensation for such costs. The contractor's request shall be itemized and include a certified statement from the bonding company stating that the value of the work will require an increase in bonding coverage and shall detail the additional costs (within allowable contract amount limitations). If *satisfactory* substantiation is provided, a new item for increased bonding costs will be incorporated into the contract by means of a construction order.

Insert the following immediately following "Department's Assistant District Engineer" near the bottom of the paragraph: "and/or the Municipality's authorized representative".

SECTION 1.05 CONTROL OF THE WORK

Section 1.05 is supplemented and amended as follows:

Substitute "Municipality" for "Department" and/or "State" and "Engineer" for "Department's Assistant District Engineer".

1.05.02-1. Plans: Substitute "Municipality" for "Department".

Add the following sentence to the end of the Subarticle:

"The Working Drawings, Shop Drawings and Product Data shall be submitted to the Designer as hereinafter noted; copies of transmittal letters shall be sent to the Municipality.

Designer

Mr. Joseph A. Cermola III, P.E.
Cardinal Engineering Associates, Inc.
180 Research Parkway
Meriden, Connecticut 06450

Municipality

Raz Alexe, P.E.
Public Works Director/Town Engineer
101 Russell Street
Litchfield, Connecticut

1.05.02-2. Working Drawings: Substitute "Municipality" for "Assistant District Engineer".

1.05.02-3. Shop Drawings:

Add the following paragraphs:

If the contractor proposes a substitution, all costs associated with the review of shop drawings, working drawings, designs or any other submissions related to the substitution including all costs incurred by the Owner and the Engineer shall be paid by the Contractor.

Each shop drawing submittal shall be identified as to the following, and stamped by the Contractor as being in complete compliance with all requirements of the Contract Drawings and Specifications:

1. Project Name and Contract Number
2. Specification Section number(s) and subparagraph(s)
3. Contract Drawing sheet number(s)

The General Contractor shall check all shop drawings for conformance with the Contract Documents and particularly against field measurements and proper fit with adjoining work prior to submitting same. A certification shall appear on each shop drawing stating that the General Contractor has made this check.

Any and all deviations from the requirements of the Drawings and/or Specifications shall be called to the attention of the Engineer in writing at the time of first submission of shop drawings, equipment data, and other drawings for approval.

1.05.02-5. Submittal Preparation and Processing – Review Timeframes:

Substitute "Designer" for "Department".

Add the following paragraphs:

"Prior to the submission of any working, shop or erection drawings, the Contractor shall prepare and submit to the Engineer, for approval, a schedule for all proposed working and shop drawings. This initial schedule should be submitted within thirty (30) days of contract award and must be submitted before the Notice to Proceed. The Contractor shall coordinate, schedule and control all submittals of working and shop drawings including those of his various subcontractors, suppliers and engineers to provide for an orderly and balanced distribution of the work.

Each Shop Drawing shall include the name and telephone number of the fabricator's contact person who is familiar with the drawing and who will be available to answer questions by the Engineer or Designer should any arise during the review process.

It is incumbent upon the Contractor to submit his shop drawings in accordance with the approved working and shop drawing schedule to facilitate expeditious review. Voluminous submittals of shop drawings at one time are discouraged and may result in increased review time. In no case will the Municipality accept liability for resulting delays, added costs and related damages when the time required for approval extends beyond the approximate times shown herein when the shop drawings are not submitted in conformance with the approved schedule."

1.05.02-5(a). Submissions: Substitute "Municipality" for "Assistant District Engineer of the administering Construction District".

1.05.02-5(b). Submissions: Substitute "Designer" for "Assistant District Engineer of the administering Construction District".

1.05.02-5(c). Submissions: Substitute "Designer" for "administering Construction District".

1.05.06 – Cooperation with Utilities (including railroads):

Add the following:

Within the project there may be public utility structures; and, notwithstanding any other clause or clauses of this Contract, the Contractor cannot proceed with his work until he has made diligent inquiry with the utility companies, municipal authorities or other utility owners to determine their exact location, and notified "Call Before You Dig". The Contractor shall notify, in writing, the utility companies, municipalities or other owners involved of the nature and scope of the project and of his operations that may affect their facilities or property. Copies of such notices shall be sent to the Engineer.

SECTION 1.06 CONTROL OF MATERIALS

Article 1.06.07 - Certified Test Reports and Materials Certificates:

Add the following:

All materials used on this project shall require a Certified Test Report or Material Certificate.

Following is a partial list of items that may be included in the project.

1. For the materials in the following items, a Certificate Test Report will be required confirming their conformance to the requirements set forth in the plans, these Specifications or both. Should the consignee noted on a Certified Test Report be other than the Prime Contractor, then Materials Certificates shall be required to identify the shipment.

Subbase	Sand	Approach Slab Concrete
Granular Fill	Riprap	Barrier Wall Concrete
Pervious Structure Backfill	Topsoil	Joint Sealer
Processed Aggregate Base	Footing Concrete	Cement
Bedding Material	Abutment and Wall Concrete	Anchoring Cement
#8 Stone	Bridge Deck Concrete	Chemical Anchors
#6 Stone	Parapet Concrete	Deformed Steel Bars
#67 Stone	Bridge Sidewalk Concrete	Threaded Steel Bars

2. For the material in the following items, a Materials Certificate will be required confirming their conformance to the requirements set forth in the plans or these specifications if it is from a Connecticut Department of transportation approved plant/supplier. Otherwise, testing is required.

Bituminous Concrete	Damp Proofing	Dowel Bars Galvanizing
Portland Cement	Membrane Waterproofing	Structural Steel
Footing Concrete	* Membrane	Metal Beam Rail Elements
Abutment and Wall Concrete	* Glass Fabric	Paint
Bridge Deck Concrete	* Primer	Grass Seed
Parapet Concrete	* Mastic	Fertilizer
Bridge Sidewalk Concrete	Deformed Steel Bars	Wetland Seed Mix
Approach Slab Concrete	Reinforcing Steel	Signs
Barrier Wall Concrete	Wire & Welded Wire Fabric	Sanitary Manhole Brick
Precast Concrete Units	Threaded Steel Bars	Concrete Building Brick
Joint Sealer	Anchor Bolts	Masonry Concrete Units

SECTION 1.07
LEGAL RELATIONS AND RESPONSIBILITIES

1.07.01—Laws to be Observed: is amended as follows:

In the second sentence of the first paragraph, after the word "State" add the words "and Municipality".

1.07.03—Proprietary Devices, Materials and Processes: is amended as follows:

After the word "State" add the words "and Municipality" throughout this Article.

1.07.04—Restoration of Surfaces Opened Pursuant to Permit or Contract: is amended as follows:

Replace the word "Department" with "Municipality" throughout this Article.

1.07.07—Safety and Public Convenience: is amended as follows:

In the penultimate paragraph, after the word "Department," add the words "or Municipality".

1.07.09—Protection and Restoration of Property: is supplemented and amended as follows:

Add the words "or Municipality" after the word "State" wherever the word "State" appears in this Article.

Add the phrase "or Municipality, as applicable" after the word "Department" wherever the word "Department" appears in this Article.

Add the following:

The Contractor shall notify the Tree Warden of the Municipality in which the bridge project is located, five (5) days prior to flagging so that the Tree Warden may be present during the flagging.

All trees scheduled to be removed outside of the proposed gutter or curb lines of the highway shall be visibly marked or flagged by the Contractor at least five (5) days prior to cutting of such trees.

The Engineer will inspect the identified trees and verify the limits of tree removal prior to the Contractor proceeding with his cutting operation, should such an operation be required elsewhere in this contract.

1.07.10 - Contractor's Duty to Indemnify the State Against Claims for Injury or Damage: is amended as follows:

Revise the title of this Article to read "Contractor's Duty to Indemnify the State and/or Municipality Against Claims for Injury or Damage."

In the first sentence, delete the words "the Department".

Replace the word "State" with "State and/or Municipality" throughout this Article.

Replace the word "Commissioner" with "Engineer" throughout this Article.

Add the following paragraph after the only paragraph:

"It is further understood and agreed by the parties hereto, that the Contractor shall not use the defense of Sovereign Immunity in the adjustment of claims or in the defense of any suit, including any suit between the State and/or Municipality and the Contractor, unless requested to do so by the State and/or Municipality."

1.07.13—Contractor's Responsibility for Adjacent Property and Services: is supplemented with the following:

The Contractor's attention is directed to the fact that overhead utilities (including utility poles, pole guys and overhead wires) exist in the immediate vicinity of the project.

The Contractor shall be liable for all damages and claims received or sustained by any persons, corporations or property in consequence of damage to the existing utilities, their appurtenances, or other facilities caused directly or indirectly by the operations of the Contractor.

1.07.14—Personal Liability of Representatives of the State: is amended as follows:

Add the words "and Municipality" after the word "State".

1.07.15—No Waiver of Legal Rights: is amended as follows:

Replace the words "Commissioner" and "Department" with "Municipality" or "Municipal" throughout this Article.

1.07.16—Unauthorized Use of Area(s) within the Project Site: is amended as follows:

Replace the words "Commissioner" and "State" with "Municipality" throughout this Article.

Add the following new Subarticle:

1.07.19—Personal Liability of Representatives of the Municipality

In carrying out any of the provisions of these specifications, or in exercising any power or authority granted to them by or within the scope of the Contract, the Engineer and his authorized representatives, including consultant engineering firms and their employees, shall be subject to no liability, either personally or as officials of the Municipality, it being understood that in all such matters they act solely as agents and representatives of the Municipality.

SECTION 1.08 PROSECUTION AND PROGRESS

Section 1.08 is supplemented and amended as follows: Section 1.08 is supplemented and amended as follows:

Throughout this Section, make the following substitutions for all occurrences of the word(s) identified below for substitution:

Substitute "Municipality" or "Municipal" for "Department" and for "State". Substitute "Engineer" for "Commissioner".

1.08.04—Limitation of Operations: is supplemented by the following:

The Contractor's activities on site shall be limited to operations between 7:00 a.m. to 5:00 p.m., Monday through Friday except legal holidays.

The Contractor will not be allowed to close Richards Road Extension at the project limits. The contractor is permitted to restrict traffic according to the M.P.T. Plan contained in the Contract Plans. with the following conditions.

The Contractor shall coordinate with the Town of Litchfield at least ten (10) days prior to proposed roadway restrictions. **The roadway cannot be restricted until authorized by the Town.**

The Contractor shall guarantee that he can and will substantially complete the work necessary to safely reopen Richards Road Extension to bi-directional traffic on or before August 30th. Traffic shall be maintained on a paved surface with a minimum 12-foot lane. To safely open the road to traffic, it is expected that the project will be substantially completed including the following:

- Pipe lining, retaining wall and ditch improvements will be completed.
- Guide railing will be completely installed or an approved safety barrier will be installed.

The Contractor shall install warning signs before restricting traffic on Richards Road Extension as shown on the M.P.T. plan.

The Contractor shall schedule his construction operations, so that construction at the site in this contract does not begin, extend into or end during the period from December 1 through March 31, except as approved by the Engineer.

SECTION 1.09
MEASUREMENT AND PAYMENT

Section 1.09 is supplemented and amended as follows:

Throughout this Section, make the following substitutions for all occurrences of the word(s) identified below for substitution:

"Municipality" or "Municipal" for "Department" and for "State".

Substitute "Engineer" for "Commissioner".

1.09.06–Partial Payments: Amend Article 1.09.06 of Form 818, 2020, as follows:

In the first paragraph under **A. Monthly and Semi-monthly Estimates:** delete "Retainage will not be held" and replace with **"five percent (5%) of the total amount determined by the Engineer will be deducted from the estimate and retained by the Municipality until the Engineer accepts the Project "**. The balance, less all previous payments, will be certified for payment. When work equaling the original contract value has been accomplished, no additional retainage will be withheld.

SECTION 1.10
ENVIRONMENTAL COMPLIANCE

1.10.02—Compliance with Laws and Regulations: is amended as follows:

Replace the word "Department" with "Municipality" throughout this Article.

In the last sentence of the last paragraph of this Article, and delete the phrase "under any other State contract".

1.10.03—Water Pollution Control: is amended as follows:

Replace the word "Department" with "Municipality" throughout this Article.

In the last sentence of the second paragraph, delete the phrase "under any other State contract".

Add the following sentence after the second sentence of the third paragraph:

The following items may also be superseded by specific permits from the Connecticut Department of Energy and Environmental Protection (DEEP), the Army Corps of Engineers (ACOE) and/or the appropriate local wetlands and watercourses regulatory authority.

In Paragraph No. 13, replace "State right-of-way" with "State or Municipal right-of-way."

1.10.07—Controlled and Hazardous Materials: is amended as follows:

Replace the word "Department" with "Municipality" throughout this Article.

SECTION 1.11
CLAIMS

Section 1.11 is supplemented and amended as follows:

Throughout this Section make the following substitutions for all occurrences of the word(s) identified below for substitution:

Substitute "Chief Administrative Official of the Municipality" for "Commissioner".

Substitute "Municipality" or "Municipal" for "Department".

DIVISION II

CONSTRUCTION DETAILS

Throughout all the various Sections contained in Division II, substitute the word "Municipality" or "Municipal" for "Department" wherever "Department" appears, except in those instances here the word "Department" is used to identify a state agency.

ITEM #0204151A - HANDLING WATER

Description: Work under this item shall consist of designing, furnishing, installing, maintaining, removing and disposing of a temporary water handling system. This may include water-handling-cofferdams (temporary barriers), bypass pipes, bypass pumps/hoses, temporary energy dissipation, sumps, drainage channels, and equipment and work necessary for dewatering.

A temporary water handling system redirects surface water beyond, through, or around the limits of construction to allow work to be done in the dry.

Materials: The materials required for this work shall be as shown on the plans, on the accepted working drawings, or as ordered by the Engineer.

Construction Methods: The Contractor shall prepare and submit written procedures for handling water. Working drawings, in accordance with Article 1.05.02, shall also be prepared and submitted.

The Contractor shall consider stream conditions and water elevations associated with the Site to determine the type of temporary water handling system required to redirect water away from work being performed. The system shall be designed to be compatible with the stage construction and Maintenance and Protection of Traffic, as indicated in the Contract, and shall conform to Section 1.10.

The Contractor shall be responsible for maintenance of the water handling system. If the system becomes damaged or displaced during construction, the system shall be corrected as required.

Unless otherwise provided or directed, all temporary water handling system components shall be removed and disposed of in an acceptable manner when no longer required.

Method of Measurement: The work under this item, being paid on a lump sum basis, will not be measured for payment.

Basis of Payment: This work will be paid for at the Contract lump sum price for “Handling Water” complete and accepted, which price shall include designing (including submittals and working drawings), furnishing, installing, maintaining, removing, and disposing of all temporary water handling system components as are necessary for completion of the work. This price shall include all materials, equipment, tools, labor and work incidental thereto.

A schedule of values for payment shall be submitted to the Engineer for review and comment.

Pay Item	Pay Unit
Handling Water	l.s.

ITEM #0651645A – CENTRIFUGALLY CAST CEMENTITIOUS LINING

Description: Work under this item shall consist of rehabilitating the interior of the existing Twin 72” Reinforced Concrete Pipes with centrifugally cast cementitious lining. The centrifugally cast concrete pipe liner shall extend over the entire length of the existing concrete pipe to form a continuous structural concrete pipe liner. This work shall also include the repair of existing spalls, chips, hairline cracks, and gaps in pipe joints per this specification.

These repair means and methods may be engineered for the application thickness, diameter, shape, traffic loads, groundwater pressures and condition of each pipe segment.

Materials: The cementitious material shall conform to the following ASTM requirements:

- The Standard Specification for Fly ash content in Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe shall not exceed 10% by weight in accordance with ASTM C-76.
- Standard test method for Compressive Strength of Hydraulic Cement Mortars shall conform to ASTM C-109
- The Modified Standard Test Method for Length Change of Hardened Hydraulic shall conform to ASTM C-157.
- Standard Test Method for Flexural Strength of Concrete (using Simple Beam with Center-Point Loading) shall conform to ASTM C-293.
- The Standard Specification for Liquid Membrane-Forming Compounds for Curing concrete shall conform to ASTM C-309.
- The Standard Test Method for Time of Setting of Concrete Mixtures by Penetration Resistance shall conform to ASTM C-403.
- Standard Test Method for Static Modulus of Elasticity should be no greater than 5,000,000 psi. (to avoid overly brittle liner) and Poisson’s Ratio of Concrete in Compression Standard Test Method for Splitting Tensile Strength of Cylindrical Concrete Specimens shall conform to ASTM C-496.
- The Standard Test Method for Bond Strength of Epoxy Systems Used with Concrete by Slant Shear shall conform to ASTM C-882.
- The Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing shall conform to ASTM C-666.
- The Standard Test Method for Measuring Changes in Height of Cylindrical Specimens of Hydraulic-Cement Grout 0 change in 28 days shall conform to ASTM C-1090.
- The Standard Test Methods for Resistance of Adhesive Preparations in Container to Attack by Bacteria, Yeast, and Fungi (Modified) shall conform to ASTM D-4783.

1. Existing Pipe Repair Mortar: The material used in the repair of the deteriorated pipe invert, chips, spalls and gaps in pipe joints shall be an ultra-high strength, high build, abrasion resistant and corrosion resistant mortar, based on advanced cements and additives including rust inhibitors. It shall be mixed with the appropriate amount of water to create a self-consolidating free flowing material that develops a high 24-hour compressive strength and adhesion.

The finished, hardened material shall be dense and highly impermeable; the result of a complex formulation of mineral, organic and densifying agents and sophisticated chemical admixtures. Graded quartz sands shall be used to enhance particle packing and further improve the fluidity and hardened density. The composition shall possess excellent thin-section toughness, a high modulus of elasticity in flexure and strong self-bonding capability.

Physical Properties of Pipe Repair Mortar

Set Time at 70 °F ASTM C-403	
Initial Set	Approx. 150 minutes
Final Set	Approx. 240 minutes
Flexural Strength ASTM C-293	
24 hours	min. 800 psi
28 days	min. 1200 psi
Compressive Strength ASTM C-109	
24 hours	5,000 psi
28 days	11,500 psi
Split Tensile Strength ASTM C-496	700 psi
Shear Bond ASTM C-882	1,720 psi
Modulus of Elasticity ASTM C-469	
28 days	min. 3.56×10^6 psi
Freeze Thaw ASTM C-666	300 Cycle Pass

2. Pipe Lining Mortar: The pipe lining material shall be a high strength, high build, abrasion resistant and corrosion resistant mortar, based on advanced cements and additives. When mixed with the appropriate amount of water, a paste-like material which can be sprayed, cast or pumped into areas ¼ inch and larger shall be obtainable.

The hardened, finished liner shall be a dense and highly impermeable pipe within a pipe. The above stated performance shall be achieved by a complex formulation of mineral, organic and densifying agents and sophisticated chemical admixtures including rust inhibitors. Graded quartz sands are to be used to enhance particle packing and further improve the fluidity and hardened density. The resultant composition shall possess excellent thin-section toughness, a high modulus of elasticity in flexure and strong self-bonding capabilities. Fibers are to be added as an aid to the centrifugal casting process, for increased cohesion and to enhance flexural strength.

The water content shall be adjusted to achieve consistencies ranging from plastic to modeling clay. The lining mortar shall be capable of being cast against soil, metals, wood, plastic or other normal construction materials.

Physical Properties of Pipe Lining Mortar

Set Time at 70 °F ASTM C-403	
Initial Set	Approx. 150 minutes
Final Set	Approx. 240 minutes
Flexural Strength ASTM C-293	
24 hours	min. 600 psi
28 days	min. 1,080 psi
Compressive Strength ASTM C-109	
24 hours	3,000 psi
28 days	8,000 psi
Split Tensile Strength ASTM C-496	682 psi
Shear Bond ASTM C-882	2,100 psi
Modulus of Elasticity ASTM C-469	
28 days	min. 3.56 10^6 psi
Freeze Thaw ASTM C-666	300 Cycle Pass

Construction Methods: The Contractor shall be completely responsible for the design of the culvert liner system.

1. Safety: The Contractor shall carry out operations in strict accordance with all applicable OSHA standards. Particular attention is drawn to those safety requirements involving working in confined spaces.

2. Culvert Liner Design and Load Rating: The design and manufacture of the culvert liner shall conform to the requirements of the latest edition of the AASHTO LRFD Bridge Design Specifications, including the latest interim specifications.

3. Working Drawings, Design Computations and Load Rating Submittals: The Contractor shall submit working drawings, design computations and load ratings to the Engineer for review in accordance with Article 1.05.02(3).

The working drawings, design computations and load ratings shall be sealed by a Connecticut licensed Professional Engineer who shall also be available for consultation in interpreting his computations and drawings, and in the resolution of any problems which may occur during the performance of the work. Please note that each working drawing must be sealed. The Professional Engineer shall have had supervisory experience on multiple projects of similar scope over the past

5 years. The Contractor shall not use the cementitious liner supplier's representatives to satisfy the supervising engineer requirements of this section unless they meet the licensure and experience requirements noted above.

The shop drawings shall include layout, fabrication, and installation drawings. The drawings shall include, but not be limited to the following:

- Layout plan of existing culvert with proposed concrete liner along with roughness elements.
- Fabrication drawings including a plan, cross-sectional and elevation view showing line dimensions, minimum liner thickness and details of the roughness elements.
- Material designations for liner and for any other materials incorporated into the final design
- Show any modification required to line host pipe with liner including repairing of the host pipe spalls, chips and invert and filling the voids in pipe joints surrounding the host pipe.
- Installation procedure, including a step-by-step description of work. The installation procedure must be consistent with water handling shown on the contract plans or with the system proposed by the Contractor and accepted by the Engineer.

All submittals shall conform to the requirements in this and other sections of the Contract Documents. If not required elsewhere, the following minimum submittals shall be required:

Reference submittals

Contractor certification verifying 5 years of experience
Lining System certification; including third-party references

Materials data submittals

Repair mortar material; including technical data sheet
Lining mortar material; including technical datasheet and third-party testing completed.

4. Handling of mortar: The bags of the mortar materials shall be stored in a cool, dry location until the Contractor is ready to use the material.

5. Wall Thickness Design:

The wall thickness design shall be based upon the compressive and bending strength of the liner material. The design loading shall be the sum of any changes in the cover depth after the liner's installation and the appropriate highway truck loading for the culvert pipe taking into account the type of soil used for the road's fill and the type of pavement structure (rigid or flexible). The calculated minimum finished thickness of the liner shall be based on a maximum possible crack width of 0.0625-inches with a factor of safety of 2.0.

The Liner thickness shall be applied to the thickness specified by the engineer but at no point shall it be less than **1 1/2 inches**.

6. Cleaning, inspection and repair of host pipe: The 72" host concrete pipes shall be inspected, cleaned and repaired in accordance with the requirements of the culvert liner system.

7. Pre-installation Meeting: A meeting with the Contractor, Manufacturer and Engineer will be held prior to the start of the liner construction. The Contractor shall be familiar with the Manufacturer's recommended method of construction. The meeting will be conducted to discuss and clarify the construction of the cementitious liner and the roughness elements.

8. Centrifugally Cast Concrete Pipe (CCCP) Installation: The required mortar mixers, compressors and pumps are standard commercial models. A high-speed, rotating applicator device will be required to provide a densely compacted liner of uniform thickness and thorough coverage.

The Contractor shall combine 50 pounds of the packaged dry mix with the manufacturer's specified amount of potable water with a high-speed shear type mixer until proper consistency is obtained. The Contractor shall continue to agitate the mortar to prevent thickening beyond the desired fluidity. The working time is approximately 30 minutes depending upon the ambient condition.

The Contractor shall position the bi-directional rotating casting applicator within the culvert pipe as required by the manufacturer and commence pumping the mortar. As the mortar begins to be centrifugally cast evenly around the interior, the contractor shall retrieve the applicator head at the best speed for applying the thickness that has been specified. If the mortar flow is interrupted for any reason, the Contractor shall stop the retrieval of the applicator head until the mortar flow is restored. Throughout the application process the Contractor shall verify the thickness using an appropriate tool.

The Contractor shall not apply the mortars when the ambient air and/or surface temperature of the culvert pipe is 100° F or higher. Shade the material and prepared the surface to keep it cool.

To extend the working time of the mortar when the ambient air temperature is 80°F or higher, but below 100°F, the Contractor is advised to combine the mortar mix material with cool or ice-cooled water. When working at these elevated temperatures, the Contractor shall make certain that the substrate is saturated surface-dry (SSD) before the mortar lining application begins.

The Contractor shall not apply the mortars when ambient air temperatures are expected to fall below 45°F within 72 hours of placement. Both the ambient air and substrate temperatures must be at least 45°F at the time of placement.

Low substrate and ambient air temperatures will slow down the rate of set and strength development. At temperatures below 65°F, the Contractor is advised to warm the material, water, and substrate. Properly ventilate the area when heating. Protect the new liner from freezing.

The Contractor shall use an ASTM C309 conforming curing compound such as 1315 Sealer or other approved equal.

Method of Measurements: This work will be measured for payment by the completion of both 72" host pipe inside surface area lined and accepted with cementitious material.

Basis of Payment: This work will be paid for at the Lump Sum price of "Centrifugally Cast Cementitious Lining", of both barrels complete in place, including but not limited to design submittals, construction of roughness elements, testing, sampling, miscellaneous materials, equipment, tools and labor incidental thereto.

Controlling groundwater and existing culvert stream flows will be paid separately by "Item # 204151- Handling Water".

The cost of repairing chips, spalls, deformities to the existing pipes, filling gaps in pipe joints, invert repair, removal of debris, cleaning of the existing structure and all other incidentals shall be included in the cost of the "Centrifugally Cast Cementitious Lining".

Pay Item

Pay Unit

Centrifugally Cast Cementitious Lining (60" RCP)

Lump Sum.

ITEM #0732999A - RESET STONE RETAINING WALL

Description:

Work under this item shall consist of removing and salvaging existing large stones and chinking stones to reset the existing stone retaining wall with neat lines and vertical faces to the limits shown on the plans or as directed by the Engineer.

Materials:

Existing stone, on site.

Construction Methods:

The Contractor shall determine shoring and bracing requirements for any excavation adjacent to the existing Stone Retaining Wall or adjacent structures.

The existing large base stones shall be left in place. Stones above the base stones shall be removed and salvaged for re-use. The stones shall be reset in straight lines both vertically and horizontally. Chinking stones shall be used as required to minimize large voids between adjacent stones. Joints in the newly reset stone retaining wall adjacent to concrete structures shall be kept to a minimum to prevent the migration of fines. The stones shall be carefully laid and solidly rammed into position and shall be clean when placed. The exposed surface shall be neat and straight in appearance.

Method of Measurement:

The work under this item, being paid on a lump sum basis, will not be measured for payment.

Basis of Payment:

This work will be paid for at the Contract lump sum price for "Reset Stone Retaining Wall," complete in place and accepted, which price shall include all materials, equipment, tools, and labor incidental thereto, also necessary excavation, shoring and bracing of the existing structures.

Pay Item

Reset Stone Retaining Wall

Pay Unit

L.S.

ITEM #1700005A – TESTING

Description

At the discretion of the Engineer, periodic on-site tests may be ordered to satisfy the quality of the work or materials used on the Project. Testing under this item only applies to those on-site tests ordered by the Engineer; **testing required by other specifications or to verify conformance with specification requirements shall not be paid for.** Testing ordered by the Engineer under this item shall be performed by an independent third-party testing company.

Construction Methods

All poured-in-place concrete will require testing. Tests will include but not be limited to air content, slump, 7-day & 28-day compression tests, etc.

Compacted Granular Fill, Pervious Structure Backfill, Subbase and Processed Aggregate Base will be tested in accordance with applicable sections of the Standard Specifications. The Contractor shall perform in-place density testing at a sufficient frequency to ensure that the specified results are continuously met. The Contractor shall submit complete field density testing and inspection records to the Engineer within 48 hours (excluding weekends and holidays) of the test in a manner acceptable to the Engineer.

Bituminous concrete pavements will be tested in accordance with Section 4.06 Bituminous Concrete of the Standard Specifications.

Basis of Payment

The sum of money for this item shown on the Estimate and in the itemized proposal as “Estimated Cost” for this work will be considered the bid price even though payment will be made as described below. The estimated cost figure is not to be altered in any manner by the bidder. Should the bidder alter the amount shown, the altered figures will be disregarded and the original price will be used in determining the total amount for the Contract.

The Town will pay the Contractor its actual costs for “Testing” plus an additional 5% as reimbursement for the Contractor’s administrative expense in connection with the services provided. The invoice must include a breakdown of date of service, actual hours of work, actual rate applied and test actually performed.

No payment on such an invoice will be made until and unless the Engineer has reviewed the invoice and approved the payment. The rate charged by the Testing Company shall not be greater than the rate that the normally charge others for similar services.

No payment will be made for Testing Services not authorized or requested by the Engineer, but ordered by the Contractor for his own convenience.