TOWN OF WATERTOWN
WATERTOWN, CONNECTICUT

NOTICE OF BID

Sprucewood Road Avenue Culvert Relining
Oakville, CT

Sealed bids are invited and will be received by the Purchasing Agent of the Town of Watertown at the office of the Purchasing Agent, Town Hall Annex, 424 Main Street, Watertown, Connecticut, until 11:00 a.m., Tuesday, November 6, 2018 at which time and place they will be publicly opened and read aloud for furnishing culvert relining on Sprucewood Road, Oakville, CT.

The Information for Bidders, Form of Bid, Specifications and other contract documents may be obtained or examined at the office of the Purchasing Agent, Town Hall Annex, 424 Main Street, Watertown, Connecticut 06795 or by accessing the Town of Watertown’s website at http://www.watertownct.org. Proposals must be submitted on the forms provided and in a sealed envelope plainly marked “Bid – Culvert Relining – Sprucewood Road, Oakville”.

To receive consideration bids must be in the hands of the Purchasing Agent or his authorized representative no later than the day and hour mentioned above.

The Purchasing Agent reserves the right to accept or reject any or all bids; to waive any informality; or to accept any bid deemed in the best interests of the Town of Watertown.

The Town of Watertown reserves the right to take into account the residency of bidders within the Town of Watertown and/or the location of the bidder's business within the Town of Watertown in awarding this bid.

All bids will be considered valid for a period of sixty (60) days.

Jason Warner
Purchasing Agent
Town of Watertown
INFORMATION FOR BIDDERS

TOWN OF WATERTOWN
WATERTOWN, CONNECTICUT 06795

Sprucewood Road Culvert Relining
Oakville, CT

BID OPENING: 11:00 a.m., Tuesday, November 6, 2018

PROPOSALS RECEIVED
All bids must be in a sealed envelope and received prior to 11:00 a.m., Tuesday, November 6, 2018 at the office of the Purchasing Agent, 424 Main Street, Watertown, Connecticut 06795.

PREPARATION OF PROPOSALS
Proposals must be made upon forms contained herein. The blank spaces in the Proposal must be filled in correctly where indicated. The Bidder must state the prices for which he proposes to do each item of the work contemplated. In case of discrepancy where both words and the numerals are requested, the words shall govern. Ditto marks are not considered writing or printing and shall not be used. The Bidder shall sign his Proposal correctly. If the Proposal is made by an individual, his name, post office address and telephone number must be shown. If made by a firm, partnership, or corporation, the Proposal must be signed by an official of the firm, partnership, or corporation authorized to sign contracts, and must show the post office address and telephone number of the firm, partnership, or corporation. Failure to do so may disqualify the bid.

Each bid must be submitted in a sealed envelope bearing on the outside the name of the Bidder, post office address, and name of the project for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed to: The Purchasing Agent, Town Hall Annex, 424 Main Street, Watertown, CT 06795.

All information shall be entered in ink or by typewriter. Mistakes may be crossed out and corrections inserted before submission of your bid. The person signing the bid shall initial corrections in ink.

Corrections and/or modifications received after the closing time specified will not be accepted.

SUBMISSION OF PROPOSALS
All proposals and literature shall be submitted IN DUPLICATE on the proposal form, which is a part of these specifications.

Descriptive literature containing complete specifications must accompany each bid. If a bidder wishes to furnish additional information, more sheets may be added.
Adobe Acrobat® Reader is required to view electronic documents on-line. If you do not have Adobe Acrobat® Reader, you may download it for free from Adobe at http://www.adobe.com/products/acrobat/readstep.html.

Response summaries will be available online at http://www.watertownct.org on the day of the bid opening.

Responses delivered via fax are received subject to the following qualifications and limitations:

1. The Town is not responsible for the confidentiality of the information transmitted.

2. The Town cannot guarantee that its fax equipment will be operational and able to receive transmittals by a particular time and date. It is the Bidder's responsibility to ensure that quotations are received in their entirety and on time at the required location. It is recommended that vendors be advised to call immediately after transmitting a document electronically to confirm complete and accurate receipt by the Town. The Town assumes no liability in the event that a bidder’s electronic transmission is not received by the Town in a timely fashion, or is not received either in its entirety or error-free.

3. Bids transmitted electronically which have a bond requirement are subject to the same submittal requirements as those responses delivered via traditional means, such as mail or hand delivery, or as otherwise stipulated by appropriate authority.

INCURRING COSTS
The Town of Watertown is not liable for any cost incurred for the preparation of proposals or submission of samples by the firms submitting proposals for the work requested in this bid document or request for proposals.

FAMILIARITY WITH THE WORK
Each bidder is considered to have examined the work to fully acquaint himself with the exact existing conditions relating to the work and has fully informed himself as to the work involved and the difficulties and restrictions attending the performance of this bid. Failure to do so will not relieve a bidder of his obligation to furnish all materials, labor and equipment necessary to carry out the work for the consideration set forth in this bid. The submission of a bid will be considered as conclusive evidence that the bidder has made such examination.

Where exploration or inspection data is shown on the Plans and/or specifications or made available to the Bidder, it is understood that such data where obtained in the usual manner and with reasonable care and are to be interpreted and used as the Bidder sees fit. There is no expressed or implied agreement that the data has been correctly indicated, and the Bidder is cautioned to take into account that conditions affecting the work may differ from those indicated.
The Owner assumes no responsibility whatsoever with respect to ascertaining for the Contractor such facts concerning physical characteristics relating to this project. The Bidder agrees that he shall make no claim for and has no right to additional payment or extension of time for completion of the work, or any other concession, because of any interpretations or misunderstanding on his part of this bid, or because of any failure on his part to fully acquaint himself with all conditions relating to the work. Permission for making borings, test pits, destructive tests or other investigations of subsurface conditions will be arranged for by the bidder upon receipt of a written approval by the Town.

CONSIDERATION OF PRIOR SERVICE

Previous performance, quality of service and merchandise will be considered.

ADDENDA AND INTERPRETATIONS & ALTERNATE PROPOSALS

Addenda information will be available online at http://www.watertownct.org. Adobe Acrobat® Reader may be required to view this document. We strongly suggest that you check for any addenda a minimum of forty-eight hours in advance of the bid deadline.

At the time of the opening of bids each bidder will be presumed to have inspected the work and to have read and to be thoroughly familiar with all of the Contract Documents (including all addenda). The failure or omission of any bidder to receive or examine any form, instruction or document shall in no way relieve any bidder from any obligation in respect to his bid.

If any person contemplating submitting a proposal is in doubt as to the true meaning of any part of these specifications, he may submit a written request for an interpretation to the Purchasing Agent. No interpretations as to the meaning of the plans, specifications or other Contract Documents will be made to any bidder orally.

Every request for such interpretation should be in writing addressed (duplicate copy) to the Town of Watertown, Purchasing Agent, 424 Main Street, Watertown, Connecticut 06795, and to be given consideration, must be received at least five (5) days prior to the date fixed for the opening of Bids. Any and all such interpretations and any supplementary instructions will be in the form of written Addenda to the Specifications which, if issued, will be mailed by Registered Mail with Return Receipt Requested to all prospective bidders at the respective addresses furnished for such purposes, not later than three (3) days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such Addendum or interpretations shall not relieve any bidder from any obligations under his bid as submitted. All Addenda so issued shall become part of the Contract Documents. Oral explanations will not be binding on the Town.

The specifications listed are to be interpreted as meaning the minimum acceptable by the Town of Watertown. Bidders are requested to submit quotations on the basis of these specifications. Alternative bids providing a broader scope and/or services than requested in these specifications may receive consideration providing such equipment and/or service is clearly explained. Any exceptions
to the specifications requested herein must be clearly noted in writing and are to be included as a part of your bid proposal. If none are included it will be assumed that there are none.

Definition of the word "complete" means that each unit of the equipment proposed shall include all appurtenances, fasteners, parts, accessories, and services ordinarily catalogued.

An item equal to that named or described in the specifications may be furnished by the Bidder, except where expressly noted as “no substitutions.” The naming of any commercial name, trademark, or other identification shall not be construed to exclude any item of any manufacturer not mentioned by name, nor limit competition, but shall establish a standard of equality only. An item shall be considered equal to the item so named or described if:

A. It is at least equal in quality, durability, appearance, strength and design.

B. It will perform at least equally the function imposed by the design for the work being contracted for or the material being purchased.

C. It conforms substantially, even with deviations, to the detailed requirements for the item in the specifications.

The Bidder shall hold the Town of Watertown, its officers, agents, servants, and employees, harmless from liability of any nature or kind because of use of any copyrighted or uncopyrighted compositions, secret process, patented or unpatented inventions, articles or appliances furnished or used under this bid, and agrees to defend, at his own expense, any and all actions brought against the Town of Watertown or himself because of the unauthorized use of such articles.

QUOTATION LIMITATION
Bidders shall offer only ONE ITEM AND PRICE for each line item bid. If an or equal item is to be bid, the bidder is to select the brand and model that meets or exceeds the specified item, and submit his bid for that item.

ESTIMATE OF WORK
For bidding purposes, the work has been subdivided into unit price items. The quantities shown are to be considered as approximate only. The Purchasing Agent does not expressly or by implication agree that the actual quantity will correspond therewith, but reserves the right to increase or decrease the amount of any item or portion of the work as deemed necessary.

WITHDRAWAL OF BID
Bidders may withdraw their proposals at any time prior to the bid date. No agent/broker shall withdraw or cancel their proposal for a period of sixty (60) days after the bid closing date of 11:00 a.m., Tuesday, November 6, 2018. The successful agent/broker shall not withdraw, cancel or modify their proposal.
POWER OF ATTORNEY
Attorneys-in-fact who sign contract bonds must file, with each bond, a certified and effectively dated copy of their power of attorney.

SUBCONTRACTORS
A. Each bidder contemplating the use of any subcontractor shall submit a list of subcontractors as listed on the Bid Form.
B. The apparent low bidder shall file with the Town of Watertown, within five (5) days after the date of bid opening, a complete list of the names and addresses of competent, responsible and qualified subcontractors who are actually to perform major portions of the work. This in no way restricts or limits the requirement that all subcontractors must be approved by the Town.
C. Subcontractors listed on the Bid Form or those previously approved may not be changed without the approval of the Town of Watertown.

Local subcontractors, material suppliers, and labor in the Town of Watertown should be considered and sought insofar, as is practical in the performance of this project.

QUALIFICATION OF BIDDER
In determining the qualifications of a bidder, the Town may consider his record in the performance of any contracts for similar work into which he may have previously entered; and the Town expressly reserves the right to reject the bid of such bidder if such record discloses that such bidder, in the opinion of the Town, has not properly performed such contracts or has habitually, and without just cause, neglected the payment of bills or has otherwise disregarded his obligations to subcontractors, suppliers, state or local codes, men or employees of subcontractors.

The Town may make such investigation as he deems necessary to determine the ability of the bidder to perform the work and the bidder shall furnish to the Town all such information and data for this purpose as the Town may request. The Town reserves the right to reject any bid if the evidence submitted by or the investigation of such bidder fails to satisfy the Town that such bidder is properly qualified, or that such bidder misrepresented material facts in the bid documents.

DISQUALIFICATION OF BIDDERS
More than one proposal from an individual, firm, partnership, corporation, or an association under the same or different names will not be considered. Reasonable grounds for believing that any Bidder is interested in more than one proposal for the work contemplated will cause the rejection of all proposals in which such Bidder is interested. Any or all proposals in which such Bidder is interested will be rejected if there is reason for believing that collusion exists among the Bidders and all participants in such collusion will not be considered in future proposals for the same work. Proposals in which the prices are obviously unbalanced may be rejected. No Contract will be awarded except to competent Bidders capable of performing the class of work contemplated.
DELIVERY
Inasmuch as this work concerns a needed public improvement, the provisions of this bid relating to the time of delivery, performance and completion of the work are of the essence of this bid. Accordingly, the successful bidder shall commence work upon receipt of the signed Purchase Order unless the Town shall authorize or direct a further delay, and shall proceed with the work diligently so as to permit completion no later than sixty (60) calendar days after receipt of the Town’s Purchase Order.

Time of delivery shall be stated as the number of calendar days following receipt of the Purchase Order by the Bidder to receipt of the goods or services by the Town of Watertown.

Prices quoted must include delivery to the Town of Watertown as specified on the Purchase Order. No charges will be allowed for parking, crating, freight, express or cartage unless specifically stated and included in this bid.

Time of delivery may be considered in the award.

PAYMENT
The Town, after inspection and acceptance of workmanship, and in consideration of the faithful performance by the Bidder of all and singular his covenants, promises, and agreements contained herein, agrees to pay the Bidder for the full completion by him of the work embraced in this Contract, within (30) Thirty Days of the receipt of the final invoice. When subcontractors or suppliers are utilized, the successful Bidder for this project shall be required to submit a Mechanics Lien Waiver, acceptable to the Town, with each progress payment and/or at time of final payment prior to any payment being made.

Time, in connection with any discount offered, will be computed from the date of delivery to the Town or from the date a correct invoice is received by the Town's Finance Department, if the latter date is later than the date of delivery.

Prices will be considered as NET, if no cash or payment discount is shown.

The successful bidder shall submit invoices to the following address:

    Town of Watertown
    Public Works/Engineering Department
    61 Echo Lake Road
    Watertown, CT 06795

IT IS UNDERSTOOD AND AGREED THAT SHOULD A BID BE ACCEPTED, IT WILL AUTOMATICALLY BECOME THE CONTRACT OR AN ADDENDUM TO ANY CONTRACT AGREED UPON.
Notification of the bid award will be made by issuance of a purchase order. Bidders are to list their
bids on the appropriate attached sheets. Bidders may attach a letter of explanation. A clear
notification should be made on the standard bid sheets at the appropriate point of explanation that
there is a letter of explanation attached. All bids must be NET prices.

The successful bidder shall submit an itemized invoice to the Town of Watertown for the work as
described herein.

The bidder shall be required to submit a Mechanics Lien Waiver, acceptable to the Town of
Watertown, with each progress payment and at time of final payment prior to any payment being
made.

At the time of award, the successful bidder shall be required to supply the Town of Watertown a
Certificate of Good Standing, certifying that the corporation is in fact a valid corporation and
presently licensed to conduct business in the State of Connecticut.

SALES TAX
Certain materials and supplies incorporated in the work of this project are exempt from Connecticut
Sales Tax. The Bidder shall familiarize himself with current regulations of the State Tax
Department. The tax on materials or supplies exempted by such regulations shall not be included as
part of the bid. The Town will furnish the successful Bidder sales tax exemption authorization.

CARE AND PROTECTION OF PROPERTY
The Bidder shall take particular care to avoid damages to all private and public property and to
private or public improvements within the Town's right of way. He shall make good any damages to
the satisfaction of the Town. There shall be no additional compensation for the repair or restoration
of private or public property improvements.

COMPLIANCE WITH FEDERAL, STATE AND LOCAL CODES
The Bidder shall be responsible for full compliance with any Federal, State and/or Local codes, laws,
regulations and standards, as applicable.

AWARD
The Town of Watertown reserves the right to accept or reject any bid to best serve its interests, or to
hold the bids for sixty (60) days before decision.

The Town reserves the right to reject any and all bids (or any part thereof), to waive defects in
proposals, or to accept any proposal deemed to be in its best interest.

Exceptions will be considered to the specification provided, providing they are listed and fully
explained on a separate page entitled "EXCEPTIONS TO SPECIFICATIONS"
Each exception will be considered as to its degree of impact and total effect on the bid. The purchaser shall determine which (if any taken) exceptions are acceptable, and this determination shall be final.

The Town of Watertown reserves the right:

1) To award bids received on the basis of individual items, or groups of items, or on the entire list of items.

2) To reject any or all bids, or any part thereof.

3) To waive any informality in the bids.

4) The Town of Watertown reserves the right to take into account the residency of bidders within the Town of Watertown and/or the location of the bidder’s business within the Town of Watertown in awarding this bid.

5) To accept the bid that is in the best interest of the Town of Watertown. The Purchasing Agent's decision shall be final.

**INSURANCE**

A. **General:**
The Bidder shall be responsible for maintaining insurance coverage in force for the life of the contract of the kinds and adequate amounts to secure all of the Bidder’s obligations under the contract with an insurance company with an AM Best Rating of A - VII or better licensed to write such insurance in Connecticut and acceptable to the Town of Watertown.

The insurer shall provide the Town of Watertown with Certificates of Insurance signed by an authorized representative of the insurance company(ies) prior to the performance of this contract describing the coverage and providing that the insurer shall give the Town of Watertown written notice at least thirty (30) days in advance of any termination, expiration, or any and all change in coverage.

Such insurance or renewals or replacements thereof shall remain in force during the Bidder’s responsibility under this agreement.

The Bidder at his own cost and expense shall procure and maintain all insurance required and shall name the Town of Watertown as an additional insured on all contracts except Worker’s Compensation and Professional Errors & Omissions coverage.

In order to facilitate this requirement for insurance, it is recommended that the bidder forward a copy of this exhibit to the bidder’s insurance representative(s).
B. **Specific Requirements:**

1. **Workers’ Compensation Insurance**

   The Bidder shall provide Workers’ Compensation Insurance required by law and the Employer’s Liability Insurance for at least the amounts of liability for Bodily Injury by accident of $100,000 each accident; Bodily Injury by Disease each employee of $100,000; Bodily Injury by Disease, policy limit of $500,000.

2. **Commercial General Liability Insurance**

   The Bidder shall carry Commercial General Liability policy (Insurance Services Office Incorporated Form CG-0001 or equivalent). A per occurrence limit of $1,000,000 is required. The Aggregate Limit will be not less than $1,000,000.

3. **Business Automobile Liability Insurance**

   The Bidder shall carry Business Automobile Liability Insurance. (Insurance Services Office Incorporated Form CA-00001 or equivalent). A per occurrence limit of $1,000,000 is required. “Any Auto” (symbol 1 or equivalent) is required.

C. **Hold Harmless & Subcontractor’s Requirements:**

The Bidder shall require the same insurance that it is required to carry by the Town of Watertown to be carried by any subcontractors and independent contractors hired by the Bidder and to obtain Certificates of Insurance before subcontractors and independent contractors are permitted to begin work.

The Bidder shall require that the Town of Watertown be named as Additional Insured on all subcontractor’s and independent contractor’s policies before they are permitted to begin work.

The Bidder and all subcontractors and independent contractors and their insurers shall waive all rights of subrogation against the Town of Watertown, and its officers, agents, servants and employees for losses arising from the work performed by each on this contract.

The Bidder assumes and agrees to hold harmless, indemnify, protect and defend the Town of Watertown against any and all liability for injuries and damages to Bidder and to Bidder’s employees, agents, subcontractors and guests, third parties or otherwise incident to or resulting from any and all operations performed by a contractor under any terms of this contract.

D. **Other Data:**

**NOTE 1:** If Bidder is only a vendor shipping goods via Common Carrier only, General Liability is required.

**NOTE 2:** If Bidder is a Professional, Errors & Omission coverage will be required.
NOTE 3: The Town reserves the right to amend amounts of coverage required and the types of coverage provided based on work or service to be performed.

PERMITS
When required all licenses and permits for complying with any applicable Federal, State, and Municipal laws, codes, regulations in connection with the prosecution of the work shall be obtained by the Bidder, at no additional cost to the Town. The cost of local building permits will be assessed at sixteen cents per one thousand dollars of construction value as declared on the building permit application pursuant to State of Connecticut Statute Sec. 29-263 by the Town of Watertown. The successful contractor will be responsible for payment to the Town of Watertown Building Inspection Department.

NONDISCRIMINATION IN EMPLOYMENT
The successful bidder shall agree and warrant that, in the performance of this contract, he will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, sex, religion, or national origin in any manner prohibited by State, Federal, County, or Municipal law. A certification of Nonsegregated Facilities and a Certification Regarding Equal Employment Opportunity shall be considered a part of this contract.

MECHANICS LIEN WAIVERS
The successful Bidder shall be required to submit a Mechanics Lien Waiver, acceptable to the Town of Watertown, with each progress payment, and/or at time of final payment, prior to any payment made.

For further technical or administrative information contact Mr. Jason Warner, Purchasing Agent at (860) 945-5260 or via email at warner@watertownct.org.
Bidders shall:

- provide a list of equipment available for the project
- provide a list of references for work performed over the last five years in the State of Connecticut
- Provide a copy of OSHA 10 certification for each person working on project, including proposed subcontractors, if any.
- List of approved subcontractors

**Project Description**

This project consists of the relining of selected segments of stormwater culverts and incidental related work on Sprucewood Road in Oakville, CT in accordance with the project plans and specifications.

The following pipe segments shall be relined:

<table>
<thead>
<tr>
<th>Name</th>
<th>Length (LF)</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>84</td>
<td>43” X 27”</td>
</tr>
<tr>
<td>2</td>
<td>117.5</td>
<td>58” X 36”</td>
</tr>
<tr>
<td>3</td>
<td>20</td>
<td>58” X 36”</td>
</tr>
</tbody>
</table>

A.C.C.M.C.P. – Asphalt Costed Corrugated Metal Pipe

All work is to be performed in accordance with the State of Connecticut Department of Transportation “Standard Specifications for Roads, Bridges and Incidental Construction, Form 816”, as supplemented and as amended below. However, it should be noted that reference to the Form of 816 is for convenience only and is not meant to imply or to infer that this project is an 816 project or that all of the terms and conditions of the Form 816 apply. Mobilization, demobilization and construction staking will not be bid separately, but the price of such work as may be required shall be included in the unit prices bid for the work.
Trafficmen:
Uniformed Police Officers will be required for all work performed in the roadway and shall be provided in accordance with the State of Connecticut Department of Transportation “Standard Specifications for Roads, Bridges and Incidental Construction”, Form 816, as amended. Upon approval by the Engineer, the contractor is to arrange for the Police Officers. The Town will be responsible for payment of the Officers. Contractor shall be responsible for all fees associated with not notifying Extra Duty Office in time to cancel extra duty officers.
TECHNICAL SPECIFICATIONS
MAINTENANCE AND PROTECTION OF TRAFFIC

Article 9.71.01 – Form 817 Description is supplemented by the following:

The Contractor shall maintain and protect a minimum of one lane of traffic in each direction, each lane on a paved travel path not less than 10 feet in width. Sidewalks to be closed shall be blocked off by means of “Sidewalk Closed” signs mounted on sawhorses and supplemented by barrels and cones as directed by Town.

Excepted therefrom will be those periods, during the allowable periods, when the Contractor is actively working, at which time the Contractor shall maintain and protect at least an alternating one-way traffic operation, on a paved travel path not less than 11 feet in width. The length of the alternating one-way traffic operation shall not exceed 300 feet and there shall be no more than one alternating one-way traffic operation within the project limits without prior approval of the Town.

COMMERCIAL AND RESIDENTIAL DRIVEWAYS

The Contractor shall maintain access to and egress from all commercial and residential driveways throughout the project limits. The Contractor will be allowed to close said driveways to perform the required work during those periods when the businesses are closed, unless permission is granted from the business owner to close the driveway during business hours. If a temporary closure of a residential driveway is necessary, the Contractor will coordinate with the owner to determine the time period of the closure.

Article 9.71.03 – Form 817 Construction Method is supplemented as follows:

EXISTING SIGNING

The Contractor shall maintain all existing side-mounted signs throughout the projects limits for the duration of the project. The contractor shall temporarily relocate signs and sign supports as many times as deemed necessary, and install temporary sign supports if necessary and as directed by the Town.

GENERAL

Unpaved travel paths will only be permitted for areas requiring full depth and full width reconstruction, in which case, the Contractor will be allowed to maintain traffic on processed aggregate for a duration not to exceed 10 calendar days. The unpaved section shall be the full
width of the road and perpendicular to the travel lanes. Opposing traffic lane dividers shall be used as a centerline.

The Contractor is required to delineate any raised structures within the travel lanes so that the structures are visible day and night, unless there are specific contract plans and provisions to temporarily lower these structures prior to the completion of work.

The Contractor shall schedule operations so that pavement removal and roadway resurfacing shall be completed full width across a roadway (bridge) section by the end of a workday (work night), or as directed by the Town.

When the installation of the intermediate courses of bituminous concrete pavement is completed for the entire roadway, the Contractor shall install the final course of bituminous concrete pavement.

When the Contractor is excavating adjacent to the roadway, the Contractor shall provide a 3-foot shoulder between the work areas and the travel lanes, with drums spaced every 50 feet. At the end of the workday, if the vertical drop-off exceeds 3 inches, the Contractor shall provide a temporary traversable slope of 4:1 or flatter that is acceptable to the Town.

If applicable, when an existing sign is removed, it shall be either relocated or replaced by a new sign the same working day.

The Contractor shall not store any material on-site which would present a safety hazard to motorists or pedestrians (e.g. fixed object or obstruct sight lines).

The field installation of a signing pattern shall constitute interference with existing traffic operations and shall not be allowed, except during the allowable periods.

Construction vehicles entering travel lanes at speeds less than the posted speed are interfering with traffic, and shall not be allowed without a lane closure. The lane closure shall be of sufficient length to allow vehicles to enter or exit the work area at posted speeds, in order to merge with existing traffic.

**REQUIREMENTS FOR WINTER**

Prior to winter, the Contractor shall install the final wearing surface and pavement markings on all sections of roadway repaired during that construction season.

The Contractor shall schedule a meeting with representatives of the Town of Watertown to determine what interim traffic control measures the Contractor must accomplish for the winter to provide safety to the motorist and permit adequate snow removal procedures. This meeting shall be
held prior to October 31 of each year and will include, but not be limited to, discussion of the status and schedule of the following items: lane and shoulder widths, pavement restoration, traffic signal work, pavement markings, and signing.

**SIGNING PATTERNS**

The Contractor shall erect and maintain all signing patterns in accordance with the traffic control plans contained herein. Proper distances between advance warning signs and proper taper lengths are mandatory.

**TRAFFIC CONTROL DURING CONSTRUCTION OPERATIONS**

The following guidelines shall assist field personnel in determining when and what type of traffic control patterns to use for various situations. These guidelines shall provide for the safe and efficient movement of traffic through work zones and enhance the safety of work forces in the work area.

**TRAFFIC CONTROL PATTERNS**

Traffic control patterns shall be used when a work operation requires that all or part of any vehicle or work area protrudes onto any part of a travel lane or shoulder. For each situation, the installation of traffic control devices shall be based on the following:

- Speed and volume of traffic
- Duration of operation
- Exposure to hazards

Traffic control patterns shall be uniform, neat and orderly so as to command respect from the motorist.

In the case of a horizontal or vertical sight restriction in advance of the work area, the traffic control pattern shall be extended to provide adequate sight distance for approaching traffic.

If a lane reduction taper is required to shift traffic, the entire length of the taper should be installed on a tangent section of roadway so that the entire taper area can be seen by the motorist.

Any existing signs that are in conflict with the traffic control patterns shall be removed, covered, or turned so that they are not readable by oncoming traffic.
When installing a traffic control pattern, a Buffer Area should be provided and this area shall be free of equipment, workers, materials and parked vehicles.

Traffic control patterns will not be required when vehicles are on an emergency patrol type activity or when a short duration stop is made and the equipment can be contained within the shoulder. Flashing lights and appropriate trafficperson shall be used when required.

Although each situation must be dealt with individually, conformity with the typical traffic control plans contained herein is required. In a situation not adequately covered by the typical traffic control plans, the Contractor must contact the Town Engineer for assistance prior to setting up a traffic control pattern.

**PLACEMENT OF SIGNS**

Signs must be placed in such a position to allow motorists the opportunity to reduce their speed prior to the work area. Signs shall be installed on the same side of the roadway as the work area. On multi-lane divided highways, advance warning signs shall be installed on both sides of the highway. On directional roadways (on-ramps, off-ramps, one-way roads), where the sight distance to signs is restricted, these signs should be installed on both sides of the roadway.

**ALLOWABLE ADJUSTMENT OF SIGNS AND DEVICES SHOWN ON THE TRAFFIC CONTROL PLANS**

The traffic control plans contained herein show the location and spacing of signs and devices under ideal conditions. Signs and devices should be installed as shown on these plans whenever possible.

The proper application of the traffic control plans and installation of traffic control devices depends on actual field conditions.

Adjustments to the traffic control plans shall be made only at the direction of the Town to improve the visibility of the signs and devices and to better control traffic operations. Adjustments to the traffic control plans shall be based on safety of work forces and motorists, abutting property requirements, driveways, side roads, and the vertical and horizontal curvature of the roadway.

The Town Engineer may require that the traffic control pattern be located significantly in advance of the work area to provide better sight line to the signing and safer traffic operations through the work zone.

Table I indicates the minimum taper length required for a lane closure based on the posted speed limit of the roadway. These taper lengths shall only be used when the recommended taper lengths shown on the traffic control plans cannot be achieved.
TABLE I – MINIMUM TAPER LENGTHS

<table>
<thead>
<tr>
<th>POSTED SPEED LIMIT MILES PER HOUR</th>
<th>MINIMUM TAPER LENGTH IN FEET FOR A SINGLE LANE CLOSURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 OR LESS</td>
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SECTION 1. WORK ZONE SAFETY MEETINGS

1.a) Prior to the commencement of work, a work zone safety meeting will be conducted with representatives of the Town, Municipal Police, the Contractor (Project Superintendent) and the Traffic Control Subcontractor (if different than the prime Contractor) to review the traffic operations, lines of responsibility, and operating guidelines which will be used on the project. Other work zone safety meetings during the course of the project should be scheduled as needed.

1.b) A Work Zone Safety Meeting Agenda shall be developed and used at the meeting to outline the anticipated traffic control issues during the construction of this project. Any issues that can’t be resolved at these meetings will be brought to the attention of the Town. The agenda should include:

- Review Project scope of work and time
- Review “Prosecution and Progress”
- Review “Trafficpersons”
- Review “Maintenance and Protection of Traffic”
- Review Contractor’s schedule and method of operations.
- Review areas of special concern: ramps, turning roadways, medians, lane drops, etc.
- Open discussion of work zone questions and issues
- Discussion of review and approval process for changes in contract requirements as they relate to work zone areas
- Discussion of interaction with Connecticut Department of Transportation personnel.

SECTION 2. GENERAL
2.a) If the required minimum number of signs and equipment (i.e. one High Mounted Internally Illuminated Flashing Arrow for each lane closed, two TMAs, Changeable Message Sign, etc.) are not available; the traffic control pattern shall not be installed.

2.b) The Contractor shall have back-up equipment (TMAs, High Mounted Internally Illuminated Flashing Arrow, Changeable Message Sign, construction signs, cones/drums, etc.) available at all times in case of mechanical failures, etc. The only exception to this is in the case of sudden equipment breakdowns in which the pattern may be installed but the Contractor must provide replacement equipment within 24 hours.

2.c) Failure of the Contractor to have the required minimum number of signs, personnel and equipment, which results in the pattern not being installed, shall not be a reason for a time extension or claim for loss time.

2.d) In cases of legitimate differences of opinion between the Contractor and the Inspection staff, the Inspection staff shall err on the side of safety. The matter shall be brought to the Town for resolution immediately or, in the case of work after regular business hours, on the next business day.

SECTION 3. INSTALLING AND REMOVING TRAFFIC CONTROL PATTERNS

3.a) Lane Closures shall be installed beginning with the advanced warning signs and proceeding forward toward the work area.

3.b) Lane Closures shall be removed in the reverse order, beginning at the work area, or end of the traffic control pattern, and proceeding back toward the advanced warning signs.

3.c) Stopping traffic may be allowed:

   • As per the contract for such activities as blasting, steel erection, etc.
   • During paving, milling operations, etc. where, in the middle of the operation, it is necessary to flip the pattern to complete the operation on the other half of the roadway and traffic should not travel across the longitudinal joint or difference in roadway elevation.
   • To move slow moving equipment across live traffic lanes into the work area.

3.d) Under certain situations when the safety of the traveling public and/or that of the workers may be compromised due to conditions such as traffic volume, speed, roadside obstructions, or sight line deficiencies, as determined by the Town and/or State Police, traffic may be briefly impeded while installing and/or removing
the advanced warning signs and the first ten traffic cones/drums only. Appropriate measures shall be taken to safely slow traffic. Once the advanced warning signs and the first ten traffic cones/drums are installed/removed, the TMAs and sign crew shall continue to install/remove the pattern as described in Section 4c and traffic shall be allowed to resume their normal travel.

3.e) The Contractor must adhere to using the proper signs, placing the signs correctly, and ensuring the proper spacing of signs.

3.f) Additional devices are required on entrance ramps, exit ramps, and intersecting roads to warn and/or move traffic into the proper travel path prior to merging/exiting with/from the main line traffic. This shall be completed before installing the mainline pattern past the ramp or intersecting roadway.

3.g) Prior to installing a pattern, any conflicting existing signs shall be covered with an opaque material. Once the pattern is removed, the existing signs shall be uncovered.

3.h) On limited access roadways, workers are prohibited from crossing the travel lanes to install and remove signs or other devices on the opposite side of the roadway. Any signs or devices on the opposite side of the roadway shall be installed and removed separately.

SECTION 4. USE OF TRAFFIC DRUMS AND TRAFFIC CONES

4.a) Traffic drums shall be used for taper channelization on limited-access roadways, ramps, and turning roadways and to delineate raised catch basins and other hazards.

4.b) Traffic drums shall be used in place of traffic cones in traffic control patterns that are in effect for more than a 36-hour duration.

4.c) Traffic Cones less than 42 inches in height shall not be used on limited-access roadways or on non-limited access roadways with a posted speed limit of 45 mph and above.

4.d) Typical spacing of traffic drums and/or cones shown on the Traffic Control Plans in the Contract are maximum spacings and may be reduced to meet actual field conditions as required.
WORK IN TRAVEL LANE AND SHOULDER TWO LANE HIGHWAY
ALTERNATING ONE-WAY TRAFFIC OPERATIONS

HAND SIGNAL METHODS TO BE USED BY UNIFORMED FLAGGERS

THE FOLLOWING METHODS FROM SECTION 6B.07, FLAGGER PROCEDURES, IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," SHALL BE USED BY UNIFORMED FLAGGERS WHEN DIRECTING TRAFFIC THROUGH A WORK AREA. THE STOP/SLOW SIGN PADDLE (SIGN NO. 80-9950) SHOWN ON THE TRAFFIC STANDARD SHEET TR-1220 01 ENTITLED, "SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS" SHALL BE USED.

A. TO STOP TRAFFIC

TO STOP ROAD USERS, THE FLAGGER SHALL FACE ROAD USERS AND AIM THE STOP PADDLE FACE TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. THE FREE ARM SHALL BE HELD WITH THE PALM OF THE HAND ABOVE SHOULDER LEVEL TOWARD APPROACHING TRAFFIC.

B. TO DIRECT TRAFFIC TO PROCEED

TO DIRECT STOPPED ROAD USERS TO PROCEED, THE FLAGGER SHALL FACE ROAD USERS WITH THE SLOW PADDLE FACE AIMED TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. THE FLAGGER SHALL MOTION WITH THE FREE HAND FOR ROAD USERS TO PROCEED.

C. TO ALERT OR SLOW TRAFFIC

TO ALERT OR SLOW TRAFFIC, THE FLAGGER SHALL FACE ROAD USERS WITH THE SLOW PADDLE FACE AIMED TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. TO FURTHER ALERT OR SLOW TRAFFIC, THE FLAGGER HOLDING THE SLOW PADDLE FACE TOWARD ROAD USERS MAY MOTION UP AND DOWN WITH THE FREE HAND, PALM DOWN.
TECHNICAL SPECIFICATIONS
CURED-IN-PLACE PIPE

Description

The work under the item for “Cured-In-Place Pipe” (CIPP) includes those services required for the reconstruction of pipelines and conduits by the installation of a resin-impregnated flexible tube, which is tightly formed to the original conduit or pipe. The resin is cured by either hot water under hydrostatic pressure or steam pressure within the tube or pipe. The Cured-In-Place Pipe (CIPP) shall be continuous and tight fitting. The work shall be completed within sixty (60) calendar days from the “Notice to Proceed.” The work includes furnishing all equipment, material and labor required to perform the services described herein. Contractor shall be responsible for blocking any existing pipe flows and providing by-pass pumping if required for the performance of the work. Contractor shall also be responsible for restoring site to original condition.

References

The latest edition and revision of the following standards form a part of this specification as referenced:

ASTM F1216 – Standard Practice for the Rehabilitation of Existing pipelines and Conduits by the inversion and Curing of a Resin-Impregnated Tube.

Performance Specification Guideline for the Installation of Cured-In-Place Pipe (CIPP) from the National Association of Sewer Service Companies (NASSCO)

Materials

Materials used for the CIPP shall meet the requirements of ASTM F1216. CIPP shall be as manufactured by Insituform Technologies, National Line, Cure-Line or Town approved equal. Hydrophilic rubber gaskets shall have two (2) beads of material protruding from one side of the strip and swell to a minimum of three times its dry size when in contact with water. Flat types of gaskets shall not be accepted. Gaskets shall be manufactured by Hydrotite or Town approved equal.

Construction Methods

The construction methods shall be in accordance with ASTM F1216, Section 7. Curing of liner Tube by hot water or steam shall be acceptable. The location, length and approximate interior dimensions of the CIPP to be installed are shown on the attached figures. Prior to lining pipe, it shall be cleaned and inspected. All material removed is to remain the property of the contractor and shall be properly disposed of off-site.
Each pipe segment shall be television inspected prior to the installation of the CIPP liner. The inspection shall be performed in “dry-pipe” conditions with no flow. The pipe shall be clean and free of all obstructions prior to installation of the liner. Prior to installation of the CIPP, The Contractor shall install a hydrophilic rubber gasket on the inside of each pipe where it meets a manhole such that the hydrophilic rubber gasket is between the host pipe and the CIPP. The annular space shall be made watertight at the ends of the liner in the manholes. Installation of the CIPP shall be in accordance with ASTM F1216, Section 7, latest edition and revision. After the liner has been cured in place, the contractor shall reinstate all active connections as required by the Town. No additional payment shall be made for the purpose of reinstating connections and the contractor shall be responsible for the cost and liability associated with such excavation and restoration work. All reinstated connections shall be sealed with grout. The Contractor shall make certain that the annular space between the host pipe and the CIPP is fully sealed with grout. No additional payment shall be made for grouting service connections. Each pipe segment shall be television inspected after the liner installation and service grouting have been completed. The inspection shall be performed “dry-pipe”. No additional payment shall be made for post rehabilitation television inspection. Upon completion of the work and testing, the contractor shall restore the project area affected by the operations to a condition at least equal to that existing prior to the work.

**Method of Measurement**

This work will be measured for payment by the linear foot per size of pipe, complete and accepted in place, from the inside wall of each structure at the beginning and end of each pipe segment. Pipe cleaning and inspection will not be measured separately for payment but shall be included in the unit prices bid. Site restoration and dewatering and bypass pumping shall not be measured for payment but work shall be included in work for which required.

**Basis of Payment**

Payment for this work will be at the contract unit price per linear foot “Cure-In-Place Pipe,-“pipe size” which price shall include all equipment, tools, and labor incidental to the completion of this item. All costs incidental to the removal and disposal of material cleaned out of the pipe shall be included in the unit price bid.
PLEASE

IT IS A REQUIREMENT OF THIS BID THAT EACH PROPOSAL SUBMITTED MUST HAVE A DUPLICATE COPY ATTACHED.

YOUR COOPERATION IS APPRECIATED
TOWN OF WATERTOWN
WATERTOWN, CONNECTICUT 06795

BID PROPOSAL

Sprucewood Road Culvert Relining
Oakville, CT

BID OPENING: 11:00 a.m., Tuesday, November 6, 2018

TO: Jason Warner, Purchasing Agent
    Town of Watertown
    Town Hall Annex
    424 Main Street
    Watertown, CT 06795

The undersigned, as bidder, agrees to furnish labor, equipment and materials as specified and declares that no person or persons, other than those named herein, are interested in this Proposal; that this Proposal is made without collusion with any person, firm, or corporation; that he has carefully examined the location of the proposed work; that no person or persons acting in any official capacity for the Town is directly or indirectly interested therein or in any portion of the profit thereof; and that he proposes and agrees, if this Proposal is accepted, to provide all necessary equipment, tools, labor and deliver and to do all work and furnish all materials specified in the manner and time therein prescribed, and according to the requirements of the Town as therein set forth, and that he will take in full payment therefor, the following unit prices and lump sums, to wit:

FIRM

Name

Street

City          State          Zip Code

NAME ____________________________________________

Please Print

TELEPHONE NUMBER ________________________________

FAX NUMBER ________________________________

EMAIL ADDRESS ________________________________

SIGNED ____________________________ DATE ____________
PROPOSAL

1. Cure-In-Place Pipe - 43” X 27” ACCMP

The unit price of
_____________________________ Dollars
and __________________________ Cents
($___________________) per Linear Foot (LF)  84 LF  $__________

2. Cure-In-Place Pipe - 58” X 36” ACCMP

The unit price of
_____________________________ Dollars
and __________________________ Cents
($___________________) per Linear Foot (LF)  137.5 LF  $__________

3. Maintenance and Protection of Traffic

The unit price of
_____________________________ Dollars
and __________________________ Cents
($___________________) per lump sum (LS)  1 LS  $__________

Computed
Total  $__________

Payment Terms _________________________________________________________________

Start Date: _________________________  Completion Date ____________________________

31
Have you taken any exceptions or have you deviated from our printed specification and if so, are such suggested changes clearly noted on the page provided for exceptions to specifications?

___ yes       ___ no

EXCEPTIONS TAKEN TO SPECIFICATIONS

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OFFICIAL ADDRESS: _________________________________________________________

PHONE NUMBER: ___________________________________________________________

BY: ___________________________ TITLE: _________________________________
    (Please Print)

DATE: _________________________________________________________________

SIGNATURE: _____________________________________________________________
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REFERENCES
Please list a minimum of three references of similar work performed within the last three years.

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