

**CITY OF NORWICH**  
NORWICH PUBLIC UTILITIES

**BID #7323**

**Paving Replacement Services**

Sealed bids for Paving Replacement Services will be received at the Office of the Purchasing Agent at City Hall, 100 Broadway, Norwich, Connecticut 06360 until 2:00 P.M., on Thursday, February 16, 2012 prevailing time, at which time they will be publicly opened and read aloud.

**Bid surety in the form of cash, a certified check or bid bond in the amount of two thousand dollars (\$2,000) is required.**

Copies of the Specifications may be obtained at the Purchasing Office at 100 Broadway, Norwich, CT 06360 or online at the State of Connecticut DAS Web Portal or at the City of Norwich web site [www.norwichct.org](http://www.norwichct.org) by clicking on Public Bids/Proposals.

Questions regarding this bid should be directed to Ms. Tammy Petersen, Purchasing Supervisor, Norwich Public Utilities at [tammypetersen@npumail.com](mailto:tammypetersen@npumail.com).

Norwich Public Utilities reserves the right 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 in the bids received if it deems it to be in the best interest of the Department to do so.

No Bidder may withdraw their bid within 60 days after the actual date of bid opening thereof. Should there be reason why the contract cannot be awarded within the specific period, this time may be extended by mutual agreement between the City and the designated, qualified low Bidder.

All final awards of the bid subject to comply with Ordinance No. 1235 adopted December 3, 1991.

All bids must be submitted in a sealed envelope bearing the bidders name and bid number.

Responding bidders must ensure that employees and applicants for employment are not discriminated against because of their race, color, religion, age, handicap, familial status, sex, or national origin.

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PURCHASING AGENT

NOTE: BIDDERS ARE HEREBY ADVISED THAT ONLY BID SURETIES FOR THE THREE LOWEST BIDDERS WILL BE HELD. ALL OTHERS WILL BE RELEASED WITHIN SEVEN DAYS.

REQUEST FOR QUOTATION

BID NO7323

THE CITY OF NORWICH
DEPARTMENT OF PUBLIC UTILITIES
Norwich, Connecticut 06360

Date January 19,2012

In your reply, refer to
Purchasing Division
City Hall Norwich CT

TO:

Three horizontal lines for recipient information.

THIS IS NOT AN ORDER

Shipping Point:

F.O.B. Via:

Delivery: Complete Shipment to be made from in days from receipt of order

Terms: % days: Net days Shipping Weight lbs.

IMPORTANT
PLEASE QUOTE ON THIS SHEET IN SPACE INDICATED
BELOW FOR THE MATERIALS AND/OR SERVICES
DESCRIBED.
EXPLAIN FULLY ANY SUBSTITUTES SUBMITTED.
PURCHASES MADE BY THE NORWICH DEPARTMENT OF
PUBLIC UTILITIES ARE CONSIDERED EXEMPT FROM THE
PAYMENT OF FEDERAL EXCISE TAXES, CONNECTICUT
SALES TAXES, ETC., AND SUCH TAXES MUST BE IDENTIFIED
SEPARATELY OR EXCLUDED FROM THE BID PRICES.
EXEMPTION CERTIFICATIONS WILL BE FURNISHED AS
REQUIRED.
THE RIGHT TO ACCEPT ALL OR ANY PART OR TO DECLINE
THE WHOLE IS RESERVED.
Your quotation must be in our office
By: Thursday, February 16, 2012
at 2:00 PM
THE CITY OF NORWICH

Table with 5 columns: Item, Quantity, Materials and/or Services Required, Unit Price, Total Price. Row 1: PAVEMENT REPLACEMENT SERVICES PER ATTACHED SPECS. Includes a note: Please answer without exception all questions listed on this request for quotation

To THE CITY OF NORWICH

We quote you as above,

Date 2011

Signed:

By:

**Project Manual and Specifications**

**Pavement  
Replacement Services**

**NORWICH**

**PUBLIC UTILITIES**

**Bid No. 7323**

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## INFORMATION TO BIDDERS

1. Receipt of Proposals

Sealed bids shall be received at the Office of the Purchasing Agent, City Hall Building, Norwich, Connecticut until 2:00 p.m. local time on Thursday, February 16, 2012 at which time they will be publicly opened and read aloud. The envelopes containing the bids must be sealed, addressed to the "Attention of the Purchasing Agent, City Hall, Norwich, Connecticut and designated as PAVEMENT REPLACEMENT SERVICES.

2. Definitions

The following terms as used in this contract are defined as follows:

- A. Owner - The Owner of the project is the City of Norwich, Norwich Public Utilities.
- B. Contractor - The term "Contractor" as hereinafter used shall refer to the General Contractor for this job.
- C. Owner's Representative - The term "Owner's Representative" as hereinafter used shall refer to the Engineer of the Department of Public Utilities of the City of Norwich, Connecticut who is appointed by the Department to supervise the work and shall extend to and include any engineer or inspector whom he may designate to inspect, test or oversee the work herein specified.
- D. City - Wherever the term "City" is used in these General Conditions, it shall mean the City of Norwich, Norwich Public Utilities.
- E. Contract - Wherever the term "contract" is used in the Information to Bidders, it shall mean the actual bid form, technical specifications, details, formal purchase order issued to successful bidder.

3. The City of Norwich reserves the right to reject any or all bids, or any part of any bid or waive any informality in bids received, where such action is deemed in the best interest of the City.

4. Method of Award

Selection will be made on the basis of unit prices submitted, safety experience, construction experience in utility construction and repair work and in accordance with a weighted average of the bid items.

5. Description of Work

Work under this contract shall be as described in the technical specification.

6. Time of Work Commencement and Completion

The successful bidder must be prepared to execute the agreement and commence work for this contract within 10 days of the Owner's acceptance of his bid proposal. The time required for the performance of the work shall be as specified in the attached technical specification. This work will be contracted for a one-year period from the date of a signed agreement with a negotiated extension of two one-year terms at the option of the City.

7. Standard Specifications

The Standard Specifications for Roads, Bridges, and Incidental Construction, Form 814A, dated 1995 of the State of Connecticut, as specifically referenced to in the Contract Documents shall apply and be considered a part of this specification as though it were bounded herein. The Standard Specification is available from the:

Department of Transportation  
Engineer of Contracts  
2800 Berlin Turnpike  
P.O. Box 317546  
Newington, CT 06131-7546

8. Contractor's Insurance

Each Bidder must be able to enter into contract, covering the work, within 10 days from the acceptance of his proposal.

The successful bidder must, within 10 days from the date of acceptance of his proposal, file with the City, Workmen's Compensation, Comprehensive General Liability, Comprehensive Auto Liability, Certificates of Insurance satisfactory to the City, in compliance with the law, and in the following form and amount:

Comprehensive General Liability

Premises - Operations - Products/Completed Operations	
General Aggregate	\$2,000,000.00
Occurrence	\$1,000,000.00
Comprehensive Automobile Liability	
Combined Single Limit	\$1,000,000.00
Workmen's Compensation	Statutory
Employer's Liability	\$1,000,000.00

If subcontractors are employed, same limits as named above shall apply and the certificate of insurance must be filed with the City.

No contract shall be binding upon the City of Norwich until such bond shall have been given and until Comprehensive General Liability, Comprehensive General

Auto Liability and Workmen's Compensation policy certificates indicated-above have been filed with the City and approved as to form and sufficiency by the Owner. The insurance policy certificate provided by the successful bidder and all subcontractors shall carry a statement by the insurance company that the City of Norwich will receive at least ten (10) days notice prior to cancellation of any portion of the policies or any modifications in the insurance coverage that may affect the City's interest. The cost of all insurance coverage shall be included in the price of the contract cost.

The insurance company must be licensed to do business in the State of Connecticut and must be satisfactory to the City of Norwich. THE CITY OF NORWICH MUST BE NAMED AS ADDITIONAL INSURED.

9. Bid Security

Each bid must be accompanied by a certified check of the bidder, or a bid bond prepared on the form of bid bond attached hereto, duly executed by the bidder as principal and having as surety thereon a surety company approved by the Owner, in the amount of Two Thousand Dollars (\$2000). Such checks or bid bonds will be returned to all but the three lowest bidders within five days after the opening of bids, and the remaining checks or bid bonds will be returned promptly after the Owner and the accepted bidder have executed the contract; or if no award has been made within 60 days after the date of the opening of the bids, upon demand of the bidder at any time thereafter, so long as he has not been notified of the acceptance of his bid.

10. Safety and Health Standards

Successful bidders must demonstrate compliance with the applicable safety and health acts.

To demonstrate compliance, bidders must provide, prior to award of the contract, documentation supporting compliance with the above standards. This includes: Written company policy and procedure Documentation of employee training and Equipment lists.

The contractor is responsible for ensuring OSHA compliance, and his responsibility includes supervising and monitoring work site conditions for OSHA compliance. If the contractor uses subcontractors, the contractor is responsible for ensuring that the subcontractors fulfill their obligations with respect to employee safety, particularly including those which affect the entire site. The City shall consider OSHA violations over the past five years in determining the ability of the Contractor to comply with OSHA requirements and in determining whether the contractor is a responsible bidder.

If there has been an OSHA violation within the past five (5) years (measured from the date of the bid), the contractor shall provide copies of the citation(s), all documents regarding final determination of such citations including settlements or any explanation(s) of such violation(s).

11. Balanced Bidding

Minus bidding on any item is prohibited. Bids should be made on each separate item of work shown in the bid (Proposal) with reasonable relation to the probable cost of doing the work included in such item, and the right is reserved to reject wholly any bid in case any item or items thereof are obviously unbalanced or appear to the City to be so unbalanced as to affect or to be liable to affect adversely any interests of the City. The attention of the bidder is called to the fact that unbalancing of bids will cause automatic rejection of the bid and affect the Contractor if certain portions of the work are increased or decreased as provided in the Contract Documents.

12. Termination for Convenience

The City hereby reserves the right to terminate this contract for non-performance or non-compliance with the Contract.

13. Experience

The Owner will not award this contract unless the Contractor furnishes satisfactory evidence of his/her ability and experience to perform this work, and that he/she has sufficient capital and equipment to enable him/her to execute the work successfully and to complete it within specified time. Prior to award of bid, the Contractor must submit a list of similar and successfully completed jobs whose relevance to the proposed job shall be deemed by the Owner. The name, address, and telephone number of a contact person involved with each of these projects must be included so they can be investigated prior to the award of the contract.

14. Prime Contractor

Successful bidder will be the prime contractor for all work. The City will consider the Contractor as the prime contractor in the event that a subcontractor may be employed for temporary and/or permanent resurfacing, or any other subcontractor work, and to eliminate conflict of responsibility, the City will hold the contractor responsible for the coordination of such work, any damages caused by such work and guarantee the permanence of such work free from defect from a period of one year from completion date.

15. Contract Security

The Contractor shall furnish a Performance Bond and Payment Bond in amounts equal to \$20,000 as security for the faithful performance of the one-year Contract, and for the payment of all persons performing labor on the project under this contract and furnishing materials, equipment and all other incidentals in connection with this contract. The Surety on such a bond shall be a duly authorized surety company satisfactory to the Owner and the cost of the same shall be paid by the Contractor prior to the starting of any work, the bonds must be approved by the Owner and be in the Owner's hands. The bonds must be from a surety company licensed and approved to do business in the State of Connecticut.

16. The Owner reserves the right to perform any portions of the bid unit price work without invalidating the contract.
17. The contractor shall schedule DOT Certified Traffic Officers for traffic control through NPU approved contractor, Norwich Police Department or Connecticut State Police and turn in daily slips for payment by NPU, with required approval with NPU per job. The Employees of the contractor that will perform this task must submit proper training documentation as to certification of training in traffic control.

Any milling in excess of 250 square yards, the Owner reserves the right to separately bid these items.

Any overlay in excess of 250 square yards, the Owner reserves the right to separately bid these items.

**BID FORM  
PAVEMENT**

REPLACEMENT SERVICES  
NORWICH, CONNECTICUT

TO: Purchasing Agent of the  
City of Norwich  
City Hall  
Norwich, Connecticut 06360

FROM: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The undersigned, having familiarized (himself, itself, themselves) with the existing conditions on the Project Site affecting the cost of the work, and with the Contract Documents for the PAVEMENT REPLACEMENT SERVICES hereby proposes to furnish all supervision, technical personnel, labor, equipment, tools, appurtenances, services, materials not supplied by the Owner, and anything else necessary, including utility and transportation services required to perform and complete this Contract, all in accordance with the Contract Documents, at and for the unit prices for work in place for the following work items. Unit prices are to be written in both words and figures. In case of discrepancy, the unit price shown in words will govern.

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>	<u>UNIT PRICE</u>
1A.	Crew cost (4 hour min.) to perform temporary pavement, repair, permanent pavement repair, processed gravel base, and bituminous concrete curbing for quantities less than the specified limits below. (materials for this item to be paid by Owner)	8 HRS.	_____

UNIT PRICE IN WORDS: \_\_\_\_\_

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1B.	Crew cost (4 hour min.) to perform milling for quantities less than the specified limits below. (materials for this item to be paid by Owner)	8 HRS.	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

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2A.	Processed Gravel Base (Less Than 25 C.Y.)	10 C.Y.	_____
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or 100 lf.of trench)

UNIT PRICE IN WORDS: \_\_\_\_\_

2B. Processed Gravel Base 75 C.Y. \_\_\_\_\_  
(25-150 C.Y.)

UNIT PRICE IN WORDS: \_\_\_\_\_

2C. Processed Gravel Base 150 C.Y. \_\_\_\_\_  
(Greater Than 150 C.Y.)

UNIT PRICE IN WORDS: \_\_\_\_\_

3A. Temporary Pavement 25 S.Y. \_\_\_\_\_  
(Less Than 50 S.Y.  
or 100 lf.of trench)

UNIT PRICE IN WORDS: \_\_\_\_\_

3B. Temporary Pavement 125 S.Y. \_\_\_\_\_  
(50-200 S.Y.)

UNIT PRICE IN WORDS: \_\_\_\_\_

3C. Temporary Pavement 200 S.Y. \_\_\_\_\_  
(Greater Than 200 S.Y.)

UNIT PRICE IN WORDS: \_\_\_\_\_

4A-1. Permanent Pavement – 210 S.Y. \_\_\_\_\_  
Local Road



(Greater Than 200 S.Y.)

UNIT PRICE IN WORDS: \_\_\_\_\_

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5A. Bituminous Concrete  
Lip Curbing  
(Less Than 100 L.F.)                      50 L.F.                      \_\_\_\_\_

UNIT PRICE IN WORDS: \_\_\_\_\_

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5B. Bituminous Concrete  
Lip Curbing  
(100-500 L.F.)                              250 L.F.                      \_\_\_\_\_

UNIT PRICE IN WORDS: \_\_\_\_\_

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5C. Bituminous Concrete  
Lip Curbing  
(Greater Than 500 L.F.)                      500 L.F.                      \_\_\_\_\_

UNIT PRICE IN WORDS: \_\_\_\_\_

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6A-1. Milling – 1-1/2” –  
Local Road  
(Less Than 50 S.Y.)                              200 S.Y.                      \_\_\_\_\_

UNIT PRICE IN WORDS: \_\_\_\_\_

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6A-2. Milling – 1-1/2” –  
Local Road

(50-200 S.Y.) 150 S.Y. \_\_\_\_\_

UNIT PRICE IN WORDS: \_\_\_\_\_

6A-3. Milling – 1-1/2” –  
Local Road  
(Greater Than 200 S.Y.) 200 S.Y. \_\_\_\_\_

UNIT PRICE IN WORDS: \_\_\_\_\_

6B-1. Milling – 2” –  
State Road  
(Less Than 50 S.Y.) 500 S.Y. \_\_\_\_\_

UNIT PRICE IN WORDS: \_\_\_\_\_

6B-2. Milling – 2” –  
State Road  
(50-200 S.Y.) 200 S.Y. \_\_\_\_\_

UNIT PRICE IN WORDS: \_\_\_\_\_

6B-3. Milling – 2” –  
State Road  
(Greater Than 200 S.Y.) 200 S.Y. \_\_\_\_\_

UNIT PRICE IN WORDS: \_\_\_\_\_

7A-1. Overlay – 1-1/2” –  
Local Road

(Less Than 50 S.Y.)                      250 S.Y.                      \_\_\_\_\_

UNIT PRICE IN WORDS: \_\_\_\_\_

7A-2. Overlay – 1-1/2” –  
Local Road  
(50-200 S.Y.)                      150 S.Y.                      \_\_\_\_\_

UNIT PRICE IN WORDS: \_\_\_\_\_

7A-3. Overlay– 1-1/2” –  
Local Road  
(Greater Than 200 S.Y.)                      200 S.Y.                      \_\_\_\_\_

UNIT PRICE IN WORDS: \_\_\_\_\_

7B-1. Overlay – 2” –  
State Road  
(Less Than 50 S.Y.)                      500 S.Y.                      \_\_\_\_\_

UNIT PRICE IN WORDS: \_\_\_\_\_

7B-2. Overlay – 2” –  
State Road  
(50-200 S.Y.)                      200 S.Y.                      \_\_\_\_\_

UNIT PRICE IN WORDS: \_\_\_\_\_

7B-3. Overlay – 2” –  
State Road  
(Greater Than 200 S.Y.)                      200 S.Y.                      \_\_\_\_\_

UNIT PRICE IN WORDS: \_\_\_\_\_

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8A	Keyhole patching Patches Minimum 18" X 18"	20 EA	_____
	Patches Maximum 24" X 24"	20 EA	_____

UNIT PRICE IN WORDS: \_\_\_\_\_

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9A	Seed and Loam	25 S.Y.	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

9B	Concrete Side Walk Repair Patches Minimum 12" X 12"	20 EA	_____
	Patches Maximum 4' X 4'	20 EA	_____

UNIT PRICE IN WORDS: \_\_\_\_\_

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

Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding. The bidder agrees that this bid shall be good and may not be withdrawn for a period of 60 calendar days after the scheduled closing time for receiving bids.

Bidder understands that the Owner reserves the right to perform any portions of the above unit price work on prospective projects without invalidating this bid.

Respectfully submitted:

By \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Printed Name)

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(Title)

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(Business Address)

(SEAL - if bid is by a corporation)

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(Telephone Number)

**TECHNICAL SPECIFICATION**  
**PAVEMENT REPLACEMENT SERVICES**

**1.00 DESCRIPTION**

This work includes the replacement of existing bituminous concrete pavement associated with the installation of utilities in the Norwich Public Utilities system.

All patches shall be squared up to nearest ½ foot and be made to have 90 degree corners.

All cold patch must be removed prior to permanent patch.

Location of Work:

The project area is all streets in the City of Norwich and surrounding towns in which the City of Norwich Public Utilities has utilities installed.

Description of Work:

Below is a list of the items of work required to be performed under this contract and a description of each:

Item 1-Crew Cost

This item consists of the Contractor providing the necessary labor and equipment to satisfactorily complete the specific items of work stated in the bid form.

Item 2-Processed Gravel Base

This item of work includes placing processed gravel base to the compacted thickness shown on the attached detail, prior to placement of permanent pavement. The processed gravel base shall be placed on the prepared subgrade prior to placing of the pavement. Processed gravel base material will be provided by the Owner.

Item 3-Temporary Pavement

This item of work includes the immediate replacement of pavement, which has been removed for the installation of utilities and appurtenances or other underground installations. The temporary pavement shall consist of 2" compacted bituminous concrete, placed on the designated thickness of compacted gravel base in accordance with the limits and to the dimensions shown on the attached detail, specified herein, or as directed by the Owner. Bituminous concrete and gravel base material will be provided by the Owner.

Item 4 – Permanent Trench Pavement

Permanent Pavement Replacement for Trench shall consist of a two course, four (4") inch (local roads) or a five course, nine (9") inch (state roads) compacted thickness bituminous concrete surface course, constructed on the compacted thickness processed gravel base in the locations and in accordance with the attached details or

as directed by the Owner. Bituminous concrete and gravel base material will be provided by the Owner.

Item 5 – Bituminous Concrete Lip curbing

The work under this Section shall be the construction of bituminous concrete lip curbing consisting of machine laid bituminous concrete constructed on the edge of the pavement in conformance with these specifications and the attached details and as directed by the Owner. Bituminous concrete material will be provided by the Owner.

Item 6 – Milling

The work under this section includes furnishing all labor, equipment and performing all operations in connection with milling existing pavement surfaces.

Item 7 – Overlay

Overlay shall consist of a one course compacted thickness bituminous concrete surface course, constructed over a milled surface or existing pavement. Bituminous concrete material will be provided by the Owner.

## **2.00 MATERIALS**

Materials:

Below are the material specifications associated with the applicable items of work. All bituminous concrete and gravel base material will be provided by the Owner.

Item 1-Crew Cost

The crew shall be comprised of all labor and equipment needed to perform the specified contract work including but not limited to superintendent, foreman, laborer, excavator, backhoe, laborer, truck drivers, paving equipment, trucking, milling equipment, sawcutting equipment, flaggers for contractor vehicles and additional tools needed to perform the specified items.

Item 2-Processed Gravel Base

Gravel base under pavement shall conform to the requirements of Subarticle M.05.01, 1, M.05.01-2, M.05.01-3 of the standard specifications, Form 814A.

Item 3-Temporary Pavement

Bituminous concrete shall conform to the requirements of Section M.04 of the Standard Specifications for surface course, Class 1.

Item 4 – Permanent Trench Pavement

Bituminous concrete surface course shall conform to Article M.04 of the Standard Specifications for surface course, Class 1, 2 and binder course, Class 4.

Item 5 – Bituminous Concrete Lip curbing

Materials for this work shall conform to the requirements of Form 814A, Article M.04.01, Class 3, and any other applicable Articles.

Item 7 – Overlay

Bituminous concrete surface course shall conform to Article M.04 of the Standard Specifications for surface course, Class 2.

**3.00 CONSTRUCTION PROCEDURES & METHODS**

Work Procedure

Response Criteria

The contractor is required to respond to work within ten (10) days of notification by fax machine or telephone. The Contractor shall have the capability of receiving notification 24 hours a day via a telephone answering machine or fax machine. Responding to work is considered the actual performance of the work. **Saturday, Sunday and State Holidays are not counted when determining the response time.**

Once notified, the Contractor shall obtain a Work Order Form from the Owner and obtain any utility materials needed (i.e. to perform the work from the Owner, and obtain a copy of the Stock Sheet. Upon completion of the work, a filled out Work Order Form and Stock Sheet (if applicable) shall be submitted to the Owner by the Contractor.

For work in a State Highway, the Contractor shall obtain a permit, insurances and a bond to satisfy any other CT DOT requirements and incur the cost there of.

The Contractor shall submit an invoice for work completed under this contract and will receive payment within 30 days of receiving the invoice.

The Contractor has to be available until local plants close.

Specific Project Limits

For the purpose of establishing a quantity range in order to determine the applicable contract unit price, work areas within 3000 linear feet of one another shall be considered one project as long work notification to the Contractor was given at the same time.

Finishing and Cleaning Up

In completing his operations, the Contractor shall immediately remove all surplus material, tools, and other property belonging to him, leaving the entire street or surroundings free and clean and in good order, at no additional expense to the City. The Contractor shall exercise special care in keeping the rights-of-way and private lands upon

which work is performed free and clean of all debris, and shall remove all tools and other property when they are not in use.

### Construction Methods

Below are the construction methods associated with the applicable items of work.

#### Item 1-Processed Gravel Base

Gravel base shall be placed and compacted in accordance with Article 3.04.03 of the Standard Specification - Form 814A.

#### Item 2-Temporary Pavement

Temporary pavement shall be placed on the specified thickness processed gravel base. Temporary pavement shall be installed per the attached detail and have the compacted thickness specified herein. Pavement shall be placed in accordance with the applicable provisions of Section 4.06 of the Standard Specifications. Temporary pavement shall be placed at the end of every work day as required by the CT DOT permit for work on State Highways. Temporary pavement shall be placed at the end of every work week for all other streets.

#### Item 3 – Permanent Trench Pavement

Temporary pavement shall be removed, the existing pavement cut back 6 inches from the edge of disturbed trench in straight lines parallel to the edges of the roadway using approved power tools, and the processed gravel base placed and compacted as specified in these Specifications and in accordance with the attached details. Tack coat shall be applied to the edge of existing pavement where it meets the new pavement. The four (4") inch and the nine (9") compacted thickness bituminous pavement shall be placed in two and five lifts, respectively, in accordance with the requirements of Article 4.06.03 of the Standard Specification.

#### Item 4 – Bituminous Concrete Lip curbing

Construction methods shall conform to the requirements of Form 814A, Article 8.15.03, and any other applicable Articles.

#### Item 5 – Milling

A neat straight longitudinal saw cut (2 inch depth) shall be made at the extent of each side of the surface to be milled. The Contractor will mill a minimum of 2" in depth along the longitudinal saw cuts to the extent required as shown on the Contract Drawings. Prior to paving the milled area will be swept and tack coated with CSS-1H at .035 gals. per square yard. The longitudinal saw cut joint will be painted with an acceptable tack coat material. The milled surface will be paved with Class 1 Bituminous Concrete to a compacted 2" depth using a self propelled paving machine covering the entire milled area. After the final pavement has been placed and compacted, the joints will be sealed with 85/100 asphalt or an approved substitute. All milling shall conform to Connecticut DOT requirements.

#### Item 6 – Overlay

Overlay shall be placed in accordance with Article 4.06.03 of the Standard Specifications and in accordance with the attached details. Contact surfaces of curbing's, gutters, manholes, etc., shall be painted with a thin uniform coat of hot asphalt cement, or asphalt cement dissolved in naphtha, just before the material is placed against them. Where the bituminous material is spread on the concrete or an old bituminous base, a uniform coat of asphalt shall be spread about one foot wide along each edge of the pavement to prevent water from getting between the new pavement and the base. In any area where the new pavement is less than 1 1/2 inches thickness and on steep grades the Engineer may order a very light web-like coating of hot asphalt paint applied to the old pavement. Care must be taken not to apply too heavy a coating or large blobs of asphalt paint.

#### **4.0 MEASUREMENT AND PAYMENT**

Below are the measurement and payment criteria associated with the applicable items of work.

Note that the Crew Cost item will be utilized only if the quantity thresholds stated in the bid form have not been met for a specific project. The Crew Cost item is the only item in which construction material cost will be paid for by the Owner. Once a quantity threshold has been met for a specific project, the applicable contract unit prices will be utilized (for the entire project) and the Contractor will be responsible for both furnishing and installation of materials.

For work in a State Highway, the Contractor shall obtain a permit, insurances and a bond to satisfy any other CT DOT requirements and incur the cost there of. This item shall not be measured for payment; the cost shall be considered part of the applicable contract unit prices.

#### Unit Abbreviations

S.Y. – per Square Yard

L.F. – per Linear Foot

L.S. – Lump Sum

HRS. – per Hour

C.Y. – per Cubic Yard

#### Item 1-Crew Cost

Crew Cost will be measured for payment by the number of hours of work performed by an appropriate sized work crew as defined in the above Section 2.0 – Materials and as specified in the bid form. If quantity thresholds are not met, a 4-hour minimum will be paid regardless of the number of hours of work performed. Crew time hours will be measured from the time the entire crew is mobilized at the site and work has started until the time site work is substantially complete and demobilization has started. Material cost including processed gravel and bituminous concrete (trucking is considered part of the contractors Crew Cost) shall be

reimbursed by the Owner once evidence of a paid material receipt is provided by the Contractor. This item shall include the cost of obtaining permits, and all tools, equipment and labor needed to perform the work.

Item 2-Processed Gravel Base

The quantity measured for payment under this Section will be the number of cubic yards of processed gravel satisfactorily placed, compacted, and graded to as indicated or directed, measured in place. Payment for processed gravel base shall be made at the contract unit price per cubic yard for compacted gravel base placed to the lines and grade specified on the drawings. Said price shall include all costs of placement of processed gravel base, preparation of subgrade and all other materials, labor and equipment necessary to satisfactorily complete the work.

Item 3-Temporary Pavement

This work shall be measured for payment by the actual number of square yards, installed to the specified thickness. Work under this Item will be paid for at the Contract unit prices per square yard for "Temporary Pavement Replacement for Trench", completed in place and accepted. These Contract unit prices shall include the placement of the bituminous material, maintenance of the construction to include the additional materials and labor required due to settlement, and all other materials, tools, equipment, labor and work necessary for or incidental to the completion of the item.

Item 4 – Permanent Trench Pavement

This work shall be measured for payment by the actual number of square yards, installed to the specified thickness. Payment for Permanent Pavement Replacement for Trench shall be made at the Contract unit price per square yard for the applicable Permanent Pavement Replacement for Trench. Said price shall include all costs of preparation of existing and temporary pavement, binder coat, placement of bituminous concrete and all other materials, labor and equipment necessary to satisfactorily complete the work. The unit price shall include the cost of replacing line striping, raising utility boxes and structures including sanitary or storm sewer appurtenances to the finish grade of the road.

Item 5 – Bituminous Concrete Lip curbing

Bituminous Concrete Lip Curbing shall be measured for payment by the Owner by the linear foot installed in place as directed by the Owner. Bituminous curbing not in the immediate area of construction which is damaged by the Contractor's negligence shall not be measured for payment.

Payment for installing bituminous lip curbing shall be at the Contract unit price bid per linear foot for "Bituminous Concrete Lip Curbing". Said price shall include installation of machine or hand laid curbing, preparation of roadway, tack coat and all materials, labor and equipment necessary to satisfactorily complete the work.

Item 6 – Milling

This work shall be paid for at the Contract unit price per square yard for “milling”, which price shall include all equipment, tools, labor and work incidental to or necessary for the completion of the work.

Item 7 – Overlay

This work shall be measured for payment by the number of Square yards of bituminous concrete installed to the specified thickness. Payment for this item will be at the contract unit price for "Bituminous Concrete Overlay", which price shall include all labor, tools, and equipment incidental thereto. The cost to form the required transition zones will not be paid for separately but shall be incorporated in this unit price. A tack coat and pavement markings shall be provided and shall be incorporated in this unit price. The Contractor shall include in the cost of this construction all resetting to grade of existing or newly constructed grates, frames, covers, valve boxes, access covers, and other items which normally must have a fixed relationship to finished grade. The Contractor shall include in the cost of construction cleaning and sweeping the milled surface and applying tack coat prior to installation.